

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI[®]

**The Role of Attachments to Mother, Father, and Peer in Depression
among Male and Female Middle Adolescents**

Katayoun Kamkar

A Thesis

in

the Department

of

Psychology

**Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts at
Concordia University
Montreal, Quebec, Canada**

May 2002

© Katayoun Kamkar, 2002



**National Library
of Canada**

**Acquisitions and
Bibliographic Services**

**395 Wellington Street
Ottawa ON K1A 0N4
Canada**

**Bibliothèque nationale
du Canada**

**Acquisitions et
services bibliographiques**

**395, rue Wellington
Ottawa ON K1A 0N4
Canada**

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-72861-7

Canada

Abstract

The Role of Attachments to Mother, Father, and Peer in Depression among Male and Female Middle Adolescents

Katayoun Kamkar

While both parent and peer attachment security have been found to be related to adolescent's well-being, the relative importance of each on the adolescent's adjustment is in question. Further, insecure attachment appears to be a more important factor in depression for adolescent girls than boys (Kobak, Sudler, & Gamble, 1991). The present study investigates the role of parental and peer attachments in depression among adolescent boys and girls, and whether secure attachment to peers protects adolescents insecurely attached to parents, particularly girls, against depression. Adolescents (n=176) completed self-reports measuring their depressed feelings and their attachment to mother, father, and best friend, and a computer task consisting of hypothetical situations in which they were asked how they would feel. The results suggested that attachment security to a close peer only protected girls insecurely attached to their father against depression. Attachment security to both parents appeared to protect adolescents against depression. These findings substantiate the importance of attachment security to parents in adolescence and the need to examine gender differences and the separate effects of both mother and father when studying the importance of security to parents and to peers on the adolescent's mental health.

Acknowledgements

Never will I forget the accomplishment of my master thesis: it has been such a challenging and unique experience! I will never forget the very important people who made this experience so memorable to me. First and foremost, I am grateful to my dear supervisor, Dr. Anna-Beth Doyle. Anna-Beth, I want to send you a special “thank you” from the bottom of my heart for helping me so much. Your knowledge, brightness, patience, and kindness have helped me to learn immensely about attachment theory, to complete my Master thesis successfully, and to move on in my graduate studies. I would also like to thank Dr. Dorothy Markiewicz for her help, advice, and her sweetness. How could I be where I am standing today without my wonderful parents, Firouzeh and Hormoz? Their love and support have always helped me to accomplish my dreams. Mom, dad, you are and will always remain in my heart. A very special thank you to my wonderful boyfriend, Tony. Tony, thank you for accepting our long distance relationship and being there for me, always. You are a significant part of my life. I would also like to thank my brother, Homayoun, whose “technical support” has been so very useful. My thanks also go to my special friend, Forouzan, whose mere company has made my life in Montreal an enjoyable journey. How can I forget my dear friends in the lab, Clairalice and Sara? I thank you for providing me with a lovely and humorous ambiance in the lab and for answering my interminable, yet wise questions! I am also grateful to Dr. William Bukowski and Dr. Dorothy Markiewicz for accepting to be members on my thesis defense committee. You have always been available and helpful. My graduate studies, so far, have made me reach the realization that I am a very lucky person: I am fortunate for having a number of precious relationships, relationships so “secure” that I feel courageous, hopeful, and motivated to move on further in my academic journey and accomplish my dream.

Table of Contents

List of Tables	vii
List of Appendices	viii
Introduction	1
The present study	8
Method	9
The Sample	9
Questionnaire Measures	10
Computer Vignette Task	12
Procedure	14
Results	15
Preliminary Analyses	15
Gender and Target Differences	16
Social Desirability	16
Associations of attachments to mother and father with attachment to peer	17
Attachment security and gender differences in depression	20
The role of multiple attachment figures in depression	28
Attachment security and gender differences in depressive emotions in reaction to interpersonal vignettes with close others	30
Discussion	31
Differential contributions of attachment to mother, father, and peer	31
Multiple attachment figures as predictors of adjustment	36
Gender differences in the role of attachments to mother and father	37

Differential contribution of mother and father	39
The MAACL versus the vignette task findings	39
Research limitations	39
Summary and future directions	40
References	42
Appendices	48

List of Tables

	Page
Table 1. Means and Standard Deviations for all Predictor Variables	18
Table 2. Intercorrelations between predictor variables (i.e. security to each target), criterion variables (MAACL & vignette depression measures), and social desirability.	19
Table 3. Means and Standard Deviations for depression as a function of attachment security to Mother and Peer.	23
Table 4. Means and Standard Deviations for depression as a function of attachment security to Father and Peer for Girls.	24
Table 5. Means and Standard Deviations for depression as a function of attachment security to Father and Peer for Boys.	25
Table 6. Means and Standard Deviations for depression as a function of attachment security to Mother and Father.	26
Table 7. Means and Standard Deviation for Depression as the function of number of targets to which adolescents are securely attached.	29

List of Appendices

	Page
Appendix A. General Information Form	48
Appendix B. Letter to Student	50
Appendix C. Student Consent Form	52
Appendix D. The Relationship Questionnaire (with Mother)	55
The Relationship Questionnaire (with Father)	57
The Relationship Questionnaire (with Best Friend)	59
Appendix E. Multiple Affect Adjective Checklist-Revised	61
Appendix F. Marlowe-Crowne Social Desirability Scale	63
Appendix G. Vignettes	65
Appendix H. ANOVA Summary Tables	76

The Role of Attachments to Mother, Father, and Peer in Depression among Male and Female Middle Adolescents

Depression is one of the most common mental health problems, and it affects women more than men (Nolen-Hoeksema, 1990). Only after about age 14 or 15 (early-middle adolescence), however, do girls manifest more depressive symptomatology than boys (e.g., Nolen-Hoeksema, 1990). Thus, it is important to understand the correlates and potential causes of depression among adolescents.

The purpose of the present study is to examine the role of attachments to both parents and peers in depression among male and female middle adolescents.

Attachment Theory

Attachment theory explains how parental closeness is a protective buffer and a source of security (Ainsworth, Blehar, Waters, & Wall, 1978). According to attachment theory, the role of the attachment figure is to provide a secure base and to be responsive when needed in times of danger. Three patterns of infant attachment, secure, insecure-anxious-resistant, and insecure-avoidant, have been identified (e.g. Ainsworth, 1969). When parents fail to adequately meet attachment needs, the child develops insecure attachment. In addition, children develop working models of the self and others that are mental representations which center on the availability and responsiveness of others and the worthiness of the self (Bowlby, 1969). For instance, when the attachment figure is appropriately responsive, the child comes to believe that others are trustworthy and reliable, and the self is worthy of love and support. However, when the attachment figure is not appropriately responsive, the child believes that others are rejecting and/or that the self is not worthy of love or comfort (Bretherton, 1985). Thus, individual differences in

attachment style are believed to reflect differences in working models (Main, Kaplan & Cassidy, 1985). Moreover, because these working models encompass cognitive, behavioral and affective aspects, they impact on many aspects of adjustment and psychological functioning.

A basic principle of attachment theory is that early working models of self, other and relationships persist into adulthood and, as a result, attachment relationships continue their importance throughout the life span (Ainsworth, 1982). To assess adults' representations of childhood attachment styles, Main and her colleagues developed the Adult Attachment Interview (George, Kaplan, & Main, 1987; Main & Goldwyn, 1988). The interviews revealed that adult attachment groups paralleled the three childhood attachment categories (e.g. Crowell & Feldman, 1987). Moreover, these same categories have been identified in young adults' self and other representations (Kobak & Sceery, 1988). Secure participants viewed the self as worthy of love and the other as supportive. Dismissive (avoidant) participants viewed the other as unsupportive, and preoccupied (anxious) ones viewed the self as unworthy of love and the other as supportive.

A self-report procedure has been developed to classify adults into three categories corresponding to the attachment styles of childhood (Hazan & Shaver, 1987). Subsequently, attachment categories have been conceptualized as derived from the interaction between the two dimensions, self and other, each ranging from positive to negative (See *Figure 1*; Bartholomew & Horowitz, 1991). Individuals are considered to have a **secure attachment** when they have a positive view of both self and other. These individuals see the self as worthy of love and expect the other to be available when needed. Individuals with positive model of self and negative model of other are said to

have a **dismissing style of attachment**. These individuals see the self as worthy of love and tend to avoid others and any close relationships in order to protect themselves against any disappointment. They like being independent since they do not perceive attachments to others as valuable. Individuals with a negative model of self and positive model of other have a **preoccupied style of attachment**. They see the self as unworthy of love and they gain self-acceptance when they obtain acceptance from another. Individuals having a **fearful style of attachment** have a negative model of both self and other. They see the self as unworthy of love and expect the other to be rejecting and untrustworthy.

		Model of Self	
		Positive	Negative
Model of Other	Positive	Secure	Preoccupied
	Negative	Dismissing	Fearful

Figure 1. Model of Adult Attachment, Bartholomew & Horowitz (1991).

Depression and Gender Differences

Female adolescents are more susceptible to depression than male adolescents (Nolen-Hoeksema, 1990). Extensive research has been done in an attempt to understand factors underlying these gender differences. For example, stress and negative life events have been found to be more consistently associated with depressive symptoms for preadolescent and adolescent girls than for boys (e.g. Rudolph and Hammen, 1999). One theory is that because of socialization into feminine roles, girls develop a self that is

defined by relationships to others. Thus, girls care more about relationships and about maintaining them (Jordan, Kaplan, Miller, Stiver, & Surrey, 1991). Although this caring may foster better mental health, it may nevertheless be associated with depression when difficulties in interpersonal relationships occur (Kaplan, 1991). In sum, vulnerability to stress, in particular interpersonal stress, renders girls more susceptible to depression than boys.

Attachment Theory and Gender Differences in Depression

Parental Attachment

A number of studies have shown how quality of attachment is associated with psychosocial functioning (e.g. Allen, Moore, Kuperminc & Bell, 1998). For instance, adolescents securely attached to their parents have higher self-esteem and show less psychological distress (e.g. Armsden & Greenberg, 1987). Insecure attachment is, however, positively related to symptoms of depression (e.g. Muris, Mayer, & Meesters, 2000). The lack of psychological availability of attachment figures is thought to result in negative working models (i.e. particular insecure styles), which evoke depressive symptoms such as feelings of guilt and of worthlessness (Cummings & Cicchetti, 1990). More specifically, insecure attachment to parents may lead to a negative view of self (i.e. preoccupied and fearful), which is positively related to depression and anxiety (Papini & Roggman, 1992).

Negative working models are, however, not all linked equally to depressive symptoms. Among the different types of insecure attachment, preoccupied attachment style, in particular, has been strongly linked to adolescent depression (Kobak & Sceery, 1988). For instance, preoccupied adolescents have been found to report higher levels of

distress on the Hopkins Symptom Checklist than adolescents with a dismissing style of attachment (Kobak & Sceery, 1988).

The relationship between insecurity of attachment styles and depression may be more pronounced for adolescent girls than adolescent boys (Kobak, Sudler, & Gamble, 1991). Girls show a tendency to develop preoccupied styles (i.e. negative view of self), known to be related to depressive symptoms, contrary to boys who show a tendency to develop dismissing strategies (i.e. negative view of others), known to be related to conduct disorder and substance abuse (Rosenstein & Horowitz, 1996).

Peer Attachment

During adolescence, nonparental figures become very important for adjustment. Friendships have a significant role and provide an emotional support (Buhrmester & Furman, 1987) that may be needed because of the biological, social and cognitive changes that occur during this transition period. Certain friendships can be seen as attachment relationships (Armsden & Greenberg, 1987), and whether an adolescent is securely attached to his or her peers has an important influence on his or her adjustment. For instance, the quality of peer attachment has been found to be positively related to well-being (e.g. self-esteem and life satisfaction) and negatively to adolescents' depression and anxiety. Adolescents reporting a secure relationship with their peers have higher perceived self-worth and are less vulnerable to emotional and behavioral problems (e.g. Cauce, Mason, Gonzales, Hiraga, & Liu, 1994). Insecure peer attachment has been shown to be a vulnerability factor for the emergence of depressive disorder in adolescence (e.g. Armsden et al., 1990). These findings are consistent with Bowlby's (1973) hypothesis concerning the link between attachment, anxiety and depression.

Gender differences have also been found with respect to attachment security to peers. Adolescent girls report being more securely attached to their peers than do adolescent boys (e.g., Nada Raja et al., 1992). It is, therefore, important to examine attachment to peers when studying depression among adolescents.

Differential Contributions of Parental and Peer Attachment

Both parental attachment and peer attachment have been identified as important for adolescent's adjustment. However, while both parent and peer attachment security have been found to be related to the adolescent's well-being (Greenberg, Siegel, & Leitch, 1983), the relative importance of each on the adolescent's adjustment is in question.

Some studies, using the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987), which explores the nature of feelings toward parents and peers, have found that the quality of attachment to parents is more strongly associated with adolescents' well-being than the quality of attachment to peers (Greenberg et al., 1983). Insecure attachment to parents has been found to be associated with greater depression and experience of negative life events than insecure attachment to peers among middle adolescents (Nada Raja, McGee & Stanton, 1992). Furthermore, the highest scores for depressive symptoms tend to be reported by adolescents with an insecure parental attachment but a secure peer attachment than for other attachment groups (Nada Raja et al., 1992). In other words, a secure peer attachment does not appear to compensate for insecure attachment to parents.

On the other hand, in at least one study, peer attachment was found to be more strongly associated with adolescents' adjustment than parent attachment. Specifically,

Laible, Carlo, and Rafaelli (2000), also using the Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987), found that middle adolescents securely attached to peers but not to parents showed fewer depressive symptoms than adolescents securely attached to parents but not to peers. Therefore, research is needed to clarify the relative importance of parental and peer attachment on the adolescent's adjustment.

In addition to examining the above issue, it appears important to investigate the number of secure relationships necessary to protect adolescent girls and boys against depression. Research has generally shown that adolescents securely attached to both their parents and their peers are the best adjusted (i.e. higher self-perceived strength such as outgoing and reliable, least aggressive and depressed), and that having multiple secure relationships is more developmentally enhancing than having a single close relationship (e.g. Laible et al., 2000; Howes, 1999). However, it is unclear to this date how many secure relationships are necessary to protect adolescent boys and girls against depression, and whether just one secure relationship can protect. That is, the research cited above has included both mother and father as parental figures and multiple peers as peer attachment figures.

One good relationship has been found necessary among six-year-olds to moderate the development of externalizing behaviors whereas more than one good relationship has been found to be necessary for ten-year-olds (Jenkins & Keating, 1998). Hence, the number of secure relationships necessary to moderate depressed feelings for middle adolescent boys and girls needs to be examined.

The present study explored the role of peer and parental attachment in depression among a normative sample of male and female middle adolescents. The participants completed questionnaires and a computer task, consisting of different hypothetical situations in which they were asked how they would feel. The computer task was given in addition to the questionnaires, because the presentation is more engaging and the vignettes more life like. The following hypotheses were tested:

First, we examined whether security of attachment to peers compensates for insecurity of attachment to parents as found by Laible et al. (2000). Thus, one main hypothesis of the current study was that secure attachment to peers would compensate for insecure attachment to parents, especially for girls. That is, we expected that the effect of variations in security to peers on adolescents' depression, particularly girls, would be as great as the effect of variations in security to mother or father on adolescents' depression.

Second, we investigated whether attachment security to peers would protect adolescents insecurely attached to their parents against depression. That is, we expected adolescents to report more depressed feelings when they were insecurely attached to their parent (i.e., mother and/or father) than when securely attached only if they were insecurely attached to their peers, not if securely attached to their peers.

Third, although research shows that attachment security is negatively correlated with depression, it is unclear how many secure relationships are necessary to protect adolescents against depression and whether adolescents securely attached to only one target figure (i.e. mother, father or peers) report less depressed feelings than those insecurely attached to all target figures. Thus, we expected adolescent boys and girls insecurely attached to mother, father, and peers to show more feelings of depression than

adolescents securely attached to only one target. In addition, we expected depressed feelings to decrease as a function of the number of targets to which adolescents were securely attached (i.e. zero, one, two, or three).

Fourth, in light of research suggesting that girls are more depressed than boys, and that the relationship between insecurity of attachment and depression may be more pronounced for girls than boys, we expected attachment quality to be more predictive of depression for adolescent girls than boys. Hence, we expected attachment insecurity with at least one attachment figure (i.e. mother, father, or peer) to be more strongly linked to depressive feelings in girls than in boys.

Finally, with research showing that girls are more depressed than boys in part because of their vulnerability to stress and to interpersonal stress, we also expected adolescent girls to show more depressive symptomatology than adolescent boys.

Method

Participants

Participants included 176 (females= 110, males= 66) ninth-grade and tenth-grade students (mean age= 15) attending Lasalle Catholic Comprehensive High School in Montreal. As reported by the participants (see Appendix A), they were predominantly Caucasian, English-speaking, and from lower middle-class homes. Most (n=111) lived with their mother and father, 15 with their mother and stepfather, 2 with their stepmother and father, 35 with their mother only, and 3 with their father only.

The students were participating in the final year of a three-year longitudinal study looking at the quality of family and peer attachment on the development of adolescent's

well-being and adjustment. Participation was voluntary and by written consent (Appendix B and C). Fourteen subjects from the original subject pool (N=195) did not return the consent form. Out of 182 participants returning the consent forms, one did not agree to participate. Hence, a total of 181 participants agreed to participate (a 93% consent rate), and 5 were not tested because of absences (i.e. two were suspended, two were absent more than once, one was out of town).

Measures

The Relationship Questionnaire (RQ)

The RQ is a self-report attachment measure (Bartholomew & Horowitz, 1991). This measure consists of four paragraphs, each describing one of four attachment styles (i.e. secure, preoccupied, fearful and dismissing). Participants were first asked to rate on a seven-point Likert scale (1= "Not at all like my relationship" to 7= "very much like my relationship") the extent to which each paragraph described the quality of their relationship with a target figure. They were then asked to think again about their relationship with that particular individual and select the one paragraph that best describes their relationship. Each subject completed the questionnaire four times, once for each of the four targets of interest: mother, father, best friend and current or most recent romantic partner, in counterbalanced order. For the present study, attachments to mother, father, and best friend were utilized (see Appendix D).

Adult attachment patterns as measured by RQ have been found to be moderately stable ($r=.51$) across an 8-month period (Sharfe & Bartholomew, 1994). The RQ attachment measure has been found to be consistent with Hazan and Shaver's (1987)

traditional three-category model (Brennan, Shaver, & Tobey, 1991). The RQ also correlates significantly with attachment styles determined by family and peer ratings, interview, self-reports, and friend-reports (Bartholomew & Horowitz, 1991).

Multiple Affect Adjective Checklist – Revised (MAACL-R)

Zuckerman & Lubin's (1985) 58-item mood checklist consists of 5 scales: anxiety (10 items), depression (12 items), hostility (15 items), positive affect (21 items), and sensation seeking (12 items). The factor loadings have been found to be for anxiety 17 - 20 %, for depression 5-11 %, and for hostility 7-11 %. Because all scales showed satisfactory internal consistency except for the sensation seeking scale (Zuckerman & Lubin, 1985), this last measure was not used in this study. The internal consistency of the first four scales ranged from .73 to .95 (Zuckerman & Lubin, 1985).

The current study used the 10 items of the anxiety scale, 9 out of 12 items of the depression scale, 13 out of 15 items of the hostility scale and the 21 items of the positive affect scale, since some items (i.e. cross, forlorn, incensed, sunk, and tormented) were judged unclear for young adolescents and were omitted (see Appendix E). Participants were asked to indicate the words which describe how they generally feel. The internal consistencies of the depression, anxiety, hostility, and positive affect scales obtained in this study were .80, .76, .81, .88 respectively.

The anxiety, depression, and hostility scales are only moderately although significantly correlated (i.e. between .4 and .6), indicating sufficient discriminant validity (Zuckerman & Lubin, 1985). Because the focus of this study is depressed feelings, we used the depression scale only.

Social Desirability Scale (SDS)

A 15-item version of the Marlowe-Crowne Social Desirability Scale was given to participants (Strahan & Gerbasi, 1972; see Appendix F). An example of an item is: “No matter who I’m talking to, I’m always a good listener”. Participants were asked to indicate True or False for each of the 15 items. This abbreviated form correlates highly with the original scale ($r = .90$), with similar reliability coefficients, ranging from .73 to .83 (Strahan & Gerbasi, 1972). The internal reliability was found to be .68 in the present study.

Computer Vignette Task

Vignettes of Stressful Situations. Participants were presented with 10 short descriptions of hypothetical potentially stressful situations (see Appendix G). Eight of the vignettes consisted of interpersonal scenarios with their mother, father, best friend, and romantic partner, with two hypothetical situations per target figure. The two other vignettes consisted of achievement scenarios involving school and work. Half of the interpersonal stories presented situations in which each of the four target persons is unavailable for the individual. The other half of the interpersonal stories depicted situations in which the other person is rejecting or disapproving of the individual. An example of an interpersonal scenario was:

“ Imagine that you have a very important decision to make. This decision will have a big effect on your future and you are very anxious about it. You are very concerned about making the best choice by tomorrow’s deadline. You go to your mom

for her advice and to discuss what you should do. You really want her help. She tells you that she doesn't have the time to talk with you. She says she is too busy."

An example of an achievement scenario was:

"Imagine that you are sitting in class and you are about to get a test back. You studied very hard for this test, more than you usually do. You are anxious to know how you did because this subject is important to you and to your career. The teacher hands you your paper and you see that you got a bad mark"

Stress Intensity Level. Following the presentation of each hypothetical situation, participants were asked to indicate "how stressful would you find this event?" on a 7-point likert scale (1= "not at all"; 7= "extremely").

Cognitive Appraisals. After measuring their stress intensity level for an event, participants were asked about what they would think if this situation with the target figure had actually happened. They answered either "Yes or No" to statements about their thoughts about themselves and about the other person in the situation.

Emotions. Participants were asked how they would feel if this situation with the target figure had actually happened. They were presented with 17 emotions and were asked to indicate either "Yes or No" if they agreed or disagreed with the emotions. The 17 emotions measured hostility (4 items: annoyed, angry, resentful, irritated), depression (7 items: sad, rejected, lonely, helpless, lost, unloved, disappointed), anxiety (4 items: nervous, worried, tense, afraid) and indifference (2 items: indifferent, unemotional). The emotions were selected from those that loaded highly on the MAACL-R factors (n= 11; Zucherman & Lubin, 1985) or were used by Collins (1996).

Finally, following all vignettes, participants were presented with a recall task.

The present study used only subjects' response on the emotion items. Depression scores with respect to mother, father and peer were obtained by averaging the sum of the 7 depression items for the first vignette with the sum for the second vignette for each target, and could range from 0 to 7. The internal reliabilities for depression to mother, father and peer variables, were .79, .79, .82 respectively.

Before the presentation of these ten vignettes, participants were administered a practice scenario in order to orient them to the task. The vignettes were presented by the E-Prime computer programme, which is a windows-based application and allows the vignettes to be presented randomly. E-Prime records the student's answer to each question. On average, participants required about 30 minutes to complete the computer task.

Procedure

This study was done with the collaboration of the vice-principal, the school psychologist and the students' French teachers. Letters describing the goals of the study and consent forms for participation were distributed to students to take home. The study was done with students who agreed to participate. All students returning the form (whether answering "yes or no") had their names entered in a draw for movie passes or HMV gift certificates. Also, those students who chose to participate were entered in a prize draw for a Sony Discman.

Data were collected during two sessions arranged at the teacher's convenience. During the first session, students, taken in groups of about 20, were asked to complete questionnaires about their relationships with parents, siblings and friends and, their

perceptions of family functioning and their parents' relationships. They were also asked to answer questions about their views of themselves, their feelings, and their involvement in a variety of behaviors (e.g., rule-breaking activities). The data for the present study was obtained from the second session. During the second session, students, taken in groups of 12 to 15 completed questionnaires (e.g., the relationships questionnaire and the multiple affective adjective checklist) and the computer task. Following the completion of the computer task, participants were finally asked to recall up to three of the stories.

Each session lasted approximately 45 minutes. At the end of the second session, students were given the opportunity to be referred to the school psychologist if questionnaires or the computer task raised any issues of concern for them.

Results

Preliminary Analyses

The criterion variables obtained from the MAACL (i.e., depression) and the vignette task (i.e., depressed affect to mother, father, and peer) were examined for normality, skewness, and kurtosis. The criterion variables on the vignette task were normally distributed. However, the MAACL depressive feelings were positively skewed; thus, a square root transformation was applied, although the means reported in the text are in raw scores. Although mother and peer attachment variables were also mildly skewed, no transformation was applied because these variables were primarily predictors and, moreover, transformation did not improve the distribution.

Gender and Target Differences

To examine gender and target (mother, father, and peer) differences in the four continuous ratings of attachment styles (i.e. security, preoccupation, dismissiveness, and fearfulness), a 2 (sex of child) x 3 (targets: Mother/Father/Peer) multivariate analysis of variance was conducted on the four seven-point ratings (e.g. security, preoccupation, dismissiveness, & fearfulness), with target as a within-participants factor. Using Wilk's criterion, results revealed a multivariate main effect for Target, $F(2,318) = 5.175$, $p < .001$, and univariate target effects for security, dismissing, and fearful, see Appendix Table H1. Pairwise comparisons with Bonferroni corrections revealed that adolescents reported being more securely attached to their mother ($M=5.61$) and their peers ($M=5.62$) than their father ($M=4.63$). They were also more dismissing with their father ($M=3.39$) than their mother ($M=2.83$) and their peer ($M=2.83$), and more fearfully attached to their father ($M=2.42$) than their mother ($M=2.01$). The means and standard deviations for all four attachment ratings for the three targets are shown in table 1. No sex differences in secure, preoccupied, fearful, and dismissing ratings, and no sex by target interaction was found. We decided, therefore, to focus only on security ratings to mother, father, and peer instead of all four attachment styles. Moreover, security ratings, derived from the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987), have also been the main focus of analysis in previous research (e.g. Laible et al., 2000; Nada Raja et al., 1992).

Social Desirability

Social desirability correlations with predictor and criterion variables were low and

significant only for depression to mother vignettes and MAACL depression, see Table 2. Further, no change in results was found when the main analyses were run using the social desirability variable as a covariate. Thus, analyses without social desirability are reported.

Predictions from attachments to mother and father to attachment to peer

Correlations between attachment security to mother, father, and peer are presented in Table 2.

To investigate whether a positive peer relationship might depend on a prior positive relationship with parents, and if so, which parent plays the primary role, a regression analysis predicting to security with peer was conducted. Sex was entered on the first step, security to mother and father on the second step, and the interactions between sex and security to father, and between sex and security to mother in the third step. Results showed that security to mother and father as a block was a significant predictor of attachment to peer, $\Delta R^2=.08$, $F_{inc}(2, 156)= 7.066$, $p<.001$. Only security to mother was uniquely significant, accounting for about half of the variance attributable to the block ($\beta=.22$, $sr^2=.04$, $p<.01$).

Table 1

Means and Standard Deviations for all Predictor Variables

<u>Predictor Variables</u>	<u>Security</u>		<u>Preoccupied</u>		<u>Dismissing</u>		<u>Fearful</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Mother	5.61 ^a	1.65	2.16	1.57	2.83 ^a	1.74	2.01 ^a	1.43
Father	4.65 ^b	2.09	2.31	1.59	3.39 ^b	1.94	2.42 ^b	1.85
Peer	5.62 ^a	1.60	2.32	1.66	2.83 ^a	1.70	2.23	1.61

Note: ^(a,b) Means differ significantly, $p < .01$

Table 2

Intercorrelations between predictor variables (i.e. security to each target), criterion variables (MAACL and vignette depression measures), and social desirability.

Variable	1	2	3	4	5	6	7	8
1. Security to Mother	-	.30***	.27***	-.15	-.16*	-.12	-.06	.15
2. Security to Father		-	.19*	-.11	.06	.01	-.05	.03
3. Security to peer			-	.04	-.10	-.10	-.05	.04
4. Depression (MAACL)				-	.36***	.12	.25***	-.20*
5. Depression mother (vignette task)					-	.66***	.63***	-.22**
6. Depression father (vignette task)						-	.65***	-.15
7. Depression peer (vignette task)							-	-.15
8. Social desirability total score								-

Note: High scores indicate more security and more depression.

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

Attachment security and gender differences in depression

To facilitate examining predictions from attachment to mother, father, and peer, and their interactions using analyses of variance, participants were grouped into secure and insecure with respect to each target (i.e., mother, father, and peer) by using a median split on security ratings to each target. Reflecting the somewhat skewed nature of the variables, the median was 5 for security to father, and 6 for security to both mother and peer. For security to father, the n was reduced from 176 to 164, reflecting that 12 students indicated they did not have a father or stepfather.

Attachments to Mother and Peer. To examine the role of attachments to mother and peer in depression, the role of gender in depression, and whether insecure attachment is more strongly linked to depressive feelings for girls than for boys, a 2 (sex of child) x 2 (attachment to peer– secure vs. insecure) x 2 (attachment to mother - secure vs. insecure) analysis of variance was conducted on the MAACL square-root transformed depression scores.

The findings revealed a main effect for mother, $F(1, 161) = 4.36, p < .05$ and a trend towards a main effect of attachment to peer, $F(1, 161) = 3.68, p < .06$. In addition, there was a significant interaction between attachment to peer x attachment to mother, $F(1, 161) = 10.65, p < .001$, see Appendix table H2. Pairwise comparisons with Bonferroni corrections revealed that adolescents securely attached to peers reported more depressed feelings when insecurely attached to mother ($M = 2.30$) than when securely attached to mother ($M = .78$). Further, surprisingly, adolescents securely attached to peers and insecurely attached to their mother ($M = 2.30$) reported more depressed feelings than those

insecure to both ($M = .99$). Finally, the main effect of attachment to mother revealed that adolescents insecurely attached to their mother reported more depression ($M = 1.69$, $SD = 2.19$) than those securely attached ($M = .96$, $SD = 1.63$). The main effect of attachment to peer showed that adolescents securely attached to peers tended to report greater depressed feelings ($M=1.23$, $SD=1.73$) than adolescents insecurely attached ($M=1.21$, $SD=2.14$), see Table 3.

Attachments to Father and Peer. To examine the role of attachment to father and peer in depression, and whether insecure attachment is more strongly linked to depressive feelings for girls than for boys, a 2 (sex of child) x 2 (attachment to peer– secure vs. insecure) x 2 (attachment to Father - secure vs. insecure) analysis of variance was conducted on the square-root-transformed MAACL depression scores.

Despite heterogeneity of variance that could not be corrected, there was a main effect of attachment to father, $F(1, 154) = 5.60$, $p < .05$, and a three-way sex x attachment to father x attachment to peer interaction, $F(1, 154) = 6.92$, $p < .01$, see Appendix table H3. Pairwise comparisons with Bonferroni corrections revealed that girls insecurely attached to their peer reported higher depressed feelings when insecurely attached to their father ($M=2.45$) than when securely attached to father ($M=.36$). Girls securely attached to peer did not differ in their report of depressed feelings whether securely ($M=1.35$) or insecurely attached to their father ($M= 1.04$), see table 4. In contrast, adolescent boys securely attached to peers reported higher depressed feelings when insecurely attached to father ($M= 2.08$) than when securely attached ($M=.39$). Paradoxically, boys insecurely attached to father reported higher depressed feelings when securely attached to peers ($M=2.08$) than when insecurely attached ($M=.56$), see table 5. In fact, boys insecurely

attached to father and securely attached to peer were more depressed than all other boys. Finally, the main effect of father revealed that adolescents securely attached to their father reported less depressed feelings ($\underline{M}=0.88$, $\underline{SD}=1.40$) than those insecurely attached ($\underline{M}=1.51$, $\underline{SD}=2.29$).

Attachments to Mother and Father. We also examined the role of attachments to mother and father in depression by performing a 2 (sex of child) x 2 (attachment to mother-secure vs. insecure) x 2 (attachment to father-secure vs. insecure) analysis of variance on the MAACL depression score. Heterogeneity of variance, due to several boys insecurely attached to mother and securely attached to father ($n=4$) endorsing no depressive symptoms, was corrected by replacing their values with scores predicted from a variable highly related with the depression measure (i.e. Anxiety) (Tabachnick & Fidell, 2001).

The results revealed a main effect of sex, $F(1,152)=4.70$, $p<.05$, with girls reporting higher depressed feelings ($\underline{M}=1.40$, $\underline{SD}=2.04$) than boys ($\underline{M}=0.81$, $\underline{SD}=1.52$), and a trend towards a main effect of attachment to mother, $F(1,152)=3.14$, $p<.08$. That is, adolescents securely attached to their mother tended to report lower depressive feelings ($\underline{M}=0.89$, $\underline{SD}=1.58$) than adolescents insecurely attached ($\underline{M}=1.70$, $\underline{SD}=2.25$). In addition, an attachment to mother x attachment to father interaction was found, $F(1,152)=10.61$, $p<.001$, see Appendix table H4. Pairwise comparisons with Bonferroni corrections revealed that adolescents securely attached to mother and father were less depressed ($\underline{M}=0.48$) than those securely attached only to mother ($\underline{M}=1.71$) or securely attached only to father ($\underline{M}=2.44$), see table 6.

Table 3

Means and Standard Deviations for depression as a function of attachment security to Mother and Peer.

Attachment to Peer	Attachment to Mother					
	Insecure			Secure		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Insecure	.99 ^a	2.09	28	1.41	2.20	32
Secure	2.30 ^b	2.13	32	.78 ^a	1.30	77

Note: ^(a,b) Means differ significantly, $p < .001$

Table 4

Means and Standard Deviations for depression as a function of attachment security to Father and Peer for Girls.

Attachment to Peer	Attachment to Father					
	Insecure			Secure		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Insecure	2.45 ^a	3.05	20	.36 ^b	.50	11
Secure	1.04	1.61	23	1.35	1.73	46

Note: ^(a,b) Means differ significantly, $p < .05$

Table 5

Means and Standard Deviations for depression as a function of attachment security to Father and Peer for Boys.

Attachment to Peer	Attachment to Father					
	Insecure			Secure		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Insecure	.56 ^a	1.09	16	.42	.80	11
Secure	2.08 ^b	2.56	13	.39 ^a	.67	22

Note: ^(a,b) Means differ significantly, $p < .05$

Table 6

Means and Standard Deviations for depression as a function of attachment security to Mother and Father.

Attachment to father	Attachment to Mother					
	Insecure			Secure		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Insecure	1.32	2.27	37	1.71 ^a	2.32	35
Secure	2.44 ^a	2.07	19	.48 ^b	.74	69

Note: ^(a,b) Means differ significantly, $p < .01$

Family Structure. To examine whether family structure influenced the findings of the analysis involving fathers, such that insecurity of father was greater for adolescents from single parent homes, two subsequent analyses were carried out.

First, the same sex, mother, and father analysis was conducted only with adolescents living both with their mother and father (n=111). Result did not differ, see Appendix table H5. As well, the same sex, father, and peer analysis was conducted only with adolescents living with both mother and father (n=111). Results again did not differ.

Second, the importance of living with father was examined directly. Adolescents were divided into two groups: those living with their mother and with a father figure whom they rated (n= 114, including 3 adolescents who lived with their stepfather and rated him for security), and those who did not live with the father they rated (n= 47; 35 adolescents lived with their mother only, and 12 lived with their stepfather and rated their father for security). A 2 (sex of child) x 2 (attachment to mother-secure vs. insecure) x 2 (attachment to father-secure vs. insecure) x 2 (living with father vs. not living with father) analysis of variance on the MAACL depression score was performed. Results were the same as before, with a main effect for sex, $F(1,138)=4.18$, $p<.05$, an attachment to mother x attachment to father interaction, $F(1,138)= 5.01$, $p<.05$, and there was no main effect or interaction involving living with father, see table Appendix table H6. A 2 (sex of child) x 2 (attachment to father-secure vs. insecure) x 2 (attachment to peer-secure vs. insecure) x 2 (living with father vs. not living with father) analysis of variance on the MAACL depression score was also performed. Results revealed as before, a three-way sex x attachment to father x attachment to peer interaction, $F(1, 140)= 6.48$, $p<.05$. However,

we did not find any main effect for father. There was no main effect or interaction involving living with father.

The role of multiple attachment figures in depression

To examine whether depressed feelings varied as a function of the number of targets to which adolescents were securely attached (i.e., zero, one, two, or three), a categorical variable with four categories (i.e. secure to no target (n= 22), to only one target (n= 36), to only two targets (n= 50), or to all three targets (n= 54)) was created. Among adolescents securely attached to only one target, 15 were securely attached to their mother, 5 to their father, and 16 to their peer. Among adolescents securely attached to only two targets, 20 were securely attached to their mother and peer, 16 to mother and father, and 14 to peer and father. A 2 (sex of child) x 4 (attachment security to zero, one, two, three targets) analysis of variance was performed on the MAACL depression score. In addition to the main effect for sex, $F(1,152)= 3.89, p<.05$ already described, a main effect for number of targets was found, $F(1, 152)= 3.80, p<.05$, see Appendix table H7. Pairwise comparisons with Bonferroni corrections revealed a significant difference between adolescents securely attached to one target versus those attached to three targets. That is, adolescents securely attached to three targets reported less depressed feelings ($M=.53$) than those securely attached to only one target ($M=1.79$). Further, an examination of the means revealed that as the number of secure targets increased, depressed feelings decreased although not significantly except that adolescents securely attached to no targets reported less depression ($M=1.10$) than those securely attached to one target ($M=1.79$) or to two targets ($M=1.45$), see Table 7.

Table 7

Means and Standard Deviation for Depression as the function of number of targets to which adolescents are securely attached.

<u>Number of Secure Targets</u>	<u>M</u>	<u>SD</u>	<u>n</u>
0	1.10	2.41	22
1	1.79 ^a	2.25	36
2	1.45	2.01	50
3	.53 ^b	.75	54

Note: ^(a,b) Means differ significantly, $p < .05$

Attachment security and gender differences in depressive emotions in reaction to interpersonal vignettes with close others

Preliminary analyses revealed that the mother vignettes ($M=5.06$, $SD=1.33$), the father vignettes ($M=5.34$, $SD=1.34$), and the best friend vignettes ($M=5.48$, $SD=1.34$) were all moderately stressful, average of 5 on a seven-point scale where 7 is very stressful. Further, high correlations were found between the three depression measures derived from the vignette task (to father, mother, and peer), see Table 2. Thus, these three dependent variables were averaged for each subject.

To examine the roles of attachment to mother, attachment to peer, and gender on depressive feelings expressed in reaction to interpersonal vignettes describing negative interactions, a 2 (sex of child) x 2 (attachment to mother– secure vs. insecure) x 2 (attachment to peer - secure vs. insecure) analysis of variance was conducted on the combined vignette depression score. There was only a main effect for sex, $F(1, 162) = 18.51$, $p < .001$, with girls reporting more depressed feelings ($M = 11.03$, $SD = 4.50$) than boys ($M= 7.87$, $SD= 4.13$). Similar 2 x 2 x 2 analyses of variance were conducted for attachment to father and peer, and for attachment to mother and father. Similar results were found to those with respect to attachments to mother and peer.

Further, to investigate whether depressed feelings on the vignette task varied as a function of the number of targets to which adolescents were securely attached (i.e., zero, one, two, or three), a 2 (sex of child) x 4 (attachment security to zero, one, two, three targets) analysis of variance was performed on the depression score obtained from the vignette task. Again only the main effect for sex was found, $F(1,153)= 27.92$, $p < .001$.

Because of the lack of significant target effects, to explore whether the vignettes were appropriately eliciting depressed reactions to negative interactions with mother, father and peer, negative affect was examined with dependent variables separated by type of vignette: that is, depressed feelings in reaction to mother, father, and peer vignettes. Hierarchical multiple regressions, with sex entered in the first block, security to the relevant target figure in the second block and the interaction of sex and security with the relevant target figure in the third block were performed. With respect to mother vignettes, sex, $\Delta R^2 = .08$, $p < .001$ and security to mother, $\Delta R^2 = .10$, $p < .05$, emerged as significant predictors of depressed feelings. For father and peer vignettes, only sex, $\Delta R^2 = .10$, $p < .001$ and $\Delta R^2 = .11$, $p < .001$ respectively, emerged as a significant predictor. These findings suggest that the vignettes depicting negative interpersonal scenarios with mother appropriately elicited depressed feelings in adolescents insecurely attached to their mother.

Discussion

The present study was designed to examine the role of attachments to mother, father, and peer in depression among male and female middle adolescents.

Differential contributions of attachment to mother, father, and peer

Attachments to mother and peer. The findings revealed that attachment security to peer does not compensate for insecure attachment to mother. Adolescents securely attached to their mother were less depressed on average than those insecurely attached. However, this finding appeared to be an artifact of averaging across scores for

adolescents secure and insecure to peer. Moreover, there was a trend toward a main effect of peer. However, contrary to our predictions, adolescents securely attached to their peers tended to be more depressed than those insecurely attached to their peers. In sum, attachment security to peer does not appear to compensate for insecure attachment to mother.

In terms of whether attachment security to peer plays a protective role, adolescents reported more feelings of depression when they were insecurely attached to their mother than when securely attached but only when they were securely attached to their peers. Hence, our hypotheses that a secure peer attachment protects adolescents insecurely attached to parents (mother) against depression was not confirmed. Moreover, protection was not greater for girls. Although adolescents securely attached to both their mother and their peers were among the best adjusted, those who were secure with their peers but insecurely attached to their mother were the most depressed. Thus, a secure peer attachment for these adolescents appeared to be negatively associated with their mental health. In other words, not only did a secure peer attachment not protect adolescents insecurely attached to mother against depression, but it was associated with the most depressed feelings.

Our findings are consonant with Nada Raja's (1992) data indicating that the highest scores of depression tend to be reported by adolescents insecurely attached to their parents and securely attached to their peers, and that insecure attachment to parents does not appear to be compensated by secure attachment to peer. Our results are also consistent with Greenberg et al.'s (1983) findings revealing that the quality of adolescents' affective attachments to their parents is related to their well-being more

strongly than that of quality of attachment to peers. Our findings contrast with those of Laible et al. (2000) who found adolescents insecurely attached to their parents but securely attached to their peers to be less depressed than those securely attached to their parents and insecurely attached to their peers. These different findings from those of Laible et al. (2000) can be partially explained by the fact that different measures of attachment and depression were used and that different statistical techniques were conducted.

Attachment to father and peer. The findings revealed that attachment security to peer does not compensate for insecure attachment to father. Adolescents reported more depressed feelings when insecurely attached to their father than when securely attached. However, the main effect for father, although significant, also appeared to be an artifact of averaging across levels of security to peer. Moreover, there was no main effect of peer. In sum, security to peer does not appear to compensate for insecurity to father.

In terms of whether attachment security to peer plays a protective role, the findings indicated that attachment security to peer appears to protect adolescent girls insecurely attached to their father against depression. Adolescent girls reported more depressed feelings when they were insecurely attached to their father than when securely attached but only when they were insecurely attached to their peers. For girls securely attached to their peers, an insecure attachment to father was not more related to their depression than a secure attachment to father.

Contrary to girls, boys did not seem to suffer very much from an insecure attachment to peers. That is, adolescent boys reported more depressed feelings when they were insecurely attached to their father than when securely attached only when they were

securely attached to their peers. When they were insecurely attached to their peers, an insecure father attachment was not associated with depression. Moreover, although adolescent boys securely attached to both their father and their peers were among the best adjusted, those who were secure with their peers but insecurely attached to their father were the most depressed. Thus, similar to adolescents with their mother, a secure peer attachment for these adolescent boys appeared to be negatively associated with their mental health. In other words, not only did a secure peer attachment not protect boys insecurely attached to father against depression, but it seemed to be related to greater depressed feelings.

Thus, although our findings for boys are consonant with Nada Raja's (1992) data indicating that the highest scores of depression tend to be reported by adolescents insecurely attached to their parents and securely attached to their peers, this does not seem to hold true for adolescent girls with their fathers. For these girls, a secure peer attachment did protect against an insecure father attachment. This finding may indicate the need for future studies to consider gender differences and to examine the separate effects of each parent (i.e., mother and father) when studying the relative importance of attachment security to parents and to peers in adolescents' adjustment.

These findings with respect to the importance of attachment security to parents and peers are consistent with a number of studies highlighting the association between attachment security to both parents and peers and psychological well-being (e.g. Laible et al, 2000; Nada Raja et al., 1992). However, while some studies have found that adolescents securely attached to peers and insecurely attached to parents are better

adjusted than those insecurely attached to peers but secure to parents (e.g., Laible et al., 2000), the present study does not support this finding. Our findings are congruent with the results of a number of studies which indicate that attachment security to parents is more related than attachment security to peers to the adolescent's mental health and that attachment to peer does not compensate for an insecure attachment to parents (e.g. Nada Raja et al., 1992; Greenberg et al., 1983). That is, adolescents securely attached to their mother were significantly less depressed than those insecurely attached to their mother and adolescents securely attached to their father were significantly less depressed than those insecurely attached to their father. However, no effect of attachment to peer appeared to compensate for insecurity to parent. As well, in contrast to a number of studies (e.g. Nada Raja, 1992), females did not report in our study greater attachment to their peers than boys.

Numerous explanations could be offered for the finding that secure peer attachment most often did not protect against an insecure parental attachment. For instance, during adolescence, despite the importance of attachment security to peers, the majority of adolescents tend to rely on their parents for emotional support and advice (Maccoby & Martin, 1983). Parents' counsel is more often preferred to that of peers particularly in situations involving future decision making (e.g. Musgrove, 1963) and, importantly, satisfaction with help from parents appears to be more linked to adolescents' psychological health than is satisfaction with help from peers (Burke & Weir, 1978, 1979). This finding is not surprising given that adolescents are at a stage of development where dependency is still very significant in their lives and that their parents, being in general wiser and more experienced, can provide them with better counsel than peers.

However, adolescents tend to seek help from peers when they perceive their parents as rejecting or indifferent, or in other words, when they are insecurely attached to their parents (e.g. Bowerman & Kinch, 1959). Adolescents may seek help from peers who similarly may also be insecurely attached to their parents and/or may also have depressed feelings or other mental health problems. Hence, the quality of help adolescents receive from their peers when faced with stressful events may not be able to protect against depression.

Identity formation may also explain in part why a secure peer attachment most often does not protect against insecure parental attachment. The way adolescents cope with the conflicts involved in becoming independent from parents and in forming their identity is influenced by their trust, respect, and relationships with their parents (Bloom, 1980). If adolescents insecurely attached to their parents have difficulty forming their identity, they may search for their identity among their peers. Hence, they may be more likely to be influenced, to follow, and to behave in the way their peer group values and does, and this may have negative consequences for them if the peer group values negative behaviors (e.g., skip school). Further, the parents of insecurely attached children may have poor management of their children's peer environments and consequently their children may be exposed more easily to negative peer influences (Patterson, Dishion, & Bank, 1984).

Multiple attachment figures as predictors of adjustment

Our findings support the importance of multiple attachment figures in the adolescent's adjustment. The majority of adolescents, in our study, were securely attached to their mother, father, and peer. These adolescents were the least depressed and

significantly less depressed than those securely attached to only one target. This result is consistent with Jenkins and Keating's (1999) data indicating that more than one secure relationship is necessary for a protective effect. Although, in our study, psychological distress tended to increase as the number of secure attachment figures decreased, adolescents securely attached to no attachment figure tended to report, contrary to our hypothesis, less psychological distress than those securely attached to one and two targets. At least two possible explanations can be offered for this finding. First, these adolescents may have defensively distorted their reports of depressed feelings. Second, since adolescents who were securely attached only to their peers did not report, in our study, a greater emotional well-being, and in some cases reported greater depressive feelings, it may be possible for adolescents insecurely attached to all attachment figures to actually feel less depression than those securely attached to only one attachment figure if the latter was often a peer.

Gender differences in the role of attachment to mother and father

Attachment insecurity to mother did not appear to affect girls more negatively than boys. Both adolescent boys and girls were negatively influenced by attachment insecurity to mother. The finding of no gender differences in relation to the association of attachment to mother with depression may be explained by the fact that mother (very often the primary attachment figure) has been shown to be the preferred attachment figure to turn to in times of stress (e.g., Youniss & Smollar, 1985), to be more influential than another attachment figure (e.g., Main et al., 1985), and that insecure attachment to mother is related to adolescent's depression (Homann, 1997).

Significant gender differences were found in relation to father. Attachment insecurity to father seemed to have a negative influence on the girls' depressed feelings only when they were insecurely attached to their peers. Several studies have found that girls' relationships with their father change during adolescence. (e.g., Youniss & Smollar, 1985). For instance, Youniss and Smollar (1985) have found that adolescent girls reported being more distant and withdrawn from their fathers, and felt that their fathers did not meet their emotional needs. This finding does not indicate, however, whether it is the fathers or the daughters who become more distant and withdrawn. Moreover, adolescent girls have been shown to use their peers more for emotional support than adolescent boys (Berndt, 1982). One may suggest that during adolescence, girls turn more towards their peers for emotional support than towards their fathers and consequently may become more distant from their fathers.

Attachment insecurity to father seemed to be associated with the boys' depressed feelings only when they were securely attached to their peers. Most findings have indicated that, relative to girls, adolescent boys are more likely to talk openly to their fathers and perceive their fathers as more caring (e.g., Burke & Weir, 1979). Moreover, father's rejection has been associated with depressive symptomatology for adolescent boys (e.g., Baron & MacGillivray, 1989). It seems that attachment security to father maintains its importance for boys during adolescence in terms of meeting their emotional needs and that, perhaps contrary to girls, adolescent boys do not seem to benefit from their peers' emotional support.

Differential contribution of Mother and Father

Attachment security to one parent did not seem to compensate for insecure attachment to another parent. Further, attachment security to one parent did not appear to protect adolescents insecurely attached to another parent against depression. We found that attachment security to both parents protected adolescents against depression. Adolescents securely attached to both parents were the least depressed and less depressed than those securely attached only to one parent.

The MAACL versus the vignette task findings

The vignette task failed to replicate the above findings. This finding is to some extent surprising and unexpected since the vignettes were moderately stressful. Our significant findings were therefore restricted to the MAACL depression scale.

Research limitations

The current study has several limitations. First, this study relied on self-report questionnaires to measure attachment security to the three attachment figures and reliance solely on self-report, especially using the single item RQ security scale as the measure of attachment, could be problematic. More reliable questionnaire instruments are currently the Relationship Scale Questionnaire (RSQ; Griffin & Bartholomew, 1994) and Experiences in Close Relationships (ECR; Brennan, Clarke, & Shaver, 1998). Further, Bowlby (1980) reported that defensive processes may interfere or distort awareness of parental rejection. The present results pertain to conscious awareness and, therefore, might not be replicable if attachment is assessed differently. Bartholomew and Shaver

(1998) found that the different means of measuring attachment (i.e., interview and self-report) overlap and no data to date indicate which type of assessment is a better predictor of behavior. However, measures that are not based entirely on self-report, such as interview measures (e.g., the Adult Attachment Interview) may clarify the findings' replicability and generality.

Second, since our vignette tasks did not seem to elicit appropriately depressed reactions to negative interactions with father and peer, our results were therefore restricted to the MAACL depression scale.

Summary and future directions

In the present study, it was shown that adolescent boys and girls securely attached to their mother, father, and peer were the best adjusted and reported significantly less psychological distress than those securely attached to only one attachment figure. Attachment security to peer did not appear to compensate for associations between insecure attachment to parents and depression. Further, attachment security to peer did not appear to protect adolescent boys and girls insecurely attached to their mother against depression. Moreover, attachment security to peer did not protect boys, although it did protect girls, insecurely attached to their father against depression. The findings highlight the need for future research to examine gender differences and the separate effects of each attachment figure (i.e., mother and father) when studying the relative importance of attachment security to parents and to peers on the adolescent's mental health. Future studies should consider the protective role of attachment to peer on the depressed feelings of girls insecurely attached to their father. Longitudinal studies would also be interesting

to conduct to examine whether peers can act as a protective factor when adolescents become young adults. Cross-sectional studies can also be useful in terms of discovering whether the protective role of peers, if any, varies with age.

References

Ainsworth, M.D.S. (1969). Object relations, dependency, and attachment: A theoretical review of the infant-mother relationship. Child Development, 40 (4), 969-1025.

Ainsworth, M.D.S (1982). Attachment: Retrospect and prospect. In C.M. Parkes & J. Stevenson-Hinde (Eds.), The place of attachment in human behavior. New York: Basic Books.

Ainsworth, M.D.S, Blehar, M.C., Waters, E., & Wall, S (1978). Patterns of attachment: A psychological study of the strange situation. Hillsdale, NJ: Erlbaum.

Allen, J. P., Moore, C., Kuperminc, G., & Bell, K. (1998). Attachment and adolescent psychosocial functioning. Child Development, 69 (5), 1406-1419.

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 (5), 427-454.

Baron, P., & MacGillivray, R.G. (1989). Depressive symptoms in adolescents as a function of perceived parental behavior. Journal of adolescent research, 4 (1), 50-62.

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

Bartholomew, K., & Shaver, P.R. (1998). Methods of assessing adult attachment. In J. Simpson & W.S. Rhodes (Eds.), Attachment theory and close relationships. New York: Guilford Press.

Berndt, T. J. (1982). The features and effects of friendship. Child Development, 53, 1446-1460.

Bowlby, J. (1969/1982). Attachment and loss: Vol. 1. Attachment. New York: Basic Books.

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

Brennan, K.A., Clark, C. L., & Shaver, P.R. (1998). Self-report measurement of adult attachment: An integrative overview. In J.A. Simpson & W.S. Rholes (Eds.), Attachment theory and close relationships (pp. 46-76). New York: The Guilford Press.

Brennan, K.A., Shaver, P.R., & Tobey, A.E. (1991). Attachment styles, gender and parental problem drinking. Journal of Social and Personal Relationships, 8(4), 451-466.

Bretherton, I. (1985). Attachment theory: Retrospect and prospect. In I. Bretherton & E. Waters (Eds.), Growing points of attachment theory and research. Monographs of the society for research in child development, 50, 3-38.

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

Burke, R. J., & Weir, T. (1979). Helping responses of parents and peers and adolescent well-being. Journal of psychology, 102 (1), 49-62.

Cauce, A. M., Mason, C., Gonzales, N., Hiraga, Y., & Liu, G. (1994). Social support during adolescence: Methodological and theoretical considerations. In F. Nestman, & K. Hurrelmann (Eds.), Social networks and social support in childhood and adolescence (pp. 89-108). Berlin: Walter de Gruyter.

Griffin, D.W., & Bartholomew, k. (1994). The metaphysics of measurement: The case of adult attachment. In K. Batholomew & D. Perlman (Eds.), Advances in personal

relationships: Vol 5. Attachment processes in adulthood (pp. 17-52). London: Jessica Kingley Publishers.

Crowell, J.A., & Feldman, S.S. (1987). Mothers' internal models of relationships and children's behavioral and developmental status: A study of mother-child interaction. Child Development, 59, 1273-1285.

Cummings, E.M., & Cicchetti, D. (1990). Toward a transactional model of relations between attachment and depression. In M.T. Greenberg, D. Cicchetti, & E.M. Cummings (Eds.), Attachment in the pre-school years: Theory, research, and intervention (pp. 339-372): University of Chicago Press.

George, C., Kaplan, N., & Main, M. (1987). The adult attachment interview. Unpublished manuscript. University of California, Berkeley.

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

Hazan, C., & Shaver, P.R. (1987). Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology, 59, 511-524.

Howes, C. (1999). Attachment relationships in the context of multiple caregivers. In J. Cassidy & P. R. Shaver (Eds), Handbook of attachment: Theory, research, and clinical applications (pp. 671-687). New York: The Guilford Press.

Jenkins, J., & Keating, D. (1998). Risk and resilience in six-and ten-year-old children. Human Resources Development, 1-2.

Jordan, J.V., Kaplan, A. G., Miller, J.B., Stiver, I.P., & Surrey, J.L. (1991).

Women's growth in connection: Writings from the Stone Center. New York: the Guilford Press.

Kaplan, A.G. (1991). The "self-in-relation": Implications for depression in women. In J. Jordan, A. Kaplan, J.B. Miller, I. Stiver, & J.L. Surrey (Eds.), Women's growth in connection: Writing from the Stone Center. New York: Guilford.

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.

Kobak, R. R., Sudler, N., & Gamble, W. (1991). Attachment and depressive symptoms during adolescence: A developmental pathways analysis. Development and Psychopathology, *3*, 461-474.

Laible, D. J., Carlo, G., & Raffaelli, M. (2000). The differential relations of parent and peer attachment to adolescent adjustment. Journal of Youth and Adolescence, *29*, 45-59.

Maccoby, E., & Martin, J. (1983). Socialization in the context of the family: Parent-child interaction. In Heatherington E. (ed.), Mussen Manual of Child Psychology, Vol. 4 (pp. 1-102). New York: Wiley.

Main, M., Goldwyn, R. (1988). An adult attachment classification system. Unpublished manuscript, University of California, Department of Psychology, Berkeley.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.),

Growing points of attachment theory and research. Monographs of the Society for Research in Child Development, 50 (1-2, Serial No. 209), 66-104.

Muris, P., Mayer, B., & Meesters, B. (2000). Self-reported attachment style, anxiety, and depression in children. Social Behavior and Personality, 28 (2), 157- 162.

Musgrove, F. (1963). Inter-generation attitudes. British Journal of Social and Clinical Psychology, 2 (3), 209-223.

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, 471-485.

Nolen-Hoeksema, S (1990). Sex differences in depression. Stanford, CA: Stanford University Press.

Papini, D. R., & Roggman, L. A. (1992). Adolescent perceived attachment to parents in relation to competence, depression, and anxiety: A longitudinal study. Journal of Early Adolescence, 12, 420-440.

Patterson, G.R., Dishion, T.J., Bank, L (1984). Family interaction: A process model of deviancy training (special issue). Aggressive Behavior, 10, 253-267.

Robinson, N. S. (1995). Evaluating the nature of perceived support and its relation to perceived self-worth in adolescents. Journal of Research on Adolescence, 5, 253-280.

Rosenstein, D., & Horowitz, H. (1996). Adolescent attachment and psychopathology. Journal of Consulting and Clinical Psychology, 64, 244-253.

Rudolph, K.D., & Hammen, C. (1999). Age and gender as determinants of stress exposure, generation, and reactions in youngsters: A transactional perspective. Child Development, 70(3), 660-677.

Scharfe, E., & Bartholomew, K. (1994). Reliability and stability of adult attachment patterns. Personal Relationships, 1, 23-43.

Strahan, R. & Gerbasi, K. C. (1972). Short, homogeneous versions of the Marlowe-Crowne Social Desirability Scale. Journal of Clinical Psychology, 28 (2), 191-193.

Youniss, J., & Smollar, J. (1985). Adolescent relations with mothers, fathers, and friends. Chicago: University of Chicago Press.

Zuckerman, M. & Lubin, B. (1985). Manual for the Multiple Affect Adjective Check List Revised. San Diego, CA: Educational and Industrial Testing Service.

Appendix A
General Information Form

GENERAL INFORMATION



43708

Please do not mark in this area

3

This information will help us describe the participants in our study.

1. Age: [] []

Date of Birth: DAY [] [] / MONTH [] [] / YEAR [] []

2. Sex: [] Female [] Male

3. Grade: [] 7 [] 8 [] 9 [] 10

4. My mom is (X one box): [] Single [] Married [] Divorced [] Widowed [] Other

5. My dad is (X one box): [] Single [] Married [] Divorced [] Widowed [] Other

6. Who lives in your house with you? (X all that apply)

- [] Mom [] Aunt [] Dad [] Grandmother [] Stepmom [] Grandfather [] Stepdad [] Cousin [] Sisters [] Friend of parent [] Brothers [] Other (specify) [] Uncle

7. For questions 4, 5 and/or 6, has this changed since last year? [] Yes [] No

8. Performance in academic subjects.

(X a box for each subject that you take)

a. Reading, English, or Language Arts

- [] Failing [] Below Average [] Average [] Above Average

b. History or Social Studies

- [] Failing [] Below Average [] Average [] Above Average

c. Arithmetic or Math

- [] Failing [] Below Average [] Average [] Above Average

d. Science

- [] Failing [] Below Average [] Average [] Above Average

JES-YRS



43708

Appendix B
Letter to Student

JHS-YR3
November, 2000

Dear Student,

For the past two years, as you may remember, you have been participating in the Concordia Relationships and Well-being Project, telling us about your relationships, feelings and behaviour. **We are now writing to ask you to help us in the phase III of our study.**



This year you will be completing questionnaires and answering questions on computer during class time at school, at times convenient for the teacher. The questionnaires will take about one class period. They are a lot like last year, and ask about your relationships with parents and friends, how your family gets along, and how you feel and act (e.g., mood, breaking rules, drug use, and sex). On the computer, possible problems with parents, friends, dating partners and school will be described briefly, and you will be asked what you would think, do, and feel.

We really appreciate that you helped us last year. **Your help again this year is very important** because we need to understand how changes in relationships affect students your age over time. **Besides, those students who choose to participate this year will be entered in THE GRAND-PRIZE draw for a SONY DISCMAN !!!**

Please complete the enclosed consent form, have one of your parents sign it, and return it to your French teacher as soon as possible. We need to hear from you even if you say no. **All students returning the form (whether answering "yes" or "no") will have their names entered in a draw for Cineplex Odeon movie passes or HMV gift certificates!!**

If you have any questions feel free to call one of us at the numbers below. Thanks a lot!

Appendix C
Student Consent Form

Consent Form For Student To Participate in Research

Student's Name: _____

Date of Birth: _____ Age: _____

School: LCCHS Grade: _____ French teacher's name /class: _____

Check where applicable:

_____ I agree to participate in the Relationships and Well-being study conducted by Katy Kamkar, Dr. Anna Beth Doyle, and Dr. Dorothy Markiewicz. (please sign below).

_____ Before I agree to participate, please call to discuss the project.
Phone number _____

_____ I do not agree to participate.

IF YOU AGREE TO PARTICIPATE, please complete the following:

I have been informed that the purpose of the research is to study students' relationships with peers and family, and well-being. Participation will involve approximately 2 hours of my class time in the winter term, completing questionnaires about friendships and family relationships, ways of dealing with stress, self-perceptions, feelings and behaviour. I will also answer questions on a computer about my thoughts and feelings in possible situations with parents, friends, school or work. I understand that **all information will be confidential** to the research team and identified only by number, although if life-threatening circumstances are reported, the research team will legally have to break confidentiality. I understand that I may withdraw consent and may discontinue participation at any time.

Signature:

Date _____

Parent(s) Name(s) _____

Address _____

City & Postal Code _____ Phone Number _____

Appendix D

The Relationship Questionnaire (with Mother)

The Relationship Questionnaire (with Father)

The Relationship Questionnaire (with Best Friend)

RELATIONSHIP WITH MOTHER (RQM)



Please do not mark in this area

			3
--	--	--	---

If you don't have a mom or stepmom, just leave this blank and go to the next questionnaire.

Please tell us who you are thinking of when you fill out this questionnaire (one box):

Mom OR Stepmom

Think about your relationship with your mother. Now read each paragraph below and indicate to what extent each paragraph describes your relationship with your mother. Put an in the box UNDER the number that is true for you.

1. 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 like my relationship		Very much like my relationship				
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. 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 like my relationship		Very much like my relationship				
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. I want to be completely emotionally close 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 like my relationship		Very much like my relationship				
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. 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 completely, 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 like my relationship		Very much like my relationship				
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YES-Y23

1 of 2

47280





47280

Please do not mark in this area



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

- the one box 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 close 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 completely, or to depend on her. I worry that I will be hurt if I allow myself to become too close to my mother.



JES-YR3

1 of 2



47280



RELATIONSHIP WITH FATHER (RQD)



47222

Please do not mark in this area

			3
--	--	--	---

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

Please tell us who you are thinking of when you fill out this questionnaire (one box):

Dad OR Stepdad

Think about your relationship with your father. Now read each paragraph below and indicate to what extent each paragraph describes your relationship with your father. Put an in the box UNDER the number that is true for you.

1. 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 like my relationship						Very much like my relationship
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. 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 like my relationship						Very much like my relationship
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. I want to be completely emotionally close 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.

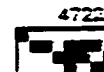
Not at all like my relationship						Very much like my relationship
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. 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 like my relationship						Very much like my relationship
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

JES-Y23

1 of 2



47222



47222

Please do not mark in this area



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

- the one box 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 close 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.



PSS-YES

PSS-YES





47375

RELATIONSHIP WITH YOUR BEST FRIEND (RQBF)

Please do not mark in this area

				3
--	--	--	--	---

Think about your relationship with your best same-sex friend. Now read each paragraph below and indicate to what extent each paragraph describes your relationship with your best friend. When you see a *** in the paragraphs below, think of your best friend by name. Put an in the box UNDER the number that is true for you.

1. It is easy for me to become emotionally close to my best friend. I am comfortable depending on *** and having him/her depend on me. I don't worry about being alone or having *** not accept me.

Not at all like my relationship							Very much like my relationship	
1	2	3	4	5	6	7		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

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

Not at all like my relationship							Very much like my relationship	
1	2	3	4	5	6	7		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

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

Not at all like my relationship							Very much like my relationship	
1	2	3	4	5	6	7		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

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

Not at all like my relationship							Very much like my relationship	
1	2	3	4	5	6	7		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

JHS-VRS

1 of 2



47375



47375

Please do not mark in this area

Think again about your relationship with your best same-sex friend. When you see a *** in the paragraphs below, think of your best friend by name. Which one of the following paragraphs best describes this relationship?

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

JES-YRE

2 of 2



47375

Appendix E

Multiple Affect Adjective Checklist-Revised

FEELINGS (MAACL-R)

47E17

Please do not mark in this area

				3
--	--	--	--	---

On this page, you will find words which describe different kinds of moods and feelings. Mark an in the boxes beside the words which describe how you generally feel. Some words may sound alike, but we want you to all the words that describe your feelings. Work rapidly.

I GENERALLY FEEL ...

- | | |
|---|--|
| 1. <input type="checkbox"/> affectionate | 28. <input type="checkbox"/> lonely |
| 2. <input type="checkbox"/> afraid | 29. <input type="checkbox"/> loving |
| 3. <input type="checkbox"/> alone | 30. <input type="checkbox"/> lost |
| 4. <input type="checkbox"/> angry | 31. <input type="checkbox"/> mad |
| 5. <input type="checkbox"/> annoyed | 32. <input type="checkbox"/> mean |
| 6. <input type="checkbox"/> complaining | 33. <input type="checkbox"/> miserable |
| 7. <input type="checkbox"/> critical | 34. <input type="checkbox"/> nervous |
| 8. <input type="checkbox"/> cruel | 35. <input type="checkbox"/> panicky |
| 9. <input type="checkbox"/> destroyed | 36. <input type="checkbox"/> peaceful |
| 10. <input type="checkbox"/> disagreeable | 37. <input type="checkbox"/> pleased |
| 11. <input type="checkbox"/> discouraged | 38. <input type="checkbox"/> pleasant |
| 12. <input type="checkbox"/> disgusted | 39. <input type="checkbox"/> polite |
| 13. <input type="checkbox"/> enraged | 40. <input type="checkbox"/> rejected |
| 14. <input type="checkbox"/> fearful | 41. <input type="checkbox"/> sad |
| 15. <input type="checkbox"/> free | 42. <input type="checkbox"/> satisfied |
| 16. <input type="checkbox"/> friendly | 43. <input type="checkbox"/> secure |
| 17. <input type="checkbox"/> frightened | 44. <input type="checkbox"/> shaky |
| 18. <input type="checkbox"/> furious | 45. <input type="checkbox"/> steady |
| 19. <input type="checkbox"/> glad | 46. <input type="checkbox"/> suffering |
| 20. <input type="checkbox"/> good | 47. <input type="checkbox"/> tender |
| 21. <input type="checkbox"/> good-natured | 48. <input type="checkbox"/> tense |
| 22. <input type="checkbox"/> happy | 49. <input type="checkbox"/> timid |
| 23. <input type="checkbox"/> hostile | 50. <input type="checkbox"/> understanding |
| 24. <input type="checkbox"/> impatient | 51. <input type="checkbox"/> warm |
| 25. <input type="checkbox"/> interested | 52. <input type="checkbox"/> whole |
| 26. <input type="checkbox"/> irritated | 53. <input type="checkbox"/> worrying |
| 27. <input type="checkbox"/> joyful | |

HS-YR3

47E17

Appendix F

Marlowe-Crowne Social Desirability Scale



46762

MC-SD

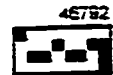
Please do not mark in this area

			3
--	--	--	---

For the following questions, please "T" for True and "F" for False.

	True	False
1. It is sometimes hard for me to go on with my work if I am not encouraged.	<input type="checkbox"/>	<input type="checkbox"/>
2. I sometimes feel resentful when I don't get my way.	<input type="checkbox"/>	<input type="checkbox"/>
3. On a few occasions, I have given up doing something because I thought too little of my ability.	<input type="checkbox"/>	<input type="checkbox"/>
4. I like to gossip at times.	<input type="checkbox"/>	<input type="checkbox"/>
5. There have been times when I felt like rebelling against people in authority even though I knew they were right.	<input type="checkbox"/>	<input type="checkbox"/>
6. No matter who I'm talking to, I'm always a good listener.	<input type="checkbox"/>	<input type="checkbox"/>
7. There have been occasions when I took advantage of someone.	<input type="checkbox"/>	<input type="checkbox"/>
8. I'm always willing to admit it when I make a mistake.	<input type="checkbox"/>	<input type="checkbox"/>
9. I sometimes try to get even, rather than forgive and forget.	<input type="checkbox"/>	<input type="checkbox"/>
10. I am always courteous, even to people who are disagreeable.	<input type="checkbox"/>	<input type="checkbox"/>
11. At times I have really insisted on having things my own way.	<input type="checkbox"/>	<input type="checkbox"/>
12. I have never been annoyed when people expressed ideas very different from my own.	<input type="checkbox"/>	<input type="checkbox"/>
13. There have been times when I was quite jealous of the good fortune of others.	<input type="checkbox"/>	<input type="checkbox"/>
14. I am sometimes irritated by people who ask favours of me.	<input type="checkbox"/>	<input type="checkbox"/>
15. I have never deliberately said something that hurt someone's feelings.	<input type="checkbox"/>	<input type="checkbox"/>

46762



Appendix G

Vignettes

You are about to be presented with a series of very short stories of potentially stressful situations. These involve your mother, your father, your best friend, and your boy/girlfriend and take place in different settings, such as at school and at work.

Imagine each situation is happening to you. Please take a few moments to picture yourself in that situation. Please also picture the other person and the interaction that you are having with them. In each situation, imagine what you would see and hear, what you would think, and how you would feel.

You will be asked a set of questions after each situation. The questions will be formatted in two ways.

**For some questions, you will be asked to select a number from 1 to 7
Other questions will ask you to answer either Yes or No.**

Use your knowledge and personal experiences of relationships and daily stressors to help you in answering the questions that follow each situation.

Remember there are no right or wrong answers. Answer the way you would react in that situation. Work as quickly as possible.

The first situation is for practice

Imagine that your brother or sister forgets your birthday.

How stressful would you find this event?

Choose the number which best represents how you feel by pressing the appropriate key.

1.....2.....3.....4.....5.....6.....7
Not at all Extremely

For each of the following statements, what would you think if the situation with your brother/sister had actually happened?

Check the box "Y" (Yes) if you would have that thought, and the box "N" (No) if you wouldn't have that thought. **Please work as quickly as possible.**

My brother/sister is forgetful Y N

My brother/sister doesn't care about my feelings Y N

My brother/sister will make it up to me Y N

I am not important to him/her Y N

I didn't remind my brother/sister of the day Y N

Please think about **how you would feel AFTER this event**, if it actually happened to you.

For each of the following items, indicate "yes" if you would feel the emotion and "no" if you wouldn't feel the emotion. **Please work quickly.**

If this situation had actually happened, would you feel:

	Yes	No		Yes	No		Yes	No
Hurt	<input type="checkbox"/>	<input type="checkbox"/>	Disappointed	<input type="checkbox"/>	<input type="checkbox"/>	Annoyed	<input type="checkbox"/>	<input type="checkbox"/>
Mad	<input type="checkbox"/>	<input type="checkbox"/>	Confused	<input type="checkbox"/>	<input type="checkbox"/>			

Imagine that you have a very important decision to make. This decision will have a big effect on your future and you are very anxious about it. You are very concerned about making the best choice by tomorrow's deadline. You go to your mom for her advice and to discuss what you should do. You really want her help. She tells you that she doesn't have the time to talk with you. She says she is too busy.

How stressful would you find this event?

1.....2.....3.....4.....5.....6.....7
 Not at all Extremely

For each of the following statements, what would you think if this situation with your mom had actually happened? Check the box "Y" (Yes) if you would have that thought, and the box "N" (No) if you wouldn't have that thought. Please work as quickly as possible.

If this situation with your mom had actually happened, would you think:

- | | | | | |
|--|---|--------------------------|---|--------------------------|
| My mom is unreliable. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My mom is insensitive. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My mom doesn't know how to help me. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My mom isn't good at comforting me. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My mom is unresponsive. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My mom doesn't know how to make me feel better. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My mom is uncooperative. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My mom is rejecting me. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
|
 | | | | |
| I am basically unlovable. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I am not a dependable person. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I am not worthy of my mom's love and attention. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I can't solve my problems. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I can't keep my mom interested in me. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I am worthless. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I will never get the support I need from my mom. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I am incapable of trusting others. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |

Please think about how you would feel AFTER this event, if it actually happened to you. For each of the following items, indicate "yes" if you would feel the emotion and "no" if you wouldn't feel the emotion. Please work quickly.

If this situation had actually happened, would you feel:

	Yes	No		Yes	No
Angry	<input type="checkbox"/>	<input type="checkbox"/>	Sad	<input type="checkbox"/>	<input type="checkbox"/>
Nervous	<input type="checkbox"/>	<input type="checkbox"/>	Indifferent	<input type="checkbox"/>	<input type="checkbox"/>
Unloved	<input type="checkbox"/>	<input type="checkbox"/>	Unemotional	<input type="checkbox"/>	<input type="checkbox"/>
Worried	<input type="checkbox"/>	<input type="checkbox"/>	Resentful	<input type="checkbox"/>	<input type="checkbox"/>
Annoyed	<input type="checkbox"/>	<input type="checkbox"/>	Afraid	<input type="checkbox"/>	<input type="checkbox"/>
Rejected	<input type="checkbox"/>	<input type="checkbox"/>	Irritated	<input type="checkbox"/>	<input type="checkbox"/>
Tense	<input type="checkbox"/>	<input type="checkbox"/>	Helpless	<input type="checkbox"/>	<input type="checkbox"/>
Lonely	<input type="checkbox"/>	<input type="checkbox"/>	Lost	<input type="checkbox"/>	<input type="checkbox"/>
Disappointed	<input type="checkbox"/>	<input type="checkbox"/>			

Imagine that you lied to your Mom about where you were and what you did last night. You believe that your Mom would not understand or approve of your behavior if you told her the truth. Your Mom realizes that you lied to her and confronts you about it. She tells you that she is extremely disappointed that you lied to her and behaved the way you did. She didn't think you were like that.

How stressful would you find this event?

1.....2.....3.....4.....5.....6.....7
 Not at all Extremely

For each of the following statements, what would you think if this situation with your mom had actually happened?

Check the box "Y" (Yes) if you would have that thought, and the box "N" (No) if you wouldn't have that thought. Please work as quickly as possible.

If this situation with your mom had actually happened, would you think:

My mom is insensitive.	Y <input type="checkbox"/> N <input type="checkbox"/>
My mom is cold.	Y <input type="checkbox"/> N <input type="checkbox"/>
My mom doesn't know how to meet my needs.	Y <input type="checkbox"/> N <input type="checkbox"/>
My mom is unresponsive.	Y <input type="checkbox"/> N <input type="checkbox"/>
My mom was being unreasonable.	Y <input type="checkbox"/> N <input type="checkbox"/>
My mom is inconsiderate.	Y <input type="checkbox"/> N <input type="checkbox"/>
My mom is hostile.	Y <input type="checkbox"/> N <input type="checkbox"/>
My mom doesn't care about me any more.	Y <input type="checkbox"/> N <input type="checkbox"/>
I am basically unlovable.	Y <input type="checkbox"/> N <input type="checkbox"/>
I am not a dependable person.	Y <input type="checkbox"/> N <input type="checkbox"/>

- I am not worthy of my mom's love and care. Y N
- I can't deal with these situations by myself. Y N
- I am worthless. Y N
- I can't do anything about this situation. Y N
- I will never get the support I need from my mom. Y N
- I am incapable of trusting others. Y N

Please think about how you would feel AFTER this event, if it actually happened to you. For each of the following items, mark the box "yes" if you would feel the emotion and the box "no" if you wouldn't feel the emotion. Please work quickly.

If this situation had actually happened, would you feel:

- | | Yes | No | | Yes | No |
|--------------|--------------------------|--------------------------|-------------|--------------------------|--------------------------|
| Angry | <input type="checkbox"/> | <input type="checkbox"/> | Sad | <input type="checkbox"/> | <input type="checkbox"/> |
| Nervous | <input type="checkbox"/> | <input type="checkbox"/> | Indifferent | <input type="checkbox"/> | <input type="checkbox"/> |
| Unloved | <input type="checkbox"/> | <input type="checkbox"/> | Unemotional | <input type="checkbox"/> | <input type="checkbox"/> |
| Worried | <input type="checkbox"/> | <input type="checkbox"/> | Resentful | <input type="checkbox"/> | <input type="checkbox"/> |
| Annoyed | <input type="checkbox"/> | <input type="checkbox"/> | Afraid | <input type="checkbox"/> | <input type="checkbox"/> |
| Rejected | <input type="checkbox"/> | <input type="checkbox"/> | Irritated | <input type="checkbox"/> | <input type="checkbox"/> |
| Tense | <input type="checkbox"/> | <input type="checkbox"/> | Helpless | <input type="checkbox"/> | <input type="checkbox"/> |
| Lonely | <input type="checkbox"/> | <input type="checkbox"/> | Lost | <input type="checkbox"/> | <input type="checkbox"/> |
| Disappointed | <input type="checkbox"/> | <input type="checkbox"/> | | | |

Imagine that you and your dad have plans to do something you are really looking forward to. You and your dad haven't had a chance to do this sort of thing for a long time. You are very excited about going. At the last minute, your dad cancels without telling you why. He just says that he can't go.

How stressful would you find this event?

1.....2.....3.....4.....5.....6.....7
 Not at all Extremely

For each of the following statements, what would you think if this situation with your dad had actually happened? Check the box "Y" (Yes) if you would have that thought, and the box "N" (No) if you wouldn't have that thought. Please work as quickly as possible.

If this situation with your dad had actually happened, would you think:

- My dad is unreliable. Y N

- My dad is insensitive. Y N
- My dad doesn't know how to meet my needs. Y N
- My dad isn't good at comforting me. Y N
- My dad is unresponsive. Y N
- My dad is inconsiderate. Y N
- My dad is rejecting me. Y N
- My dad can't be trusted. Y N
-
- I am basically unlovable. Y N
- I am not worthy of my dad's love and attention. Y N
- I can't keep my dad interested in me. Y N
- I will never get my dad to give me what I need. Y N
- I am worthless. Y N
- I can only depend on myself. Y N
- I will never get the support I need from my dad. Y N
- I am incapable of trusting others. Y N

Please think about how you would feel AFTER this event, if it actually happened to you. For each of the following items, mark the box "yes" if you would feel the emotion and the box "no" if you wouldn't feel the emotion. Please work quickly.

If this situation had actually happened, would you feel:

- | | Yes | No | | Yes | No |
|--------------|--------------------------|--------------------------|-------------|--------------------------|--------------------------|
| Angry | <input type="checkbox"/> | <input type="checkbox"/> | Sad | <input type="checkbox"/> | <input type="checkbox"/> |
| Nervous | <input type="checkbox"/> | <input type="checkbox"/> | Indifferent | <input type="checkbox"/> | <input type="checkbox"/> |
| Unloved | <input type="checkbox"/> | <input type="checkbox"/> | Unemotional | <input type="checkbox"/> | <input type="checkbox"/> |
| Worried | <input type="checkbox"/> | <input type="checkbox"/> | Resentful | <input type="checkbox"/> | <input type="checkbox"/> |
| Annoyed | <input type="checkbox"/> | <input type="checkbox"/> | Afraid | <input type="checkbox"/> | <input type="checkbox"/> |
| Rejected | <input type="checkbox"/> | <input type="checkbox"/> | Irritated | <input type="checkbox"/> | <input type="checkbox"/> |
| Tense | <input type="checkbox"/> | <input type="checkbox"/> | Helpless | <input type="checkbox"/> | <input type="checkbox"/> |
| Lonely | <input type="checkbox"/> | <input type="checkbox"/> | Lost | <input type="checkbox"/> | <input type="checkbox"/> |
| Disappointed | <input type="checkbox"/> | <input type="checkbox"/> | | | |

Imagine that you would very much like to go on a special school trip. In order to go, you need your dad's advice and help. When you ask for it, he refuses to talk about it or to help you and tells you that he is not happy with the way you've been acting lately. He doesn't think you deserve to go.

How stressful would you find this event?

1.....2.....3.....4.....5.....6.....7
Not at all Extremely

For each of the following statements, what would you think if this situation with your dad had actually happened? Check the box "Y" (Yes) if you would have that thought, and the box "N" (No) if you wouldn't have that thought. Please work as quickly as possible.

If this situation with your dad had actually happened, would you think:

- | | | | | |
|--|---|--------------------------|---|--------------------------|
| My dad is insensitive. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My dad is cold. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My dad is unresponsive. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My dad is uncooperative. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My dad is hostile. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My dad doesn't care about me any more. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My dad can't be trusted. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| My dad doesn't know how to help me. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| | | | | |
| I am basically unlovable. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I am not a dependable person. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I made my dad react the way he did. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I am not worthy of my dad's love and care. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I will never get my dad to give me what I need. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I am worthless. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I can only depend on myself. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |
| I will never get the support I need from my dad. | Y | <input type="checkbox"/> | N | <input type="checkbox"/> |

Please think about how you would feel AFTER this event, if it actually happened to you. For each of the following items, mark the box "yes" if you would feel the emotion and the box "no" if you wouldn't feel the emotion. Please work quickly.

If this situation had actually happened, would you feel:

- | | Yes | No | | Yes | No |
|---------|--------------------------|--------------------------|-------------|--------------------------|--------------------------|
| Angry | <input type="checkbox"/> | <input type="checkbox"/> | Sad | <input type="checkbox"/> | <input type="checkbox"/> |
| Nervous | <input type="checkbox"/> | <input type="checkbox"/> | Indifferent | <input type="checkbox"/> | <input type="checkbox"/> |
| Unloved | <input type="checkbox"/> | <input type="checkbox"/> | Unemotional | <input type="checkbox"/> | <input type="checkbox"/> |
| Worried | <input type="checkbox"/> | <input type="checkbox"/> | Resentful | <input type="checkbox"/> | <input type="checkbox"/> |
| Annoyed | <input type="checkbox"/> | <input type="checkbox"/> | Afraid | <input type="checkbox"/> | <input type="checkbox"/> |

Rejected	<input type="checkbox"/>	<input type="checkbox"/>	Irritated	<input type="checkbox"/>	<input type="checkbox"/>
Tense	<input type="checkbox"/>	<input type="checkbox"/>	Helpless	<input type="checkbox"/>	<input type="checkbox"/>
Lonely	<input type="checkbox"/>	<input type="checkbox"/>	Lost	<input type="checkbox"/>	<input type="checkbox"/>
Disappointed	<input type="checkbox"/>	<input type="checkbox"/>			

Imagine that you and your best friend go to a party. When the two of you get there, your best friend leaves you for the entire night to go talk with other friends. You do not know these friends, and your best friend doesn't introduce you. You don't know anyone else at the party.

How stressful would you find this event?

1.....2.....3.....4.....5.....6.....7
 Not at all Extremely

For each of the following statements, what would you think if this situation with your best friend had actually happened? Check the box "Y" (Yes) if you would have that thought, and the box "N" (No) if you wouldn't have that thought. Please work as quickly as possible.

If this situation with your best friend had actually happened, would you think:

My best friend is not dependable.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
My best friend is insensitive.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
My best friend is cold.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
My best friend doesn't know how to help me.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
My best friend isn't good at comforting me.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
My best friend doesn't know how to make me feel better.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
My best friend is inconsiderate.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
My best friend is rejecting me.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
I am basically unlovable.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
I am not a dependable person.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
I was boring my friend tonight.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
I am not worthy of my best friend's love and attention.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
I can't keep my best friend interested in me.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
I will never get my best friend to give me what I need.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
I am worthless.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>
I will never get the support I need from my best friend.	Y	<input type="checkbox"/>	N	<input type="checkbox"/>

Please think about how you would feel AFTER this event, if it actually happened to you. For each of the following items, mark the box "yes" if you would feel the emotion and the box "no" if you wouldn't feel the emotion. Please work quickly.

If this situation had actually happened, would you feel:

	Yes	No		Yes	No
Angry	<input type="checkbox"/>	<input type="checkbox"/>	Sad	<input type="checkbox"/>	<input type="checkbox"/>
Nervous	<input type="checkbox"/>	<input type="checkbox"/>	Indifferent	<input type="checkbox"/>	<input type="checkbox"/>
Unloved	<input type="checkbox"/>	<input type="checkbox"/>	Unemotional	<input type="checkbox"/>	<input type="checkbox"/>
Worried	<input type="checkbox"/>	<input type="checkbox"/>	Resentful	<input type="checkbox"/>	<input type="checkbox"/>
Annoyed	<input type="checkbox"/>	<input type="checkbox"/>	Afraid	<input type="checkbox"/>	<input type="checkbox"/>
Rejected	<input type="checkbox"/>	<input type="checkbox"/>	Irritated	<input type="checkbox"/>	<input type="checkbox"/>
Tense	<input type="checkbox"/>	<input type="checkbox"/>	Helpless	<input type="checkbox"/>	<input type="checkbox"/>
Lonely	<input type="checkbox"/>	<input type="checkbox"/>	Lost	<input type="checkbox"/>	<input type="checkbox"/>
Disappointed	<input type="checkbox"/>	<input type="checkbox"/>			

Imagine that you and your best friend are not getting along very well lately and that you have been arguing much more than usual. This morning at school, the two of you had another argument. Later, you find your best friend hanging around with a new group of friends. They look like they are having a great time together, laughing and joking around. You go up to your best friend and the others, but they ignore you.

How stressful would you find this event?

1.....2.....3.....4.....5.....6.....7
 Not at all Extremely

For each of the following statements, what would you think if this situation with your best friend had actually happened? Check the box "Y" (Yes) if you would have that thought, and the box "N" (No) if you wouldn't have that thought. Please work quickly.

If this situation with your best friend had actually happened, would you think:

My best friend is unreliable.	Y <input type="checkbox"/>	N <input type="checkbox"/>
My best friend is insensitive.	Y <input type="checkbox"/>	N <input type="checkbox"/>
My best friend is cold.	Y <input type="checkbox"/>	N <input type="checkbox"/>
My best friend doesn't understand how I feel.	Y <input type="checkbox"/>	N <input type="checkbox"/>
My best friend is unresponsive.	Y <input type="checkbox"/>	N <input type="checkbox"/>
My best friend is hostile.	Y <input type="checkbox"/>	N <input type="checkbox"/>

My best friend doesn't care about me any more.	Y <input type="checkbox"/>	N <input type="checkbox"/>
My best friend can't be trusted.	Y <input type="checkbox"/>	N <input type="checkbox"/>
I am basically unlovable.	Y <input type="checkbox"/>	N <input type="checkbox"/>
I am not a dependable person.	Y <input type="checkbox"/>	N <input type="checkbox"/>
I made my best friend react this way.	Y <input type="checkbox"/>	N <input type="checkbox"/>
I am not worthy of my best friend's love and care.	Y <input type="checkbox"/>	N <input type="checkbox"/>
I will never get my best friend to give me what I need.	Y <input type="checkbox"/>	N <input type="checkbox"/>
I am worthless.	Y <input type="checkbox"/>	N <input type="checkbox"/>
I will never get the support I need from my best friend.	Y <input type="checkbox"/>	N <input type="checkbox"/>
I am incapable of trusting others.	Y <input type="checkbox"/>	N <input type="checkbox"/>

Please think about how you would feel AFTER this event, if it actually happened to you. For each of the following items, mark the box "yes" if you would feel the emotion and the box "no" if you wouldn't feel the emotion. Please work quickly.

If this situation had actually happened, would you feel:

	Yes	No		Yes	No
Angry	<input type="checkbox"/>	<input type="checkbox"/>	Sad	<input type="checkbox"/>	<input type="checkbox"/>
Nervous	<input type="checkbox"/>	<input type="checkbox"/>	Indifferent	<input type="checkbox"/>	<input type="checkbox"/>
Unloved	<input type="checkbox"/>	<input type="checkbox"/>	Unemotional	<input type="checkbox"/>	<input type="checkbox"/>
Worried	<input type="checkbox"/>	<input type="checkbox"/>	Resentful	<input type="checkbox"/>	<input type="checkbox"/>
Annoyed	<input type="checkbox"/>	<input type="checkbox"/>	Afraid	<input type="checkbox"/>	<input type="checkbox"/>
Rejected	<input type="checkbox"/>	<input type="checkbox"/>	Irritated	<input type="checkbox"/>	<input type="checkbox"/>
Tense	<input type="checkbox"/>	<input type="checkbox"/>	Helpless	<input type="checkbox"/>	<input type="checkbox"/>
Lonely	<input type="checkbox"/>	<input type="checkbox"/>	Lost	<input type="checkbox"/>	<input type="checkbox"/>
Disappointed	<input type="checkbox"/>	<input type="checkbox"/>			

Appendix H
ANOVA Summary Tables

Table H 1

Repeated Measure MANOVA Summary Table: Attachment styles as a function of gender and target.

Source of Variance	Wilks' Lambda	Hypothesis Df	Error df	F
Multivariate				
Sex	.98	4.00	156.00	.79
Target	.79	8.00	152.00	5.18***
Target x Sex	.93	8.00	152.00	1.35
Univariate				
TARGET	Mean Square ^a	Hypothesis ^a Df	Error ^a df	F ^a
Security	50.67	1.91	302.87	20.12***
Preoccupied	.58	1.95	310.46	.37
Dismissing	18.70	1.98	314.33	7.90***
Fearful	8.30	1.83	290.12	4.20*

Note: ^a Greenhouse-Geisser Correction

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

Table H 2

ANOVA Summary Table: Depressed feelings as a function of Sex, Security to Mother, & Security to Peer.

Source	Sum of Squares	df	Mean Square	F
Sex	1.56	1	1.56	2.40
Secure peer	2.38	1	2.38	3.68 ⁺
Secure Mother	2.82	1	2.82	4.36*
Sex x Secure Peer	1.33	1	1.33	2.06
Sex x Secure Mother	.72	1	.72	1.11
Secure Peer x Secure Mother	6.89	1	6.89	10.65**
Sex x Secure Peer x Secure Mother	0.08	1	0.08	.12
Within	104.22	161	.65	

* $p < .05$, ** $p < .01$, *** $p < .001$, ⁺ $.05 < p < .10$

Table H 3

ANOVA Summary Table: Depressed feelings as a function of Sex, Security to Father, & Security to Peer

Source	Sum of Squares	df	Mean Square	F
Sex	1.65	1	1.65	2.53
Security Father	3.65	1	3.65	5.60*
Security Peer	.92	1	.92	1.41
Sex x Security Father	0.03	1	0.03	.043
Sex x Security Peer	.65	1	.65	.99
Security Father x Security Peer	.15	1	.15	.24
Sex x Security Father x Security Peer	4.51	1	4.51	6.92**
Within	100.33	154	.65	

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

Table H 4

ANOVA Summary Table: Depressed feelings as a function of Sex, Security to Mother, & Security to Father.

Source	Sum of Squares	df	Mean Square	F
Sex	2.83	1	2.83	4.70*
Security Mother	1.89	1	1.89	3.14
Security Father	0.01	1	0.01	.01
Sex x Security Mother	0.06	1	0.06	.11
Sex x Security Father	.41	1	.41	.68
Security Mother x Security Father	6.40	1	6.40	10.61***
Sex x Security Mother x Security Father	1.34	1	1.34	2.22
Within	91.60	152	.60	

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

Table H 5

ANOVA Summary Table: Depressed feelings as function of Sex, Security to Mother, & Security to Father for adolescents living with both their Mother & Father.

Source	Sum of Squares	df	Mean Square	F
Sex	1.804	1	1.80	3.03*
Security Mother	0.06	1	0.06	.11
Security Father	.25	1	.25	.42
Sex x Security Mother	.43	1	.43	.72
Sex x Security Father	.62	1	.62	1.04
Security Mother x Security Father	3.19	1	3.19	5.36*
Sex x Security Mother x Security Father	.43	1	.43	.71
Within	58.90	99	.60	

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

Table H 6

ANOVA Summary Table: Depressed feelings as a function of Sex, Security to Mother & Security to Father, & adolescents living with or without Father.

Source	Sum of Squares	df	Mean Square	F
Sex	2.63	1	2.63	4.18*
Security Mother	1.85	1	1.85	2.94
Security Father	0.01	1	0.01	.01
Livedad	.82	1	.82	1.31
Sex x Security Mother	0.00	1	0.00	.01
Sex x Security Father	.17	1	.17	.28
Security Mother x Security Father	3.15	1	3.15	5.01*
Sex x Security Mother x Security Father	1.33	1	1.33	2.11
Sex x Livedad	0.03	1	0.03	.04
Security Mother x Livedad	.64	1	.64	1.01
Sex x Security Mother x Livedad	.31	1	.31	.49
Security father x Livedad	.27	1	.27	.43
Sex x Security Father x Livedad	.49	1	.49	.79
Security Mother x Security Father x Livedad	0.02	1	0.02	.03
Sex x Security Mother x Security Father x Livedad	0.05	1	0.05	.09
Within	86.70	138	.63	

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

Table H 7

ANOVA Summary Table: Depressed feelings as a function of gender and number of Targets to which adolescents are securely attached.

Source	Sum of Squares	df	Mean Square	F
Sex	2.56	1	2.56	3.89*
Security to Target	7.51	3	2.50	3.80*
Sex x Security to Target	.17	3	0.06	.09
Within	100.07	152	.66	

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