The Role of Adolescent-Parent Attachment and Conflict Resolution Strategies in Late Adolescents' Romantic Relationships

A Thesis

in

The Department

of

Psychology

Presented in Partial Fulfilment of the Requirements
for the Degree of Doctor of Philosophy at
Concordia University
Montreal, Quebec, Canada

October 25, 2004

Your file Votre référence
ISBN: 0-494-09954-2
Our file Notre référence
ISBN: 0-494-09954-2

ABSTRACT

The Role of Adolescent-Parent Attachment
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Late Adolescents' Romantic Relationships

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Concordia University, 2004

Two studies were conducted to assess the role of adolescent-parent attachment and conflict resolution strategies in late adolescents' romantic relationships. Study 1 (n = 248; female = 171; mean age = 18.59; SD = 1.09) investigated relationship status (current vs. previous), length of relationship (< 1 year vs. ≥ 1 year), and sex of the participants as moderating variables in the link between adolescent-parent and romantic partner attachment dimensions. In Study 2 (n = 97; female = 76; mean age = 18.41; SD = .81), results of Study 1 were replicated. Additionally, conflict resolution strategies with parents were examined as a mediational variable in the links between parental attachments and romantic partner attachments. Although the hypothesized mediational model did not prove significant, results from both of these studies suggest direct and indirect links between adolescent-parental and romantic partner attachment dimensions. Anxious attachment with mother was positively associated with anxious attachment with romantic partner. Anxious and avoidant attachments with mother were associated with *avoidant* attachment with romantic partner only indirectly via the use of collaboration and avoidance/capitulation conflict resolution strategies with mother. Anxious attachment to father was positively associated with anxious adolescent attachment with romantic partner and negatively associated with avoidant romantic partner attachment. Additionally, relationship status may moderate the link between parental attachment and

anxious romantic partner attachment. For participants reporting on a previous romantic relationship, but not on a current romantic relationship, avoidant attachment with mother and father (albeit in different directions) were associated with anxious attachment with romantic partner.

Acknowledgements

I could not have accomplished this major task of writing a doctoral thesis without the constant love, support, and encouragement of my most important attachment figures. Thank you mom and dad for always being there when I needed you and telling me I could do whatever I set my mind to do. Thank you Jan, my life partner, for your remarkable patience with me, your constant encouragement to me, and your wonderful love for me. Without you this would not be possible (we did it!).

I would also like to thank those professors who have contributed greatly to my academic career as a graduate student and have inspired me in my learning. To Dorothy Markiewicz, Anna Beth Doyle, Alex Schwartzman, Jane Stewart and Dolores Pushkar, I give my thanks and appreciation.

Finally, I would also like to express my gratitude to the Conseil Quebecois de la Recherche Sociale – Fonds de Recherche sur la Societe et al Culture who made this research possible through their generous funding throughout my four years in the doctoral program.

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The Role of Parent-Adolescent Attachment and Conflict Resolution Strategies in Late Adolescents' Romantic Relationships

An important part of adolescence is the acquisition of experience in romantic relationships. These relationships play an integral role in the adolescent's social development (Connolly & Goldberg, 1999), adjustment (Overbeek, Vollebergh, Engels & Meeus, 2003; Zimmer-Gembeck, Siebenbruner & Collins, 2001), and future adult intimate relationships (Brown, 1999; Collins, Cooper, Albino, & Allard, 2002). Indeed, by late adolescence, the ability to establish a close, intimate bond with a romantic partner is a noteworthy predictor of life satisfaction and emotional well-being (Moore & Leung, 2002). While the importance of these relationships has been established, little is known about the course and nature of, or the influencing factors on, adolescent romantic relationships (Shulman & Scharf, 2000).

The purpose of this study is to investigate factors influencing adolescent romantic relationships by clarifying the role of adolescent-parent attachment in the attachment quality of late adolescents' romantic relationships. This is first accomplished by conceptualizing attachment theory as an emotion regulation theory where the impact of emotion in a romantic relationship (e.g., reports on current vs. previous romantic relationships) on the association between adolescent-parent attachments and adolescent-romantic attachments is explored. Second, the identification and investigation of conflict and problem solving strategies as a possible mediation variable in this association will also be explored.

In the following sections, I will first review attachment theory as it pertains to romantic relationships, and its conceptualization as a theory of emotion regulation,

followed by a section on the measurement of attachment. Then I will highlight the literature on the course and nature of adolescent romantic relationships and underscore the literature on conflict resolution strategies as they pertain to attachment and romantic relationships. Finally, a summary of the hypotheses for this study will be given, followed by sections on the method, plan of analyses, results, and a general discussion of those results.

Attachment Theory and Coherence of Functioning Across Relationships

Attachment theory has been applied to adult love relationships with much empirical support and is perhaps the strongest model available for understanding the nature of adult love relationships and intimacy (Collins & Read, 1990; Kobak & Hazan, 1991; Johnson, Makinen, & Millikin, 2001; Shaver & Hazan, 1993). By outlining the adaptive need for contact, comfort, security and closeness, attachment theory explains not only why couples bond but also what causes them distress, thus providing a useful map for adult intimate relationships (Johnson, Hunsley, Greenberg, & Schindler, 1999).

The concept of attachment was developed by John Bowlby (1969/1982, 1973, 1980) in his observation of mothers and their infants as a means to account for the human tendency to form strong affectional bonds. Attachment theory posits that a behavioural system has evolved in humans that has been naturally selected to maintain proximity between infants and their primary caregivers in order to ensure the infant's safety and survival. According to this theory, when infants perceive their caregivers as responsive and available they are able to stray from their "secure base" and explore the environment with confidence. Alternatively, when infants perceive their caregivers as insufficiently available or responsive their behavioural system activates attachment behaviours in order

to restore proximity with their caregivers. Over repeated interactions, individual differences in attachment bonds emerge based on infants' expectations regarding caregiver responsiveness and dependability.

Ainsworth and her colleagues (1971, 1978), using the Strange Situation paradigm (a procedure that elicits a child's attachment behaviors through brief separations and reunions with the caregiver), identified three types of infant-caregiver attachment styles; secure, anxious/avoidant, and anxious/ambivalent. Later, a fourth category was identified; insecure/disorganized attachment (Main & Solomon, 1990). Van Ijzendoorn, Goldberg, Kroonenberg, and Frankel (1992) in a meta-analysis of Strange Situations classifications found 55% secure, 23% avoidant, 8% anxious-ambivalent, and15% disorganized.

The type of attachment experienced by the child is first a property of a particular infant-caregiver relationship. However, through repeated interactions as the infant grows, the child begins to internalize the expectations, joys, disappointments, and losses with the attachment figure and organize them into what Bowlby (1969/1982, 1973) called "internal working models," which become a property of the child him/herself (Bowlby, 1988). These models are mental representations as to whether or not the world is a safe place, whether close others are dependable, and whether the self is viewed as lovable and protected, which are carried forward into new relationships where they guide expectations, perceptions and behaviour. Thus, it is through this mechanism that the influence of the initial parent-child attachment on romantic relationships is thought to take place (Collins & Read, 1990; Shaver & Hazan, 1988).

Ample research has investigated the influence of internal working models on *adult* romantic relationships. Hazan and Shaver (1987) argued that individual differences in how romantic love is experienced and manifested are due to differences in past attachment histories. In their study, they found three main types of love relationships that parallel the three main infant attachment classifications of Ainsworth et al. (1978). Furthermore, results also indicated that people with different romantic attachment orientations entertained different beliefs about the course of romantic love, the availability and trustworthiness of love partners and their own love-worthiness, thus reflecting individuals' working models. Finally, they also found that people experienced love differently in a manner consistent with their attachment style.

Hazan and Shaver's (1987) landmark study has been a springboard for other researchers to investigate the links between adult attachment styles to a variety of outcome variables. With respect to romantic relationships, subsequent studies have replicated and extended Hazan and Shaver's results by connecting adult attachment styles to romantic relationship qualities in ways predictable from attachment theory. Thus, profiles of the three attachment styles have begun to emerge. In general, individuals with *secure* attachment styles have been shown to be mediated by a working model in which self is considered worthy of care and that the partner is esteemed (Feeney & Noller, 1990; Hazan & Shaver, 1987). In comparison to the insecure groups, they are more trusting of their partners and do not fear closeness (Mikulincer, 1998). They also report higher marital satisfaction and intimacy than insecure groups and experience love relationships as happy and friendly (Feeney, 1994; Hazan & Shaver, 1987; Pistole, Clark & Tubbs,

1995). Finally, securely attached individuals have been found to be less likely to divorce or separate (Kirkpatrick & Hazan, 1994).

Individuals with an *anxious/ambivalent* style of attachment, on the other hand, show a different profile. In contrast to a secure attachment style, the working model of an individual with an anxious/ambivalent style has been shown to be one of low self-worth while the partner is held in esteem or even idealized (Feeney & Noller, 1990; Hazan & Shaver, 1987). They put a high value on passionate love, and seek security in their relationships (Mikulincer, 1998; Mikulincer & Erev, 1991). Love relationships are experienced as involving obsession, extreme sexual attraction, and a desire for union (Hazan & Shaver, 1987). Individual with anxious/ambivalent attachment styles tend to report less satisfaction and more conflict and ambivalence over their relationships (Levy & Davis, 1988; Simpson, 1990).

Working models of *dismissing avoidance* individuals include a high sense of self-worth and self-reliance but a mistrust of other people (Hazan & Shaver, 1987). They report a lower desire for intimacy and passion than other attachment groups, remain more distant, and seek more control in their relationships (Mikulincer, 1998; Mikulincer & Erev, 1991). Individuals with avoidant attachment style lend themselves to poor communication in marriage and are associated with misunderstanding and conflict (Mikulincer & Florian, 1999). Within their relationship experience, these persons describe less satisfaction, interdependence, trust, intimacy and commitment than those who are securely attached (Feeney & Noller, 1990, 1991: Hazan & Shaver, 1987, 1990; Simpson, 1990).

In addition to this line of research, a few studies have also investigated the association between attachment history with parent and romantic relationship quality in adulthood. Perceptions of the quality of participants' relationships with each parent and the parents' relationship with each other, in Hazan and Shaver's (1987) study, were found to be the best predictors of adult romantic attachment. Secure subjects reported warmer relationships with both parents and between their two parents than insecure subjects. Avoidant and anxious ambivalent subjects differed from one another in that avoidant subjects described their mothers as cold and rejecting while anxious/ambivalent subjects saw their fathers as unfair. Feeney and Noller (1990) in their replication of this study found similar results with the addition of long separations from mother to be more likely for individuals with an avoidant attachment style.

Links have also been made between internal working models of the child-parent relationship as assessed by the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1996) and adult romantic relationship quality. Cohn, Silver, Cowan, Cowan, & Pearson (1992) found that for men, but not for women, working models of childhood attachment relationships were associated with the quality of couple relationships in adulthood in both laboratory and home observations. However, no association was found between the interview measure and a self-report questionnaire of marital satisfaction. Owens, Crowell, Pan, Treboux, O'Conner, and Waters (1995) also found links between AAI classifications and working models of romantic relationships as inferred from the Current Relationship Interview (CRI), a measure designed to parallel conceptually with the AAI (Crowell & Owens, 1996).

Attachment Styles and Adolescent Romantic Relationships

While numerous studies of adult relationships have made the link between internal working models and adult love relationships (for review see Feeney, 1999), fewer studies have looked primarily at *adolescents*. Armsden and Greenberg (1987), using self-report questionnaires, and Bartholomew and Horowitz (1991), using a semi-structured interview investigated the relationship between late adolescents' family and peer attachment representations. Results indicated that attachment styles were meaningfully related but not reducible to representations of childhood experiences. However, in both of these studies, peer attachment representations included friends as well as romantic partners.

Furman and his colleagues (Furman, 1999; Furman & Wehner, 1994, 1997; Furman, Simon, Shaffer, and Bouchey, 2002) investigated links between representations of parents, friends and romantic partners through "relational views". Relational views are thought to incorporate expectations of all the behavioural systems, including caregiving, affiliation, sexual, and attachment. Results from these studies suggest that adolescents' representations of relationships with their parents are inconsistently related to their representations of romantic relationships. In a sample of middle adolescents, the degree of concordance in the working model classifications derived from interviews regarding parents and romantic partners were not significant. However, parent support was significantly related to dyadic support in romantic relationships. When questionnaires were used, links between styles for parents and romantic partners were significant only for the preoccupied scores (Furman, Simon, Shaffer, and Bouchey, 2002). In a previous study (Furman & Wehner, 1997) with a middle adolescent sample, correlations were low

between parent-adolescent relationships and romantic relationships, with only two of the six correlations between corresponding styles significant. For late adolescents, however, the correlations were higher with four of the six correlations between corresponding styles significant. These authors suggest that links between views of romantic relationships and relationships with parents may be more apparent in late adolescence or adulthood, as romantic relationships develop and caregiving and attachment components become more important.

A few longitudinal studies have also begun to document this relationship in adolescence. In the tradition of the adult literature that investigated the links between internal working models of romantic relationships and the quality of romantic relationship, Collins, et al. (2002), found that adolescents with avoidant attachment styles with romantic partners at age 13-19 engaged in fewer pro-relationship behaviors, and these were linked to poor relationship quality with a different romantic partner 5.5 years later. Other researchers have investigated links between internal working models with parents and later romantic relationships. Collins and Sroufe (1999) demonstrated that 16-year-olds who were more securely attached as infants (as assessed by the Strange Situation) were more likely to be dating, and to have closer and more sustained relationships with their dating partners, than those from the other attachment style groups. Roisman, Madsen, Hennighausen, Sroufe, and Collins (2001), using the AAI, found child-parent attachment working models at age 19 to be linked with observed behaviours and quality of interactions with romantic partners two years later. Furthermore, a link between parent-child dyadic behaviours observed at age 13 and the romantic relationship behaviours observed eight years later was mediated by the participants' age 19 child-

parent working models. Finally, Grossman, Grossman, Winter and Zimmerman (2002), also using the AAI, found that adolescent-parent internal working models at age 16 were linked with internal working models with romantic partner measured by the CRI six years later.

Attachment as Emotion Regulation

Adolescent romantic relationships, although brief, are thought to be emotionally intense experiences (Feiring, 1996). Seiffge-Krenke (1995) found adolescents, 12- to 17-years of age, generally described their experiences of being in love with much positive affect. However, girls expressed emotions more often, particularly negative ones, and perceived being in love as being more unpleasant and paralysing than did boys. Shulman and Scharf (2000) also found gender differences in adolescents' emotional experience of romantic relationships. Girls reported a higher level of affective intensity in their romantic relationships than did boys, across all age groups in their study of cohorts 14, 16, and 19 years of age. Additionally, adolescents who were currently dating reported higher affective intensity with their partner than adolescents reporting on a previous relationship, in each cohort. Thus, according to this study, the emotional intensity of a relationship appears to be particularly salient for girls, and for both male and female adolescents in ongoing dating relationships.

The ability to tolerate intense affect is essential to making functional decisions, especially in conflictual situations (Keiley & Seery, 2001; Tomkins, 1963). Therefore, how adolescents manage these intense emotions may be particularly important to the gaining and maintaining of romantic relationships, and underscores the importance of the role of emotions in adolescent romantic lives. With this in mind, the theoretical

framework used in investigating adolescent romantic relationships should account for individual differences in emotion regulation, and explore possible differences according to gender and relationship status (e.g., ongoing vs. prior).

Attachment theory has been conceptualized as a theory about emotion and emotion regulation (Sroufe & Waters, 1977, Mikulincer, Shaver & Pereg, 2003). According to Tomkins (1963), emotion is regulated to reduce unfavourable and increase favourable conditions, thus allowing individuals to endure or tolerate their feelings. In attachment theory, infants experience distress when caregivers are inaccessible, distant, or disapproving. When caregivers are available and responsive, however, infants feel secure and comfortable. According to Bowlby, activation of the attachment system in infants motivates behaviours (i.e., the expression of negative affect) that signal distress to the caregiver. These behaviours are designed to reduce arousal or anxiety. The caregiver's response to these signals, or lack thereof, influences the child's emotional state and ultimately the development of affect regulation (Reis & Patrick, 1996).

For infants with repeated experiences of responsive caregivers, the expression of negative emotion serves as an adaptive function. This engenders an ability to constructively modulate negative affect in accordance to realistic appraisals, typical of secure attachment (Fuendeling, 1998). Conversely, for infants who repeatedly experience inappropriate responses to their distress signals, negative emotion must be adapted by either hyperactivation or deactivation, typical of anxious/ambivalent and avoidant attachment styles (Kobak, Cole, Ferenz-Gillies, Fleming & Gamble, 1993). In this way, rules for regulating distress-related affect evolve in the context of parental responsiveness to the child's signals of distress. Repeated experiences of emotional

expression and its reception also lay the foundations for working models of self and other (Bowlby, 1988). Internal working models are then evidenced in attachment styles. That is, the internalization of a particular history of attachment experiences and consequent reliance on a particular attachment-related strategy of affect regulation results in the systematic pattern of relational expectations, emotions, and behaviour (Mikulincer, Shaver & Pereg, 2003). Thus, the individual's working models of attachment and attachment styles are closely linked to concurrent rules for regulating distress (Kobak & Sceery, 1988).

In adulthood, attachment styles reflect different styles of affect regulation in interpersonal settings (Sroufe & Waters, 1977). This is especially evident with affect evoked by issues related to closeness, separation, intimacy, and relationship security – in short, emotions in romantic relationships (Reis & Patrick, 1996). Research has shown that when stressed, a time when the attachment system is most likely to be activated, individuals with different attachment styles respond in dissimilar ways. Individuals classified as secure tend to acknowledge their dilemmas and seek out others for support (Mikulincer, 1997). They have also been shown to be better able to regulate negative emotion in both problem solving and social contexts (Koback & Hazan, 1991). They are able and willing to trust romantic partners and share ideas and feelings with them in a flexible, appropriate manner that is sensitive to their partners' needs (Mikulincer & Nachshon, 1991).

Anxious/ambivalent individuals, on the other hand, have an exaggerated desire for closeness and are more likely to be clinging, rigid, and hyper-vigilant in attempts to remain close to others and become overly dependent on romantic partners (Feeney &

Noller, 1990; Mikulincer, Florian, & Tolmacz, 1990). They readily express fear and anger, use disclosure inappropriately, and feel unappreciated by both romantic partners and co-workers (Hazan & Shaver, 1990; Mikulincer et al., 1990). To reduce tension they have been shown to drink alcohol more than individuals that are securely attached and engage in binge eating under stress (Brennan & Shaver, 1995).

In contrast, individuals with an avoidant attachment style fail to focus on feelings and do not self-disclose (Mikulincer & Nachshon, 1991). They often direct attention away from distress through work (Hazan & Shaver, 1990), keep emotion at low levels of intensity (Bartholomew & Horowitz, 1991; Feeney & Noller, 1991), or dismiss the importance of the relationships altogether (Kobak & Sceery, 1988). During an anxiety-producing laboratory situation it was demonstrated that they do not seek comfort from their partners (Simpson, Rholes, & Nelligan, 1992). Furthermore, they have been shown to drink alcohol more frequently and in larger quantities as a means of reducing tension than other attachment styles and avoid emotional dependency and commitment in romantic relationships by frequently fantasizing about sex with someone else and engaging in relatively brief sexual encounters (Brennan & Shaver, 1995).

Attachment theory posits that it is the innate need for security, as well as the concomitant vulnerability to rejection by, or loss of, the attachment figure, that underlies the habitual responses individuals may have with their partners (Johnson & Greenberg, 1995). In this way, attachment theory helps to explain how people's emotional experience is connected to their meaning system and subsequent behaviour in relationships. It also provides an explanatory way to organize the emotional processes

within each person, their interpretations of their partners' behaviour, and the reciprocal impact these individuals have on one another (Pistole, 1994).

One way in which attachment needs affect emotions is through appraisal. Lazarus and Folkman (1984) distinguish between two stages of appraisal, primary and secondary. Primary appraisal refers to the evaluation of a stimulus event as positive, negative, or neutral for the self. Secondary appraisal pertains to perceived ability and resources for coping with the threatening stimulus. Both types of appraisals influence emotions (Lazarus, 1991), and both are involved in the operation of the attachment system. Collins and Read (1994) point out that attachment-related events typically initiate immediate, automatic emotional reactions and that these emotional reactions reflect primary appraisals of events on the satisfaction of attachment needs or goals.

For example, threatened or actual loss of a loved one usually elicits emotions such as sadness, anger, or jealousy. During relationship dissolutions individuals with different attachment styles have been shown to behave differently. Individuals anxiously attached display higher levels of protest and despair than other attachment styles (Fraley & Davis, 1994, as cited in Furman & Flanagan, 1997); highly avoidant individuals, men in particular, report significantly less emotional distress (Simpson, 1990). This is consistent with attachment style differences in reaction to separation reminders (e.g., asking people to imagine vividly their being separated from a loved one). Under such circumstances, Mikulincer, Florian, Birnbaum and Malishkewitz (2002) found that anxious persons reacted to separation reminders with heightened accessibility of death-related thoughts. Fraley and Shaver (1997) found that avoidant individuals were not only better able to

stop thinking about a break-up but were also able to lower the level of their autonomic response to breaking up.

Similar to internal working models of self and other, secondary appraisals reflect assessments of personal and social coping resources. That is, negative models of self involve perceptions of being unlovable and personally inadequate to contend with threat. Negative models of others entail ideas that significant others are unlikely to be supportive (Bartholomew & Horowitz, 1991; Feeney & Noller, 1990; Hazan & Shaver, 1987). Taken together these studies support attachment theory's conceptualization of individual differences in emotional behaviour within intimate relationships, especially when the attachment system is activated during times of stress.

Attachment theory's conceptualization and the empirical support of generalization of relationship functioning and emotion regulation makes it particularly appropriate for understanding the development of adolescent romantic relationships. For these reasons, in this study, the factors contributing to the quality of adolescents' attachment to romantic partners will be explored. Although limited research has explicitly addressed the contribution of child-parent attachment to adolescent romantic relationships, this research has largely consisted of interview and intense coding strategies that look at attachment categorically, measures which do not always correlate with self-report measures (e.g., Cohn et al., 1992). The links between adolescent-parent and adolescent-romantic partner attachment categories using self-report measures are inconclusive while links between adolescent-parent and romantic partner attachment dimensions have not been tested. Of the few studies that used self-report measures to establish the link between internal working models and the quality of romantic relationships, most have relied on

questionnaires focusing on romantic partner rather than parental attachment styles. Furthermore, none of these studies have delineated the conditions in which adolescent-parent attachments are most relevant to adolescent romantic relationships nor the mechanisms through which this contribution may take place.

The present thesis builds on prior research by investigating if and in what way adolescent-parent attachment dimensions, rather than categories, are associated with adolescent-romantic partner attachment dimensions. This association was tested using a self-report questionnaire measure that specifically targets both of these types of relationships. Additionally, three moderating variables were explored in order to more specifically delineate the conditions in which adolescent-parent attachments are most relevant to adolescent romantic relationships. These variables include sex, length of the romantic relationship, and whether or not the adolescent was reporting on a current or past romantic relationship at the time of testing. Finally, adolescent-parent conflict resolution strategies, also conceptualized as a means of emotion regulation, are identified as a possible mechanism through which the contribution of adolescent-parent attachment style takes place.

Measuring Adult Attachment

The measurement of adult attachment has emerged from two streams of research: (1) research dealing with attachment in nuclear families, which has typically relied on attachment interviews, and (2) research focusing on attachments to contemporary peers or romantic partners that has mainly used self-report measures (Simpson & Rholes, 1998). The foundations for both of these streams lie in Bowlby's attachment theory and in Ainsworth's Strange Situation (Ainsworth, et al., 1978).

In the first line of research, the most widely used interview measure of adult attachment has been the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985). This interview was created to asses the security of the adult's over-all working model of attachment based on the interviewees' account of their childhood attachment-related experiences and the meaning they currently assigned to those past experiences. The interview's scoring system was developed by the examination of 44 parental interviews for which the Strange Situations classifications of the interviewees' infants had already been determined. This scoring system focuses primarily on discourse properties (e.g. coherence, anger) of childhood attachment experiences rather than on prepositional content of what is said and therefore may not be recognized or acknowledged by the interviewee. Such coding classifies adults into three attachment categories (secure-autonomous, preoccupied, dismissing) that parallel the three infant attachment patterns (secure, anxious/ambivalent, avoidant) identified by Ainsworth et al. (1978). A fourth category in the AAI (unresolved) parallels a disorganized infant pattern that was later established (Main & Solomon, 1990). In this way, the AAI was explicitly developed to predict the Strange Situation behaviour of the respondents' infants (Simpson & Rholes, 1998). Subsequent research has repeatedly established that the AAI adult classifications for interviewees do in fact predict patterns of attachment of the interviewees' infants (for review, see van IJzendoorn, 1995).

A meta-analysis of the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1996) assessing adult patterns of attachment revealed a distribution of classifications similar to that found in infancy: 58% secure, 24% dismissing, and 18% preoccupied (Bakermans-Kranenburg & van Ijzendoorn, 1993). Findings of concordance

between the AAI and infant strange situation for *adolescents* have been mixed, from high concordance to none at all (Main, 1997; Weinfield, 1996 as cited in Allen & Land, 1999). Zimmermann, Fremmer-Bombik, Spangler, and Grossmann (1997) found that there was no significant relationship between infant strange situation and the AAI attachment representations at age 16. However there was a relationship between the infant strange situation and representations of parent's availability and reactions when distressed or when experiencing problems at age 10. This, in turn, was related to the AAI attachment representations. Results of a study by Waters, Merrick, Treboux, Crowell, and Albersheim (2000) also help to explain this discrepancy. Seventy-two percent of the infants received the same secure versus insecure attachment classification at age 20 (kappa = .44). Forty-four percent of the infants whose mothers reported negative life events changed attachment classifications from infancy to early adulthood. Only 22% of the infants whose mothers reported no such events changed classifications. Adolescent attachment organization may be significantly influenced both by developmental changes and by challenges in the current environment (Allen & Land, 1999).

In the second line of research, Hazan and Shaver (1987) were the first to apply Ainsworth's infant typology to adult romantic relationships as a means of explaining individual differences in love relationships. Reasoning that orientations to romantic relationships might be an outgrowth of previous attachment experiences, they developed a short self-report measure asking participants to chose one of three paragraphs, extrapolated from the three infant patterns, which best described their important romantic relationships. The distribution of classifications was similar to that of infant attachment styles: 56% secure, 25% avoidant, 19% anxious/ambivalent. Collins and Read (1990)

and Simpson (1990) developed continuous scales based on ratings of sentences contained in Hazan and Shaver's paragraphs. These and other authors (e.g., Levy & Davis, 1988; Feeney & Noller, 1990; Kobak & Sceery, 1988) have demonstrated how each attachment style correlated with other important relationship constructs in predictable ways consistent with attachment theory.

In reviewing the literature of the time, Bartholomew (1990) highlighted an important difference between the two lines of research (family/interview and romantic relationships/questionnaires). She concluded that interview and questionnaire methods differed in their assessment of dismissing-avoidant individuals and proposed two distinct forms of avoidance: one motivated by a defensive self-sufficiency (dismissing) and the other motivated by a fear of rejection (fearful). Drawing on Bowlby's (1973) idea of internal working models, in an expanded model of attachment, Bartholomew identified two continuously distributed (positive vs. negative) attachment dimensions: Model of Self and Model of Other. The first indicates the degree to which individuals have internalized a sense of their own self-worth and, thus, expect others to respond to them positively; the second indicates the degree to which others are expected to be available and supportive (Griffin & Bartholomew, 1994). Thus, a negative model of *self* is closely associated with *anxiety about abandonment* while a negative model of *other* is associated with the tendency to *avoid closeness* in relationships (Brennan, Clark & Shaver, 1998). Strong support for convergent and discriminate validity has been established for the self- and other-model attachment dimensions (Griffin & Bartholomew, 1994).

The two attachment dimensions that represent general expectations about the worthiness of the self and the availability of others define four prototypical attachment

strategies for regulating felt security in close relationships: secure, preoccupied, avoidant, and fearful (Bartholomew, 1990; Bartholomew & Horowitz, 1991). Individuals with secure attachment patterns are thought to have a positive view of self and others (low anxiety and low avoidance); those with dismissing attachment patterns have a positive view of self but negative view of others (low anxiety and high avoidance). Those with preoccupied attachment patterns have a negative view of self and positive view of other (high anxiety and low avoidance), and those with fearful attachments have a negative view of self and a negative view of others (high anxiety and high avoidance; see Figure 1). Three of these patterns (secure, preoccupied, and dismissing) are conceptually similar to the corresponding AAI categories and three of the patterns (secure, preoccupied, and fearful) are similar to Hazan and Shaver's secure, anxious/ambivalent, and avoidant categories (Bartholomew & Shaver, 1998).

The idea of self-reports assessing two dimensions that underlie attachment orientations is not new. Ainsworth et al.'s (1978) three major attachment categories (secure, anxious, and avoidant), from which Hazan and Shaver (1987) extrapolated for their self-report measure, were obtained using a discriminate function analysis from continuous rating scales used by coders to characterize the infants' behaviour. Thus, Ainsworth's three major attachment categories could be conceptualized as regions in a two-dimensional space defined by dimensions of Avoidance (discomfort with closeness and dependency) and Anxiety (crying, failing to explore confidently in the absence of other, and angry protest directed at mother during reunions; Brennan, Clark & Shaver, 1998). Hazan and Shaver's categories have also been shown to represent two dimensions. Simpson (1990) separated Hazan and Shaver's paragraphs into items where

Figure 1.

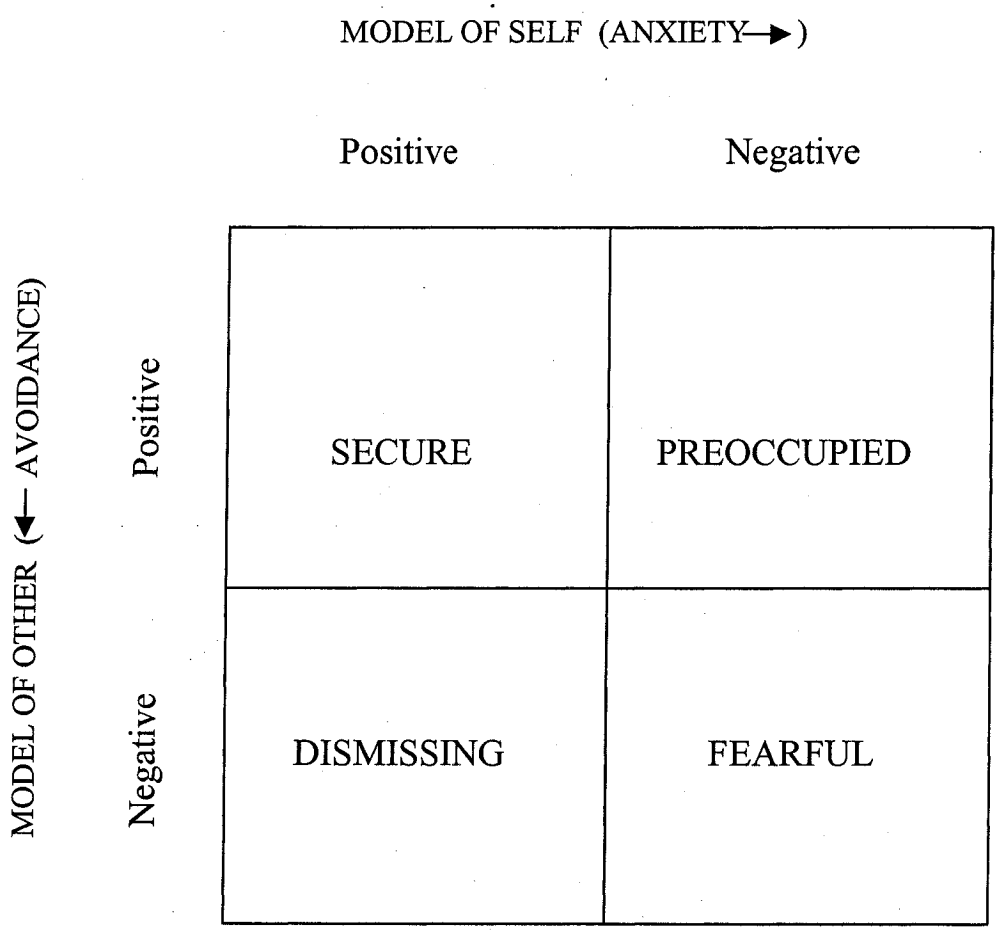

Figure 1: The four attachment styles conceptualized as Model of Self and Other (Bartholomew & Horowitz, 1991)

participants would agree or disagree to varying degrees. When these items were factor analyzed, a two-factor solution was obtained (Security versus Avoidance and Anxiety about Abandonment). Collins and Read (1990) performed a similar analysis and obtained a three-factor solution. However, two of the factors (discomfort with Closeness and Discomfort with Dependence on romantic partner) were significantly correlated and could be conceptualized as facets of avoidance (Brennan, Clark & Shaver, 1998).

Using the extant self-report attachment measures, Brennan, Clark and Shaver (1998) factor-analyzed all non-redundant attachment items and found two independent factors that corresponded to the already conceptualized Anxiety and Avoidance dimensions. Moreover, these dimensions were well represented by two 18-item scales on their measure, *Experiences in Close Relationships* (ECR; Brennan, Clark & Shaver, 1998). Thus, virtually all self-report measures of attachment load on anxiety and avoidance factors, which according to Crowell, Fraley and Shaver (1999), can be conceptualized by their cognitive/representational names, "model of self" and "model of other" or their affective-behavioural names, "anxiety" and "avoidance."

Apart from the different conceptualizations of dismissing-avoidant attachment, questionnaire measures of attachment differ from the AAI in a variety of ways, including the obvious difference in method (intensively coded interview transcripts vs. brief self-reports) as well as a difference in focus. Questionnaire measures typically assess orientations in the domain of romantic relationships and close relationships in general, while the AAI assesses working models of early child-parent relationships. Additionally, the AAI is thought to provide a fairly direct window onto attachment-related unconscious processes while questionnaires are assumed to focus only on conscious attachment-

related material. This difference, however, may be overstated since recent studies have found evidence that individual differences on self-report attachment measures are correlated with measurable unconscious processes consistent with attachment theory (for review see Shaver & Mikulincer, 2002). Nevertheless, classifications using questionnaire measures generally tend to be uncorrelated or, at best, moderately associated with AAI classifications (Bartholomew & Shaver, 1998; Crowell, Treboux, & Waters, 2000; Shaver, Belsky, & Brennan, 2000), and while they are related to shared central concepts of attachment theory they are not identical in meaning (Shaver & Mikulincer, 2002).

The Course and Nature of Adolescent Romantic Relationships

Although the nature and course of adolescent romantic relationships is not fully determined, several researchers have begun to chart the developmental course of heterosexual experiences in such relationships (e.g., Dunphy, 1963; Richards, Crowe, Larson, & Swarr, 1998). Generally, it is not until early adolescence that boys and girls begin to become interested in interacting more with the opposite sex with the average age of initiation into dating and the first romantic relationship being approximately age 14 (Zimmer-Gembeck, 1999). Typically, mixed-sex interactions occur first in groups that later evolve into group dating (several pairs engage in an activity together), which eventually result in the formation of romantic couples (Brown, Feiring, & Furman, 1999). Additionally, having a large network of opposite-sex friends increases the likelihood of developing a romantic relationship in later adolescence (Connolly, Furman, & Konarski, 2000). Studies indicate frequency of romantic relationships from early to late adolescence rises from approximately 33% in early adolescence, to approximately 70% in late adolescence (Furman & Wehner, 1997; Laursen & Williams, 1997). The length of

romantic relationships also increases with age. Young adolescents measure their romantic relationships in terms of days or weeks (Neider & Seiffge-Krende, 2001) whereas mid-adolescents report their relationships average 4 months (Feiring, 1996). Slightly older adolescents typically have relationships under a year with longer relationships gradually emerging as adolescents grow older (Levesque, 1993).

How adolescents experience and perceive their romantic relationships also appears to change over time. Younger adolescents typically report their romantic relationships more in terms of companionship and status, while older adolescents focus more on characteristics of intimacy, care, and support (Connolly & Goldberg, 1999; Shulman & Scharf, 2000). This change in perceptions of romantic relationships as adolescents grow older is consistent with two recently proposed models of adolescent romantic relationships by Brown (1999) and Connolly and Goldberg (1999). According to these authors, the development of adolescent romance follows a specific sequence of four phases as adolescents mature: initiation, affiliative, intimate, and committed. Physical attraction and desire are the prominent features of the initiation phase that takes place in early adolescence, although interactions are few. It is not until mid-adolescence, during the affiliative phase that boys and girls meet within mixed-gender groups where emphasis is placed on companionship. As adolescents grow older, and during the third phase of intimate romantic relationships, couples are formed and deeper mutual feelings are experienced. Finally, it is not until late adolescence that committed relationships are established. In these relationships there is a desire for shared intimacy, a readiness and ability to show caring behaviour and a bonding that takes place.

When investigating adolescent romantic relationships, the phase of romantic development is important to consider, as it has implications for the quality of adolescent romantic relationships. This is particularly pertinent when examining attachment qualities that are more relevant during the later phases of development (i.e., intimate and committed) when adolescents are older, their relationships are longer, and a greater emphasis is placed on intimacy, care and support within those relationships. Connolly and Johnson (1996) and Furman and Wehner (1994, 1997) argue that links with relationships with parents should become more evident as adolescents mature, and the focus shifts to intimacy and emotional closeness as their romantic relationships lengthen, and attachment and caregiving factors become more important. For these reasons, this study focuses on older adolescents (17-24 years).

While adolescent perceptions of romantic relationships may change over time depending on the romantic development phase, some researchers have found that adolescents' perceptions of their romantic relationships vary with whether or not they are currently involved with their partners. As previously noted, Shulman and Scharf (2000) found that adolescents who were currently dating reported higher affective intensity with their partners than adolescents reporting on previous relationships, regardless of age. Similarly, Taradash, Connolly, Pepler, Craig, and Costa (2001), in their study of adolescents ranging from 13- to 18-years in age (mean age 15), found that adolescents currently in a romantic relationship perceived their romantic relationship as more intimate than adolescents reporting on a past relationship. Thus, whether or not adolescents are currently involved in romantic relationships makes a difference in their perceptions of the relationship.

According to attachment theory, parent-child relationships are likely to be the context in which intense emotions are experienced and in which emotion regulation skills are learned (Thompson, 1994). That is, rules, or internal working models, pertaining to the parent-child relationships, guide individuals' responses when their security is challenged and subsequent intense negative emotions have to be regulated (Cassidy, 1994; Grossmann & Grossman, 1993; Kobak & Sceery, 1988). The more intense the elicited emotions are and the more "felt security" is challenged, the more early working models of attachment become influential (Zimmermann, Maier, Winter & Grossmann, 2001). In relationships of high emotional investment and intensity (i.e., current romantic relationships), the parent-child attachment system would be expected to be activated. Thus, it can be argued that whether or not an individual is actually in a romantic relationship, or merely remembering a past one, will have a significant effect on the findings concerning the contribution of adolescent-parent relationship (also an ongoing relationship) to the quality of the romantic relationship, particularly if the quality being measured is related to attachment.

This has important implications for the methodology used in the investigation of romantic relationships. Previous outcome studies on adolescent romantic relationships have not distinguished between participants currently participating in a romantic relationship and those that are reporting on a past one (Furman & Wehner, 1994; Scharf & Mayseless, 2001; Shulman & Scharf, 2000). In part, this may be due to the relative short duration of romantic relationships in adolescents, making it difficult to target participants at the time of an ongoing romantic relationship. This is striking when compared to investigations of adult romantic relationships, where participants are

typically recruited while currently involved. The delineation in adolescent research of teens reporting on current versus previous romantic relationships could affect the results of the studies.

The first of two studies in this thesis investigated whether or not the association between adolescent-parent and romantic attachment is moderated by relationship status (current vs. previous). Given that the parent-child relationship is most central to the development of the attachment system and emotion regulation, and given the saliency and emotional intensity of ongoing romantic relationships, it is expected that current (vs. past) romantic relationships would more likely activate the early attachment system. Additionally, the adolescent-parent relationship, like an ongoing romantic relationship, is a current and thus salient relationship. Therefore, it was hypothesized that quality of attachment to parents would be more strongly associated with reports of the quality of current (vs. past) romantic relationships.

Traditionally research has largely focused on attachments of adolescents to mother or to parents as a unit, rather than attachments to each parent individually (Kerns & Stevens, 1996). However, research on infant and adult attachment has showed that attachment relationships are relationship specific (Asendorph, Banse, Wilpers & Neyer, 1997, as cited in Buist, Dekovic, Meeus & van Aken, 2002; Steele, Steele, & Fonagy, 1996). Some studies have found systematic differences between adolescent's descriptions of the quality of attachment to mother and the quality of attachment to father (e.g., McCormic, & Kennedy, 1994); other studies have not (e.g., Pipp, Shaver, Jennings, Lamborn, & Fischer, 1985). Moreover, adolescent-mother attachment relationships have been found to be higher in quality than adolescent-father attachment relationships

(Benson, Harris & Rogers, 1992; Paterson, Field, & Pryor, 1994). Additionally, Gecas and Schwalbe (1986) found that late adolescent self-esteem was more strongly affected by fathers' support than by mothers' support.

Studies also show that the effects of mother versus father attachment may be different for girls and boys. Paterson et al. (1994) found that from early to late adolescence, girls utilized their mothers for support and proximity more while males utilized their mothers less. Buist, et al. (2002) found that the quality of attachment to same-sex parent slowly and gradually decreased during adolescence while the quality of attachment to the opposite-sex parent was more erratic and nonlinear, with stronger increases and decreases. Other research has found that mothers tend to remain emotionally involved with both their sons and their daughters during adolescence, while fathers' relations with the daughters tend to be emotionally flat and distant (Youniss & Smollar, 1985). Rice, Cunningham, and Young (1997) found that for males, attachment to father was more highly associated with social competence than attachment to mother. For girls, however, attachments to both parents were of equal importance. Given that mother and father attachments are distinct but related relationships, and the changing nature of adolescents' relationships to their parents, attachment to mother and attachment to father were investigated separately throughout this thesis.

With respect to romantic relationships even less is known about the differential effects of mother and father attachment. Frazier, Byer, Fischer, Wright, and DeBord (1996) found that participants' ratings of maternal caregiving, but not paternal caregiving, were associated with partner attachment styles. Collins and Read (1994), on the other hand, found descriptions of the opposite-sex parent of the participant, but not

descriptions of the same-sex parent, predicted the attachment style dimension of their partner. However, the component of attachment style that was predicted was different for men than for women. For men, ratings of their mother mainly predicted whether their partner was worried about abandonment, whereas for women, ratings of their father predicted whether their partner was comfortable with closeness. These authors suggest that the opposite-sex parent may be used as a model for what heterosexual relationships are like or should be like, and what a person should expect from a romantic partner.

In a longitudinal study, Grossmann, Grossmann, Winter and Zimmermann (2002) found for fathers, but not for mothers, a measure of sensitivity that assessed emotional support and gentle challenges in a toddler-parent play situation was associated with security of partnership representation as well as quality of discourse about partnership at age 22. Composite scores of maternal sensitivity, but not play sensitivity, from ages 1, 2, and 6, were also associated with security of partnership representation as well as quality of discourse about partnership at age 22. These authors suggest that fathers complement the mother's role in the domain of the child's exploratory side of attachment and that *both* parents' sensitivities are core contributions to the development of attachment security.

Indeed, other longitudinal research in attachment studies of mothers, fathers, and their children point toward inner-world emotional lessons taught by mothers (e.g., the ability to acknowledge distress in others; Steele, Steele, Croft, & Fonagy, 1999) and more outer-world or exploratory social lessons taught by fathers (e.g., the child's functioning in peer relationships; Verschueren & Marcoen, 1999). While fathers may serve as a connection to work and society at large, mothers may serve as a connective bond to

family relationships and each may model different skills necessary in different contexts (Rice, et al., 1997). Romantic relationships, still relatively new in late adolescents, may be more highly associated with the father attachment as adolescents venture out into this new type of love relationship. On the other hand, the inner-world emotional competencies associated with mother-child attachment are also important in romantic relationships, which might indicate that adolescent-mother attachment is more highly associated with attachment to romantic partner. Thus, the differential role of adolescent-mother and father attachment in adolescent romantic relationships remains unclear and although this will be investigated throughout this thesis, a specific hypothesis was not made.

When using attachment measures, it is important to consider whether or not the romantic partner is an attachment figure, as this will likely affect the findings. At least two studies investigating the transfer of attachment features from parents to romantic partner have determined that all four features were transferred to the romantic relationships which were two years or more in length (Fraley & Davis, 1997; Hazan & Zeifman, 1994). Therefore in the first study, length of relationship was also explored as a moderating variable. Additionally, because boys and girls have been shown to report different levels of emotional intensity (Shulman & Scharf, 2000) and emotional experiences in their romantic relationships (Neider & Seiffge-Krenke, 2001; Seiffge-Krenke, 1995; Shulman & Kipnis, 2001), as well as differences in their attachment to their parents (Patterson et al., 1994), gender was examined.

Conflict Resolution Strategies and Attachment

As previously noted, attachment theory provides a good explanation of individual differences in emotional behaviour within intimate relationships, especially when the attachment system is activated during times of stress. The most frequent experience of stress in romantic relationships is during times of conflict (Nieder & Seiffege-Krenke, 2001). For adolescents, romantic relationships are the second most frequently reported relationship, after mother, in which conflict is experienced (Laursen, 1995). According to Berscheid (1983), close relationships have the potential to evoke considerable positive and negative affect, and arousal frequently occurs when an organized behavioural sequence is interrupted in these relationships, i.e., interruptions often occur during interpersonal conflict when one individual objects to, or opposes, the behaviour of the other (Shantz, 1987). Such interruptions are perceived as threatening. Consequently, innate mechanisms trigger a defensive emotional response toward the person perceived to the source of the threatening interruption.

The management of conflict in romantic relationships is yet another new milieu for adolescents to learn to negotiate. As such, it is likely that they draw conflict management skills from previous relationships. The family context is often the first in which children observe and experience conflict resolution strategies (e.g. between mother and father) as well as practice these skills with parents and siblings. Conflict resolution styles that develop in parent-adolescent and sibling relationships may then provide adolescents with scripts for managing conflict in interpersonal relationships.

Research has shown that conflict resolution strategies used within both mother-adolescent and father-adolescent dyads predict similar conflict resolution strategies in late

adolescents' romantic relationships (Resse-Weber & Bartle-Haring, 1998). Martin (1990) found results differed somewhat for males and females. For girls, avoidant conflict resolution styles with mother and father, as well as verbal aggression conflict resolution styles with mother contributed to an avoidant conflict resolution style with romantic partner. For boys, only avoidant conflict resolution style with father contributed to a similar style with romantic partner. Furthermore, when examining conflict behaviour in romantic partners with relationship difficulties, a significant link with avoidant conflict strategy was established only for girls, suggesting that the avoidant style may be particularly detrimental to girl's romantic relationships. Resse-Weber and Marchand (2002) also found gender differences in their study of conflict resolution styles between adolescent-parents and adolescent-romantic partners. For girls, mother-adolescent and father-adolescent conflict resolution strategies were significant predictors of adolescent-romantic partner conflict resolution behaviours. For boys, only father-adolescent conflict resolution behaviours predicted similar behaviours with romantic partner. Finally, in a longitudinal study, Roisman et al. (2001) found associations between observed adolescent-parent conflictual behaviour at age 13 and later adolescent-romantic partner behaviour at age 20.

Because conflict is emotionally arousing and conflict resolution strategies can be viewed as the means to manage emotions, these strategies should be highly linked to attachment. Indeed, associations have been found between adolescent-parent attachment and their conflict resolution strategies with parents. Kobak et al. (1993) found links between adolescents' working model with parents (as measured by the AAI) and observed conflict behaviours with mothers. Secure adolescents demonstrated more

constructive emotion regulation, less dysfunctional anger, and more engagement during problem solving with their mothers than insecure adolescents. However males and females with avoidant strategies differed somewhat in problem solving with their mothers. Males engaged in more dysfunctional anger than females while females more often allowed the mother to dominate the conflictual discussion. Ducharme, Doyle and Markiewicz (2002) found that adolescents with a dismissing-avoidant attachment style with their mothers were more likely to use disengagement as a conflict resolution strategy with their mother and tended to use less negotiation and compromise when compared to adolescents with a secure attachment style with their mothers.

The link between attachment styles with parents and conflict resolution styles with romantic partners has also been made, albeit moderated by gender. Cohn et al. (1992) found links, for men but not for women, between observed conflict resolution strategies with romantic partners and internal working models of attachment to parents, using the AAI. Creasey (2002), also using the AAI, found that secure (vs. insecure) adolescent-parent working models were associated with less negative behavioral patterns in romantic relationships for males, and with more positive behavioral patterns for females.

Empirical studies have also linked general attachment styles in close relationships and attachment to romantic partner to conflict resolution styles with romantic partner. With respect to general attachment styles, Simpson, Rholes, & Phillips (1996) found, in adults, that insecure attachment styles predicted conflict management difficulties during a problem solving task. Creasey, Kershaw, and Boston (1999), in a study of late adolescents with their romantic partners, found that high scores on the anxiety dimension

were significantly associated with more conflict escalation and negativity with romantic partners while high scores on the avoidance dimension were associated with more conflict withdrawal as well as conflict management negativity.

With respect to attachment to romantic partners, several studies have demonstrated associations with the use of particular conflict resolution strategies with romantic partners. In general, these researchers found that individuals securely attached were more likely to use compromise (Pistole, 1989) and better able to constructively regulate their emotions during problem-solving interactions (Kobak & Hazan, 1991). Conversely, individuals with an anxious/ambivalent attachment style reported their conflicts as being more coercive, distressing, and lacking in mutual negotiation (Resse-Weber & Marchand, 2002); while those avoidantly attached reported less effective problem-solving communication and greater conflict (Collins, et al., 2002).

To summarize these studies, we find that attachment to parents is associated with conflict resolution strategies used with parents and with romantic partners. Additionally, conflict resolution strategies with parents are associated with conflict resolution strategies used with romantic partners, which in turn are associated with general attachment styles in close relationships as well as with attachment to romantic partners (see Figure 2). However there are no studies that make the important link between adolescent-parent attachment, adolescent-parent conflict resolution styles, and attachment to romantic partner. Furthermore, while studies have established certain links between attachment and conflict resolution strategies, they did not test for the mediating role of conflict

Figure 2.

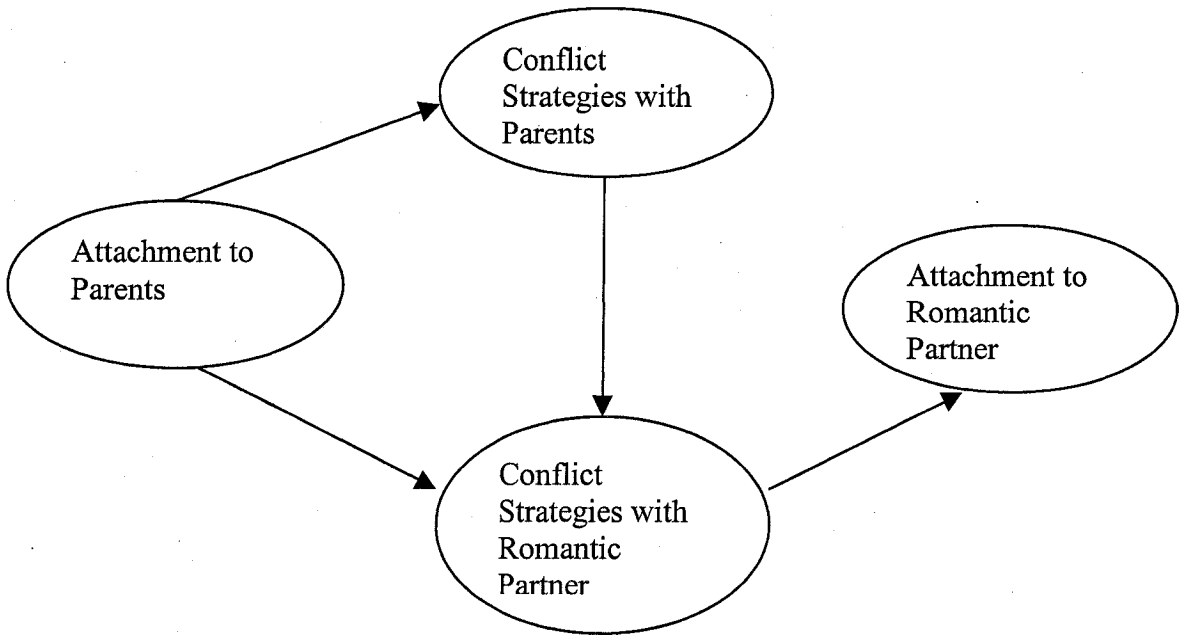

Figure 2: Associations between attachments to parents, conflict resolution strategies with parents and attachment to romantic partner

resolution strategies in the association between attachment to parents and attachment to romantic partner.

Study 2 of this thesis investigates adolescent-parent attachment and adolescent-parent conflict resolution strategies as contributing factors to the quality of adolescent romantic relationships (i.e., attachment to romantic partner), testing the latter as mediating. To this end, it is hypothesized that links between parent-adolescent attachment and attachment quality with romantic partner will be mediated by conflict resolution strategies (see Figure 3). That is, less secure attachments to and less positive conflict resolution strategies with parents should predict less secure attachment to romantic partner. More specifically, avoidant attachment styles and conflict resolution strategies have been shown to be particularly detrimental to adolescent romantic relationships (e.g., Collins et at., 2002; Martin, 1990). Thus, it is hypothesized that the conflict resolution style avoidance/capitulation will be a particularly important mediator. Additionally, because males and females' emotional experience of romantic relationships may be different, and gender differences have been found for the links between attachment with parents and conflict resolution strategies with parents and romantic partners, gender will be explored as a moderating variable. Finally, consistent with the hypotheses of Study 1, it is expected that this mediational model will hold true for adolescents reporting on a current romantic relationship.

Figure 3.

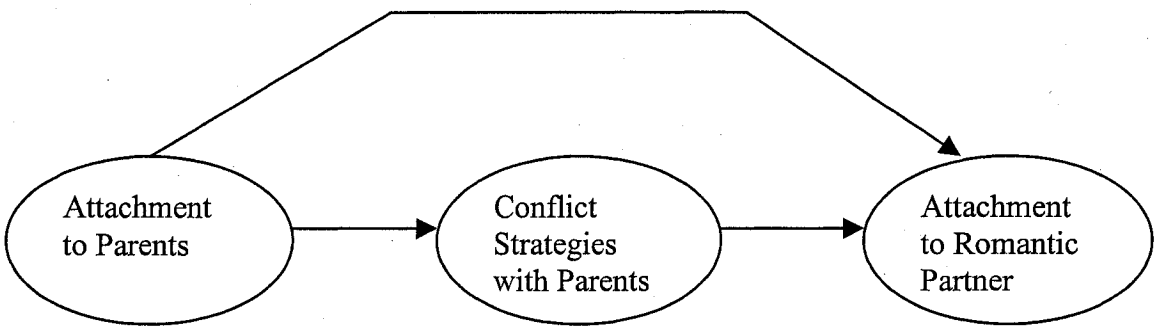

Figure 3: The association between attachment to parents and attachment to romantic partner mediated by conflict strategies with parents

Summary of Hypotheses

Study 1 investigates the role of adolescent-parent attachment dimensions in adolescent-romantic partner attachment dimensions. Additionally, the romantic relationship status (current vs. previous), length of relationship (< 1 year vs. ≥ 1year), and sex of the participants are examined as moderating variables in that link. It was hypothesized that the role of adolescents' attachment with parents in adolescents' attachment to romantic partner will be moderated by the romantic relationship status of the adolescents. That is, we expected that this contribution would be evident for adolescents reporting on a current romantic relationship, and not for those reporting on a previous romantic relationship. Additionally, we expected that the length of the romantic relationship would moderate the contribution of adolescents' attachment with parents to adolescents' attachment with romantic partner. That is, we expected that this contribution would be evident for adolescents reporting on a longer romantic relationship, and not for those reporting on a shorter romantic relationship. Although sex was explored as a potential moderator, specific predictions were not formulated.

Study 2 sought to identify and investigate contributing factors of adolescent-parent attachment dimensions and adolescent-parent conflict resolution strategies to the quality of adolescent's attachment to romantic partner. Moreover, conflict resolution strategies with parents were examined as a mediational variable in the contribution of adolescent-parent attachments to adolescent-romantic partner attachments. It was hypothesized that less secure attachments and less positive conflict resolution strategies with parents would be associated with less secure attachments with romantic partners. Furthermore, we expected that these conflict resolution strategies would mediate the

association between attachment to parents and attachment to romantic partners. In particular, it was expected that the association between the avoidance dimension of attachment with parents and the avoidance dimension of attachment with romantic partner would be mediated by the avoidance/capitulation conflict resolution styles.

Method

Participants

For Study 1, there were 248 participants (female = 171; mean age 18.59; SD = 1.09). Participants for Study 2 were a subset of 97 from Study 1 (female = 76; mean age 18.41; SD = .81) who had completed a Conflict and Problem Solving Questionnaire.

Study1:

Participants in Study 1(N = 248) were drawn from a larger study investigating close relationships in which 403 students, similar in age, were approached in two ways. First, 271 of those approached were recruited from two junior colleges in Montreal[1]. Overall participation rate for this subgroup was 98%. Second, the remaining 132 individuals approached were drawn from the same study. These participants were part of a larger group (n = 662), who were recruited from two public high schools. The subsample at Time 3 did not differ in SES, ethnicity or family status from the original high school sample. Seventy-three percent of these participants reported attending junior colleges, 10% of these participants reported attending university, while 17% reported not attending school.

Of the 403 total students approached, 285 completed romantic attachment measures (either current or past) necessary for the Study 1. Twenty-one of those individuals were excluded from analyses because they did not complete the mother (n = 8) or father (n = 13) attachment measures. Additionally, 16 individuals did not report the length of their romantic relationship (either current or past) and therefore were also excluded from the analyses. Of the remaining 248 participants, 158 (116 female)

reported currently being in a romantic relationship, while 90 (55 female) reported not currently being in a romantic relationship but previously having been involved in one.

The two subgroups for Study 1 were comparable on SES, family status, and ethnicity. The majority of students came from middle-class families, based on reported occupation of father, and mother if working (Blishen, Carroll, & Moore, 1987). Mean socio-economic status (SES) was 48.01 (SD = 15.15) for fathers (characteristic of supervisors, opticians, construction electricians, and mechanical repairers) and 43.65 (SD = 13.04) for mothers (characteristic of social workers, teachers, and sales persons) based on the 1981 socioeconomic index for occupations in Canada (Blishen et al., 1987).

Seventy-eight percent reported living with two-parent families (74% intact, 4% with a stepparent), 17% reported living with a single parent, 5% of the participants did not live at home. On the questionnaires, students could endorse one or more ethnicities. Ethnicity of the participants varied. Seventy-eight percent endorsed one item: of the total sample 31% endorsed European, 26% English Canadian, 14% Asian, 6% French Canadian, 6% African, 2% Latin American, and 15% Other. Twenty-two percent endorsed two or three items, most of which were a mixture of European with English Canadian or French Canadian.

Similarly, when the sample was divided in current vs. previous romantic relationship, they were comparable in mean ages (18.6 and 18.5 years, respectively; SD = 1.1; age range from 17-24 and 17- 22); mean length of relationship (< 1 year), ethnicity, SES, and place of residence (e.g., living at home with parents).

Study 2:

Participants for Study 2 were the subsample of the original high school sample, previously mentioned, taken from Time 3 of the larger short-term longitudinal study (n = 132). These participants completed a conflict and problem-solving questionnaire necessary for Study 2. Of the 132 participants, 97 (76 female) completed in their entirety all of the measures necessary for Study 2. Seventy-one (57 female) of these participants reported on a current romantic partner for the romantic attachment measure while 26 reported on a previous one (19 female). Ethnicity, SES, and family status were comparable to those in the larger group for Study 1 who did not participate in Study 2.

Procedure

For the subgroup originally recruited from the junior colleges, permission was obtained from the Deans of the colleges and from the psychology professors to invite their students in class to participate in a study on relationships and well-being in adolescence, following approval from the colleges' own ethics boards. In class, students were given a written consent (see Appendix A) to participate and a questionnaire package of self-report measures. To encourage participation, the names of students who completed the package were entered into a draw for a Discman, movie passes and certificates at a local music store. The questionnaire package took approximately 90 minutes to complete. Three questionnaires were used for this study (an attachment measure, a relationship history measure, and a general information form). Other measures included in the package dealt with issues not relevant to this study (e.g., adjustment, etc.).

For the subgroup obtained through following a larger high school sample, students were contacted by telephone and mailed a consent form and a questionnaire package similar to the one described above. Participants who returned their consent forms had their names entered in a raffle for movie passes. Questionnaires included an attachment measure, a relationship history measure, and a general information form for Study 1. For Study 2, a conflict and problem solving measure was also used. As previously described, these measures were included in the larger package that participants completed, which dealt with issues not relevant to this study.

Measures

The Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991). To assess the quality of relationships between the adolescent and their mother, father, and romantic partner, an adaptation of The Relationship Questionnaire was administered. In this measure there are four descriptive paragraphs, one for each attachment-style prototype: secure, fearful, preoccupied, and dismissing. Participants were asked to rate each paragraph on 7-point scales indicating the extent to which the paragraph described their relationship with each of the target figures (mother, father, and romantic partner).

The RQ has been validated against self-report measures of self-concept and interpersonal functioning (Bartholomew & Horowitz, 1991), and has shown significant associations with other self-report measures of attachment security (Bartholomew & Shaver, 1998). According to Bartholomew (1996) the measure can be worded either to refer to general orientation to close relationships or to specific relationships. Previous research has employed the RQ in such a way as to measure older adolescents' attachment with multiple targets (Scharfe & Bartholomew, 1994; Trinke & Bartholomew, 1997).

In order to reduce the number of predictors into meaningful variables, the continuous ratings of secure, dismissing, preoccupied and fearful attachments were combined into two underlying dimensions for each target figure: Model of Self and Model of Other (Bartholomew & Horowitz, 1991), as previously described. The Model of Self dimension (Anxiety) was obtained by summing the ratings of the two attachment patterns with negative self models (preoccupied and fearful) and subtracting the ratings of the two patterns with positive self models (secure and dismissing). The Model of Other dimension (Avoidance) was obtained by summing the ratings of the two attachment patterns with negative other models (dismissing and fearful) and subtracting the ratings of the two patterns with positive other models (secure and preoccupied). These two underlying dimensions (Anxiety and Avoidance) for each relationship (mother, father, and romantic partner) were used to identify the quality of each attachment relationship and will subsequently be referred to by their affective-behavioural names, Anxiety and Avoidance. The alpha for the RQ in the present sample (N = 248) was Anxiety Mother = .18; Avoidance Mother = .15; Anxiety Father = .12; Avoidance Father = .34; Anxiety Romantic Partner = .39; Avoidance Romantic Partner = -.07.

Conflict and Problem Solving (CPS: Kerig, 1996). To assess conflict resolution strategies between adolescents and their parents a modified version of the CPS was administered that included relevant factors from the original CPS measuring marital conflict resolution strategies. The strategies that were assessed (separately for mother and father) included: Collaboration (5 items included trying to reason with the other person, talking about the issue, and expressing thoughts and feelings), Avoidance/Capitulation (5 items included trying to ignore the problem, leaving the scene,

and giving in to the other person to escape argument), Stalemate (5 items reflected that the individuals had reached an impasse such as crying, sulking, and giving the "silent treatment"), and Verbal Aggression (included 5 items involving yelling, insulting, and being sarcastic). For each item, participants indicated the frequency in which they used each resolution strategy on a 4-point scale ranging from "never" to "often". Reliability (alpha) scores for the subscales were: Collaboration (mother = .86; father = .89), Avoidance/Capitulation (mother = .75; father = .68), Verbal Aggression (mother = .75; father = .78) and Stalemate (mother = .68; father = .59). Convergent and discriminate validity has been established for the CPS against other measures of marital conflict (Kerig, 1996).

The Relationship History Questionnaire. This measure was used to determine the length of current and previous romantic relationships. Participants were asked to check one of six boxes ranging from "0-3 months" to "7+ years."

General Information. This questionnaire was used to obtain the age, sex, social economic status, mother tongue, school attended, marital status of participants' parents, and ethnic/cultural background, as well as the people with whom they were currently living.

Results

Preliminary Analyses

Prior to the main analyses, data was screened for univariate outliers, which were brought within three standard deviations of the group means. Linearity and normal distributions were established for all continuous variables used in the study. Singularity was also established. Multicollinearity, however, was indicated for the conflict problem solving strategies Stalemate with Mother and Stalemate with Father. Both of these variables had tolerance values less than .25. Additionally, these variables had the lowest reliability scores of the subscales. These variables were therefore dropped from the analyses (Tabachnick & Fidell, 1996). To test for order effects of the attachment measures a mixed model ANOVA was also performed (attachment style X target figure X order). The test revealed no significant interactions or main effects.

Correlations between the two attachment dimensions (Anxiety, Avoidance), separately for mother, father, and romantic partner, were examined to ensure that they were separate constructs. Correlations were significant but low for all target figures (see Table 1). Intercorrelations were also performed between the conflict and problem solving strategies (collaboration, avoidance/capitulation, and verbal aggression) with mother and with father. These correlations also supported retaining separate constructs, ranging from significant low to moderate correlations (see Table 2). While significant correlations between mother and father conflict problem solving strategies were high, they were kept separate in order to allow for conceptual distinctions between parents and to be consistent with the distinct attachment dimensions for parents. Finally, the intercorrelation between Relationship Status and Length of Relationship was examined to

Table 1.

Study 1:

Intercorrelations between Attachment Dimensions with Mother, Father and Romantic Partner, Relationship Status, Length of Relationship, and Sex (N = 248)

Variable	1	2	3	4	5	6	7	8	9
1. Anxiety Romantic Partner	-	.17**	.21**	-.03	.23**	.13*	-.21**	-.13*	-.12
2. Avoidance Romantic Partner		-	.00	.10	-.16*	.02	-.24**	-.25**	.02
3. Anxiety Mother			-	.26**	.42**	.22**	.12	.02	-.04
4. Avoidance Mother				-	.03	.30*	.01	.00	.09
5. Anxiety Father					-	.31**	.09	.05	-.10
6. Avoidance Father						-	-.02	-.09	.03
7. Relationship Status							-	.06	-.13*
8. Length of Relationship								-	-.07
9. Sex									-

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

Table 2.

Study 2:

Intercorrelations between Attachment Dimensions with Mother, Father, and Romantic Partner, Relationship Status, Length of Relationship, Sex, and Conflict and Problem Solving Strategies with Mother and Father (N = 97)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Anxiety Mother	-	.38**	.43**	.20*	.34*	.02	.02	-.03	-.15	-.28**	.35**	.27**	-.24*	.27**	.22*
2. Avoidance Mother		-	.20	.35**	-.01	.15	-.14	-22*	.08	-.56**	.32**	.23*	-.28**	.26**	.14
3. Anxiety Father			-	.34**	.30**	-.20	.04	-.56	-.21*	-.21*	.32**	.11	-.38**	.27**	.10
4. Avoidance Father				-	.29**	.03	-.09	-.24*	.05	-.18	.33**	.10	-.49**	.41**	.25*
5. Anxiety Romantic Partner					-	.12	-.13	-.04	-.19	-.03	.12	.15	-.10	.02	.06
6. Avoidance Romantic Partner						-	-.17	-.41**	-.02	-.18	.25*	-.04	.01	.08	.01
7. Relationship Status							-	.04	-.08	.02	-.02	-.21*	-.06	.00	-.12
8. Length of Relationship								-	-.10	.24*	-.33**	-.01	.21*	-.35**	-.06
9. Sex									-	.05	-.17	-.09	.07	-.16	-.05
10.Collaboration Mother										-	-.34**	-.34**	.67**	-.21*	-.21*
11.Avoidance/Capitulation Mother											-	.32*	-.39**	.78**	.35**
12.Verbal Aggression Mother												-	-.35**	.25**	.71**
13.Collaboration Father													-	-.36**	-.33**
14.Avoidance/Capitulation Father														-	.42**
15.Verbal Aggression Father															-

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

establish that the two variables were separate constructs. Results indicated that the constructs did not overlap significantly (r = .06, *ns*).

Plan of Analyses: Study 1

To test whether the contributions of parents were moderated by Relationship Status (current vs. previous), and/or Length of Relationship (<1 year, ≥ 1 year), in predicting to the quality of relationship with romantic partner, hierarchical regressions were performed predicting to Anxiety and Avoidance with Romantic Partner in separate analyses, as outlined by Jaccard and Turrisi (2003). In the first two regressions, Relationship Status, Length of Relationship, Sex, and the four attachment dimensions with parents were entered on the first step. The interaction terms for the four attachment dimension with parents X Relationship Status were entered on the second step to see if they were significant as a block. In a third and fourth regressions, the variables entered were identical with the exception of the interaction terms. These were replaced by interactions terms representing the attachment dimensions with parents X Length of Relationship.

Because the emotional intensity of a current romantic relationship in adolescence has been put forward as critical for the attachment dimensions with parents to predict to attachment with romantic partner, it was hypothesized that the block of interaction terms with Relationship Status would be significant. Additionally, the block of interaction terms with Length of Relationship was also hypothesized to be significant, as longer romantic relationships are more likely to be attachment bonds. Because Sex was also of interest as a moderating variable, fifth and sixth regressions were performed using the attachment dimensions with parents X Sex on the second step.

Regressions Including Interactions with Relationship Status

Significant results were found for the first step, $\Delta R^2 = .16$, $p < .01$, in predicting Anxiety with Romantic Partner. Sex uniquely predicted ($\beta = -.14$, $sr^2 = .02$, $p < .05$), as did Length of Relationship ($\beta = -.13$, $sr^2 = .02$, $p < .05$), Relationship Status ($\beta = -.25$, $sr^2 = .06$, $p < .01$), Anxiety with Mother ($\beta = .17$, $sr^2 = .02$, $p = .01$), and Anxiety with Father ($\beta = .16$, $sr^2 = .02$, $p < .05$). For the second step, a trend for the block was obtained, $\Delta R^2 = .03$, $p = .09$, with the interaction term Avoidance with Father X Relationship Status uniquely predicting ($\beta = -.26$, $sr^2 = .02$, $p < .01$) and a trend for Avoidance with Mother X Relationship Status ($\beta = .19$, $sr^2 = .01$, $p = .08$) to uniquely predict (see Table3a). Interaction effects were followed up using the technique described by Jaccard, et al. (2003) indicating that, while Anxiety with Mother and Father predicted Anxiety with Romantic Partner for all participants, Avoidance with Father and Mother predicted Anxiety with Romantic Partner for participants reporting on a *previous* romantic relationship (for father, $\beta = .26$; for mother, $\beta = -.22$) but not for participants reporting on a *current* romantic relationship (for father, $\beta = -.07$; for mother, $\beta = -.01$).

When predicting to Avoidance with Romantic Partner, again, the first block was significant, $\Delta R^2 = .14$, $p < .01$, with Length of Relationship ($\beta = -.23$, $sr^2 = .05$, $p < .01$), Relationship Status ($\beta = -.22$, $sr^2 = .05$, $p < .01$), and Anxiety with Father ($\beta = -.16$, $sr^2 = .02$, $p < .05$) uniquely predicting (see Table 3b). The second block, containing the interaction terms, however, was not significant, nor was a trend obtained.

Regressions Including Interactions with Length of Relationship or Sex

When regressions were performed with interaction terms of the attachment dimensions with Length of Relationship or with Sex, Step 2 was not significant nor were

Table 3a.

Study 1 Summary of Hierarchical Regression Analysis: Parental Attachment Dimensions X Relationship Status Predicting to Anxiety with Romantic Partner (N = 248)

	Anxiety with Romantic Partner			
Variables	$R^2 \Delta$	Beta	sr^2	Beta (last step)
Step 1:	.16**			
Sex		-.14*	.02	-.13*
Length of Relationship		-.13*	.02	-.13*
Relationship Status		-.25**	.06	-.24**
Anxiety with Mother		.17*	.02	.16
Anxiety with Father		.16*	.02	.05
Avoidance with Mother		-.08	.00	-.23*
Avoidance with Father		.05	.00	.26*
Step 2:	.03 ^{t}			
Anxiety with Mother X Relationship Status		.03	.00	.03
Anxiety with Father X Relationship Status		.14	.00	.14
Avoidance with Mother X Relationship Status		.19 ^{t}	.01	.19 ^{t}
Avoidance with Father X Relationship Status		-.26**	.02	-.26**

$R^2 = .19$, $p < .05$

**$p = .01$, *$p < .05$, $^t p = .09$

Table 3b.

Study 1 Summary of Hierarchical Regression Analysis: Parental Attachment Dimensions X Relationship Status Predicting to Avoidance with Romantic Partner (N = 248)

	Avoidance with Romantic Partner		
Variables	$R^2 \Delta$	Beta	sr^2
Step 1:	.14**		
Sex		-.05	.00
Length of Relationship		-.23**	.05
Relationship Status		-.22**	.05
Anxiety with Mother		.07	.00
Anxiety with Father		-.16*	.02
Avoidance with Mother		.09	.01
Avoidance with Father		.00	.00

$R^2 = .15$, $p<.01$

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

there significant unique interaction terms. Thus, the association between adolescent-parent attachment dimensions and adolescent-romantic partner attachment dimensions was not moderated by either sex or length of the romantic relationship.

Summary of Analyses: Study 1

Results of the analyses partially supported the hypotheses. Consistent with the hypotheses, attachment to parents predicted attachment to romantic partner. Anxiety with Mother and Father positively predicted Anxiety with Romantic Partner, while Anxiety with Father negatively predicted Avoidance with Romantic partner. In addition, there was a trend for the relationship status of participants to moderate the effect of parental attachment when predicting Anxiety with Romantic Partner. However, contrary to the hypotheses, only for participants reporting on a *previous* romantic relationship, and not for those reporting on a *current* one, did the parental attachment dimension Avoidance predict Anxiety with Romantic Partner. The hypothesis that the length of the romantic relationships would moderate parental attachment also lacked support. Finally, Sex was not found to be a moderating variable.

Plan of Analyses: Study 2

To test whether the link between attachment to parents and romantic partner is mediated by the conflict resolution strategies used with parents, conditions for mediation outlined by Baron and Kenny (1986) were investigated. For the proposed mediational model these conditions are as follow: (1) attachment style to parents must be related to attachment style to romantic partner (Study 1 demonstrated this but it needed to be replicated with the smaller subsample), (2) conflict resolution styles with parents must be related to attachment style to romantic partner, (3) attachment style to parents must be

related to the conflict resolution styles with parents, and (4) the association between attachment style to parents and attachment style to romantic partner must be reduced in significance when conflict resolution strategies with parents is statistically controlled (see Figure 3).

The attachment variables were as previously described (Anxiety and Avoidance with Mother, Father and Romantic Partner). Conflict resolution strategies with parents included Collaboration, Avoidance/Capitulation, and Verbal Aggression with Mother and with Father. It was hypothesized that the more anxious and avoidant adolescents were with their parents the more anxious and avoidant they would be with their romantic partners; and that this would be mediated by more negative (i.e., Avoidance/Capitulation and Verbal Aggression) and less positive (i.e., Collaboration) conflict and problem solving strategies with their parents.

First Condition: Regressions Including Attachment Dimensions with Parents Predicting to Attachment to Romantic Partner

Because results from Study 1 suggested that the romantic relationship status of adolescents is important when responding to attachment measures, status was also examined with the smaller subsample for Study 2, with analyses similar to those used previously. The variables Sex, Length of Relationship, Relationship Status, Anxiety and Avoidance with Mother and with Father were entered on the first step while the interaction terms (attachment dimensions to parents with Relationship Status or with Length of Relationship or with Sex) were entered on the second step, grouped in separate analyses. Similar to the previous study, significant results were found for the first step, $\Delta R^2 = .26$, $p < .01$, in predicting Anxiety with Romantic Partner. Unique predictors,

however, were somewhat different, with Anxiety with Mother ($\beta = .32$, $sr^2 = .07$, $p < .01$), Avoidance with Mother ($\beta = -.26$, $sr^2 = .05$, $p < .05$), and Avoidance with Father ($\beta = .27$, $sr^2 = .05$, $p < .05$) uniquely contributing, and a trend for Relationship Status ($\beta = -.17$, $sr^2 = .03$, $p = .08$) to uniquely predict.

Significant results were also obtained for the second block, $\Delta R^2 = .13$, $p < .05$, with the interaction terms Anxiety with Mother X Relationship Status ($\beta = -.59$, $sr^2 = .03$, $p < .05$), Avoidance with Mother X Relationship Status ($\beta = .57$, $sr^2 = .06$, $p < .01$) and Avoidance with Father X Relationship Status ($\beta = -.53$, $sr^2 = .06$, $p < .01$) uniquely predicting (see Table 4a). Interaction effects were followed up, as before, using the technique described by Jaccard and Turrisi (2003). Analysis revealed that Anxiety with Mother predicted Anxiety with Romantic Partner, more strongly for participants reporting on a previous romantic relationship ($\beta = .92$ $p < .01$, than for current, $\beta = .27$, $p = .01$). Furthermore, similar to Study 1, for participants reporting on a *previous* romantic relationship Avoidance with Mother ($\beta = -.80$, $p < .01$) and Avoidance with Father ($\beta = .68$, $p < .01$) predicted Anxiety with Romantic Partner, in the opposite direction. That is, more Avoidance with Mother contributed to less Anxiety with Romantic Partner, while more Avoidance with Father contributed to more Anxiety with Romantic Partner. However, for participants reporting on a *current* romantic relationship, Avoidance with Mother ($\beta = -.08$, *ns*) and Avoidance with Father ($\beta = .04$, *ns*) did *not* predict Anxiety with Romantic Partner significantly. Interaction effects for these analyses, however, should be viewed with caution as the vast majority of participants were reporting on a current romantic relationship ($n = 71$) rather than a previous romantic relationship ($n = 26$).

Table 4a.

Study 2 Summary of Hierarchical Regression Analysis: Parental Attachment Dimensions X Relationship Status Predicting to Anxiety with Romantic Partner (N = 97)

		Anxiety with Romantic Partner		
Variables	$R^2 \Delta$	Beta	sr^2	Beta (last step)
Step 1:	.26**			
Sex		-.13	.01	-.05
Length of Relationship		-.03	.00	-.07
Relationship Status		$-.17^t$	.03	-.19*
Anxiety with Mother		.32**	.07	.92**
Anxiety with Father		.10	.01	.06
Avoidance with Mother		-.26*	.05	-.80**
Avoidance with Father		.27*	.05	.68**
Step 2:	.13*			
Anxiety with Mother X Relationship Status		-.59*	.03	-.59*
Anxiety with Father X Relationship Status		-.03	.00	-.03
Avoidance with Mother X Relationship Status		.57**	.06	.57**
Avoidance with Father X Relationship Status		-.53**	.06	-.53**

$R^2 = .39$, $p<.05$

**$p = .01$, *$p < .05$, $^t p = .08$

When predicting Avoidance with Romantic Partner, similar to the first study, only the first block was significant ($\Delta R^2 = .27$; $p < .01$) with Length of Relationship ($\beta = -.42$, $sr^2 = .16$, $p < .01$), and Anxiety with Father ($\beta = -.28$, $sr^2 = .05$, $p = .01$) uniquely predicting (see Table 4b). Because the parental attachment dimensions predicted both the romantic partner attachment dimensions significantly, further investigation of the mediational model was performed on the entire subsample.

Second Condition: Regressions Including Adolescent-Parent Conflict Resolution Strategies Predicting to Anxiety and Avoidance with Romantic Partner

To investigate the contribution of adolescent-parent conflict resolution strategies to Anxiety and Avoidance with Romantic Partner, two regressions were performed. For the first regression, predicting Anxiety with Romantic Partner, independent variables included Sex on the first step and conflict and problem solving strategies with mother (Collaboration with Mother, Avoidance/Capitulation with Mother, and Verbal Aggression with Mother) and with father (Collaboration with Father, Avoidance/Capitulation with Father, and Verbal Aggression with Father) on the second step. The second regression, predicting Avoidance with Romantic Partner, was similar to the first.

Results were not significant when predicting Anxiety with Romantic Partner. When predicting Avoidance with Romantic Partner, significant results were obtained for the second step only, $\Delta R^2 = .16$, $p < .05$. Collaboration with Mother ($\beta = -.31$, $sr^2 = .04$, $p < .05$) and Avoidance/Capitulation with Mother ($\beta = .47$, $sr^2 = .07$, $p < .01$) uniquely contributed (see Table 5). Because only the conflict and problem-solving strategies with

Table 4b.

Study 2 Summary of Hierarchical Regression Analysis: Parental Attachment Dimensions X Relationship Status Predicting to Avoidance with Romantic Partner (N = 97)

	Avoidance with Romantic Partner		
Variables	$R^2 \Delta$	Beta	sr^2
Step 1:	.27**		
Sex		-.12	.01
Length of Relationship		-.42**	.16
Relationship Status		-.14	.02
Anxiety with Mother		.09	.01
Anxiety with Father		-.28**	.05
Avoidance with Mother		.08	.00
Avoidance with Father		-.06	.00

$R^2 = .28$, $p<.01$
**$p = .01$

Table 5.

Study 2 Summary of Hierarchical Regression Analysis: Conflict and Problem Solving Strategies with Mother and Father Predicting to Avoidance with Romantic Partner (N = 97)

	Avoidance with Romantic Partner		
Variables	$R^2 \Delta$	Beta	sr^2
Step 1:	.00		
Sex		-.02	.00
Step 2:	.16*		
Collaboration with Mother		-.31*	.04
Avoidance/Capitulation with Mother		.47**	.07
Verbal Aggression with Mother		-.23	.01
Collaboration with Father		$.27^t$	.03
Avoidance/Capitulation with Father		-.26	.01
Verbal Aggression with Father		.14	.00

$R^2 = .16$, $p<.05$

**$p = < .01$, *$p < .05$, $^t p = .06$

mother predicted Avoidance with Romantic Partner significantly, further testing of the hypothesized mediational model was performed only with this dependent variable.

Third Condition: regressions Including Attachment Dimensions with Mother Predicting to Collaboration and Avoidance/Capitulation with Mother

Two hierarchical regressions were performed in order to test the third condition for mediation that attachment style with parents are related to conflict and problem solving strategies with parents. Because previous analyses revealed that only Anxiety with Father and Collaboration and Avoidance/Capitulation with Mother significantly contributed to Avoidance with Romantic Partner, regressions investigating the attachment dimension Anxiety with Father predicting to Collaboration with Mother and Avoidance/Capitulation with Mother were performed. Sex was included on the first step while Anxiety with Father was included on the second step.

Results indicated that for both regressions Sex was not significant. When predicting to Collaboration with Mother, the second step, however, was significant, $\Delta R^2 = .04$, $p < .05$, with less Anxiety with Father predicting to more Collaboration with Mother ($\beta = -.21$, $sr^2 = .04$, $p < .05$; see Table 6). When predicting to Avoidance/Capitulation with Mother, the second step was also significant, $\Delta R^2 = .09$, $p < .01$, with more Anxiety with Father ($\beta = .30$, $sr^2 = .09$, $p < .05$) predicting to more Avoidance/Capitulation with Mother (see Table 7).

Table 6.

Study 2 Summary of Hierarchical Regression Analysis: Anxiety with Father Predicting to Collaboration with Mother (N = 97)

	Collaboration with Mother		
Variables	$R^2 \Delta$	Beta	sr^2
Step 1:	.00		
Sex		.05	.00
Step 2:	.04*		
Anxiety with Father		-.21*	.04

$R^2 = .04$, $p < .05$
*$p < .05$

Table 7.

Study 2 Summary of Hierarchical Regression Analysis: Anxiety with Father Predicting to Avoidance/Capitulation with Mother (N = 97)

	Avoidance/Capitulation with Mother		
Variables	$R^2 \Delta$	Beta	sr^2
Step 1:	.03		
Sex		-.17	.02
Step 2:	.09**		
Anxiety with Father		.30**	.09

$R^2 = .12$, $p < .01$

**$p < .01$

Final Test of Mediation

To test the final condition for mediation, that the association between attachment style with parents and avoidance with romantic partner is reduced in significance when conflict resolution strategies with mother are statistically controlled, a hierarchical regression was performed. Only the predictor variables previously identified as contributing uniquely (i.e., Anxiety with Father, Collaboration with Mother, and Avoidance/Capitulation with Mother) were entered into the equation to reduce the number of predictors. Anxiety with Father was entered on the first step while Collaboration with Mother and Avoidance/Capitulation with Mother were entered on the second step. Results indicated the first step with the predictor variable Anxiety with Father was significant, $\Delta R^2 = .04$, $p = .05$ ($\beta = -.20$, $sr^2 = .04$, $p = .05$). The second step was also significant, $\Delta R^2 = .12$, $p < .01$, with Avoidance/Capitulation with Mother ($\beta = .30$, $sr^2 = .07$, $p < .01$) uniquely contributing. Anxiety with Father, however, still proved to significantly predict to Avoidance with Romantic Partner and was *not* reduced in significance, as indicated by the beta weight ($\beta = -.32$, $p < .01$; see Table 8). Therefore the conflict and problem solving variables, Collaboration and Avoidance/Capitulation with Mother, entered in the equation did not mediate the link between Anxiety with Father and Avoidance with Romantic Partner.

Other Findings

Although not part of the investigation for mediation, for interest sake, hierarchical regressions examining the attachment dimensions with parents predicting to the remaining conflict and problem solving strategies with parents not previously tested (i.e., Verbal Aggression with Mother and Collaboration, Avoidance/Capitulation, and Verbal

Table 8.

Study 2 Summary of Hierarchical Regression Analysis: Anxiety with Father and Collaboration and Avoidance/Capitulation with Mother Predicting to Avoidance with Romantic Partner (N = 97)

	Avoidance with Romantic Partner			
Variables	$R^2 \Delta$	Beta	sr^2	Beta (last step)
Step 1:	.04*			
Anxiety with Father		-.20*	.04	-.32**
Step 2:	.12**			
Avoidance/Capitulation with Mother		.30**	.07	.30**
Collaboration with Mother		-.14	.02	-.14

$R^2 = .16$, $p<.01$

**p = < .01, *p < .05

Aggression with Father) were performed. Independent variables included Sex, on the first step, and Anxiety and Avoidance with Mother when predicting to Collaboration, or Avoidance/Capitulation, or Verbal Aggression with Mother on the second step. When predicting to the conflict and problem solving strategies with Father, Anxiety and Avoidance with Father were entered on the second step.

Results indicated that for all six regressions Sex was not significant. However all of the steps with predictors from attachment with parents to adolescent-parent conflict and problem solving strategies were significant, with the direction of effects consistent with predictions. These results are included in the Appendix F (see Tables 9-14).

Summary of Analyses: Study 2

Although the conditions for mediation were not met either when predicting to Anxiety or Avoidance with Romantic Partner, several interesting findings were obtained. First, similar to Study 1, it was established that parental attachment predicted romantic partner attachment. Second, there was also some evidence that the romantic relationship status of the participants moderated the parental attachment dimensions when predicting to Anxiety with Romantic Partner. In this study, like Study 1, Anxiety with Mother positively predicted Anxiety with Romantic Partner for all participants. However, only for participants reporting on a *previous* romantic relationship did Avoidance with Mother (negatively) and with Father (positively) uniquely predict to Anxiety with Romantic Partner. Third, in examining all the regressions two indirect effects could be established for predictions to the avoidance dimension with romantic partner. Aspects of attachment with parents predicted to aspects of adolescent-parent conflict and problem solving strategies, which in turn predicted to an aspect of attachment with romantic partner.

More specifically, in examining the unique predictors, Avoidance with Mother negatively predicted Collaboration with Mother, which in turn negatively predicted to Avoidance with Romantic Partner. Additionally, Anxiety and Avoidance with Mother positively predicted to Avoidance/Capitulation with Mother, which in turn positively predicted to Avoidance to Romantic Partner (see Figure 4).

Figure 4.

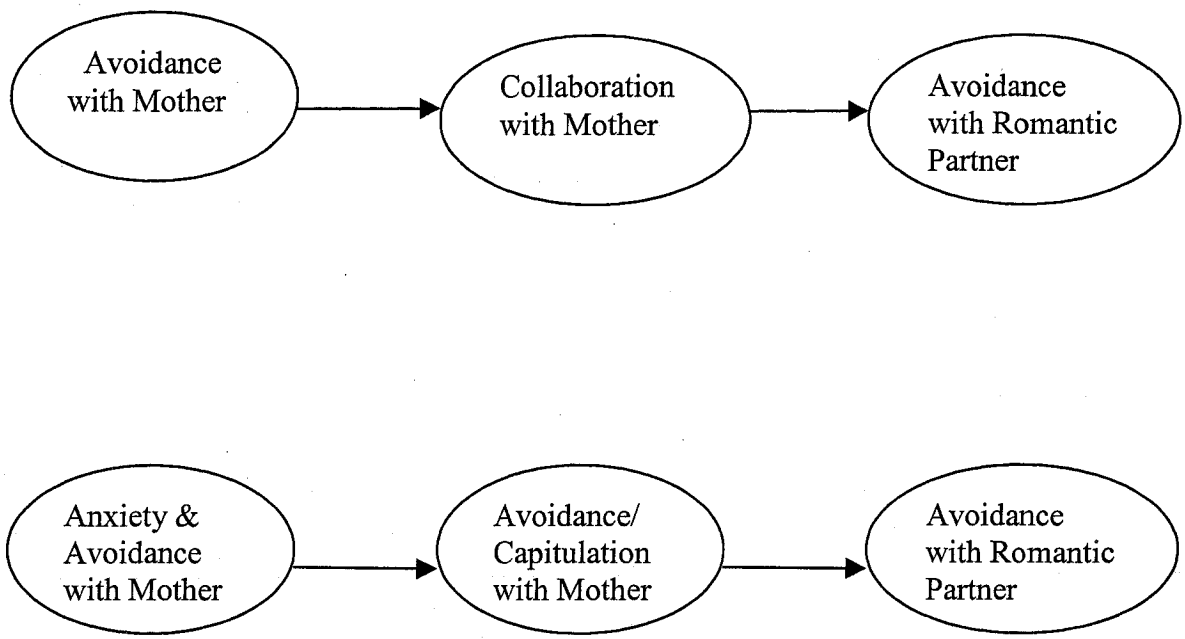

Figure 4: Indirect effects of attachment to mother predicting to conflict strategies with mother, which in turn predict to attachment to romantic partner

Discussion

The importance of romantic relationships in adolescents has well been established, yet little is know about the factors influencing these relationships. Attachment researchers have found some evidence for links between parent-child attachment working models and adolescent romantic relationships using interview methods that categorize attachment styles. These links, however, have not been established using self-report measures that conceptualize attachment bonds dimensionally. Moreover, neither the conditions in which adolescent-parent attachments are most relevant to adolescent romantic relationships nor the mechanisms through which this contribution may take place have been delineated.

The purpose of this thesis was threefold: (1) to establish the link between adolescent-parent attachment dimensions and adolescent-romantic partner attachment dimensions, using a self-report measure, (2) to investigate the conditions in which adolescent-parent attachments are most relevant to adolescent romantic relationships by exploring three moderating variables, and (3) to identify and test a mediational variable in the contribution of adolescent-parent attachments to adolescent-romantic partner attachments. In *Study 1*, the contribution of adolescent-parent attachment to adolescent-romantic partner attachment was explored using three moderating variables: sex, length of the relationship, and the relationship status. It was hypothesized that (1) the quality of attachment to parents would be more strongly associated with reports of the quality of current (vs. past) romantic relationships and (2) that this association would be stronger for adolescents in longer romantic relationships ($\geq$ 1 year).

In *Study 2*, conflict and problem solving strategies with parents were identified and tested as a possible mediational variable in the contribution of adolescent-parent attachments to adolescent-romantic partner attachments. It was hypothesized that less secure attachments and less positive conflict resolution strategies with parents would predict less secure attachments with romantic partners. Moreover, it was hypothesized that conflict resolution strategies would mediate the association between attachment to parents and attachment to romantic partners. More specifically, the association between avoidant attachment with parents and avoidant attachment with romantic partner would be mediated by avoidance/capitulation conflict resolution styles.

Predictions of Attachment to Romantic Partner from Parental Attachments

Results from Study 1, and from the replication with the subsample in Study 2, support that adolescent-parent attachment contributes to adolescent-romantic partner attachment when assessed dimensionally, using a self-report measure. The most consistent findings from both samples were (1) Anxiety with Mother contributed to Anxiety with Romantic Partner and (2) Anxiety with Father contributed to Avoidance with Romantic Partner. These results suggest that while attachment to mothers and fathers both contribute to the quality of attachment to romantic partners, they do not always do so in similar ways. The more anxious older adolescents feel about their mothers rejecting them and about their own self-worth with their mothers, the more attachment Anxiety they feel with their romantic partners. Alternatively, and somewhat counter intuitively, the *less* anxious adolescents feel about their fathers rejecting them and their own self-worth with their fathers the *more* they avoid closeness with their romantic partners.

In both cases, it seems that adolescents' sense of self, rather than their view of others, is a stronger contributor to the quality of attachment to romantic partners. This may be due to the overall importance of identity formation during adolescence and the importance of establishing their sense of self-worth in new relationships. Why *less* anxiety with father should contribute to more avoidance with romantic partner is not entirely clear. Perhaps adolescents that feel less anxious with their fathers (i.e., more self-worth with their fathers and less concern over being rejection by them) do not desire or feel the need, as of yet, to seek closeness in their romantic relationships. Alternatively, adolescents who are more anxious with their fathers may use their romantic partners as compensation and are less avoidant with them.

While regressions did not show significant sex interactions, the fact that the sample was largely made up of females (69% in the larger sample and 78% in the subsample) may indicate that these finding are specific to them. That is, for adolescent girls, their relationship with their mother may be more important in generalizing to anxiety with their romantic partner consistent with attachment theory. However, girls' relationship with their father may be more important in contributing to how comfortable they feel being close to their romantic partners.

Trinke and Bartholomew's (1997) study of attachment hierarchies may provide some insight to this phenomenon. They found that females ranked their romantic partners lower in the safe haven function than did males and surmised that females may find their romantic partners less satisfying as a safe haven or have a greater number of figures to use as safe havens and therefore, rely less on their male partners. In the current

study, perhaps girls who feel less anxious with their fathers, in particular, do not rely on and thus avoid closeness more with their romantic partners.

In the larger sample (Study 1) Anxiety with Father as well as Anxiety with Mother was also associated with Anxiety with Romantic Partner. That is, the more anxious older adolescents felt about being rejected by both their parents and about their own self-worth with their parents, the more attachment Anxiety they felt with their romantic partners. The lack of repetition of the finding for Anxiety with Father being associated with Anxiety with Romantic Partner in the subsample (Study 2) may be due to the smaller number of participants (i.e., decreased power of the analysis).

In addition to these findings, Length of Relationship and Relationship Status were found in Study 1 to contribute to the attachment dimensions with Romantic Partner and there was a trend for Relationship Status to be associated with Anxiety with Romantic Partner in Study 2. The findings that adolescents reporting on shorter romantic relationships also report more Anxiety and Avoidance with their romantic partners are not surprising. Romantic relationships are a relatively new type of relationship in adolescence. Thus, young people may need at least one year before they are comfortable with closeness in these relationships. Additionally, because this type of relationship is relatively new, it may take more time for adolescents to develop a more positive sense of self with their romantic partners.

With regards to the relationship status, even in late adolescence being in a current romantic relationship may contribute to the adolescents' sense of self in a positive way. Thus, adolescents currently in a romantic relationship might report less anxiety in terms of their sense of self with their romantic partner than adolescents reporting on a previous

romantic relationship. On the other hand, adolescents who are uncomfortable with being close to their romantic partners may not be able, or do not desire, to maintain a relationship. The finding supports previous findings from an older sample (mean age 22) where participants who were married or currently in a romantic relationship reported less anxiety and avoidance with their romantic partners than those reporting on a previous romantic relationship (Shi, 2003). The lack of repetition of the finding for Length of Relationship to predict to Anxiety with Romantic Partner and Relationship Status to predict to Avoidance with Romantic Partner in the subsample (Study 2) might merely be due to the reduction of sample size and power.

Although, as expected, Relationship Status did moderate the relationship between adolescent-parent attachment and the adolescent-romantic partner attachment, the pattern of findings was opposite to that predicted. Additionally, this was true only for Anxiety with Romantic Partner. Contrary to the hypothesis, results from both studies suggest that for older adolescents reporting on a *previous* romantic relationship, but not for those reporting on a current one, low Avoidance with Mother and high Avoidance with Father contributed to high Anxiety with Romantic Partner. The fact that avoidance with parents was significantly associated with anxiety with romantic partner only for those participants reporting on a *previous romantic relationship* may indicate that the avoidance with parents is particularly important for adolescents considering their ex-romantic partners. The negative direction of the relationship with mother suggests that these adolescents may be using their romantic relationship to compensate for feeling uncomfortable with closeness to their mothers. Conversely, adolescents who experienced high attachment anxiety in their previous relationships may now turn toward and rely on

their mothers for a sense of closeness and attachment security. A third plausible explanation is that adolescents in a *current* romantic relationship may idealize their romantic partners. With respect to their fathers, how comfortable with closeness adolescents are to their fathers might have played a role in their sense of self, in terms of being lovable and fearing rejection, with their previous romantic partner. Alternatively, adolescents who experienced high attachment anxiety in their previous relationship may become more uncomfortable with closeness to their fathers.

Although these results do not necessarily point toward the emotional saliency of a current romantic relationship to elicit the attachment dimensions with parents more than a previous romantic relationship, as expected, it is interesting to note that relationship status still may play a role, at least, in the association between the avoidant attachment with parents and anxious attachment with romantic partner. Therefore, it could be argued that this variable is still worthy of consideration when employing attachment measures to investigate adolescent romantic relationships.

Contrary to our hypothesis, the length of the romantic relationship did not moderate the relationship between adolescent-parent attachments and adolescent-romantic partner attachment. This may be due to the fact that the measure did not sufficiently distinguish between romantic relationships that are full-blown attachment figures (generally taking at least two years in length) and those that are not. It should also be considered that, unless a very large sample is employed, the length of relationship might not be a good measure for adolescent romantic relationships in terms of a moderating variable between attachment dimensions with different target figures, as the vast majority of these relationships are not over two years in length. This is not to say

that the length of relationship is not worthy of consideration when assessing adolescent romantic attachments. In both studies, this variable did negatively predict avoidance with romantic partner, indicating that adolescents in shorter romantic relationships report more avoidance with their romantic partner and, in the larger sample, the length of the romantic relationship also predicted anxiety with romantic partner. That is, adolescents in romantic relationships, at least one year in length, reported less attachment anxiety with their romantic partner.

Although no specific prediction was put forth regarding the moderating variable sex, it should be noted that the interaction of sex with the parental attachment dimensions did not significantly predict either anxiety or avoidance with romantic partners. This is consistent with the majority of previous studies that failed to find gender difference in attachment styles (e.g., Brennan & Shaver, 1995; Hazan & Shaver, 1987; Shi, 2003).

The Role of Adolescent-Parent Conflict and Problem Solving Strategies

Contrary to our hypothesis, results of Study 2 did not support the mediational model either when predicting to anxiety or avoidance with romantic partner. Indirect effects, however, were established. Avoidant attachment with parents contributed to adolescent-parent conflict resolution strategies similarly for mother and father. Older adolescents lower in attachment avoidance with their parents (i.e., more comfortable with closeness to their parents) used more collaboration as a conflict resolution strategy with their parents. Those higher in attachment avoidance, however, used more avoidance/capitulation and verbal aggression conflict resolution strategies. For anxious attachment differences were found between parents. High attachment anxiety with mother (i.e., less self-worth with their mothers and more worried about being rejected by

their mothers) was associated with the use of more Avoidance/Capitulation and Verbal Aggression with mother, while high attachment anxiety with father was associated with less use of collaboration as a conflict and problem solving strategy with father.

These results are not surprising. Collaboration involves joint problem solving in order to find a solution that takes into account both parties' needs (Kerig, 1996). This requires self-disclosure, an understanding of the other, and a willingness to consider different opinions as valid. In other words, this type of strategy requires individuals to put aside fear, anxiety, and defensiveness, to be comfortable with self-exposure, and to have a reasonable reliance on the other individual (Shi, 2003). For adolescents high in avoidance with their parents, this may be particularly difficult and thus, they may be less inclined to use collaboration in an attempt to resolve conflict with them. Additionally, adolescents high in anxiety with their fathers may also be less likely to use a collaborative strategy as it may require a certain amount of self-confidence that they may not feel with their fathers.

Conversely, Avoidance/Capitulation as a conflict problem strategy allows one to escape from conflict either by ignoring the problem, leaving the scene, or giving in to the other person to escape argument. To discuss issues openly requires the individual to be comfortable in relying on the other person and to seek their support. This may prove to be too difficult for adolescents high in avoidance with their parents and therefore they may rely on the similar technique of avoidance/capitulation to resolve conflict with them. Additionally, high anxiety with mothers may cause adolescents to use more avoidance/capitulation strategies in order to avoid the risk of being rejected by their

mothers by avoiding conflict. This might be especially true for mothers because of the important role mothers play in attachment hierarchies (Trinke & Bartholomew, 1997).

Finally, verbal aggression involves behaviour such as yelling, accusing, and/or insulting that could be viewed as a way to resolve conflict by domination. Adolescents that are high in avoidance with their mothers and fathers may use this type of strategy to avoid more intimate discussions. Conversely, adolescents that are high in anxiety with their mothers may use this strategy in order to obtain their mothers' attention and keep them engaged. Perhaps high anxiety with fathers is not highly associated with verbal aggression as a strategy with adolescents and their fathers because fathers are generally seen as more intimidating than mothers and adolescents may be more cautious in using this aggressive strategy as a means engaging their fathers.

In continuing the search for indirect effects, results also indicated that the conflict and problem solving strategies with parents were significantly associated with avoidance with romantic partner, but not to anxiety with romantic partner. Thus, it seems that the manner in which adolescents resolve conflict with their parents might influence how comfortable they are in closeness to their romantic partners, but not necessarily how they view their own self-worth with their partner or the likelihood that their partner will reject them. More specifically these results suggest that adolescents who use more collaboration and less avoidance/capitulation strategies with their mothers, in particular, more less comfortable with closeness to their romantic partners.

In examining the unique predictors of all of these results two indirect effects suggesting that these variables are associated in a chain link fashion were established. First, more avoidance with mother was associated with less collaboration with mother

that in turn was associated with more avoidance with romantic partner (see Figure 4). Second, more avoidance *and* anxiety with mother was associated with the use of more avoidance/capitulation with mother as a conflict resolution strategy that in turn was associated with more avoidance with romantic partner (see Figure 5). The indirect effects with mother support, in part, the hypothesis that less secure adolescent-parent attachments will be linked to less secure adolescent-romantic partner attachments. However, the links were not mediated by less positive conflict resolution strategies, as expected. That is, the link between avoidance with mother and avoidance with romantic partner was not explained by either Collaboration or Avoidance/Capitulation conflict and problem solving strategies. The findings that these variables are intercorrelated, however, are consistent with previous studies that suggest avoidance, both in attachment and in conflict resolution strategies, may be particularly detrimental to adolescent romantic relationships (Collins et. al 2002; Martin, 1990).

Limitations to the Studies and Future Direction

A number of methodological drawbacks need to be addressed when considering the results of the studies. First, the large majority of female participants in both studies limits the extent to which results may apply for boys. Results obtained from these studies may be more relevant for females than they are for males. Future studies should ensure a more balanced sex ratio. Second, the measure of Length of Relationship may not have been sufficiently stringent in either study to establish the hypothesized moderating effect. However, such a strict criterion may not be realistic for the majority of adolescent romantic relationships. Thus, the length of relationship may not be a particularly useful moderating variable. Third, the small number of participants reporting on a previous

romantic relationship in the subsample of Study 2 makes it difficult to establish conclusive results in the replication of Study 1.

The sole use of self-report measures raises concerns regarding shared method variance and collecting data from multiple sources is recommended. Additionally, although internal working models may be resistant to change and are carried forward into new relationships, these working models bias but do not necessarily determine appraisals of an attachment figure's availability (Kobak, 1999). Attachment security results from a dynamic transaction between internal working models and the quality of the current attachment relationships. Therefore, reports from the adolescent's romantic partner might be particularly important in understanding the attachment to that romantic partner.

The correlational design of the study prohibits firm conclusions regarding the causal ordering of the study variables and the developmental process of adolescent romantic relationships. Longitudinal studies are therefore necessary for future research in order to establish whether early attachment and conflict problem solving experiences predict later romantic relationship qualities beyond predictions from later family experiences. Finally, although Study 2 establishes the link between adolescent-parent conflict and problem solving strategies and adolescent-romantic partner attachment, as well as indirect effects, a more comprehensive understanding of the mechanisms through which adolescent-parent attachments contribute to adolescent-romantic partner attachment should include a measure of the conflict and problem solving strategies with romantic partner. A longitudinal design, with more participants, would allow a stronger demonstration of the various pathways in which adolescent-parent attachment may influence adolescent-romantic relationships.

Summary

Consistent with our hypothesis, parental attachment predicted the quality of attachment to romantic partner, particularly the parental Anxiety dimension. Evidence was also found for the association between parental avoidant attachment and anxious attachment to romantic partner to be moderated by adolescents' relationship status, although the pattern of findings was opposite to our hypothesis. That is, while anxiety with parents may play a role in adolescent anxious attachment to romantic partner, regardless of relationship status, it may be that only for those previously in a romantic relationship that avoidant attachment to parents plays a part. Also contrary to our hypothesis, the length of the romantic relationship did not moderate the relationship between attachment to parents and to romantic partner.

Although the hypothesized mediational model did not prove significant, two indirect effects were established whereby (1) avoidant attachment with mother was associated with collaboration with mother, which in turn was associated with avoidant attachment with romantic partner and (2) avoidant and anxious attachment with mother was associated with avoidance/capitulation with mother, which in turn was associated with avoidant attachment with romantic partner. In examining these indirect effects, the link between conflict and problem solving strategies with parents and attachment to romantic partners, previously not tested, was established. It is interesting to note that how adolescents negotiate conflict with their parents, their mother in particular, seems to be important only for the avoidant attachment to romantic partner. Thus, the experience for adolescents of resolving, or attempting to resolve, conflict with their mothers may be more important to how adolescents view their romantic partner and the distance they are

comfortable with between themselves and their romantic partner, rather than to their sense of self-worth with their partner.

To conclude, while anxious attachment with mother is positively associated with anxious attachment with romantic partner directly, only indirectly are anxious and avoidant attachment with mother associated with avoidant attachment with romantic partner via the use of the conflict and problem solving strategies, collaboration and avoidance/capitulation with mother. For father, a different pattern emerges with no indication of indirect effects. That is, anxious attachment with father is positively associated with anxious attachment with romantic partner but negatively with avoidant attachment with romantic partner (see Figure 5). Finally, for participants reporting on a previous romantic relationship, but not for those reporting on a current romantic relationship, avoidant attachment with mother and father (albeit in different directions) might also be associated with anxious attachment with romantic partner.

Figure 5.

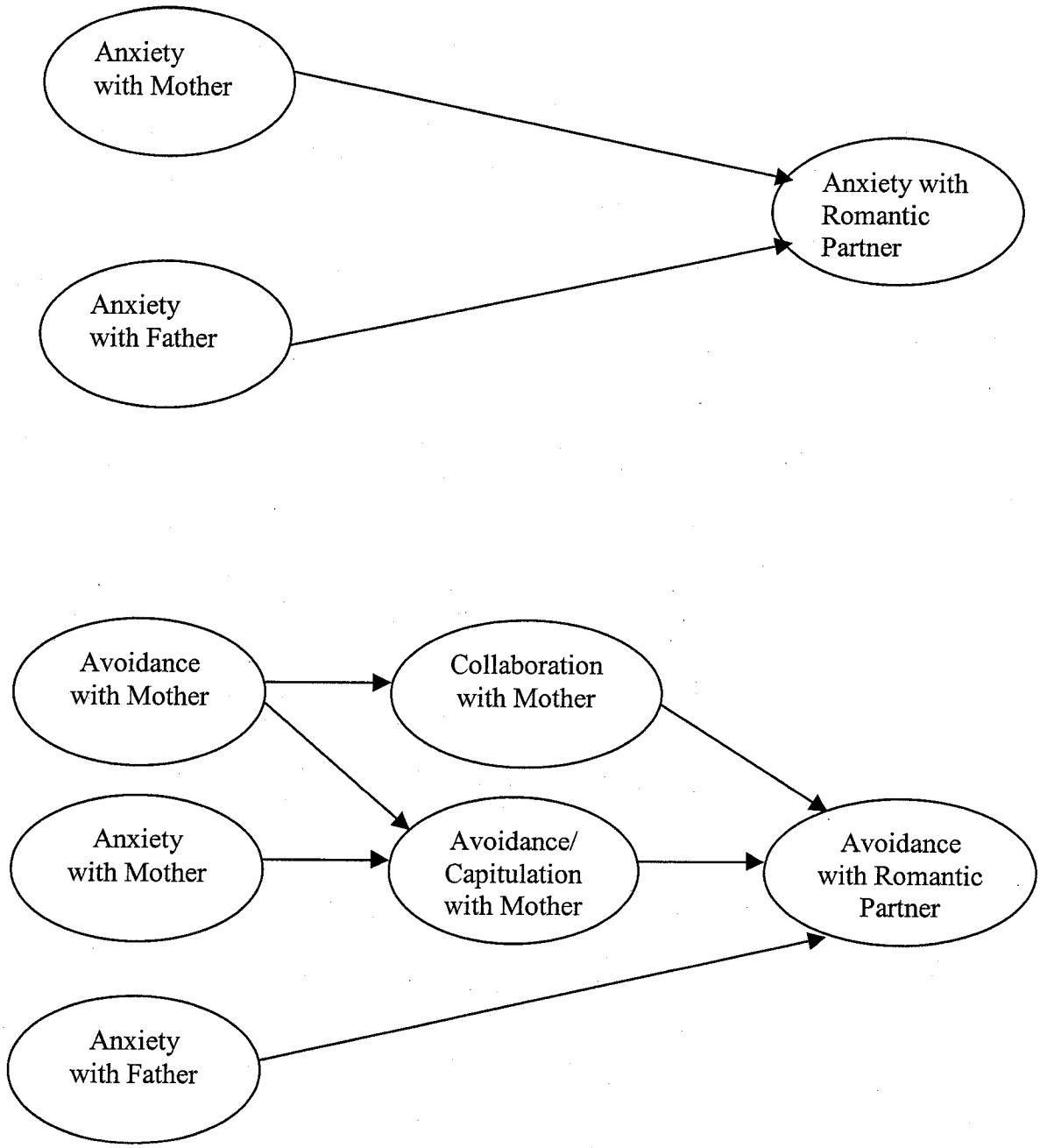

Figure 5: Indirect and direct links between attachment to parents and attachment to romantic partner

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Footnotes

[1] Five of the original 276 participants were dropped from analyses, as their age was more than 3 standard deviations above the mean age of 18.87 (SD = 1.78).

Appendix A

Consent Form

CENTRE FOR RESEARCH IN HUMAN DEVELOPMENT
tel: (514) 848-2240 fax: (514) 848-2815

April 1999 (CEGEP YR1)

CONSENT FORM TO PARTICIPATE IN RESEARCH

Check where applicable:

_____ I agree to participate in the study conducted by Dr. Dorothy Markiewicz, and Dr. Anna-Beth Doyle of the Centre for Research in Human Development. I have been informed that the study is about relationships, coping, emotions, and behaviour.

_____ I do not agree to participate in this study.

IF YOU AGREE TO PARTICIPATE, please complete the following:

I have been informed that the purpose of the research is to study the link between relationship quality, coping style, emotions, and behaviour. Participation involves one session of approximately 90 minutes, during which I am asked to complete questionnaires about my relationship with my friends, my parents, my perception of my parents' relationships, the ways I cope with stress, my mood and feelings about myself, and involvement in rule-breaking behaviour, use of alcohol and drugs, and sexual behaviour. Because it is important to understand changes over time, students will be approached again in one year, and again the next year, to complete similar questionnaires. However, there is no obligation to continue. I understand that ALL INFORMATION WILL BE CONFIDENTIAL to the research team, and identified only by number. I understand that I may withdraw my consent and may discontinue participation at any time.

Everyone completing the questionnaires will have their name entered in a draw to win Cineplex Odeon movie passes for two OR a $20 gift certificate for HMV Music Stores. There is also one grand prize, which is a Sony Discman!!

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

Name (please print):_____

Street Address:_____

City and Postal Code_____

Phone Number:

_____

Signature: _____ Date: _____

CEGEP/CEGEP level: _____ Psychology teachers' name/class:_____

Appendix B

Relationship Questionnaire (Romantic Partner)

54843

YOUR ROMANTIC RELATIONSHIP (RQR)

Please do not mark in this area

				1

If you do not have a current girlfriend/boyfriend or have not recently had a girlfriend/boyfriend, 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):

☐ Current girl/boyfriend OR ☐ Most recent girl/boyfriend

Think about your relationship with your girlfriend/boyfriend. Now read each paragraph below and indicate to what extent **each** paragraph describes your relationship with this person. When you see a *** in the paragraphs below, think of your girlfriend/boyfriend 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 girlfriend/boyfriend. I am comfortable depending on *** and having her/him depend on me. I don't worry about being alone or having *** not accept me.

Not At All						Very Much
1	2	3	4	5	6	7
☐	☐	☐	☐	☐	☐	☐

2. I am comfortable not having a close emotional relationship with my girlfriend/boyfriend. 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						Very Much
1	2	3	4	5	6	7
☐	☐	☐	☐	☐	☐	☐

3. I want to be completely emotionally close with my girlfriend/boyfriend, 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 her/him.

Not At All						Very Much
1	2	3	4	5	6	7
☐	☐	☐	☐	☐	☐	☐

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

Not At All						Very Much
1	2	3	4	5	6	7
☐	☐	☐	☐	☐	☐	☐

Appendix C

Relationship History Questionnaire

12340

Relationship History

Please do not mark in this area

				1

Answer the following questions about your **same-sex *best friend***:

1. Do you have a same-sex *best* friend now (with whom you are each other's closest friend)? ☐ Yes ☐ No
   If yes, answer the following. If no, go to question 2.

   a. Put the initials of his/her name here: ☐

   b. How long have you known each other? (☒ one box)

   - ☐ 0-3 months
   - ☐ 4-6 months
   - ☐ 7-11 months
   - ☐ 1-2 years
   - ☐ 3-6 years
   - ☐ 7+ years

   c. How long have you been *best* friends? (☒ one box)

   - ☐ 0-3 months
   - ☐ 4-6 months
   - ☐ 7-11 months
   - ☐ 1-2 years
   - ☐ 3-6 years
   - ☐ 7+ years

---

2. Did you have **another *best*** friend before this one **(that you are no longer best friends with)**?
   ☐ Yes ☐ No

   If yes, for how long were you *best* friends? (☒ one box)

   - ☐ 0-3 months
   - ☐ 4-6 months
   - ☐ 7-11 months
   - ☐ 1-2 years
   - ☐ 3-6 years
   - ☐ 7+ years

---

3. Think about **other** best friends you've had, before this, since you were 10 years old. At any given time, think of the one person with whom you were best friends. How many **such** best friends (only 1 at a time) have you had since you were 10 years old? (Don't include your current or just previous best friend.)
   ☐ 0 ☐ 1 ☐ 2-3 ☐ 4-6 ☐ 7-10 ☐ 11 or more

   List them by their initials.
   Below each person's initials indicate about how long (in months or years) you were best friends.

Initials	Initials	Initials
☐	☐	☐
How long	How long	How long
☐ 0-3 months	☐ 0-3 months	☐ 0-3 months
☐ 4-6 months	☐ 4-6 months	☐ 4-6 months
☐ 7-11 months	☐ 7-11 months	☐ 7-11 months
☐ 1-2 years	☐ 1-2 years	☐ 1-2 years
☐ 3-6 years	☐ 3-6 years	☐ 3-6 years
☐ 7+ years	☐ 7+ years	☐ 7+ years

Answer the following questions about *romantic partners*:

1. Have you ever dated someone? ☐ Yes ☐ No

If **no**, go to the next questionnaire.

a. How old were you when you first began dating?

- ☐ 12 years old or younger
- ☐ 13-14 years old
- ☐ 15-16 years old
- ☐ 17-18 years old
- ☐ 19 years or older

b. How many steady relationships with a romantic partner have you had since you began dating (you and your partner agreed to date only each other)?

☐ 0 ☐ 1 ☐ 2-3 ☐ 4-6 ☐ 7-10 ☐ 11 or more

List your previous steady romantic partners by initials. Below each person's initials indicate about how long (in months or years) you were in a steady relationship with them. (Don't include your current partner.)

Initials	Initials	Initials
☐	☐	☐
How long	How long	How long
☐ 0-3 months	☐ 0-3 months	☐ 0-3 months
☐ 4-6 months	☐ 4-6 months	☐ 4-6 months
☐ 7-11 months	☐ 7-11 months	☐ 7-11 months
☐ 1-2 years	☐ 1-2 years	☐ 1-2 years
☐ 3-6 years	☐ 3-6 years	☐ 3-6 years
☐ 7+ years	☐ 7+ years	☐ 7+ years

---

2. Are you currently in a steady romantic relationship? ☐ Yes ☐ No

If **no**, skip to the next questionnaire.

a. For how long have you known this partner (☒ one)?

- ☐ 0-3 months
- ☐ 4-6 months
- ☐ 7-11 months
- ☐ 1-2 years
- ☐ 3-6 years
- ☐ 7+ years

b. How long ago did this relationship become a steady one (☒ one)?

- ☐ 0-3 months
- ☐ 4-6 months
- ☐ 7-11 months
- ☐ 1-2 years
- ☐ 3-6 years
- ☐ 7+ years

Appendix D

General Information Form

GENERAL INFORMATION FORM

53458

Please do not mark in this area

Order: 1 2 3 4

The information provided in this form will help us describe the range of participants in our study.

1. Age:

2. Date of Birth: DAY / MONTH / YEAR

3. Sex: ☐ Female ☐ Male

4. Grade:

☐ 7 ☐ 11
☐ 8 ☐ Cegep 1
☐ 9 ☐ Cegep 2
☐ 10 ☐ Cegep 3+

5. School:

☐ Vanier ☐ LaSalle
☐ Dawson ☐ St. Thomas
☐ John Abbott ☐ Other (specify) _____

6. My grades generally average (1-99) ___ %
AND letter grade (circle one):
A B C D F

7. I have skipped a grade or did two years in one:
☐ Yes ☐ No

8. I have failed/repeated a grade:
☐ Yes ☐ No

9. What is your mother tongue (first language)?
☐ English ☐ French ☐ Other (specify) _____

10. What languages do you speak at home?
☐ English ☐ French ☐ Other (specify)

11. I have ___ sister(s).
Specify how many are older than you: ___

12. I have ___ brother(s).
Specify how many are older than you: ___

13. My mom is (☒ one box):
☐ Single ☐ Married ☐ Divorced ☐ Widowed ☐ Other

14. My dad is (☒ one box):
☐ Single ☐ Married ☐ Divorced ☐ Widowed ☐ Other

15. Who lives (lived) in your house with you?
(☒ all that apply)

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

16. For questions 13, 14 and/or 15, have there been any changes over the course of the past year?
☐ Yes ☐ No

17. My ethnic/cultural background is
(☒ all that apply below)

☐ English Canadian ☐ Asian
☐ French Canadian ☐ American
☐ Aboriginal ☐ Latin American
☐ African ☐ Australian
☐ European ☐ Other (specify) _____

18. I have lived in Canada ___ years.

53458

Appendix E

Conflict and Problem Solving Questionnaire

46894

CONFLICTS AND PROBLEM-SOLVING SCALE

Please do not mark in this area

				2

All family members disagree once in a while. We would like to know how you deal with conflict in your relationship with **your mom, your dad,** and **your closest in age sibling** (brother or sister).

The following questions describe various strategies you may use to deal with conflict with **your mom, your dad** and **your sibling.** Please indicate how often YOU use each strategy, by making an ☒ in the box which best corresponds to your situation.

(If you have no brothers or sisters, ☒ this box ⟶ ☐ and leave the "sibling" items blank.)

When dealing with conflict with your mom, dad, or sibling, how often do YOU:

1. Talk it out with the other person.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

2. Listen to the other's point of view.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

3. Try to reason with the other.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

4. Try to find a solution that meets both of our needs equally.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

5. Compromise, meet the other half way, "split the difference".

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

6. Give in to the other's viewpoint to escape argument.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

7. Try to ignore the problem, avoid talking about it.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

8. Change the subject.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

46894

Please do not mark in this area

When dealing with conflict with your mom, dad, or sibling, how often do YOU:

9. Clam up, hold in feelings.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

10. Leave the room.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

11. Cry.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

12. Sulk, refuse to talk, give the "silent treatment".

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

13. Complain, bicker without really getting anywhere.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

14. Enlist friends or family to support my own point of view.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

15. Insist on my point of view.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

16. Raise voice, yell, shout.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

17. Interrupt/don't listen to the other.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

18. Become sarcastic.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

19. Name-call, curse, insult.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

20. Withdraw love or affection.

Mom:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Dad:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often
Sibling:	☐ Never	☐ Rarely	☐ Sometimes	☐ Often

46894

Appendix F

Other Findings

Table 9.

Study 2 Summary of Hierarchical Regression Analysis: Attachment with Mother Predicting to Collaboration with Mother (N = 97)

	Collaboration with Mother		
Variables	$R^2 \Delta$	Beta	sr^2
Step 1:	.00		
Sex		-.03	.00
Step 2:	.33**		
Anxiety with Mother		-.06	.00
Avoidance with Mother		-.55**	.27

$R^2 = .33$, $p<.01$
**$p < .01$

Table 10.

Study 2 Summary of Hierarchical Regression Analysis: Attachment with Mother Predicting to Avoidance/Capitulation with Mother (N = 97)

	Avoidance/Capitulation with Mother		
Variables	$R^2 \Delta$	Beta	sr^2
Step 1:	.03 ^{t}		
Sex		-.17 ^{t}	.03
Step 2:	.15**		
Anxiety with Mother		.23*	.04
Avoidance with Mother		.24*	.05

$R^2 = .18$, $p<.01$

**$p < .01$, *$p < .05$, $^t p = .09$

Table 11.

Study 2 Summary of Hierarchical Regression Analysis: Attachment with Mother Predicting to Verbal Aggression with Mother (N = 97)

	Verbal Aggression with Mother		
Variables	$R^2 \Delta$	Beta	sr^2
Step 1:	.01		
Sex		-.09	.01
Step 2:	.09*		
Anxiety with Mother		.19 [t]	.03
Avoidance with Mother		.17	.02

$R^2 = .10$, $p<.05$

*$p < .05$, [t]$p = .08$

Table 12.

Study 2 Summary of Hierarchical Regression Analysis: Attachment with Father Predicting to Collaboration with Father (N = 97)

	Collaboration with Father		
Variables	$R^2 \Delta$	Beta	sr^2
Step 1:	.00		
Sex		.07	.00
Step 2:	.28**		
Anxiety with Father		-.23*	.04
Avoidance with Father		-.41**	.15

$R^2 = .28$

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

Table 13.

Study 2 Summary of Hierarchical Regression Analysis: Attachment with Father Predicting to Avoidance/Capitulation with Father (N = 97)

	Avoidance/Capitulation with Father		
Variables	$R^2 \Delta$	Beta	sr^2
Step 1:	.02		
Sex		-.16	.02
Step 2:	.19**		
Anxiety with Father		.11	.01
Avoidance with Father		.38**	.13

$R^2 = .21$; **$p < .01$

Table 14.

Study 2 Summary of Hierarchical Regression Analysis: Attachment with Father Predicting to Verbal Aggression with Father (N = 97)

	Verbal Aggression with Father		
Variables	$R^2 \Delta$	Beta	sr^2
Step 1:	.00		
Sex		-.05	.00
Step 2:	.07*		
Anxiety with Father		-.01	.00
Avoidance with Father		.26*	.06

$R^2 = .07$; *$p < .05$