1995

The role of attachment, affect and integrative complexity in couple discussions

Fiona Jill Currie
Wilfrid Laurier University

The Role of Attachment, Affect and Integrative Complexity in Couple Discussions

Fiona Jill Currie
University of Waterloo, 1992

Submitted to the Department of Psychology in partial fulfilment of the requirements for the Master of Arts degree.

Wilfrid Laurier University
1995

ISBN 0-612-04636-2

Canada

Abstract

The purpose of the present investigation was to explore the possible associations between marital affect and cognitive complexity of discourse within an attachment context. Attachment theorists (e.g., Bowlby, 1982) have proposed that bonds formed between infants and their parents are internalized as working models of self and others and continue to influence the infant in relationships even into adulthood. In particular, possible longitudinal influences of variations in early attachment experiences may be seen in the discussions of couples about relationship issues. It was hypothesized that childhood attachment relationships with parents would be associated with the level of cognitive complexity of the couples' comments and with the kind of affect produced in couple discussions. The relationship between affect and the level of cognitive complexity in the discussions was also explored.

Fifty-six wives and 52 husbands participating in a larger study of the transition to parenthood completed attachment scales (see Cowan & Cowan, 1994) and were videotaped trying to resolve a couple or parenting issue of their choice. The couple discussions were then coded for integrative complexity and kinds of affect expressed by the spouses. It was hypothesized that a more secure attachment to parents would be associated with less reciprocation of negative affect from the partner and a higher level of complexity in the discussions. As well, it was predicted that more complex speech should also be related to a lower level of negative affect reciprocation. Two findings of notable interest were obtained, such that attachment to the opposite-sex parent, particularly for wives, was related to the amount of overall negativity produced by the

wives and by the couples. Also, the predicted relationship between negative affect reciprocation and integrative complexity was generally found, such that individuals and couples who were more complex in their thinking, reciprocated and expressed less negative affect. However, there was no evidence that attachment status was a predictor of integrative complexity in the couple discussions, contrary to the hypothesis. Implications of the present study are discussed in terms of gender roles within marriages and developing interventions for couples experiencing communication difficulties.

Acknowledgements

There are a number of people I wish to thank who contributed significantly to the development of the research project and the write-up of this paper.

I would first like to express my gratitude to my advisor, Dr. Michael Pratt, whose guidance and support aided me tremendously. Also, I wish to thank my thesis committee members, Dr. Bruce Hunsberger and Dr. S. Mark Pancer who not only read this lengthy manuscript, but gave me great suggestions along the way.

A huge thank you to Rebecca Filyer. I would not have been able to finish this project without her. I especially appreciate all those long hours she helped me analyze the data.

Thanks to Susan Alisat who helped me get supplies, who co-ordinated the complexity meetings and circulated my material for coding.

I wish to express my thanks to my fellow interviewers for the New Families Research Project, Kim Ewing, Margo Gallant, and Tracey Idle. Kim also helped me with the SPAFF coding and gave me great moral support. Margo trained me as an interviewer, and helped make my transition to the project much easier.

Thank you to Dr. Phillip Cowan and Dr. Carolyn Pape Cowan for allowing me to use their attachment measures and for helping me get practice by scoring their couple tapes.

I could not have completed this project without the love and support of my family and my colleagues, Stephen Friedman, Daniel Lamothe and Michelle Kalra. They

feigned interest in what I was doing, despite hearing about my project over and over again.

Finally, I wish to thank the couples and their children who participated in the New Families Research Project. I appreciate enormously their co-operation and willingness to let a virtual stranger eavesdrop on their conversations.

Table of Contents

List of Tables

List of Figures

The Role of Attachment, Affect and Integrative Complexity in Couple Discussions

What makes some marriages thrive while even more marriages fail? Although this question appears to be rather broad in scope, it has prompted both researchers and lay people alike to try to find the magic ingredients for a successful marriage. While some researchers have shown that certain couple and individual characteristics increase the likelihood of marital success (e.g., Gottman, 1993), perhaps the answer to why some marriages last, while others do not, lies deep within the past of each person.

John Bowlby, an attachment theorist (1982), postulated that when a bond develops between an infant and a caregiver, the child forms "internal working models" of self and others, which are affected by the degree of responsiveness of the caregiver. For instance, an infant who received love and attention from its caregiver would incorporate these positive experiences into constructive internal working models (i.e., a secure attachment) of what to "expect" of others and itself. An internal working model is thus a generally unconscious blueprint of how individuals perceive themselves and the environment in terms of the ability to trust others and the degree of competence they feel as people. Conversely, infants who experienced their caregivers as non-responsive would then develop more negative generalized internal working models of themselves and others (i.e., an insecure attachment). Bowlby (1982) also theorized that these internal working models help structure future relationships as children develop into adulthood. Several studies have found some evidence for the possible existence of internal working models in adulthood in regards to adult romantic relationships (e.g., Collins & Read, 1990; Feeney & Noller, 1990). For instance, Collins and Read (1990) found that individuals

with a secure attachment to their romantic partner desire intimacy and closeness more than adults with a more insecure attachment to their partner. Desired intimacy and closeness are indicative of people who are comfortable with themselves and others important in their lives. A probable source of these positive feelings is a secure base provided by the primary caregiver in childhood. One means of establishing continuity of these positive experiences throughout the lifetime may be through the development of these internal working models.

In the present study, the possible emotional and cognitive expressions of internal working models that have been shaped by an adult's attachment relationship with his or her parents were examined. Components of internal working models have been explored by Bretherton (1983), who postulated that models of self and others may be understood as kinds of scripts or schemas that individuals develop through life experience. Bretherton theorized that the expression of these internal working models may have both cognitive (e.g., "I am a worthy person because people try to meet my needs") and emotional (e.g., "I feel safe around my caregiver") aspects. In the present study, linkages were explored between how current levels of affect expressed between spouses in marital discussions, and the cognitive complexity of communications about relationships in these interactions, are associated with the attachment relationships formed by each partner in childhood. Attachment thus seemed like a useful framework for examining how marital interaction and integrative complexity, two seemingly different bodies of research literature might be connected. For instance, the interactions between spouses involve both emotional regulation (e.g., Gottman & Levenson, 1992) as well as

communication skills (e.g., Noller, 1982), which require spouses to analyze and monitor the cognitive bases of statements made to one another. Integrative complexity, the measure of cognitive complexity used in the present study, focuses on styles of information processing and also underlies aspects of interpersonal communication.

Until now, the relationships among attachment, affect and integrative complexity of information processing and communication have not been examined within a single, unified framework. Although some studies have explored associations between some of these concepts (e.g., Cohn, Silver, Cowan, Cowan & Pearson, 1992), there has been no attempt to examine a model of how these three constructs might be integrated. Therefore, the purpose of this study was to elucidate how early childhood attachment experiences might influence two distinct aspects of couple communication: degree of cognitive complexity in couples' discussions about their relationships and the regulation of expression of negative affect in these discussions. If attachment style can be shown to be linked to these two different aspects of marital communication, then the idea that internal working models about self and others, formed in childhood and presumably characterized by both affective and cognitive components, influence the interactions of married adults would be further strengthened.

Before presenting the hypotheses and framework for conceptualizing the relationships among attachment, affect and integrative complexity, background information regarding attachment theory and research from infancy to adulthood will be provided. Recent findings on marital interaction and on integrative complexity, as they pertain to

attachment, will also be discussed. Finally, the hypotheses and the research questions that were posed in the present study will be presented.

A Review of Attachment Theory and Research

Over the last forty or fifty years, increasing attention has been paid to the nature of parent-child relationships. Bowlby (1982), the founder of attachment theory, viewed the parent-child relationship as a behavioral system having developed over millions of years as an evolutionary mechanism to promote the survival of the human species. He maintained that children and their primary caregivers (typically the mother) develop meaningful bonds during infancy which are qualitatively different from every other relationship. Children internally represent their relationship with their mothers by forming "working models" of self and others. Bowlby argued that these internal working models form the basis of how an infant perceives itself and the social environment in terms of safety and trust issues. For instance, a child is likely to develop more positive models of self and others if the parent provides a secure base (i.e., provides a balance of protection and opportunity for exploration) for the child and is responsive to its needs. Bowlby maintained that children are not consciously aware of these developing internal working models, and that in order to examine them, parent-child interactions must be observed. Since the operations of internal working models are contingent upon the child's current level of "felt-security" (i.e., how protected and loved a child feels), they should be most evident during stressful situations.

Ainsworth, Blehar, Waters and Wall (1978) developed an observational measure to assess the nature of specific mother-child interactions, called the Strange Situation, to test Bowlby's (1982) theory that the quality of parent-child interactions is particularly evident during times of stress. Ainsworth et al. (1978) observed parents and their infants before and after a brief separation episode, during which the infants were left alone with a stranger. The researchers found that the absence of the parent, combined with the presence of a stranger, made most babies very uneasy. She and her colleagues then proceeded to observe the reactions of the infants during a reunion with their mothers, based on the idea that the stress felt by a child would be diminished when comforted by their parent.

From the researchers' observations, infants were classified according to the ways they interacted with their mothers during the reunion episode. Infants who showed signs of distress upon separation, but who sought comfort upon the mother's return, were classified as securely-attached. Bowlby (1982) theorized that securely-attached children would have positive internal working models of self and others as a result of early and consistent parental responsiveness. Ainsworth et al. (1978) also observed infants who refrained from physical contact upon the mother's reappearance, and who did not seem outwardly distressed by her departure. They subsequently classified these children as avoidantly-attached, since they seemed to avoid being consoled by the parent. A final group of infants was also noted. These infants were highly distressed during the separation episode. However, upon their mother's return they showed inconsistent

behaviour, such as alternately seeking and resisting maternal support. This group of infants was classified as anxious-resistant, since they seemed uneasy about the separation, sought comfort, and yet resisted being soothed by their mother. Bowlby (1982) argued that insecurely-attached children (i.e., the avoidant and anxious-resistant groups) would develop less positive working models of both others and themselves as a result of unresponsive or inconsistent parenting.

The proportions of Ainsworth et al.'s (1978) attachment groups have been shown to be relatively consistent across studies in several cultures. It is generally accepted that approximately 70% of infant relationships classified are securely-attached, 20% of infants have an anxious-avoidant attachment, and 10% of infants have an anxious-resistant attachment to their mothers (van Ijzendoorn & Kroonenberg, 1988).

Attachment Patterns Beyond Infancy

Subsequent research has broadened our knowledge of attachment, by examining how older children who have experienced differing attachment relationships with their parents behave as they develop. Distinct differences among the various attachment groups have been noted in older children (Main, Kaplan & Cassidy, 1985). For instance, Main et al. (1985) found that attachment patterns observed in infants with mothers put in the Strange Situation at 12 months were predictive of the attachment patterns found for the same children with their mothers at age 6 (r=.76) using parallel measures of security and functioning of the children. As well, securely-attached children seemed to have better

peer relations, were more confident and had higher self-esteem than children classified as avoidant or anxious-resistant. These results suggest that while children learn to integrate new experiences, the internal working models that have developed in infancy may show considerable persistence.

Research on attachment has been extended into adolescence (Armsden & Greenberg, 1987; Kobak & Sceery, 1988; Bringle & Bagby, 1992). For instance, Kobak and Sceery (1988), using an interview measure of adolescent attachment status, found that the three patterns they observed, subsequently labelled secure, dismissing and preoccupied, were similar to the attachment patterns observed by Ainsworth in the Strange Situation (i.e., secure, avoidant, and anxious-resistant, respectively). New terms were given to the adult classifications to differentiate them from the childhood terms and because an interview was used in lieu of the Strange Situation. Adolescents classified as securely-attached shared most of the qualities of securely-attached infants, such as higher levels of self-esteem and confidence and greater ego resiliency. Adolescents classified as dismissing were very similar to the avoidant attachment style found in infants, such that they tended to exhibit more hostile behaviour than the securely-attached adolescents and seemed to "dismiss" the idea of needing or wanting close relationships. Finally, adolescents classified as preoccupied (i.e., those people who seemed obsessed with thinking about past relationships and needing to be in a relationship) shared many of the characteristics of anxious-resistant children, such as increased fearfulness and insecurity. Attachment style was also found to affect how adolescents viewed their relationships with

their parents. For instance, secure adolescents perceived their parents as being more supportive and caring than adolescents with more insecure attachments to their families.

Armsden and Greenberg (1987) explored how an attachment to one's parents is related to psychological well-being by using a 60-item questionnaire called the Inventory of Parent and Peer Attachments (IPPA), which measures adolescents' attachments to their parents and peers. The measure was developed by Greenberg, Siegal and Leitch (1984), and given to adolescents ranging in age from 17 to 20 years. The researchers found that not only were secure parent-adolescent attachments related to well-being (as assessed by a self-esteem measure), but the quality of parent-adolescent relationships was also related to the adolescents' levels of depression and feelings of resentment. However, some of the dependent measures of adjustment used contained items that were similar to the defining characteristics of certain attachment groups. For example, the scale measuring affective status contained questions regarding the amount of hostility participants felt. However, hostility is also one of the defining features of the dismissing attachment group. Thus, the results should be interpreted with caution, as they might seem to be partly artifactual in nature.

Nevertheless, Bringle and Bagby (1992) found similar results when they investigated the relationship between attachment and well-being. Insecurity of attachment was related to lower levels of self-esteem and social skills and to adolescents' perceptions that their own parents were cold and unresponsive. Perceptions of inadequate parenting were also

associated with adolescent reports of more family problems, both in childhood and adolescence.

Attachment In Adulthood

Research on adults now encompasses many different aspects of attachment. Although much of the work has focused on adult romantic attachment, other attachment bonds do exist. Ainsworth (1989) suggested that attachment relationships between adults and their parents, siblings and friends are still important to examine, despite the attention mother-infant relationships have received. One of the better documented areas has been the impact of attachment on subsequent parenting and how particular attachment styles may influence the relationships between parents and children.

Parenting and the Intergenerational Transmission of Attachment Patterns

The possibility that a parent's attachment relationship with the family of origin may in turn affect the relationship with his or her own child has also been explored. For example, Crowell and Feldman (1988) found that securely-attached mothers were more supportive and provided their children with an optimal level of assistance during assigned tasks. As well, the children reciprocated these positive experiences by displaying, for example, more positive affect in response to their mother's assistance. The researchers found a trend for mothers classified as insecurely-attached to be more likely to have a child with behavioral and/or developmental difficulties. Further evidence that negative

parenting patterns may be transmitted from one generation to the next was revealed by Main and Goldwyn (1984), who uncovered a disturbing relationship between an abusive mother's experience of rejection by her own mother and the subsequent maltreatment of her own infant. For instance, physically and emotionally abusive mothers were more likely to report negative childhood experiences with their own parents, thus perpetuating the cycle of abusive behaviour. This finding suggests that children of such individuals may be at risk for developing negative internal working models as the result of abusive and unresponsive parenting.

The strength of prospective studies regarding the possibility that attachment styles are transmitted from one generation to the next was illustrated by the work of Fonagy, Steele and Steele (1991). They interviewed expectant mothers during the third trimester of pregnancy. Mothers had their attachment status to their family of origin classified using a comprehensive measure developed by Main and Goldwyn (1988), called the Adult Attachment Interview (AAI). The AAI is a detailed interview in which individuals are asked to describe their childhood and its impact on current relationships. Transcripts are assessed for the quality of past experiences and the coherence of the individual's perception of these experiences, and rated on Likert scales. Past studies (e.g., Cohn et al., 1992) have found that while securely-attached adults can speak with ease about their problems of the past, dismissing and preoccupied individuals tend to have transcripts filled with inconsistencies, and they tend to describe the past in a disorganized manner.

Mothers were classified according to the AAI during pregnancy, and when the babies were 12 months old they were observed with their mothers in the Strange Situation. Therefore, Fonagy et al. (1991) attempted to prospectively predict the infant's later attachment style with the mother based on the mother's attachment to her own family, observed before the child's birth. They found that the majority of mothers classified as securely-attached on the AAI had securely-attached children, while most of the dismissing and preoccupied mothers had insecurely-attached infants. These findings suggest that a mother's relationship with her family of origin may influence her attachment patterns with her own infant.

Adult Romantic Attachment

Some research has now been conducted in the area of adult romantic attachment (Bartholomew, 1990; Cohn et al., 1992; Senchak & Leonard, 1992). Hazan and Shaver (1987) suggested that the three attachment groups first observed by Ainsworth et al. (1978) may have parallels in romantic attachment. They hypothesized that people may experience adult romantic love differently, depending on their attachment status in relation to their parents. The researchers developed a brief attachment measure which involved choosing one of three descriptions. Each description was based on an adult version of Ainsworth et al.'s (1978) attachment style groupings (i.e., secure, avoidant and anxious-resistant). For example, the "secure" description read "I find it relatively easy to get close to others and am comfortable depending on them and having them depend

on me. I don't often worry about being abandoned or about someone getting too close to me". Based on the choices made from the three descriptions, adult parallels of Ainsworth et al.'s (1978) attachment groups were revealed. Hazan and Shaver (1987) also noted that the three groups differed predictably on scales measuring the quality of their current romantic relationship. For example, securely-attached adults sought out intimacy and were not afraid of having close relationships, while adults classified as dismissing tended to have shorter-lasting relationships, apparently because of a fear or an avoidance of intimacy. Although preoccupied adults reported a desire to be intimate, they had a tendency to experience jealousy and sexual attraction to an obsessive degree. Their relationships were also not very successful. Again, the results must be carefully scrutinized, as Hazan and Shaver's (1987) attachment measure and their outcome measures contained similar kinds of themes. For example, securely-attached individuals were found to pursue relationships without fear, yet this is how the researchers defined secure attachment. In the future, researchers should endeavour to choose outcome measures which do not examine themes directly found in the attachment descriptions.

Feeney and Noller (1990) hypothesized that attachment history greatly influences adult romantic relationships. A past measure of attachment was assessed by asking participants to describe their relationship with their family of origin, while current romantic attachment style was assessed using the measure created by Hazan and Shaver (1987). Feeney and Noller (1990) found that when adults recalled their childhood experiences, securely-attached adults reported more positive feelings toward their parents

than did insecurely-attached adults. In terms of romantic relationships, securely-attached adults were more trusting of their partners than individuals with an insecure attachment style. As well, adults in the dismissing group reported more feelings of rejection and mistrust, while adults with a preoccupied attachment style reported a lack of independence and a strong need for commitment in their romantic relationships. Again, these findings are not surprising, given the manner in which the attachment styles were defined. For example, securely-attached individuals were reported to be more trusting than insecurely-attached individuals in their relationships; however, the idea of trust is central to how a secure attachment was constructed.

A Review of the Role of Affect in Marital Interactions

Investigations into the nature of couple interactions have progressed from simple self-report measures to more elaborate observational coding systems (e.g., Gottman, 1993). Such coding systems allow researchers to document and analyze the subtleties of actual verbal and non-verbal behaviour between spouses. Significant progress has been made in the examination of couples' affective experiences. For instance, conventional wisdom held that distressed and non-distressed couples could be differentiated by the amount of positive affect expressed by couples. Simply put, the more warmth and affection shown by each spouse, the happier and more successful was the marriage. As well, negative affect was deemed to be dysfunctional and primarily characteristic of unhappy couples (Gottman, Markman, & Notarius, 1977).

More recent studies have demonstrated that positive affect does not differentiate between distressed and non-distressed couples very well (Gottman et al., 1977; Noller, 1982). In fact, analyzing overall levels of positive and negative affect may not be the most productive means of examining the data; rather, it is the amount of positive and negative reciprocity of affect which may be a more precise indicator of successful marriages according to Gottman (Gottman et al., 1977). Reciprocity refers to the increased likelihood of a spouse responding in kind to the emotion expressed by the other spouse. For example, positive reciprocity would occur if a wife responded in a positive way to her husband's positive expressions of affect. Gottman et al. (1977) found limited evidence for the discriminating ability of positive reciprocity in couple affect, such that in non-distressed couples, wives were more likely to reciprocate their husband's positive emotions than in distressed couples. However, subsequent studies failed to replicate this finding and have instead observed that negative, rather than positive, reciprocation of affect may be a more powerful predictor of the duration of marital relationships (Gottman, 1980; Noller, 1982; Haefner, Notarius, & Pellegrini, 1991; Krokoff, 1991; Levenson & Gottman, 1983; Margolin & Wampold, 1981; Markman, 1991).

For instance, Margolin and Wampold (1981) compared distressed and non-distressed couples using a technique called sequential analysis. Couple discussions were transcribed and examined on a turn-by-turn basis. Predictions were made about the probabilities of behaviours occurring based on different lengths of behavioral sequences, known as "lags". For instance, the relation between one behaviour and the next behaviour in

sequence in a discussion is known as lag 1. Lag 2 would therefore be defined as the relation between behaviour 1 and the behaviour exhibited by the same person two turns later. Margolin and Wampold (1981) argued that sequential analysis reveals patterns of interactions that otherwise would be undetected in a non-sequential analysis. They found that while positive reciprocity was indicative of both distressed and non-distressed couples through lag 2, negative reciprocity was experienced in significantly more distressed couples than non-distressed couples at lag 1. By simply examining the base rate levels of positive and negative affect, these patterns would not have been discovered. These studies emphasize that neither positive nor negative affect itself is inherently beneficial or harmful to a marriage and that the expression of negative affect may actually be productive in some instances (e.g., Gottman et al., 1977). However, negative reciprocity may be a more precise way of understanding dysfunctional couple interactions.

Gender differences have also been documented in the study of affect in marital interactions. For instance, Noller (1982) discovered that wives express much more positive and negative emotion, while husbands communicate more neutral messages. Similar results were found by Haefner et al. (1991) and Margolin and Wampold (1981), such that wives were likely to de- -strate more negative verbal affect than their husbands. Haefner et al. (1991) and Pratt, Garcia and Santolupo (1993) suggested that these gender differences are indicative of typical male and female behavioral patterns, where men tend to withdraw when faced with discussing an emotional issue. Conversely,

wives, who typically raise the issues to be discussed (Markman, 1991), are more likely to express their emotions, both positive and negative.

A Review of the Marital Interaction and Attachment Literature

Some of the studies that have linked the areas of attachment and patterns of marital interaction will now be reviewed. Although many of these studies did not examine the role of negative reciprocation of affect directly, they serve to highlight some of the important attachment style and gender differences in the patterns of expression of couple affect.

Collins and Read (1990) explored the relationship between attachment and the quality of dating relationships. They hypothesized that adult attachment style would be significantly related to the quality of the participants' current romantic relationships. The researchers had 71 dating couples complete a widely-used relationship satisfaction questionnaire, called the Dyadic Adjustment Scale (Spanier, 1976). Attachment status was measured using the 18-item Adult Attachment Scale, developed by the researchers, based on the three descriptions created by Hazan and Shaver (1987). A factor analysis was performed on the descriptions and three underlying factors were revealed: the extent to which people desired closeness and intimacy (labelled "close"), the extent to which they felt they could rely on others (labelled "depend"), and how anxious they felt about being abandoned (labelled "anxious"). Distinct gender patterns in how attachment status affected a romantic relationship were also noted. For instance, while the best predictor

of female relationship satisfaction was the degree of closeness desired by her partner (i.e., women felt more satisfied when their partner desired a close relationship), the degree of partner anxiousness best predicted the level of male relationship satisfaction (i.e., men felt more satisfied when their partner was less anxious about their relationship). These gender differences emphasize how male and female attachment patterns can differentially affect the quality of a romantic relationship.

The next three studies that will be reviewed have examined how the combination of attachment styles in couples may influence the success of marriages. Kobak and Hazan (1991) tested 40 couples using Hazan and Shaver's (1987) attachment measure and the Marital Q-set developed by Kobak, which is a Q-sort measuring security of attachment and the quality of marital relationships. The researchers hypothesized that individuals with a secure attachment style would more effectively control the expression of their emotions than insecurely-attached individuals. Gender differences were found, such that husbands' security of attachment was associated with more support and less rejection of their wives during a problem-solving task. Conversely, wives' insecurity of attachment was related to a rejection of husbands during the task. This finding suggests that insecure wives may be more likely to reciprocate negative affect during the task, although this was not directly investigated. Kobak and Hazan (1991) emphasized that attachment status and the ability to communicate during a couple problem-solving task may influence one another. That is, while security of attachment may influence the quality of marital communication, good communication skills can also provide an environment where

positive models of self and others can be extended and reinforced, thus altering the nature of internal working models.

Senchak and Leonard (1992) conducted research on a sample of 322 newlywed couples participating in a longitudinal study concerning the impact of alcohol use on the quality of marriage. The researchers used Hazan and Shaver's (1987) brief attachment measure, and scales assessing family relationships. The findings indicated that certain combinations of attachment styles in couples increased the couples' chance of having successful marriages. First, securely-attached, more than insecurely-attached, individuals were likely to marry a partner with a secure attachment style, while insecurely-attached, more than securely-attached, individuals were likely to marry a partner with an insecure attachment style. However, overall, greater proportions of both insecurely and securely-attached people were likely to marry a secure spouse. Senchak and Leonard (1992) were able to distinguish four different groups of couples: secure-secure couples, secure husband-insecure wife couples (called mixed H), secure wife-insecure husband couples (called mixed W), and insecure-insecure couple combinations. The secure-secure couple type rated their relationships as being more intimate than either mixed or insecure couple groups. In terms of marital functioning, couples with an insecure attachment style were more likely to experience partner behaviours as negative than were securely-attached or mixed couples. Mixed couples generally scored lower on marital functioning measures than secure couples and higher than insecure couples. These findings suggest that not only are secure people drawn to one another, but that a secure attachment style in

partners relates to a higher level of intimacy and a lower level of negative affect within the couple.

Cohn et al. (1992) also found interesting individual and couple attachment patterns. They hypothesized that individuals' attachment to family of origin would influence their own relationships in terms of marital satisfaction. It was also predicted that couples in which both partners were secure would report higher levels of marital satisfaction than mixed or insecure couple groups. The researchers assessed the attachment style of the participants with the Adult Attachment Interview (AAI) and marital satisfaction was assessed by the couples' self-reports. The couples were also observed interacting with one another and with their children as they helped them with problem-solving tasks.

In terms of attachment, marital satisfaction was found to be particularly associated with couples in which the husband was securely-attached, rather than insecurely-attached. The secure husbands also displayed more positive interactions with their spouses. The same effects were not found for couples in which the wife was secure and the husband was insecure, however. At a couple level, those individuals in marriages in which both spouses were securely-attached, engaged in less conflict and exhibited more positive affect when interacting with their spouses while they aided their child in the assigned tasks than did insecurely-attached couples. However, different trends for men and women were found. For example, despite their own "negative" attachment status, insecurely-attached women married to secure men seemed to cope much better and have greater marital satisfaction than insecurely-attached women married to insecurely-attached men. This

finding suggests that the connection between a wife's past attachment, and behaviours in marital interactions may be mediated by the husband's working model of attachment. Perhaps a securely-attached husband can buffer the effects of his wife's own problematic childhood experiences. Unfortunately, the role of wives' attachment in marital relations could not be tested, due to the lack of secure wife-insecure husband couple combinations in this sample.

Following the results by Cohn et al. (1992), Ewing and Pratt (1995) explored the possible link between attachment style and couple communication further. Past studies had utilized only self-report measures of marital interactions (e.g., Kobak and Sceery, 1991; Senchak and Leonard, 1992) or global ratings of interaction quality (e.g., Cohn et al., 1992). Therefore, Ewing and Pratt (1995) decided to use the Specific Affect Coding System (SPAFF) (Gottman & Levenson, 1992), which is a comprehensive means of directly observing and evaluating the emotional quality of couple interactions. Verbal and non-verbal behaviours are observed for each individual, and coded as positive, negative and neutral by a set of ten specific affect codes (such as anger, joy and disgust). Ewing and Pratt (1995) replicated Gottman's (1980) findings that distressed couples express more negative affect and less positive affect than do non-distressed couples overall. Attachment style was assessed using the 18-item measure of adult romantic attachment of Collins and Read (1990). Security of romantic attachment was related to greater marital satisfaction, as measured on the Locke-Wallace inventory (Locke & Wallace, 1959). For wives, marital satisfaction was predicted by a higher score on the

"depend" factor of Collins and Read (1990), while for husbands, marital satisfaction was predicted by both a higher score on the "depend" and a lower score on the "anxious" factors.

The role of the husband's attachment status in predicting the quality of couple interactions was also examined in this study. Ewing and Pratt (1995) hypothesized that the husband's attachment style would be the best predictor of the quality of marital interactions, based on past findings (Cohn et al., 1992; Collins & Read, 1990; Kobak & Hazan, 1991). Specifically, it was predicted that a husband's greater security of attachment would be associated with more positive and less negative affect in the couple discussions. As expected, the measure of husbands' attachment status predicted both the amount of negativity and positivity expressed by the couple. Wives' attachment scores were not predictive of the couples' affect when the husbands' attachment status was added, however. These results are consistent with the research of Cohn et al. (1992) and may demonstrate that attachment status for men seems particularly important in regulating negative emotion in couple discussions, in that men's romantic attachment style seemed to be the somewhat stronger predictor of both positive and negative affect by the couple in the discussions.

A Review of the Integrative Complexity Literature

In this section, a separate body of research on reasoning and communication, utilizing the measurement technique of integrative complexity, will be discussed.

Integrative complexity scoring was developed from earlier work on cognitive complexity from an information-processing perspective (Harvey, Hunt & Schroder, 1961) and has been used as a means of measuring the degree to which the reasoning of an individual about a topic is simple or complex (e.g., Suedfeld and Piedrahita, 1984). The discourse of individuals about various topics is analyzed based on two factors: differentiation (i.e., recognizing two or more perspectives or dimensions), and integration (i.e., combining the perspectives or dimensions into a cohesive framework), of which differentiation is a necessary prerequisite. Simplicity of thought is characterized by "black and white" reasoning, where only one viewpoint is taken. More complex thoughts involve taking more than one perspective or combining these views or perspectives systematically. Discourse is then rated on a scale from 1 to 7, where lower scores represent more simplistic ways of viewing issues, and higher scores represent increased differentiation and/or increased integration of ideas. The structure, and not the content, of a person's speech or writing is rated (e.g., Suedfeld et al., 1984).

Integrative complexity typically has been utilized in the political arena to analyze the speeches of political leaders (Pancer, Hunsberger, Pratt, Boisvert & Roth, 1992; Suedfeld & Rank, 1976; Tetlock, 1981) and to investigate the nature of international conflicts. For instance, Suedfeld and Tetlock (1977) found that during international crises that resulted in war, the speeches made by leaders of the countries involved were more simplistic than those made in crises that ultimately led to more peaceful resolutions. There have also been more recent applications of integrative complexity as a way of

examining individual differences in religiosity (Hunsberger, Lea, Pancer, Pratt & McKenzie, 1992) and reasoning about personal life dilemmas (Pratt, Diessner, Hunsberger, Pancer & Savoy, 1991).

Integrative complexity has been shown to vary for individuals across contexts (e.g., Hunsberger et al., 1992). For example, a person who has a high degree of complexity regarding one specific social issue, such as capital punishment, may hold very simplistic views about another issue, such as gender bias in the schools. Plausibly, one factor which influences the level of complexity on a topic is the extent to which individuals report having thought about it more extensively (e.g., Pratt, Hunsberger, Pancer & Roth, 1992; Hunsberger, Pancer & Pratt, 1994).

Research on Integrative Complexity and Attachment

Integrative complexity has also been used to investigate the areas of parenting and marital interaction, although not extensively (Pratt, Cohn, Cowan & Cowan, 1991a; Pratt, Cohn, Cowan & Cowan, 1991b; Pancer, Pratt, Hunsberger & Gallant, 1993; Pratt et al., 1993). Theoretically, integrative complexity may be seen as one method of highlighting individual differences in how people think about relationships within families. Consequently, such variations in complexity may help us understand how people mentally represent their family relationships. Pratt et al. (1991a; 1991b) examined how a parent's complexity of thinking about his or her relationship with family of origin (as assessed by Main's AAI) was related to current family relationships in terms of

parenting stress and responsiveness towards his or her own child. Pratt et al. (1991b) found that for husbands, both security of attachment and a higher level of complexity regarding the impact of early attachment experiences on contemporary relationships, independently predicted a greater level of responsiveness in observations of interactions with their own children. This result suggests that for men, a secure attachment style and being able to view relationships more complexly may both contribute to better communication and warmer relations with their children. For wives, only security of attachment was found to predict parental responsiveness, however. In terms of parenting stress, Pratt et al. (1991b) found a negative relationship between parenting stress and complexity of relationship thinking, but again for husbands only. Perhaps thinking more complexly about family relationships may help to prepare husbands for dealing with crises as parents with less distress (cf. Pancer et al., 1993).

Pratt et al. (1991b) documented other important findings. First, security of attachment and complexity of reasoning about relationships are positively correlated, which suggests that feeling comfortable within relationships may help a person take the viewpoint of his or her spouse more easily or conversely, that taking a spouse's perspective may make that person feel more comfortable talking with their spouse. Second, the complexity scores for husbands and wives were positively interrelated, suggesting that the reasoning of one spouse may affect the other as they experience and interact within the relationship. Future investigations of the complexity of couples in actual discussions are likely to yield results that are distinct from complexity as analyzed

in such individual interviews, since the discourse between couples is more conversational in nature, than more structured interviews. As well, sample size restrictions in the Pratt et al. (1991b) study prohibited an analysis of the different sub-types of secure and insecure attachment patterns in relation to complexity of reasoning. Overall, Pratt and his colleagues (1991b) found that securely-attached individuals (particularly husbands) were more complex in interviews than people with a less secure attachment in their thinking about current parenting and attachment issues.

Research on Integrative Complexity and Marital Interaction

Pratt et al. (1993) examined how levels of complexity may be related to levels of spousal affect in couple discussions. Participants were involved in a longitudinal study about their children's transition to school (see Cowan & Cowan, 1993). Integrative complexity was measured for each spouse from transcripts of two different 10-minute couple discussions about parenting and marital issues. Affect was measured using the SPAFF coding system (Gottman & Levenson, 1992). A positive correlation in complexity scores between spouses was found, perhaps paralleling Suedfeld and Tetlock's (1977) finding that shifts in complexity of communications by the leaders of one country influenced the level of complexity of their counterparts in the conflict in the same direction. Specifically, in Pratt et al.'s study (1993), higher levels of complexity in one spouse's comments were apparently reciprocated by the other spouse. In terms of affect, negative reciprocation was more frequent in the marital discussions, than in the parental

discussions, which suggests that discussions about marital issues may have been more emotionally-charged than were parenting discussions. In the discussions concerning marital issues, husbands reciprocated negative affect less frequently when their wives were more complex in making their initial negative statements than when they were initially simplistic (Pratt et al., 1993). This finding suggests that level of complexity in discussions may moderate the expression of negative affect by the other spouse, thus reducing the likelihood of an escalation of negative affect. Perhaps more complex speech, typically characterized by the speaker taking more than one perspective, is perceived by the spouse as less threatening than simplistic speech where only one perspective (presumably the speaker's own) is expressed. However, these results were all based on simple lag 1 analyses only and should not be generalized to patterns of couple communication over the course of discussions.

A Summary of the Research

While the previous literature reviews of attachment, marital interaction and integrative complexity may seem rather disparate, certain patterns have emerged that deserve closer attention. Studies examining the nature of affect in marital problem-solving interaction (e.g., Gottman, Markman, & Notarius, 1977) have revealed that negative rather than positive affect is the better discriminator of distressed versus non-distressed couples. Margolin and Wampold (1981) found that reciprocity of affect, especially negative reciprocation, is highly predictive of the quality of marital interactions. Gender

differences have also been revealed, such that females typically express more positive and negative affect, while males express more neutral affect (Haefner et al., 1991; Noller, 1982).

In the attachment and marital interaction literature, Kobak and Hazan (1991) found that insecurely-attached wives were more likely to reject their husbands during problem solving tasks, thus increasing the chance that negative affect might be reciprocated. Apparently, attachment status plays an important role in how affect is expressed and received by spouses. Cohn et al. (1992) and Ewing and Pratt (1995) found that a husband's attachment status was a good predictor of both partners' behaviours in marital interactions, and suggested that a husband's security of attachment may act as a buffer by moderating negativity when his wife's attachment is of an insecure nature.

Research on attachment and integrative complexity has revealed that integrative complexity accounts for further variance in parenting behaviour after attachment style has been considered (Pratt, 1991a; Pratt 1991b). Both security of attachment with the family of origin and higher levels of complexity of attachment reasoning, for men, were associated with better parenting, which suggests that positive internal working models and the ability to think complexly about relationships may help men cope with the stresses of parenting. For women, however, parental responsiveness was related only to attachment status.

In terms of marital affect and complexity, Pratt et al. (1993) found that level of complexity of one spouse is mirrored in the other, such that either complex or simple

statements tend to be reciprocated. Higher levels of complexity were also associated with a reduction in negative affect reciprocation by the partner (Pratt et al., 1993). Specifically, when wives expressed their negative affect in a more complex manner, husbands were less likely to respond in a negative way. This finding suggests that complexity may moderate how affect, especially negative affect, is communicated in couples' problem-solving discussions.

When examining the concepts of attachment, marital affect and integrative complexity, it seemed evident that each of these concepts is potentially related to the others. However, no research to date had attempted to explore how they all might interact. Further, no previous studies have systematically examined reciprocation of negative affect, the strongest discriminator of marital distress, according to Gottman (e.g., 1980). In trying to organize a framework for understanding these variables, it seemed likely that attachment to one's parents influences the subsequent quality of marital interactions (Cohn et al., 1992). Since attachment research suggests that working models develop in infancy (Ainsworth, 1989), the nature of these models of self and others must surely affect the extent to which an adult is able to discuss emotional issues with his or her spouse. For example, security of attachment and the underlying positive working models that characterize it may enable an individual to react more calmly and positively when faced with expressions of negative affect from his or her spouse. Insecurely-attached adults, conversely, may not have working models that allow them to withstand

the negative emotions of their spouses, thus producing the risk of more escalation of negative affect.

Given the findings on attachment, marital affect and integrative complexity, it seemed plausible that attachment style would also influence how one thinks about a current romantic relationship. Specifically, security of attachment was thought to be related to a more complex view about close relationships (Pratt et al., 1991a), since theoretically, more positive working models may enable a person to feel more comfortable with taking the spouse's perspective during a couple discussion. Conversely, having less positive working models was thought to be related to a tendency to use more simplistic reasoning and communication about the couple relationship. Also, security of attachment (i.e., positive working models of self and others) may provide individuals with an ability to access their cognitive resources (e.g., feeling comfortable and not as threatened while discussing sensitive issues) more easily when engaged in couple discussions, thus allowing them to think in more complex ways. Insecurely-attached individuals may have had to spend more time during the discussions coping with, for example, fears of abandonment or intimacy, which may hinder their ability to think in more complex terms, and lead to more stereotypic responses that do not consider the partner's perspective. There is related evidence, for example, that personal stress or excessive time pressures induce more stereotypic and/or simplistic beliefs and attitudes about others (Olson & Zanna, 1993).

Finally, it seemed plausible that the level of integrative complexity and the expression of affect in couple discussions should also relate to one another. For instance, being

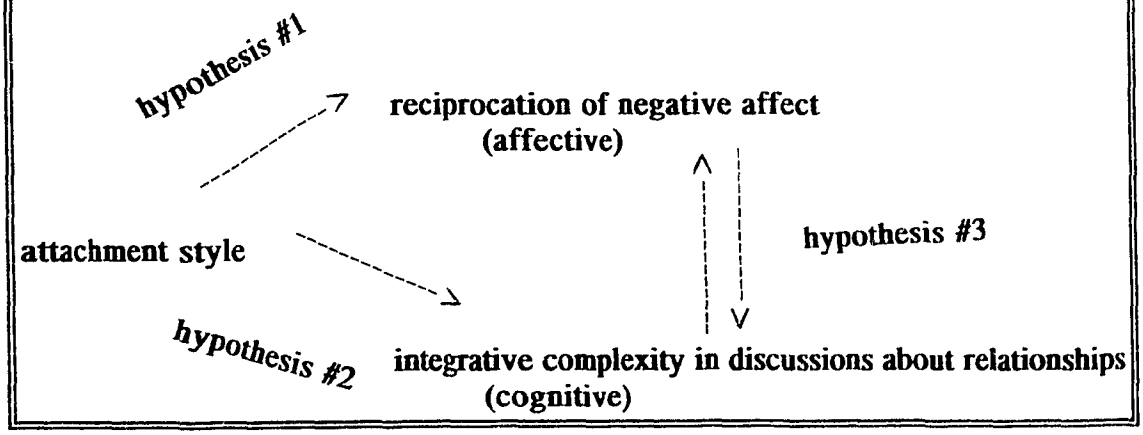
more complex while expressing negative emotions (perhaps acknowledging the spouse's point of view) may serve to reduce the likelihood that these negative emotions would be reciprocated (Pratt et al., 1993). Simplistic, or "black and white" negative statements in the couple discussion may be construed by the spouse as more combative or critical (cf. Suedfeld & Tetlock, 1977). As well, level of complexity about couple issues may be affected by the intensity of affect expressed. For example, it seemed likely that couples caught in a cycle of negative affect reciprocation would be less likely to consider the other's perspective, thereby resulting in more simplistic expressions of their thoughts.

Research Questions

The purpose of this investigation was to study the relationships among attachment styles, types of affect, and integrative complexity of communications about relationships in marital discussions. Given that internal working models have been described as having both cognitive and emotional aspects (Bretherton, 1983), attachment seemed an appropriate context in which to explore the relationships between marital affect and integrative complexity. If internal working models that develop in childhood remain present and active in adults, then certain cognitive and affective expressions of these models might be observed in couple discussions of pertinent issues. Such discussions should presumably be stressful enough to elicit the differential patterns of internal schemata underlying various attachment styles.

A heuristic model of how attachment patterns in one's family of origin may relate to the expression of affect and of cognitive complexity by couples was developed below (see Figure 1). From this model, three hypotheses were generated. Hypothesis #1 examined the relationship between attachment style and the reciprocation of negative affect by the two partners, hypothesis #2 explored the link between attachment style and integrative complexity of partners' communication, and finally hypothesis #3 investigated the possible association between reciprocity of negative affect and integrative complexity in couple discussions .

Figure 1. Model for examining possible relationships among attachment style, negative affect and level of integrative complexity in marital discussions.



Before the three hypotheses are discussed more specifically, there were some gender differences which were expected to be replicated in this study. Based on the research of Margolin and Wampold (1981) and Noller (1982), it was expected that wives would

express more positive and negative affect than their husbands, while husbands would display more neutral behaviour in the discussions.

Hypothesis #1

In terms of the impact that attachment style has on affect in couple interactions, Kobak and Hazan (1991) and Ewing and Pratt (1995) found that security of romantic attachment was generally related to lower levels of negative affect in discussions. Predictions were also made about couple combinations of attachment patterns and their effects on affect. Past research would suggest that secure-secure couples should report higher levels of marital satisfaction (Kobak & Hazan, 1991), and exhibit fewer withdrawals and fewer incidents of verbal aggression during discussions (Senchak & Leonard, 1992) than either mixed (i.e., secure-insecure) or insecurely-attached couples in problem-solving tasks. Therefore the following prediction was made:

For both males and females, greater security of attachment was predicted to be related to less reciprocation of negative affect by that individual in the couple discussions. At the couple level, secure-secure couple combinations were expected to reciprocate the least amount of negative affect in the discussions, compared with all other groupings.

Hypothesis #1b

The role of gender and attachment style was also examined. Past research (Cohn et al., 1992; Ewing & Pratt, 1995) has shown that a husband's attachment style may influence how his wife responds in couple discussions, such that insecurely-attached wives married to securely-attached husbands were more likely to behave like securely-attached wives than were insecurely-attached wives married to insecurely-attached husbands. As a corollary to hypothesis #1, the following prediction was made:

A husband's attachment style was predicted to buffer the effects of his wife's attachment style in couple interactions, such that secure husbands-insecure wives should behave more like the secure-secure couple combination by showing lower reciprocation of negative affect in couple discussions, than would couples where both partners were less positively attached to their families of origin.

Hypothesis #2

Pratt et al. (1991b) found that security of attachment was related to more complex thoughts in interviews. Although analyses have not been conducted on the relationship between attachment and integrative complexity in couple discussions, it seemed plausible that similar results would occur in the discussion context. Based on the finding by Pratt et al. (1991b), that security of attachment was related to higher levels of integrative complexity in interviews about relationships for men, it seemed plausible that couples in

which both partners were secure would have higher complexity scores than either mixed or insecure couple groups.

Therefore:

For both males and females, greater security of attachment was thought to be associated with more complex statements made by individuals in the couple discussions overall. Again, at the couple level, secure-secure dyads were expected to exhibit the highest level of complexity of thinking in the discussions.

Hypothesis #3

It was also expected that reciprocation of negative affect and level of integrative complexity in the discussions would mutually affect one another, based on Pratt et al's. (1993) finding that wives who initially phrased their negative statements in a more complex manner reduced the likelihood that their husbands would respond negatively to their negative affect. Therefore, the following prediction was made about this possible relationship:

Reciprocation of negative affect should be related to level of complexity in discussions about relationships, such that more complex expressions in the discussions should be linked to a reduction in the amount of negative affect reciprocation that occurs.

Conversely, lower levels of negative affect may permit the expression of more complex comments in discussions.

Method

Design

The present study was a part of a larger longitudinal study examining new parents' expectations and experiences. In the larger study, 73 couples were interviewed at three different time periods: once during the third trimester of pregnancy, and twice postpartum (at 6 and 18 months). Before their child was born, the couples were interviewed about their expectations of becoming new parents. Postpartum interviews focused on their experiences with their young child. At each visit, the couples completed questionnaires containing measures which then asked about various components of their transition to parenthood (see Tables 1 and 2). At the beginning of the study there were 73 couples participating; however by the 18-month interview, 67 couples remained. Attrition was due to several couples moving out of town, or couples who separated or divorced.

Table 1. Prenatal and Postnatal Measures

Prenatal Measures	Postnatal Measures (6 months)
Centre for Epidemiological Studies in Depression Scale	Centre for Epidemiological Studies in Depression Scale
Hazan and Shaver's Single-Item Attachment Measure	Hazan and Shaver's Single-Item Attachment Measure
Locke-Wallace Marital Adjustment Scale Scale	Locke-Wallace Marital Adjustment Scale
Need for Cognition Scale	Feelings About Parenting
Perceived Stress Scale	Perceived Stress Scale
Self-Complexity Measure	Self-Complexity Measure
Rosenberg Self-Esteem Scale	Rosenberg Self-Esteem Scale
Social Provisions Scale	Social Provisions Scale
"Who Does What" Scale	"Who Does What" Scale
	Infant Characteristics Questionnaire
	Cohen-Hoberman Inventory of Physical Symptoms
	Life Experiences Survey
	Abidin Parenting Stress Inventory
	IPPA (parental subscale)

Table 2. Postnatal Measures (18 months)
Abidin Parenting Stress Inventory
Centre for Epidemiological Studies in Depression Scale
Cohen-Hoberman Inventory of Physical Symptoms
Feelings About Parenting
Marital Adjustment Scale
Parenting Situation Questionnaire
Perceived Stress Scale
Relationship with Mother (past and present)
Relationship with Father (past and present)
Religious Beliefs and Practices
Romantic Attachment Measure (Collins and Read)
Rosenberg Self-Esteem Scale
Social Provisions Scale
"Who Does What" Scale

Participants

Of the larger sample consisting of 67 couples, 56 wives and 52 husbands completed the Relationship with Mother and Father attachment measures and participated in a couple discussion and were thus included in the present analyses. Of the 67 couples who were interviewed at the 18-month visit, several did not participate in the couple discussions or did not return their questionnaires and thus could not be included in these analyses. Wives ranged in age from 19 to 43 ($\underline{M}$=30), and husbands ranged in age from 21 to 51 ($\underline{M}$=32). Couples had been living together for an average of 5.88 years and 37.5% were

expecting or had given birth to a second child at the 18 month follow-up visit. In terms of education, 49% of the husbands in the study had completed a community college or university program and 90% had received their secondary school diplomas. 67% of the wives had a college diploma or university degree and 90% had completed secondary school. The majority of the husbands were employed full-time (53%), while only 29% of the wives were working full-time, at the time of the 18-month data collection.

Primary Measures

Attachment Scales

In the present study, attachment scales (Relationship to Mother and Relationship to Father) for each parent were developed by Cowan and Cowan (1994), as a measure of how positive an adult's relationships with his or her parents were in childhood and how positive the relationships are currently. Two scales for each parent were used, one for the past relationship, and one for the present relationship. Although there are many attachment measures available, the researcher chose these particular scales because, unlike most other attachment measures, they included an index that measures present relationships with parents. The nature of these measures was fairly similar to the AAI, which comprehensively assesses childhood experiences and an individual's current thoughts and feelings regarding these events. As well, each scale asked the participants to indicate whether they were responding about their parent, their parental figure, or that they did not have a parent. Each consisted of 6 questions, in which the participants were

asked to circle the appropriate response, on a scale from 1 to 7, with higher scores indicative of a more positive relationship with the parent (item two was reverse-coded). Possible scores ranged from 6 to 42. The questions probed the relationship with the parent in terms of the parent's involvement with the participant, the amount of conflict in the relationship, how happy/unhappy the participant felt/feels when recalling the relationship, how close/distant the participant felt/feels to his or her parent, how cold/warm and how satisfying/unsatisfying the relationship with the parent was/is to the participant (see Appendices A, B, C and D). The items in the attachment scales were all highly correlated, generating strong internal consistency. For the attachment scales completed by the wives in the sample, the Cronbach's alphas were as follows: α=.87 for past attachment to mother, α=.96 for past relationship to father, α=.90 for present relationship to mother, and α=.94 for present relationship to father. For the attachment scales completed by the husbands in the study, alphas were obtained, as follows: α=.84 for past relationship to mother, α=.70 for past relationship to father, α=.89 for present relationship to mother, and α=.95 for present relationship to father.

It must be acknowledged that the Relationship to Mother and Father scales used in the present study measured the degree to which individuals perceive or perceived their relationships with their parents as being positive, close and warm, rather than measuring "security of attachment", per se. Therefore, the scales used in the current study may not directly assess all aspects of adult attachment styles as described by Main and Goldwyn (1984) and others, which focus also on responses and feelings regarding stress and

separation. Nevertheless, these scales are based in the tradition of the romantic attachment measures (e.g. Collins & Read, 1990; Hazan & Shaver, 1987), which contain similar questionnaire items for assessing interpersonal attachment relationships. Furthermore, these measures do parallel some of the important content of the AAI.

Relationship with Armsden and Greenberg's (1987) Measure of Attachment

To assess the construct validity of the Cowan's (1993) Relationship to Mother and Relationship to Father attachment scales, they were compared with the subscale of Armsden and Greenberg's (1987) attachment scale, called the Inventory of Parent and Peer Attachment (IPPA), which had been collected at the 6-month interview. This scale measures present relationships with one's parents and was given to the participants at the 6 month post-partum visit. The total scale contains 60 items and was designed to examine participants' current feelings of trust and anger towards their parental attachment figure, and the degree to which they feel their parents were responsive to their needs. Another component of the IPPA, involving peer-attachment items, was not used in the study. The parental subscale of the IPPA was compared with the attachment scales used in the present study, since both measures examined the participants' feelings towards their parental attachment figures. For both husbands and wives in the study, the parental component of the IPPA was moderately positively related to the attachment scales used in the present study one year later (see Table 3). These concurrent relationships suggest that the present attachment scales have an acceptable level of validity.

Table 3. Correlations between the Armsden and Greenberg (1987) IPPA and the Attachment Scales

	Mother Past	Father Past	Mother Present	Father Present
Husbands				
IPPA	.34*	.57**	.42*	.40*
Wives				
IPPA	.42**	.48**	.59**	.59**

* $p < .05$, ** $p < .01$
N husbands vary from 35 to 46
N wives vary from 39 to 50

Specific Affect Coding System

The Specific Affect Coding System (SPAFF) is an observational coding system for couple discussions developed by John Gottman (see Gottman and Levenson, 1992). Trained coders are instructed to observe both verbal and non-verbal expressions by each individual in the discussion, rather than simply the content of what is said. Physical features, such as head nodding, body movement and eye contact, as well as vocal tone and amplitude, are used to classify the kind of affect being expressed on a turn-by-turn basis. Therefore, an individual's expressions are considered from a holistic point of view in the context of what is being communicated in the interchange.

Coders are instructed to rate each turn of speech in terms of positive, negative, or neutral affect (see Appendix E). Neutral affect is coded when there is an exchange of information, questions are asked, or statements are made with little or no accompanying

expression of emotion. Positive and negative affect on the SPAFF are further divided into several categories, such as affection/caring, humour, joy/enthusiasm, and interest/curiosity (i.e., positive codes) and whining, anger, disgust, fear and sadness (i.e., negative codes). In the current study, another negative code, irritation, was included as part of the coding procedure (Pratt et al., 1993). The irritation code can be distinguished from the anger code primarily by degree of intensity. Emotional blends were also coded (e.g., humour-sadness), with a maximum of two codes recorded per turn. The SPAFF has been shown to be related meaningfully to other variables, notably marital satisfaction. Ewing and Pratt (1995) found that both positive and negative affect for husbands and wives in the present sample were associated with marital satisfaction, such that higher levels of negative affect in the discussions were associated with lower marital satisfaction scores, while more positive affect was related to higher marital satisfaction scores.

Two raters observed and coded 12 practice tapes. Four more tapes were then coded separately for inter-rater reliability (kappa =.84), which was calculated using Cohen's (1960) kappa for the ten specific affect codes across these four tapes.

Integrative Complexity Scoring

The couple discussion transcripts were coded for integrative complexity turn-by-turn (i.e., every completed turn expressed by an individual was scored for the highest level of processing present) using the system developed by Suedfeld and colleagues (see Baker-Brown, Ballard, Bluck, deVries, Suedfeld and Tetlock, 1992). The coding system

utilizes a 7-point scale, where 1 represents no differentiation or integration, 3 represents some differentiation, and 5 and above represent a high level of integration. Scoring began only when the couple had decided on a topic to discuss. Clarifications and repetitions of utterances, requests for clarification, "backchanneling" (e.g., "umhmm" or "yeah") and off-topic statements were not scored. Genuine requests for information or feedback were scored as a "2", indicating openess to alternatives and some differentiation (e.g., "Can you tell me what you mean?", see Appendix F for more examples of complexity scores).

For the present study, an average score was calculated for each participant across the entire transcript. Using these index scores, the author, who served as primary coder, achieved a reliability of $r(8) = .75$ with a second trained scorer on these materials. Both of the raters scored 10 practice transcripts together, and then 10 transcripts (10 wives and 10 husbands) were scored separately for inter-rater reliability.

Procedure

The data from the present study were collected from couples who were interviewed in their homes when their first-born child was 18 months old. Although some measures from the 6-month visit were used in the analyses, the vast majority of the data used for the present study were from the 18-month visit. Two female graduate student researchers conducted the interviews. After giving consent, each parent engaged in some activities with his or her child, while being audio and videotaped. Couples were then separately

interviewed about their experiences as new parents, since the time of the last visit.

Finally, the couples were videotaped discussing an issue from a list of possible topics supplied by the researchers (see Appendix G). The discussion followed the protocol developed by Cowan and Cowan (1992) (see Appendix H). Couples were instructed to read the list and spend no more than two minutes deciding on an issue. They were also told to try to make some progress in resolving the issue in 10 minutes. After the discussion, each participant was given a brief questionnaire which asked how he/she felt about participating in the discussion. This questionnaire was not examined as a part of the present study. Couples were then asked to discuss a happy occasion that they enjoyed as a couple or as a family as part of the debriefing session, to alleviate any negativity generated by the discussion.

Participants were left with questionnaire packages to be completed separately and mailed in after completion. The questionnaire packages contained the items found in Table 2, including the Relationship to Mother and Relationship to Father, which were of primary interest to the present investigation. After the questionnaires were received at Wilfrid Laurier University, the couple was sent a cheque for twenty dollars, as remuneration for their participation. When all of the couples had been interviewed, a descriptive summary of the results was sent to all of the participants.

Results

The following results section will begin with a description of the sequential analyses; that is, the analyses used to assess the degree of reciprocation of negative affect, the primary dependent measure. Next is a description of how the attachment scales were collapsed to produced attachment indices for each individual in the sample, followed by an explanation of how the integrative complexity scores were calculated. Possible gender differences that should occur in terms of kinds of affect produced will be discussed briefly first. Finally, tests of hypotheses #1-3 regarding the general relations among the three measures of interest in the discussions (i.e., attachment, affect, and integrative complexity) will be reported.

Sequential Analyses of Affect

Omnibus Test

The specific affect codes were collapsed, resulting in three summary affect codes: negative, neutral and positive, following Ewing & Pratt (1995). A matrix for the entire sample was formed by computing transitional probabilities for the three kinds of affect (i.e., negative, positive and neutral) an individual expresses in response to his or her partner's behaviour (lag 1), using the method recommended by Gottman (1990). A likelihood-ratio chi-square test (LRX) was used to compare the unconditional probabilities of each kind of response with the actual observed pattern of responses. A non-random

sequential pattern in the data was verified, with more reciprocation of positive, neutral and negative affect observed in the discussions at lag 1 than would be expected if an individual's response affect was independent of his or her partner's preceding statement. A likelihood-ratio chi-square, LRX (4) = 1102.3, $p < .05$, suggested that the levels of the 9 response patterns observed in the data were different from the expected values for these patterns (see Table 4).

Table 4. Observed Responses and Transitional Probabilities for Overall Matrix

		Time 2			
		Negative	**Neutral**	**Positive**	**Total**
	Negative	734 (.645)	342 (.301)	62 (.054)	1138
Time 1	**Neutral**	380 (.180)	1390 (.658)	341 (.162)	2111
	Positive	33 (.050)	383 (.581)	243 (.369)	659
	Total	1147	2115	646	3908

Note: transitional probabilities are in brackets

Tests of Homogeneity

The overall matrix was then compared with transitional probability matrices generated separately for the wives and husbands in the sample, with the observed values of the overall matrix being used as expected values for each spouse (Bakeman & Gottman, 1986; Gottman, 1990, see Tables 5 and 6 for transitional probabilities). The analysis revealed a significant likelihood-ratio chi-square, LRX (6) = 46.18, $p < .05$, indicating that the two genders had distinct patterns, and hence must be considered separately. Separate

analyses of the two matrices revealed a strong sequential pattern for both husbands and wives, as there was a greater degree of positive, negative and neutral reciprocation than expected, based on the unconditional probabilities for each partner. Comparing the transitional probability matrices in Tables 5 and 6, wives appeared to be even more likely than husbands to respond negatively to negative statements and less likely to produce a neutral response to their partners' negativity.

Table 5. Transitional Probabilities for Husbands

		Husband's response		
		Negative	**Neutral**	**Positive**
	Negative	.592	.354	.054
Wife's prior statement	**Neutral**	.135	.694	.171
	Positive	.041	.612	.346

Table 6. Transitional Probabilities for Wives

		Wife's response		
		Negative	**Neutral**	**Positive**
	Negative	.711	.233	.055
Husband's prior	**Neutral**	.219	.627	.153
statement	**Positive**	.060	.548	.393

Each couple was compared with the overall matrix, to examine which couples fit the pattern of results obtained for all participants in the study as a whole. A closer examination of the couple matrices revealed that the vast majority (49 out of 54) of

couples did not have complete matrices, that is, one or more of the nine cells was empty. Therefore, a homogeneity test on the entire sample was not conducted. However, based on the fact that the standardized residuals produced for couples, husbands and wives shared a wide range and were normally distributed (see below), it seemed clear that the overall pattern of negative reciprocation was observed only for some couples and individuals, but not others. In other words, some couples and individuals were more likely to respond negatively to negative statements than other couples and individuals.

Tests of Stationarity

Stationarity, or the degree to which the content is uniform throughout a discussion, was also tested (see Gottman, 1990). Each discussion was divided in two, based on the research of Gottman (1979). Gottman's work suggests that couple discussions exhibit three distinct phases, including agenda building, arguing and persuasion, and finally negotiation. Since the discussions in the present sample were relatively short (10 minutes) and included two minutes of initial topic selection which were typically unscorable, these discussions were divided into only two parts to try to capture something of these sequential patterns, while still retaining relatively substantial data sets for analysis. Using a likelihood-ratio chi-square and the observed responses of the overall matrix as a set of expected scores, the two halves of all the discussions combined were compared with the overall sample matrix. Results indicated that, indeed, the two halves of the discussions were distinct, LRX (6)=55.26, $p < .05$ (see Tables 7 and 8). The

second half of discussions (compared with the first half) contained more negative, positive and neutral reciprocation, as indicated by the differences between the transitional probabilities between the first and second halves of the discussions.

This pattern seems to reflect Gottman's (1979) general findings that later stages of discussions are typically more emotionally-laden. Given that couples were instructed to attempt to resolve an issue, it would seem logical that the second half of discussions would involve more reciprocation of negative affect, as the couples began to engage in serious conversation about issues causing friction, as opposed to the more positive responses initially found in most discussions. The greater reciprocity of partner affect as engagement increased over time thus seems a reasonable finding.

Table 7. Overall Matrix Transitional Probabilities (first half of discussion)

		Time 2		
		Negative	**Neutral**	**Positive**
Time 1	**Negative**	.609	.324	.067
	Neutral	.181	.635	.185
	Positive	.064	.583	.353

Table 8. Overall Matrix Transitional Probabilities (second half of discussion)

		Time 2		
		Negative	**Neutral**	**Positive**
Time 1	**Negative**	.677	.280	.043
	Neutral	.179	.683	.138
	Positive	.032	.579	.389

The matrix combining all husband responses following wives' statements was examined for stationarity. Results indicated that, like the overall matrix, the two halves of the discussions for husbands in the sample showed disparate patterns, LRX (6) = 19.80, $p < .05$. For husbands, the second half of the conversation contained more negative and neutral reciprocation, as well as more negative responses following neutral statements, and more neutral responses following negative statements. Again, these results are consistent with Gottman's (1979) work, which found that typically the latter part of couple discussions contains higher levels of emotion, as is characterized by reciprocation of the partner's statements.

Interestingly, stationarity tests conducted on the overall female matrix did not show the same pattern found for husbands in the study, LRX (6) = 10.54, $p > .05$. Both halves of the conversations contained approximately the same levels of negative, neutral and positive reciprocation of affect. Apparently, then, husbands over the course of the discussions become less likely to make positive statements towards their wives, and are more likely to reciprocate their wives' negative and neutral statements, whereas wives showed less change. It would seem that husbands are particularly at risk for contributing to an increase in intensity of affect during the later part of couple discussions.

Calculating Standardized Residuals

The negative reciprocation scores indexed the extent to which the number of negative responses to an initial negative behaviour was different from the base rate level of

negative behaviours for the person overall. They thus provided an individual or a couple negative reciprocity score. Positive scores indicated that an individual or a couple was more likely to be negative in response to a negative statement, than when the partner had produced a positive or neutral statement. Negative scores, on the other hand, indicated a decreased probability of negative responses occurring following a negative statement by the spouse.

Standardized residuals for negative reciprocation were calculated for each individual and couple, using the method described by Bakeman, Adamson and Strisik (1989). These scores were calculated by subtracting the expected score from the observed score and then dividing that total by the square root of the expected score. Expected values were calculated by multiplying the overall percentage of negative responses made by a given individual by the total of all of their responses to their spouse's negative statements. An example of this calculation will be provided using a hypothetical couple, where husband John's standardized residual is being calculated. Assume that John makes 100 statements in the couple discussion and that 50 (50%) of these statements are negative. If his wife, Amy, makes 40 negative statements, one would expect John to respond to Amy negatively 50% of the time (i.e., 20 negative statements). If John makes more than 20 negative statements following comments when Amy has previously been negative, his standardized residual for his degree of negative reciprocation would be greater than zero. Conversely, if John expresses fewer than 20 negative statements in response to his wife's negativity, then the standardized residual for John would be less than zero.

Couples and individuals with no negative behaviours in the discussion could not be included in these calculations. In addition, those couples and individuals where the partners exhibited only a small number of negative responses, thus providing little scope for reciprocation of negative affect, were necessarily excluded from these analyses. Those people who made fewer than 4 negative statements were therefore not included in the analyses. This process led to the exclusion of 16 husbands (30% of the sample) and 21 wives (38% of the sample). In parallel, 13 couples (24% of the sample) were excluded from the analyses of the dyads, for the same reasons (see Table 9 for descriptive statistics for negative reciprocation analyses).

Table 9. Summary of Negative Reciprocation Responses

negative recip.	N	Mean	SD	Min	Max
couples	41	1.08	1.35	-1.42	4.49
husbands	38	1.04	1.07	-0.55	3.54
wives	35	0.94	0.86	-0.52	2.78

Note: the negative reciprocation scores are the standardized residuals

Possible selection biases were tested by comparing those individuals included in the negative reciprocation analyses with those individuals who were excluded. The two groups did not differ (ps $> .05$) in terms of attachment or complexity scores, nor for any of the available parental adjustment variables, including depression, parenting stress, perceived life stress, self-esteem, marital satisfaction and social support.

Although rates of negative reciprocity are thought to best distinguish between distressed and non-distressed couples (see Gottman et al., 1977), Gottman and others (Gottman, Notarius, Markman, Bank & Yoppi, 1976; Noller, 1982) have reported that distressed couples also exhibit higher base rates of negative behaviour and lower base rates of positive behaviour in discussions involving marital issues. Therefore, the present data were also analyzed for non-contingent rates of both negative and positive behaviour as outcome measures (see Tables 10 and 11 for descriptive statistics), since such a substantial proportion of the sample could not be analyzed for negative reciprocation, as noted above. Therefore, both reciprocation and base rate data from the SPAFF were used in testing the hypotheses below. The non-contingent rates of negative and positive affect were strongly related as well, such that the correlation between the two variables for couples was, $r(54)=-.76$, $p<.001$, while the correlations for husbands and wives for negative and positive affect were, $r(54)=-.60$, $p<.001$ and $r(54)=-.66$, $p<.001$ respectively.

Table 10. Summary of Percentage of Negative Affect Responses

	Mean	SD	Minimum	Maximum
couples	27.57	25.09	0.00	90.40
husbands	25.63	25.43	0.00	88.60
wives	30.22	25.91	0.00	97.40

$N=54$

Table 11. Summary of Percentage of Positive Affect Responses				
	Mean	**SD**	**Minimum**	**Maximum**
couples	17.70	12.43	0.00	48.60
husbands	17.34	13.64	0.00	56.80
wives	18.44	13.12	0.00	47.10
N=54				

Validity of Negative Reciprocation and Non-contingent Rates of Negative and Positive Behaviour

Some consideration was given to examining the validity of the negative reciprocation standardized residuals. As mentioned in the method section, base rates of negativity and positivity were shown to have a relationship with marital satisfaction in the present sample, such that couples who are more content have a tendency to express less negative affect and more positive affect in couple discussions (Ewing & Pratt, 1995). Gottman and Levenson (1992) also reported that higher levels of marital satisfaction were associated with lower rates of negative affect reciprocation. The negative reciprocation indices derived in the present study were examined with regards to marital satisfaction scores collected during the 18-month visit. Although not significant, rates of couple reciprocation and husband and wife reciprocation of negative affect were all somewhat negatively related to marital satisfaction scores (r's ranged from -.14 to -.23), which suggested that when the amount of overall negativity expressed was removed from the correlations, the amount of purely reciprocated negative affect was not significantly

related to marital satisfaction in the present sample (in contrast to the findings of Gottman and Levenson, 1992).

The Attachment Measures

Four attachment scales were completed by each participant: past relationship with mother, past relationship with father, present relationship with mother, and present relationship with father (see Appendices A, B, C, and D). Each scale consisted of 6 questions (using a 1 to 7 response format, with higher scores representing a more positive experience; item 2 was reverse coded) pertaining to the closeness, warmth and happiness individuals felt about their relationship with each parent. Initially, the attachment scales were to be collapsed across parent, along past and present dimensions. However, analyses with the parental adjustment variables demonstrated a clear pattern of association between adjustment for husbands and wives and their relations with the opposite-sex parent (see next section). Although no specific predictions had been made in terms of attachment differences between parents, the data suggested that the relationship with the opposite-sex parent, especially the perceived past relationship, was likely most important in relation to current adaptation in marriage. Therefore, none of the attachment scales was collapsed, in order to capture the most information possible about the intricacies of these past and present attachment relationships (see Table 12 for descriptive statistics for the attachment scales).

Table 12. Descriptive Statistics for Attachment Indices to Both Parents		
	Mean per Item	**SD**
husbands		
mother (past)	4.28	0.81
mother (present)	5.13	1.04
father (past)	3.95	1.03
father (present)	5.13	1.21
wives		
mother (past)	5.30	1.07
mother (present)	5.65	0.99
father (past)	4.53	1.01
father (present)	4.96	1.05

Note: the scale mean was substituted for any missing item
N husbands=52, N wives=56

Relationship between Attachment Scales and other parental adjustment variables

As noted above, correlations between each of the attachment scales (past and present) for each parent and adjustment produced interesting results. Although these variables were not directly linked to the hypotheses, their relationships to the Relationship to Mother and Father attachment scales provided a means of determining which relationships with parents had the strongest association with variables related to marital interaction. For husbands, it appeared that a positive past relationship with their mothers was especially important in relation to a number of variables assessing parental adjustment, both concurrently at the 18 month visit (time 3) and longitudinally at the prenatal (time 1) and 6 month post-natal visits (time 2) (see Table 13 for the correlations). Relations were found between past relationship with mother and the following measures: perceived life stress at time 1 and time 3, self-esteem at time 1, time 2 and time 3, marital

satisfaction at time 1 and at time 2, social support at time 2 and time 3, depression at time 3 and parenting stress at time 3. Husbands' present relationship with their mothers was associated with parenting stress at time 2, while past relationship with their fathers was related to marital satisfaction at time 1. Present relationship with their fathers was significantly correlated with perceived stress at time 2 and self-esteem at time 3. Clearly, a man's perception of his relationship with his mother in childhood, more than any other attachment relationship measured, is linked with his experiences of his current role as husband and father during the transition to parenthood. The direction of these correlations was consistent, with better current adjustment always linked to reports of a more positive relationship with mother.

Table 13. Correlations between attachment variables and parental adjustment variables (Husbands)

	Mom Past	Mom Present	Dad Past	Dad Present
Time 1+				
Social Support	.16	.12	-.15	.00
Perceived Stress	-.26*	-.08	-.24	-.21
Self-Esteem	.34**	.23	.16	.21
Marital Satisfaction	.29*	.08	.34**	-.01
Depression	-.07	-.09	-.18	-.06
Time 2				
Social Support	.32*	.11	.15	.21
Perceived Stress	.01	-.25	-.14	-.29*
Self-Esteem	.29*	.20	.17	.19
Marital Satisfaction	.27*	-.08	.21	.02
Depression	.06	-.10	-.05	-.23
Parenting Stress	-.08	-.34*	-.10	-.05
Time 3				
Social Support	.31*	.19	.17	.00
Perceived Stress	-.34*	.00	-.17	.00
Self-Esteem	.31*	.23	.18	.32*
Marital Satisfaction	.17	.06	.07	-.04
Depression	-.39**	-.02	-.20	-.01
Parenting Stress	-.28*	-.01	-.19	-.14

* $p < .05$, ** $p < .01$
+ parenting stress was not measured at Time 1
N's for the correlations varied from 44 to 59

Analyses of wives' relationships with their parents yielded a different pattern of results. Wives' past relationship with their mothers was associated with social support at time 1 and at time 2 (see Table 14). Present attachment to their mothers was only correlated with marital satisfaction at time 3. However, a clear pattern between the present, and particularly the past, relationship with fathers and current adjustment was

found. Wives' past relationship with their fathers was related to self-esteem at time 1 and at time 2, parenting stress at time 2 and time 3, social support at time 2, perceived stress at time 2 and at time 3, depression at time 2 and at time 3, and marital satisfaction at time 3. Wives' present relationship with their fathers was associated with self-esteem at time 1 and at time 2, social support at time 2, perceived stress at time 2, depression at time 3 and marital satisfaction at time 3. Again, these significant correlations were all consistent and interpretable, as better parental relationships were associated with more positive adaptation. Relations with the opposite-sex parent, particularly in the past, for both the men and the women in this sample thus had stronger associations with their current level of adjustment during the transition to parenthood than did relations with the same-sex parent.

Table 14. Correlations between attachment variables and parental adjustment variables (Wives)

	Mom Past	Mom Present	Dad Past	Dad Present
Time 1+				
Social Support	.30*	.17	.12	.24
Perceived Stress	.02	-.24	-.20	-.19
Self-Esteem	.00	.05	.28*	.33*
Marital Satisfaction	.18	.22	-.05	.09
Depression	.09	-.04	-.23	-.13
Time 2				
Social Support	.27*	.24	.38**	.38**
Perceived Stress	-.15	-.14	-.42*	-.28*
Self-Esteem	.04	.11	.25*	.33*
Marital Satisfaction	.04	.02	.02	.01
Depression	-.04	-.02	-.36**	-.25
Parenting Stress	-.21	-.13	-.36**	-.16
Time 3				
Social Support	.14	.24	.17	.18
Perceived Stress	-.14	.15	-.26*	-.24
Self-Esteem	.16	.23	.23	.25
Marital Satisfaction	.14	.30**	.36*	.30*
Depression	-.16	.09	-.41**	-.33*
Parenting Stress	-.13	-.21	-.38**	-.25

* $p < .05$, ** $p < .01$
+ parenting stress was not measured at Time 1
N's for the correlations vary from 44 to 61

Integrative Complexity Scores

Integrative complexity was scored from the transcripts produced from each discussion. Average complexity scores for each discussion, and averages for the first and the second halves of the discussions, were generated for each partner, following the results of Pratt et al. (1993) that suggested some differences in complexity scores over

time. At the couple level, the overall scores were obtained by averaging across husband and wife. Couple scores ranged from 1.27 to 2.14 overall ($\underline{M}=1.66$, for a breakdown of the results from the first and second half of the discussion, see Table 15). For husbands, overall scores ranged from 1.11 to 2.24 ($\underline{M}=1.62$), with the actual individual turn scores ranging from 1 to 4. For wives, complexity scores ranged from 1.30 to 2.17 ($\underline{M}=1.70$), with actual responses ranging from 1 to 3. These scores are consistent with Pratt et al.'s (1993) ranges of 1.6 to 1.8 on similar couple discussion data. They are also similar to scores reported by Suedfeld and Bluck (1993) and deVries and Walker (1986) for individuals' written materials, although somewhat lower than average complexity scores usually obtained in interviews on relationship issues (e.g., Pratt el al., 1991a).

The complexity scores for the first and second halves of the discussions at a couple and individual level were related to one another, as expected, $\underline{r}(54)=.53$, $\underline{p}<.001$ for dyads, $\underline{r}(54)=.46$, $\underline{p}<.001$ for wives, and $\underline{r}(54)=.48$, $\underline{p}<.001$ for husbands. Across the discussions as a whole, husbands' and wives' average complexity scores were also positively related, $\underline{r}(54)=.33$, $\underline{p}<.05$. The complexity scores between the partners were not so strongly correlated during the first half of the discussions, $\underline{r}(54)=.24$, $\underline{p}<.10$, but partners' scores for the second half were more closely linked, $\underline{r}(54)=.43$, $\underline{p}<.001$. This finding is consistent with Pratt et al. (1993), who found a positive correlation between spousal scores and an increase in such dependency from the first to second halves of their discussions as well. The somewhat lower positive dependence in the first halves of conversations may reflect the fact that it is in the second halves of the discussions where

more serious problem-solving is undertaken, as suggested by Gottman (1979). Under these conditions, the level of complexity is apparently reciprocated somewhat more strongly between partners, just as was observed above for reciprocation of affect.

Table 15. Descriptive Statistics for Integrative Complexity

Variable	Mean	SD
couples		
complexity average	1.66	.198
first half of discussion	1.67	.224
second half of discussion	1.65	.228
husbands		
complexity average	1.62	.264
first half of discussion	1.62	.266
second half of discussion	1.61	.344
wives		
complexity average	1.70	.233
first half of discussion	1.72	.289
second half of discussion	1.69	.255

N=54

Testing the Hypotheses

The first results that will be reported are those pertaining to gender. Next, the hypotheses concerning the primary variables in the study, namely attachment, affect and integrative complexity will be discussed.

Gender Differences

A comparison between genders was conducted to see if differences existed in terms of the kind and amount of affect produced. In terms of positive affect, no gender differences were found. However, wives produced significantly more negative responses than husbands in the couple discussions, $t(53)=2.59$, $p<.05$, while husbands expressed more neutral affect than did wives, $t(53)=2.98$, $p<.05$. These results for negative and neutral affect are consistent with the findings of Noller el al. (1982) and Pratt et al. (1993), though it should be noted that these authors also found some gender differences for positive affect as well.

Affect and Attachment

There were only two significant relationships between the attachment indices and the amount of negative affect reciprocated in the discussions (see Table 16). For wives, surprisingly, the past relationship with their fathers was positively associated with the amount of negativity reciprocated by their husbands in the discussions. As well, husbands' past attachment to their mothers was positively associated with the amount of negativity reciprocated by their wives in the discussions. Greater negative reciprocation of affect was thus actually positively correlated with certain indices of attachment. Given the large number of correlations tested (36), however, these unpredicted results could simply reflect chance. In addition, wives who had a more positive relationship with their

fathers expressed less negativity overall, which also emphasizes the link between the opposite-sex parent and couple interactions.

Table 16. Affect and Attachment Correlations

	Wives		Husbands	
	Past(father)	Present(father)	Past(mother)	Present(mother)
couples				
neg. recip.	.28	.24	.20	-.20
negativity	-.26	-.07	.03	.15
positivity	.24	.08	.03	-.10
husbands				
neg. recip.	.31*	.12	.12	-.25
negativity	-.15	.02	.03	.06
positivity	.21	-.01	.16	-.06
wives				
neg. recip.	.15	.09	.33*	-.01
negativity	-.35*	-.18	.05	.17
positivity	.18	-.01	.16	-.06

Note: negative reciprocation scores are the standardized residuals
* $p < .05$
N's vary from 29 to 54

The first specific prediction to be tested was that greater security of attachment to parents would be related to less negative reciprocation by an individual or by a couple (hypothesis #1). This hypothesis was analyzed using the standardized residuals produced for each individual and couple, indicating the likelihood rates of actual negative reciprocation compared with expected levels. Each gender was tested separately for the

individual predictions. As can be seen in Table 16, none of the zero-order correlations of negative reciprocity and own attachment scores was significant, however.

Analyses of non-contingent negativity rates revealed that the relationship between wives' past attachment to their fathers and the amount of negativity they expressed in the discussions was significant, and a marginal relationship was found for wives' past attachment to their fathers and the amount of negativity produced by the couple, consistent with hypothesis #1 (see Table 16). Females' attachment patterns to their fathers appeared to have some relation to how they reacted with their spouse when discussing issues of importance to new families.

Base rates of positive affect were also examined on couple and individual levels. However, no relationships were revealed with respect to the attachment indices. This lack of findings for positive affect is somewhat consistent with the results obtained by Gottman (1980). Gottman documented that non-contingent rates of negative affect are more powerful discriminators of couple distress than are base rates of positive affect.

A prediction was made that a husband's attachment status would greatly affect his wife's behaviour in the discussion (hypothesis #1b), such that dyads in which the husband was secure and the wife was insecure would behave similarly to couples in which both partners were secure (see Cohn et al., 1992). However, the fact that in the preceding analyses, wives' relationships with their fathers were more related to the kind and frequency of affect that occurred for both themselves and their husbands is contradictory to this prediction. This finding was confirmed using a regression approach, in which

wives' past and present attachment to their fathers were entered first, followed by husbands' past and present relationships with their mothers as a means of predicting negative reciprocation, overall negativity and overall positivity for the couple. However, only when the husbands' attachment status was removed, did the wives' relationships with their fathers produce a significant effect for overall couple negativity, $F(2,43)=3.30$, $p<.05$. Apparently, when attachment relationships are considered for this data set, it was the wife's perception of her experiences with her father that was most directly linked to how she and her husband expressed themselves in discussions, rather than the husband's relationship with his family of origin. There were no significant effects produced for negative affect reciprocation or overall positivity in the regression analyses.

Integrative Complexity and Attachment

Hypothesis #2 stated that greater security of attachment to parents should be associated with more complex statements made by individuals in the couple discussions. However, there were no significant correlations found between integrative complexity and attachment at all for couples, husbands or wives (see Appendix I for correlations). Therefore, hypothesis #2 was not supported.

Integrative Complexity and Affect

Hypothesis #3 stated that negative reciprocity and integrative complexity should mutually affect one another, such that lower levels of complexity would be related to a

greater likelihood of the reciprocation and expression of negative affect. As can be seen in Table 17, there were some weak correlations between levels of integrative complexity and types of affect expressed in the discussions, consistent with this hypothesis. Husbands who were more complex during the entire conversation, had wives who tended to reciprocate less negativity of affect. Husbands who were more complex during the entire discussion also had wives who were somewhat less negative overall. Finally, husbands who were more complex overall, tended to be more positive in their conversations. Perhaps those husbands who are more positive towards their spouse are able to express more of the complexity in their thinking, whereas negativity produced in a discussion leads to the partner becoming more defensive, and perhaps more simplistic in commenting overall.

Table 17. Correlations between Affect and Complexity

	Husband Complexity	Wife Complexity
husbands		
negative reciprocation	-.19	-.24*
negativity	-.12	-.23*
positivity	.23*	.10
wives		
negative reciprocation	-.25*	-.28**
negativity	-.23*	-.20
positivity	.04	.28**

Note: negative reciprocation scores are the standardized residuals

* $p < .10$, ** $p < .05$

N husband neg. recip= 38
N husband negativity and positivity= 52
N wife neg. recip= 35
N wife negativity and positivity=54

For the wives, quite similar patterns emerged. Wives who were more complex overall, reciprocated less negative affect (see Table 17). Wives who were more complex overall also had husbands who tended to express less negativity. As well, wives who were more complex overall had husbands who tended to reciprocate less negative affect. Wives who were more complex during the discussion were also more positive overall. Once again, it appears as though wives who were more complex in their discussions were less likely to reciprocate their husband's negativity, and to have their husbands reciprocate their own negativity. Perhaps complexity, in this situation, acts as a buffer

and allows individuals not to react too hastily to their partner's negativity. It may also be that more complex expressions of one's negative affect reduce the antagonistic nature of these comments for the partner (Pratt et al., 1993).

As might be anticipated from these individual data, at the couple level, those couples who were more complex during the entire discussion reciprocated less negative affect overall (see Table 18). As well, couples who expressed less negativity and were somewhat more positive during the conversations, were more complex in their comments during the discussions. These results are consistent with those found in the separate gender analyses. Those dyads whose partners were more complex in discussions seemed to be less likely to escalate each other's negativity directly and were generally less negative during the conversations overall. However, the results obtained for husbands and wives particularly should be interpreted cautiously, as some of the correlations were above the p=.05 level.

Table 18. Correlations between Couple Level Affect and Complexity

	Integrative Complexity
negative reciprocation	-.35**
negativity	-.28**
positivity	.22*

Note: negative reciprocation scores are the standard residuals
* p<.10, ** p<.05

N neg. recip.= 41
N negativity and positivity= 54

In summary, the predicted relationship between negative affect and integrative complexity (hypothesis #3) was supported, given that generally, simple responses in the discussions were associated with more negative reciprocation of affect, more negativity overall, and somewhat less positivity of affect expressed.

Discussion

The present investigation attempted to develop a more extensive view of marital interactions during couple discussions. It has been documented that an individual's past relationship with his or her parents can influence how that individual will later function in a romantic relationship (Feeney & Noller, 1990; Cohn et al., 1992). This transmission of attachment styles has been hypothesized by theorists in the field (e.g., Bowlby, 1982) to occur through the development and expression of internal working models of relationships. Although internal working models cannot be studied directly, possible components (i.e., cognitive and affective components) of internal working models may be expressed during the interplay between partners, and may illuminate the impact of central relationships developed in childhood on subsequent adult relationships. It should be noted, however, that in the present study, individuals' representations of cognitive and emotional aspects of their internal working models were not directly tested. Instead, these components were conceptualized as distinct and examined within an attachment framework for analysis. In doing so, it was assumed that the couple discussions that

were observed reflected an interaction of the expression of these two aspects of partners' internal working models.

Possible longitudinal influences of early attachment experiences may be seen in partners' discourse with each other, and this may involve both cognitive and emotional aspects of communication. Based on previous research, it was hypothesized that childhood attachment relationships with parents would be linked to the level of integrative complexity (e.g., Pratt et al., 1991b) and the kind of affect produced in discussions (e.g., Kobak & Hazan, 1991) regarding important issues pertaining to couples. Several predictions were then made as to the relationships among attachment, integrative complexity, and affect that should be observed in marital discourse.

The following passages will provide an overview of the results obtained in the present study, including a summary of how each hypothesis was tested. The last three sections will contain a description of some of the limitations and implications of the study, and suggested directions for future research.

Findings of the Study

Gender Differences

Gender differences found in past research in terms of the kinds of affect produced by husbands and wives were, for the most part, confirmed in the present study. Although no differences between husbands and wives were found in the frequency of positive affect expressed in the discussions, wives did produce more negative affect, while husbands

produced more neutral affect. These latter findings are consistent with the research of Noller et al. (1982) and Pratt et al. (1993). A possible explanation for these sex differences may be that women feel more comfortable discussing issues of importance to their marriage than are their husbands, which may account for women's higher incidence of negative affect. Men, on the other hand, are more likely to withdraw in couple discussions (Markman, 1991; Pratt et al., 1993) than are women, which may explain their increased likelihood of expressing more neutral statements in these discussions.

Attachment and Marital Affect

It was hypothesized that husbands' and wives' attachment relationships with their parents would influence their expressions of affect in discussions with their spouses. Specifically, it was predicted that husbands and wives with a more secure attachment to their parents would be less likely to reciprocate their partner's negative affect during a discussion of issues for the couple, than would individuals with a more insecure attachment to their parents (hypothesis #1). As a corollary, it was predicted that couples in which both partners were securely attached would reciprocate less negative affect than couples that were more insecurely-attached.

Standardized residuals were calculated as indices of the degree to which the number of negative responses to previous negative statements made by an individual or couple was different from the base rate level of negative behaviours of that individual or couple. Although the hypotheses were primarily centred around individuals' and couples' rates

of reciprocation of negativity, non-contingent rates of negative and positive behaviour were also included in the analyses. In terms of attachment, there were some positive correlations found between negative affect reciprocation and attachment scores, contrary to what was expected, in that negative reciprocation was predicted to be lower when an individual had a more positive relationship with his or her parents (see Table 18). In particular, a pattern emerged such that husbands reciprocated more negative affect when their wives were securely-attached to their fathers in childhood. Wives also reciprocated more negative affect when their husbands had had a positive past relationship with their mothers.

This unpredicted, but consistent pattern of associations between reciprocation by the partner and attachment to the opposite-sex parent may suggest that individuals feel less inhibited about responding to their spouse's negativity when the spouse is more securely-attached to his or her own family of origin. Perhaps security of attachment, in this case, produced an atmosphere in which the reciprocation of negative affect is not perceived by the partners as threatening. In contrast, in couples where the partner is more insecurely-attached, the direct reciprocation of negative affect may have been problematic in the past, leading to uncontrolled escalation. These couples may have adapted to this risk factor by generally avoiding an immediate hostile response to the less secure spouse. This speculative interpretation suggests that the original hypothesis regarding security of attachment and the reciprocation of negative affect may have been overly simplistic. Follow-up research on this interpretation is definitely needed.

In contrast to these findings, analyses examining base-rates of negativity in the couple discussions for wives revealed that a more secure attachment is related to a decrease in the overall expression of negativity. This finding may suggest that wives are influential in shaping the course of such discussions, given that those wives with a more secure past attachment to their fathers expressed less total negativity. As well, couples in which the wife was more securely-attached to her father tended to produce fewer negative statements overall. Although these findings do not provide direct support for hypothesis #1 in terms of negative affect reciprocation, they do support the notion that security of attachment is associated (albeit complexly) with the amount of overall negativity produced by individuals and couples.

Analyses of non-contingent rates of positive affect were also conducted. No significant effects were found. This lack of findings may be somewhat consistent with Gottman's (1980) results that implicate negative reciprocity and base-rates of negativity as more important predictors in distinguishing distressed versus non-distressed couples, than overall rates of positivity.

Role of Husbands' Attachment Status in Couple Discussions

A prediction was also made regarding the role of a husband's attachment style in relation to the kinds of affect produced in the couple discussions by his wife. It was predicted that couples in which a husband was securely-attached, and his wife was insecurely-attached, would behave like couples in which both partners were securely-

attached (hypothesis #1b) (see Cohn et al., 1992). Husbands' attachment styles were expected to influence the kind of affect produced in the couple discussions, such that couples in which the husband was secure and the wife insecure would be less likely to reciprocate their partner's negative affect. However, using a regression approach, the results in the present study suggested that the wife's security of attachment to family of origin was somewhat more predictive of rates of couple negative behaviour than was the husband's attachment status. For instance, wives' attachment to their fathers was a modest predictor of lower amounts of negativity expressed by them and by the couple in the discussions. This finding suggests that wives' attachment experiences may have an impact on how couples interact when discussing issues of importance to their relationships. However, given the past research which has documented a strong influence of husbands' attachment style for couple discussions (e.g., Cohn et al, 1992; Ewing & Pratt, 1995), it seems likely that the interplay between spouses' attachment styles is more complicated than was once thought. Moreover, in the Cohn et al. (1992) study, the possible influences of wives' attachment experiences on their husbands' attachment styles could not be ascertained due to sample limitations.

The present investigation would suggest that wives' attachment styles need to be further studied. Perhaps the attachment styles of wives influence the kind of affect produced in the couple discussions, and husbands' romantic attachment styles then have an impact on the quality of the relationships (e.g., marital satisfaction). As well, Cohn et al. (1992) observed the interactions directly between parents and their children, and

not couple interactions. The difference between these two types of interactions are probably distinct enough to yield some of these discrepancies between the studies.

Attachment and Integrative Complexity

It was predicted that early attachment experiences would also have an impact on the level of integrative complexity expressed by individuals and couples, such that a more secure attachment to parents would be related to higher levels of integrative complexity in the discussions (hypothesis #2). However, this hypothesis was not supported, as no significant effects were noted for husbands, wives or couples relating parental attachment and complexity. These findings are not consistent with previous work examining the relationship between attachment and integrative complexity (e.g., Pratt et al. 1991b), which suggested that these two variables are positively related. Greater security of attachment, particularly for husbands, was associated with a higher level of complexity of thinking in the previous study. However, Pratt et al. (1991b) used the AAI for classifying participants into the various attachment groups and measured complexity of individuals' thinking in the attachment interview itself, rather than complexity of communication in couple discussions, which is a somewhat different context.

The original hypothesis concerning attachment and integrative complexity assumed that the reason these variables would be related was that integrative complexity would be at least a partial reflection of the cognitive component of internal working models of adults. A more comprehensive measure, such as the Adult Attachment Interview (AAI),

should contain questions that, in addition to assessing an individual's emotional state, also examines the individual's interpretive framework regarding attachment issues. One possible explanation for the finding of no relationship between these two variables here is that the items contained in the attachment measures used in the present study primarily index emotional components (i.e., the extent to which an individual is happy and satisfied with his or her relationship with a parent).

Although these aspects are important in helping to determine security of attachment, the broader, more interpretively-oriented components of attachment relationships were not included in the scale items adapted from Cowan and Cowan (1994). Perhaps, if the present attachment scales had been broader in scope, then a relationship between attachment and integrative complexity might have been observed. The attachment scales were more consistently related to the parental subscale of the IPPA (Armsden & Greenberg, 1987), however, suggesting some degree of concurrent validity for these measures, but perhaps more in the emotional vein.

Integrative Complexity and Marital Affect

A pattern of positive correlation of complexity scores between spouses was found, which was consistent with the results found by Pratt et al. (1993). As well, the dependency of the scores of the partners increased somewhat over the course of the discussions, perhaps reflecting that the second halves of conversations contain more serious discussion of the issues, as the complexity of statements made by one spouse

seemed to become more inter-dependent on the statements made by the other. This finding lends support to Gottman's (1979) description of the final phase of typical discussions, in which partners become engaged in more intense debate of issues.

Finally, integrative complexity and marital affect were hypothesized to be associated with one another, such that more simplistic statements would be related to an increase in negative affect reciprocation, and to overall rates of negativity (hypothesis #3). Complexity and marital affect were associated with each other in meaningful and predicted ways (see Tables 17 and 18). An inverse relationship between integrative complexity and negative reciprocation was found, such that husbands who were less complex tended to have wives who reciprocated more negative affect. Conversely, wives who were less complex tended to have husbands who reciprocated more negativity, and they themselves reciprocated more of their husbands' negativity. Finally, at the dyadic level, those couples who were less complex in discussions were more likely to become engaged in a greater escalation of negative affect. These findings provide some support for the construct validity of the measure of negative reciprocation, since there was some concern as to the validity of the standardized residuals constructed for these analyses, given that they were not highly associated with marital satisfaction indices.

In terms of the analyses of non-contingent negative data and integrative complexity, similar results emerged. Husbands who spoke less complexly expressed more negativity and had wives who expressed more negativity. Less complex wives also had partners who produced somewhat more negative statements. At the couple level, spouses who had

lower levels of complexity also expressed more negativity overall during the discussions. It does appear that the degree to which an individual or a couple can view an issue from more than one perspective is related to the kind and intensity of affect expressed in these couple discussions.

Analyses of base-rates of positive affect produced similar, yet weaker, results. Generally, individuals and couples who were more complex in their thinking displayed somewhat more positive behaviour in the discussions. These findings are consistent with Gottman's (1980) research, which suggested that negative, more than positive, behaviour creates a physiological connection between people engrossed in conversation (i.e., individuals being influenced physiologically to their partners' expressions of emotion), as well as being a better discriminator between distressed and non-distressed couples. For example, Kaplan, Burch, and Bloom (1964) demonstrated that when positive and negative interactions between participants were monitored by their galvanic skin responses (GSR), the GSR could only be predicted within an individual and across individuals when negative interactions were being studied.

The relationships observed between negative reciprocation, overall negativity and integrative complexity are revealing in a number of ways. First, the results suggest that complexity may act as a buffer in conversations, such that showing greater complexity, and likely thereby the tendency to view an issue from more than one perspective, allows an individual to take a broader and less reactive view of the issue. For instance, Haefner et al. (1991) found that husbands and wives who were satisfied with their marriage

engaged in more problem-solving behaviours as a couple. As well, being complex in a conversation in expressing comments may reduce the volatility of comments made by the spouse. Perhaps being able to take multiple perspectives in conversations between spouses allows those individuals to distance themselves from the highly-charged feelings generated by the conversation, without withdrawing emotionally from the discussion. This idea is similar to Gottman's (1993, personal communication to M. Pratt) suggestion that greater integrative complexity may operate as a means of soothing oneself when a spouse expresses intense emotions in such conversations.

It may also be true, however, that being less negative in a discussion simply allows for greater degree of complexity of thought, since the direction of this relationship, given the correlational nature of the findings, cannot be ascertained. Put another way, couples caught in a cycle of negativity may not be in a position to view the issues at hand from more than one perspective. As well, the lack of ability to manage negativity may prevent spouses from generating alternative ways for resolving conflicts. The parallels between these findings for couples and the results described by Tetlock (1986) for complexity of international communications during disputes are nonetheless quite striking, regardless of the precise explanation for these phenomena. Recall that Suedfeld and Tetlock (1977) found that during international conflicts which ultimately escalated to war, the speeches made by the leaders of the countries involved were significantly less complex than the speeches made by leaders when the crises were resolved more peacefully.

Other Findings

The Importance of Attachment to the Opposite-Sex Parent

Past and present indices of feelings about each parent were used. Although no predictions were made regarding differences between the parents, the data collected for each parent were utilized, since little research has focused on such possible gender differences. A finding of interest is that gender differences emerged between the husbands and wives in the sample. For the husbands, early relations to their mothers seemed to be the primary predictor of adaptation, at least in this transition to parenthood context. However, for the wives, their relationships with their fathers seemed to have the greatest impact on the parental adjustment variables in the study (e.g., depression and marital satisfaction). Past research (e.g., Ainsworth et al., 1978; Crowell & Feldman, 1988; Main & Goldwyn, 1984) has stressed the importance of the primary caregiver (typically the mother) in the development of attachment bonds. However, little evidence, in terms of attachment, has been gathered on the importance of the opposite-sex parent in influencing an individual's relationship with a partner. Perhaps the opposite-sex parent acts as a role model, from whom individuals start to form an impression of what they expect from a future spouse. This impression may then affect how individuals express themselves in discussions with their spouses. Hetherington (1972) found evidence that daughters of divorcees and widows were greatly influenced by the absence of their fathers, such that by adolescence, they were exhibiting distinctively different patterns of behaviours, including romantic behaviours, with males. Although in the present study

the nature of the marriages of the participants' parents was not examined, it does seem evident that relations with the opposite-sex parent may be more important than has generally been considered.

General Patterns of Discussions

Analyses of the discussions as a whole revealed that the first and second portions contained somewhat different patterns of affect expressed by the couples. This finding is consistent with the research of Gottman (1979), who noted that the later parts of discussions may contain stronger expressions of emotions, as husbands and wives seriously discuss issues of importance. In the present study, the second halves of the discussions were filled with more negative, positive and neutral reciprocation, which suggests that as a conversation develops, partners become more and more influenced by their spouse's behaviour. As well, this pattern of behaviour suggests that couples in the later portion of these discussions may be more likely to become engaged in serious conflicts, in which the escalation of negative affect may be a strong contributor. Perhaps encouragement of greater integrative complexity can be a tool for helping partners control or manage the ways and extent to which they reciprocate their spouse's negative emotions. Although not all conflict is detrimental to relationships, Gottman (1980) has clearly documented how the rates of reciprocation of negative affect, and the expression of negativity in general, tend to differentiate distressed from non-distressed couples.

The patterns exhibited by the husbands and wives in the discussions were also somewhat different. For husbands, the reciprocation of negative and neutral affect was stronger in the second half than in the initial stages of the discussions. For wives, the two halves of the discussions were identical, such that wives did not exhibit significant changes in the rates of different affect expressed over the course of the conversations. These gender differences in terms of the nature and intensity of affect expressed, suggest that husbands' expression of affect changes more over the course of discussions, than does that of their wives. These findings suggest that husbands, particularly in the later part of the discussions, may have been influenced by their wives' behaviour, such that they reciprocated more of their partners' negative and neutral affect.

Limitations of the Present Study

There were a few limitations in the present study. First, characteristics of the sample may preclude the results from being generalized to a larger population. The husbands and wives who participated in the present study were highly homogeneous in terms of race (almost exclusively white). As well, the sample tended to be well-educated. For instance, 49% of the husbands and 67% of the wives had obtained a community college diploma or a university degree. Certainly, this level of education is not representative of the general population, and may have coloured the nature of the couple discussions in terms of content and nature of the discourse. As well, almost 38% of these mothers had already given birth to a second child. Given that the first child in the families was about

18 months of age, these families with two children under two years may have been experiencing a great deal of stress. Although the present investigation focused on couple relationships, it cannot be denied that the number and age of the children may have had an impact on the nature of the couple discussions, given the stressful times that many young couples experience when starting their families (Cowan & Cowan, 1992).

The majority of the mothers and the fathers in the sample worked outside the home part or full-time. The pressure of providing a nurturing family environment, as well as performing adequately at a job, must undoubtedly place considerable demands on these parents. These factors have been mentioned to provide a more complete picture of the lives of the families in the study and to provide a framework for understanding what many couples brought to their discussions. They also suggest possible limits on the generalizability of the present findings to a larger population of couples who may not have young children, or to couples of different ethnicities and of a different social economic status.

There were also problems inherent with some of the measures, particularly the "attachment" scales. The scales were rather short (they consisted of only 6 items) and they did not directly assess attachment styles, but rather degree of positivity of parental relationships. As well, given that the scales measured how positive individuals feel about their relationships with their parents, individuals with a dismissing attachment style (characterized by idealization of a parent and a tendency to minimize negative experiences with their parents) might have inadvertently responded similarly to securely-attached

individuals. For instance, in response to a question asking how satisfied they are with their mothers, individuals with a dismissing attachment style might have answered very positively. Thus, they may have appeared more securely-attached than if they had been classified using other attachment measures.

Although these scales asked meaningful questions, they certainly were not broad enough in scope to capture the complexity of attachment relationships. Measures such as the Adult Attachment Interview (AAI), which directly measures attachment styles, would be preferable in assessing attachment styles and assigning individuals to the various attachment groups. Although the AAI would have been the measure of choice, it too suffers from the same drawbacks that all known adult attachment measures do: they are retrospective by nature in contrast to observational assessments of childhood attachments. Whether attachment relationships are assessed using questionnaire or interview techniques, researchers cannot expect to receive a realistic view of how individuals became attached to their parents in childhood. Although it is the individual's **perception** of his or her experiences that is the most important factor in assessing attachment relationships, perhaps the artificial environment created when participants are asked questions about their childhoods should be reconsidered as the only means of acquiring such information. Although harder to implement, observing actual stressful incidents that occur between spouses may be better measures of contemporary attachment styles (in this case, romantic attachment). Of course, this method would still pose a problem for childhood attachments of adults unless one conducted a very long-term study.

The couple discussions used in the present study may serve not only to reveal interesting trends in integrative complexity and affect, but they may also give a more direct means of viewing attachment relationships, albeit from a romantic attachment standpoint, in their natural form. Ewing and Pratt (1995) made an appropriate suggestion that conversations in which non-stressful issues were discussed might be included as a means of comparison with these "problem" discussions. Theoretically, attachment styles should be elicited during times of stress. Therefore, this idea could be tested by including non-controversial topics in the discussions, and comparing these discussions with those involving more partner disagreement.

As well, the analyses concerning negative affect reciprocation were severely hampered by the nature and duration of the couple discussions. Many individuals and couples had to be excluded from the analyses because their discussions were not long enough (or serious enough) to provide the research with enough displays of negative affect. The discussions were set at 10 minutes in length so that the couples would not get tired, since it was the last task asked of the participants in a fairly intensive interview session. Unfortunately, most couples spent a great amount of time deciding on a topic and, as a result, the portion of scorable material was considerably less than 10 minutes in length. As well, many couples were tired and found it difficult to discuss such personal issues so late into the interview. Future attempts at interviewing couples should include longer discussions at the beginning of any visit, so that the participants do not seem so overwhelmed about the process.

Further, there was some concern about the validity of the negative reciprocation scores. Past research (e.g., Gottman, 1980) has suggested that level of negative reciprocation of affect is negatively related to marital satisfaction. In the present study, these two variables were not strongly related, although the relationships were in the expected direction. In contrast, Ewing and Pratt (1995) found a relationship between non-contingent rates of negativity and marital satisfaction in the present sample, which reduced the confidence the researchers had in using the negative reciprocation indices and suggested that the base-rates of overall negativity might be a preferable measure.

Implications

This study was an attempt to extend our knowledge of attachment, marital affect, and integrative complexity in the hope of elucidating how early childhood experiences have an impact on couples' communication in relationships and expression of their feelings in discussions. The present research took a new approach to studying attachment, marital affect and integrative complexity, and extended previous work in the following ways: first, it was the first study to examine these three variables in one study, allowing for a more elaborate model to be tested of the possible combination of these effects. What is now known from the present study about the relationships between childhood attachment and affect is that wives' early relationships with their fathers may be especially important in determining the amount of negativity that is produced by both the wives and by the couples. Wives who reported being more positively attached to their fathers in childhood

expressed less negativity and were a part of a couple who expressed less negativity. Since the display of negative emotions characterizes many distressed couples (Markman, 1991), the finding that a woman's early experiences with her father have such a relation to how she and her partner behave, has some implications for the health of relationships. This finding also lends support to the idea that, despite years of subsequent development, an individual's childhood relationships can still have a significant link with adult romantic relationships.

Second, the role of integrative complexity as a predictor of affect expressed by individuals and couples in discussions is a significant contribution to the literature. A pattern was revealed such that individuals who were more complex in discourse, tended to reciprocate less negative affect and expressed less negativity overall. This finding is consistent with the research of Pratt et al. (1993), which found that when wives were simplistic in their negative statements to their husbands, their husbands were more likely to be negative in return than when wives expressed negativity via more complex statements.

Such results may have significant implications for clinicians working with distressed couples. Perhaps cognitive-behavioral therapies that teach couples to express their thoughts to their spouses in more complex ways may be beneficial. Coaching partners to view issues, especially issues introduced by their spouses, from more than one perspective may reduce the amount of negativity displayed in discussions, as well as the perception of negative statements made by others once they are spoken. Markman (1991)

reported interesting findings from such a cognitive-behavioral intervention designed for couples, in which husbands who participated in the program learned to respond to their wives' non-productive statements with more problem-solving behaviours. The results from this project may suggest that the manner in which individuals think about issues might be changed in order to reduce the risk of couples responding in harmful ways to their spouses' statements. Of course, such an intervention study would provide a strong test of the present hypotheses about complexity and partners' affect, which are so far based on only correlational data.

Finally, unlike most previous studies, the attachment measures assessed relationships to each parent separately. Most previous research on attachment to parental figures, whether it has assessed children (e.g., Main & Goldwyn, 1984) or adults (e.g., Cohn et al., 1992) has generally ignored the importance of gender of the parent in the family of origin. Even with measures like the AAI, adults' attachments to mothers and fathers have been assumed to be similar. The findings of the present study would suggest that it is essential to think of individuals' relationships with their two parents as being more distinctive. These results also stress particularly the influential nature of the opposite-sex parent for adult romantic relationships.

Future Research

The present research has illuminated several aspects of the marital relationship that need to be further studied. First, gender differences in how partners communicate have

been documented. For instance, in the present study, wives expressed more negative behaviour, while husbands exhibited more neutral behaviour. Previous studies (e.g., Pratt el al., 1993) have also documented how wives tend to introduce the topics of discussion. The next step to be taken is to ascertain the reasons behind these patterns. For example, the tendency for men to express themselves in more neutral terms may reflect a pattern of avoidance and withdrawal. Although this tendency has been studied previously (Gottman et al., 1977; Levenson & Gottman, 1983), this pattern of avoidance may reflect a power imbalance in relationships within many couples. Gottman and Krokoff (1989) have documented how women not only have to introduce issues to their husbands, but must actively encourage their husbands to openly express their anger, to avert the process of withdrawing from the conversation. This process leaves women with the primary burden of maintaining relationships.

A common finding in wife-dominant couples is that these partnerships tend to score low on measures of marital satisfaction (see Gray-Little & Burks, 1983). Corrales (1975) interpreted this unhappiness, particularly by the wives in such relationships, to be the result of the husbands' withdrawal and lack of assuming responsibility for the relationship. Future research might attempt to assess this imbalance of power, since Markman (1991) found that the degree of male withdrawal from conflict situations was the best predictor of future divorce. One method of doing so would be to add a "withdrawing/avoidant" code to the Specific Affect Coding System developed by Gottman (e.g., 1993). By directly monitoring these patterns of avoidance, typically made by

husbands, researchers will be in a better position to understand the underlying patterns of the interplay between husbands and wives in marital discussions.

Another aspect concerning gender differences that could be examined is the exact role that attachment, both to parents and to the spouse, plays in how couples interact. Previous studies have stressed the importance of husbands' attachments to their parents (Cohn et al., 1992) and to their spouses (Ewing & Pratt, 1995) in influencing marital interaction. The present study found somewhat contradictory evidence, tentatively suggesting that it is the wives' attachment experiences in the family of origin which may be of greater importance to the couple relationship. Although different attachment measures were used in these various studies, these findings highlight the complex nature of attachment relationships and their adult outcomes. Perhaps a study could be designed which incorporated both strong romantic and parental attachment measures, to determine how these two attachment styles may differentially relate to each other and the expression of affect in couple discussions. Current efforts to develop a "couple attachment" interview paralleling the AAI by a number of research teams may facilitate this research strategy.

In summary, the present study uncovered an important link between individuals' past relationships with their opposite-sex parents, particularly for women, and the dynamics of their own marriages. As well, couples who are able to take the spouses' perspective in a discussion about marital and parenting issues, seem to be less likely both to express and to reciprocate negative affect. These findings reveal interesting patterns within

marital relationships that may help isolate risk factors for certain couples that are experiencing difficulties. As well, these findings may have applications to clinical settings. Perhaps clinicians who are aware of the relationship between greater perspective-taking and the kinds of affect expressed by couples will be better able to understand when their clients are experiencing such difficulties. Ultimately, such an understanding will hopefully lead researchers and clinicians to be better able to help couples in distress to communicate more effectively.

References

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

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

Armsden, G.C., & Greenberg, M.T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence, 16*, 427-454.

Bakeman, R., Adamson, L.B., & Strisik, P. (1989). Lags and logs: Statistical approaches to interaction. In Bornstein, M.H., & Bruner, J.S. (Eds.), *Interaction in human development*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Bakeman, R., & Gottman, J.M. (1986). *Observing interaction: An introduction to sequential analysis*. New York: Cambridge University Press.

Baker-Brown, G., Ballard., E., Bluck, S., deVries, B., Suedfeld, P., & Tetlock, P.E. (1992). *Scoring manual for integrative and conceptual complexity*. In J. Atkinson, D. McClelland, & J. Veroff (Eds.), *Handbook of thematic analysis*. New York: Springer-Verlag.

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

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

Bretherton, I. (1983). Attachment theory: retrospect and prospect. *Monographs of the Society for Research in Child Development, 50,* 3-35.

Bringle, R.G., & Bagby, G.J. (1992). Self-esteem and perceived quality of romantic and family relationships in young adults. *Journal of Research in Personality, 26,* 340-356.

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement, 10,* 37-46.

Corrales, R.G. (1975). Power and satisfaction in early marriage. In R.E. Cromwell & D.H. Olson (Eds.), *Power in families.* New York: Wiley.

Cohn, D.A., Silver, D.H., Cowan, C.P., Cowan, P.A., & Pearson, J.L. (1992). Working models of childhood attachment and couple relationships. *Journal of Family Issues, 13(4),* 432-449.

Collins, N.L., & Read, S.J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58(4),* 644-663.

Cowan, C.P, & Cowan, P.A. (1992). *When partners become parents: The big life change for couples.* New York: HarperCollins.

Cowan, C.P., & Cowan, P.A. (1993). *Marriages under stress: The emotional context of children's transition to school.* Symposium given at the Society for the Research in Child Development, annual meeting, New Orleans.

Cowan, C.P., & Cowan, P.A. (1994). Personal communication to M. Pratt, Wilfrid Laurier University.

Crowell, J.A., & Feldman, S.S. (1988). Mothers' internal models of relationships and children's behavioral and developmental status: A study of mother-child interactions. *Child Development, 59*, 1273-1285.

deVries, B., & Walker, L. (1986). Moral reasoning and attitudes toward capital punishment. *Developmental Psychology, 22*, 509-513.

Ewing, K.J., & Pratt, M.W. (1995). *The role of adult romantic attachment in marital communication and parenting stress*. Poster presented at the biennial meeting of the Society for Research in Child Development, Indianapolis.

Feeney, J.A., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology, 58(2)*, 281-291.

Fonagy, P., Steele, H., & Steele, M. (1991). Maternal representations of attachment during pregnancy predict the organization of infant-mother attachment at one year of age. *Child Development, 62*, 891-905.

Gottman, J.M. (1979). *Marital interaction: Experimental investigations*. New York: Academic Press.

Gottman, J.M. (1980). Consistency of nonverbal affect and affect reciprocity in marital interaction. *Journal of Consulting and Clinical Psychology, 48*, 711-717.

Gottman, J.M. (1990). *Sequential analysis: A guide for behavioral researchers.* New York: Cambridge University Press.

Gottman, J.M. (1993). The roles of conflict engagement, escalation, and avoidance in marital interaction: A longitundinal view of five types of couples. *Journal of Consulting and Clinical Psychology*, *61*, 6-15.

Gottman, J.M. (1993). Personal communication to M.W. Pratt, Wilfrid Laurier University.

Gottman, J.M., & Krokoff, L.J. (1989). The relationship between marital interaction and marital satisfaction: A longitudinal view. *Journal of Consulting and Clinical Psychology*, *57*, 47-52.

Gottman, J.M., & Levenson, R.W. (1992). Marital processes predictive of later dissolution: Behavior, physiology, and health. *Journal of Personality and Social Psychology*, *63*, 221-233.

Gottman, J., Markman, H., & Notarius, C. (1977). The topography of marital conflict: A sequential analysis of verbal and nonverbal behaviour. *Journal of Marriage and the Family*, *39*, 461-477.

Gottman, J.M., Notarius, C., Markman, H., Bank, S., & Yoppi, B. Behavior exchange theory and marital decision making. *Journal of Personality and Social Psychology*, *34*, 14-23.

Gray-Little, B., & Burks, N. (1983). Power and satisfaction in marriage: A review and critique. *Psychological Bulletin*, *93*, 513-538.

Greenberg, M., Siegal, J., & Leitch, C. (1984). The nature and importance of attachment relationships to parents and peers during adolescence. *Journal of Youth and Adolescence*, *123*, 73-86.

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52(3),* 511-524.

Haefner, P.T., Notarius, C.L., & Pellegrini, D.S. (1991). Determinants of satisfaction with marital discussions: An exploration of husband-wife differences. *Behavioral Assessment, 13,* 67-82.

Harvey, O., Hunt, D., & Schroder, H. (1961). Conceptual systems and personality organization. New York: Wiley.

Hetherington, M. (1972). Effects of father absence on personality development in adolescent daughters. *Developmental Psychology, 7,* 313-326.

Hunsberger, B., Lea, J., Pancer, S.M., Pratt, M., & McKenzie, B. (1992). Making life complicated: prompting the use of integratively complex thinking. *Journal of Personality, 60,* 95-114.

Hunsberger, B., Pancer, S.M., & Pratt, M.W. (1994). Religious fundamentalism and integrative complexity of thought: A relationship for existential content only? *Journal for the Scientific Study of Religion, 33,* 335-346.

Kaplan, H.B., Burch, N.R., & Bloom, S.W. (1964). Psychological covariation and sociometric relationship in small peer groups. In P.H. Leiderman & D. Shapiro (Eds.), *Psychological approaches to social behaviour.* Stanford, Calif: Stanford University Press.

Kobak, R.R., & Hazan, C. (1991). Attachment in marriage: Effects of security and accuracy of working models. *Journal of Personality and Social Psychology, 60,* 861-869.

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

Krokoff, L.J. (1991). Communication orientation as a moderator between strong negative affect and marital satisfaction. *Behavioral Assessment, 13*, 51-65.

Levenson, R.W. & Gottman, J.M. (1983). Marital interaction: Physiological linkage and affective exchange. *Journal of Personality and Social Psychology, 45*, 587-597.

Locke, H.J., & Wallace, K.M. (1959). Short marital-adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living, 21*, 251 255.

Main, M , & Goldwyn, R. (1984). Predicting rejection of her infant from mother's representation of her own experience: Implications for the abused-abusing intergenerational cycle. *Child Abuse and Neglect, 8*, 203-217.

Main, M., & Goldwyn, R. (1988). 'An adult attachment classification system', unpublished manuscript, University of California, Berkeley.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development, 50*, 66-104.

Main, M., & Cassidy, J. (1988). Categories of response to reunion with the parent at age 6: predictable from infant attachment classifications and stable over a 1 month period. *Developmental Psychology, 24(3)*, 415-426.

Margolin, G., & Wampold, B.E. (1981). Sequential analysis of conflict and accord in distressed and nondistressed marital partners. *Journal of Consulting and Clinical Psychology*, *49*, 554-567.

Markman, H.J. (1991). Constructive marital conflict is not an oxymoron. *Behavioral Assessment*, *13*, 83-96.

Noller, P. (1982). Channel consistency and inconsistency in the communications of married couples. *Journal of Personality and Social Psychology*, *43*, 732-741.

Olson, J., & Zanna, M. (1993). Attitudes and attitude change. *Annual Review of Psychology*, *44*, 117-154.

Pancer, S.M., Hunsberger, B., Pratt M.W., Boisvert, S., & Roth, D. (1992). Political roles and the complexity of political rhetoric. *Political Psychology*, *13*, 31-43.

Pancer, S.M., Pratt, M.W., Hunsberger, B., & Gallant, M. (1993). *Partner differences in thinking about the transition to parenthood*. Paper presented at the annual meeting of the American Psychological Association, Toronto.

Pratt, M.W., Cohn, D., Cowan, P.A., & Cowan, C.P. (1991a). *Connecting the generations: Adults' complexity of reasoning about attachment, security of working models, and patterns of parenting*. Paper presented at the biennial meeting of the Society for Research in Child Development, Seattle.

Pratt, M.W., Cohn, D., Cowan, P.A., & Cowan, C.P. (1991b). *The cognitive connection: Using integrative complexity analysis to study adult thinking about*

three-generational family issues. Paper presented at the biennial meeting of the Society for Research in Child Development, Seattle.

Pratt, M.W., Diessner, R., Hunsberger, B., Pancer, S.M, & Savoy, K. (1991c). Four pathways in the analysis of adult development and aging: Comparing analyses of reasoning about personal-life dilemmas. *Psychology and Aging, 6,* 666-675.

Pratt, M.W., Garcia, H., & Santolupo, S. (1993). *Response and reciprocity: Predicting couple marital satisfaction and communication competence from discourse complexity and affect measures*. Paper presented at the biennial meeting of the Society for Research in Child Development, New Orleans.

Pratt, M.W., Hunsberger, B., Pancer, S.M., & Roth, D. (1992). Reflections on religion: Aging, belief orthodoxy, and interpersonal conflict in the complexity of adult thinking about religious issues. *Journal for the Scientific Study of Religion, 31,* 574-522.

Senchak, M., & Leonard, K.E. (1992). Attachment styles and marital adjustment among newlywed couples. *Journal of Social and Personal Relationships, 9,* 51-64.

Spanier, G.B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family, 38,* 15-28.

Suedfeld, P., & Bluck, S. (1993). Changes in integrative complexity accompanying significant life events: Historical evidence. *Journal of Personality and Social Psychology, 64*, 124-130.

Suedfeld, P., & Piedrahita, L.E. (1984). Intimations of mortality: Integrative simplification as a precursor of death. *Journal of-Personality and Social Psychology, 47*, 848-852.

Suedfeld, P., & Rank, A.D. (1976). Revolutionary leaders: Long-term success as a function of changes in conceptual complexity. *Journal of Personality and Social Psychology, 34*, 169-178.

Suedfeld, P., & Tetlock, P.E. (1977). Integrative complexity of communications in international crises. *Journal of Conflict Resolution, 21*, 169-184.

Tetlock, P.E. (1981). Personality and isolationism: Content analysis of senatorial speeches. *Journal of Personality and Social Psychology, 41*, 737-743.

Tetlock, P.E. (1986). Accountability and complexity of thought. *Journal of Personality and Social Psychology, 45*, 74-83.

van Ijzendoorn, M.H., & Kroonenberg, P.M. (1988). Cross-cultural patterns of attachment: A meta-analysis of the strange situation. *Child Development, 59*, 147-156.

Appendix A
Relationship With Mother

The Past. Please answer the following questions in terms of your memory of your relationship with your mother (or mother-figure) when you were a young child.

FIRST, PLEASE CHECK ONE:
I am answering about my mother _____
I am answering about my mother-figure _____
I am not answering because there was not a mother/mother-figure when I was growing up_____

CIRCLE THE MOST APPROPRIATE NUMBER FROM 1 TO 7 FOR EACH ITEM BELOW.

1. I remember my mother's involvement with me as:

1	2	3	4	5	6	7
Very Uninvolved		Somewhat Uninvolved		Somewhat Involved		Very Involved

2. I remember the amount of conflict in my relationship with my mother as:

1	2	3	4	5	6	7
Very High		High		Low		Very Low

3. On the whole, I remember my relationship with my mother as:

1	2	3	4	5	6	7
Very Unhappy		Unhappy		Happy		Very Happy

4. On the whole, I remember my relationship with my mother as:

1	2	3	4	5	6	7
Very Distant		Distant		Close		Very Close

5. On the whole, I remember my relationship with my mother as:

1	2	3	4	5	6	7
Very Cold		Cold		Warm		Very Warm

6. On the whole, I remember my relationship with my mother as:

1	2	3	4	5	6	7
Very Unsatisfying		Unsatisfying		Satisfying		Very Satisfying

Appendix B
Relationship With Father

The Past. Please answer the following questions in terms of your memory of your relationship with your father (or father-figure) when you were a young child.

FIRST, PLEASE CHECK ONE:
I am answering about my father _____
I am answering about my father-figure _____
I am not answering because there was not a father/father-figure when I was growing up_____

CIRCLE THE MOST APPROPRIATE NUMBER FROM 1 TO 7 FOR EACH ITEM BELOW.

1. I remember my father's involvement with me as:

1	2	3	4	5	6	7
Very Uninvolved		Somewhat Uninvolved		Somewhat Involved		Very Involved

2. I remember the amount of conflict in my relationship with my father as:

1	2	3	4	5	6	7
Very High		High		Low		Very Low

3. On the whole, I remember my relationship with my father as:

1	2	3	4	5	6	7
Very Unhappy		Unhappy		Happy		Very Happy

4. On the whole, I remember my relationship with my father as:

1	2	3	4	5	6	7
Very Distant		Distant		Close		Very Close

5. On the whole, I remember my relationship with my father as:

1	2	3	4	5	6	7
Very Cold		Cold		Warm		Very Warm

6. On the whole, I remember my relationship with my father as:

1	2	3	4	5	6	7
Very Unsatisfying		Unsatisfying		Satisfying		Very Satisfying

Appendix C
Relationship With Mother

The Present. Please answer the following questions in terms of how your relationship with your mother (or mother-figure) is now.

FIRST, PLEASE CHECK ONE:
I am answering about my mother _____
I am answering about my mother-figure _____
I am not answering because I do not have a mother/mother-figure _____

CIRCLE THE MOST APPROPRIATE NUMBER FROM 1 TO 7 FOR EACH ITEM BELOW.

1. Right now, my mother's involvement with me is:

1	2	3	4	5	6	7
Very Uninvolved		Somewhat Uninvolved		Somewhat Involved		Very Involved

2. Right now, the amount of conflict in my relationship with my mother is:

1	2	3	4	5	6	7
Very High		High		Low		Very Low

3. On the whole, I feel that my relationship with my mother is:

1	2	3	4	5	6	7
Very Unhappy		Unhappy		Happy		Very Happy

4. On the whole, I feel that my relationship with my mother is:

1	2	3	4	5	6	7
Very Distant		Distant		Close		Very Close

5. On the whole, I feel that my relationship with my mother is:

1	2	3	4	5	6	7
Very Cold		Cold		Warm		Very Warm

6. On the whole, I feel that my relationship with my mother is:

1	2	3	4	5	6	7
Very Unsatisfying		Unsatisfying		Satisfying		Very Satisfying

Appendix D
Relationship With Father

The Present. Please answer the following questions in terms of how your relationship with your father (or father-figure) is now.

FIRST, PLEASE CHECK ONE:
I am answering about my father _____
I am answering about my father-figure _____
I am not answering because I do not have a father/father-figure _____

CIRCLE THE MOST APPROPRIATE NUMBER FROM 1 TO 7 FOR EACH ITEM BELOW.

1. Right now, my father's involvement with me is:

1	2	3	4	5	6	7
Very Uninvolved		Somewhat Uninvolved		Somewhat Involved		Very Involved

2. Right now, the amount of conflict in my relationship with my father is:

1	2	3	4	5	6	7
Very High		High		Low		Very Low

3. On the whole, I feel that my relationship with my father is:

1	2	3	4	5	6	7
Very Unhappy		Unhappy		Happy		Very Happy

4. On the whole, I feel that my relationship with my father is:

1	2	3	4	5	6	7
Very Distant		Distant		Close		Very Close

5. On the whole, I feel that my relationship with my father is:

1	2	3	4	5	6	7
Very Cold		Cold		Warm		Very Warm

6. On the whole, I feel that my relationship with my father is:

1	2	3	4	5	6	7
Very Unsatisfying		Unsatisfying		Satisfying		Very Satisfying

Appendix E
Specific Affect Coding System

Positive Codes	Negative Codes	Neutral Code
1. Humour	1. Anger	1. Question-response
2. Affection/Caring	2. Disgust/Scorn/Contempt	2. Information Exchange
3. Interest/Curiosity	3. Whining	
	4. Sadness	
	5. Fear	
	6. Irritation	

Appendix F
Examples of Levels of Integrative Complexity in Discussions (after Baker-Brown et al., 1992) (from Pratt et al., 1993)

Level	Description	Examples
1	A single perspective or dimension is considered (absolutistic)	"Cause we know what that really means."
2	A second perspective or dimension is hinted at or tolerated, but not fully specified (initial differentiation)	"Well, I would like to be able to do that, if we could work it out."
3	Two or more views or dimensions are tolerated and specified fully (full differentiation)	"So let's figure out what you would like and what it is that we can both do."
4	Two views or dimensions are in tension or some dynamic relation between them is suggested (beginning integration)	"You are conflicted about that...You want leisure time, and you want financial security in life, and it is difficult to have both."
5	An integration rule is specified for how two or more views or dimensions are co-ordinated (full integration)	"If we could have both the close time as a family and the social time with the neighbours, that might really make us feel we'd created a balance in our social lives."
6	A dynamic system with two or more levels is sketched	No examples in the sample
7	A dynamic, interactive system is specified	No examples in the sample

Appendix G
Topics for Couple Discussions

Below is a list of some issues that can be difficult ones for parents. We would like you to pick an issue in which you have a difference or disagreement that is unresolved and spend about 10 minutes trying to make some progress in resolving it. **Please spend no more than 2 minutes picking an issue** -either from the list below or one of your own - so that you can use the rest of the time for your discussion.

Division of work in raising our child
Management of money in the family
Our sexual relationship
Discipline
Division of workload in the family
Our relationship with our in-laws
The amount of time we spend together as a couple
The way one of us/both of us communicate with our child
The need for time alone for either one of us
How to handle tantrums
Willingness to work for improvement in our relationship
The way we communicate with each other
Decisions about our leisure/travel time
Our work
Personal habits

PLEASE FEEL FREE TO PICK AN ISSUE OF YOUR OWN

WE WILL COME BACK INTO THE ROOM WHEN YOU HEAR THE KNOCK.

Appendix H

Protocol for Couple Discussions (Developed by Cowan & Cowan, 1992)

Let me tell you what we're going to ask you to do now. This card contains some topics we'd like you to talk to each other about. We'll leave the room shortly and within a minute or so you'll hear a couple of knocks on the wall. That'll be your signal to pick up the cards and talk to each other about one of the topics on the card. It is up to the two of you to choose which topic to discuss. You can also choose an issue of your own that is not on the card. You will have about 10 minutes to discuss the issue. When the time is up you will hear a knock which will signal you to finish up your last sentence and then we will return.

Appendix I
Attachment and Integrative Complexity Correlations

Attachment Measure	Couple Complexity	Husband Complexity	Wife Complexity
Husbands			
past (mother)	.10	.14	.02
past (father)	-.15	-.13	-.15
present (mother)	.01	.05	.02
present (father)	.00	.10	-.08
Wives			
past (mother)	.12	.12	.12
past (father)	-.07	-.02	-.07
present (mother)	-.14	-.05	-.16
present (father)	-.07	-.06	-.02

Note: ps > .10