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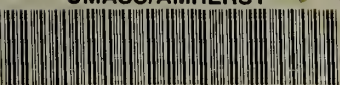
Representations of others and perceptions of relationships.

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REPRESENTATIONS OF OTHERS AND PERCEPTIONS OF RELATIONSHIPS

A Thesis Presented

by

MARY E. WADE

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

MASTER OF SCIENCE

May 1993

Psychology

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REPRESENTATIONS OF OTHERS AND PERCEPTIONS OF RELATIONSHIPS


A Thesis Presented

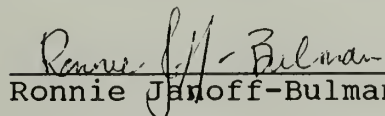
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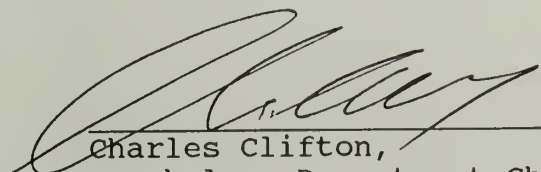
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DEDICATION

For my parents, Thomas W. Wade and Ann Farrell Wade, who constantly provide me with love and inspiration. Thank you especially for Kevin, Patti, and Tara (or is that Tara, Patti, and Kevin) who all keep me going in their own unique ways.

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CHAPTER 1

INTRODUCTION

The construct of internal working models is critical to the recent extension of Bowlby's attachment theory to adult relationships. Theorists suggest that these models, or schemas, direct individuals' perceptions, memories, and behavior in their intimate relationships (Bowlby, 1973; Bretherton, 1985; Collins & Read, 1990). Internal working models are thought to foster continuity between early experiences in close relationships and subsequent adult experiences (Bowlby, 1973; Hazan & Shaver, 1987). The properties of the internal working models, that is, the ways in which they guide this information processing, are relatively unknown. The primary goal of these studies is to examine the nature of internal working models using a social cognitive framework and methodologies.

. Recent work investigating romantic love has extended Bowlby's (e.g., 1969) attachment theory to adult romantic relationships. Shaver, Hazan, and Bradshaw (1988) criticized several dominant traditions in intimate relationships research as being too descriptive and atheoretical, and they suggested that Bowlby's ethologically-based theory of infant attachment provides a theoretical framework for understanding close relationships. Following from Bowlby's theory, Hazan and Shaver (1987) posited that infants' earliest experiences in the infant-caregiver relationship influence beliefs and emotions in

extension stating, in his often cited quote, that attachment behavior is present "from the cradle to the grave" (Bowlby, 1979).

Bowlby's original theory proposed that the complex interaction between the primary caregiver (usually the mother) and the infant is functional from an evolutionary perspective. The attachment relationship, first, can provide security that allows infants to explore the environment, and, second, can provide comfort in threatening situations (Bowlby, 1969; Troy & Sroufe, 1987). Based on the quality of the early experiences with the caregiver, the infant develops an attachment style, which is a general behavioral tendency for interaction with others. The three infant attachment styles are classified as secure, anxious-avoidant, and anxious-ambivalent (Ainsworth, Blehar, Waters & Wall, 1978). Internal working models are mental representations about the self and others that drive these attachment styles (Bowlby, 1973; Bretherton, 1985). These working models have been linked to preschool-age social interaction patterns, and affect regulation in adolescence (Kobak & Sreery, 1988; Troy & Sroufe, 1987).

Adult attachment researchers also suggest that internal working models provide continuity between early childhood relationships and adult relationships by influencing individuals' expectations and interpretations of behavior in on-going relationships (Collins & Read, 1990; Kobak & Hazan, 1991). Working models are reflected in the type of beliefs

people have about relationships and attachment figures. Theorists (e.g., Bowlby, 1973; Main, Kaplan & Cassidy, 1985) have mapped out the content of these internal representations -- or schemas. They emphasize that these working models include beliefs about others (e.g., whether the caregiver is reliable, consistent, and accepting), and beliefs about the self (whether one is lovable and competent).

Research (e.g., Hazan & Shaver, 1987; Bartholomew & Horowitz, 1991) has yielded knowledge about the content of the beliefs in working models about adult relationships. This work has shown that secure people view love as happy and trusting; avoidants view it as involving emotional extremes, jealousy, and fear of intimacy; and preoccupied (anxious-ambivalent) people view love as involving obsession. Previous work has therefore developed knowledge of the content of internal working models.

The present studies shift the emphasis to investigate the structure of attachment models and how they are associated with perceptions and behavior in adult relationships. Bartholomew and Horowitz (1991) recently highlighted the distinction between image of self and image of others, acknowledging that both are components in working models. Having reduced working models into these two components, the next logical step is to examine each component. The present research focused on the internal representations of others. By addressing one component of

Bartholomew's distinction (the model of others), an understanding of the effects of different others (mother and romantic partner) on working models can be gained. The present research examines which significant others are important in forming expectations and beliefs about others, and the relative impact of both early childhood and later adult experiences.

Attachment theory and research have assumed that early experiences with the primary caregiver contribute to the adult's romantic attachment style, but have not tested this assumption. One possibility is that the most important aspect of internal working models of others is a person's childhood relationship with a primary caregiver. The early infant-caregiver relationship forms a prototype for future relationships, and exerts a continuing and strong influence on adult relationships. In this view, working models of attachment might be organized in a hierarchical fashion. That is, representations of the relationship with mother dominate the models, and directly influence perceptions of adult relationships. Models are not updated by later experience. This model of processing is a strict interpretation of the infant to adult attachment process.

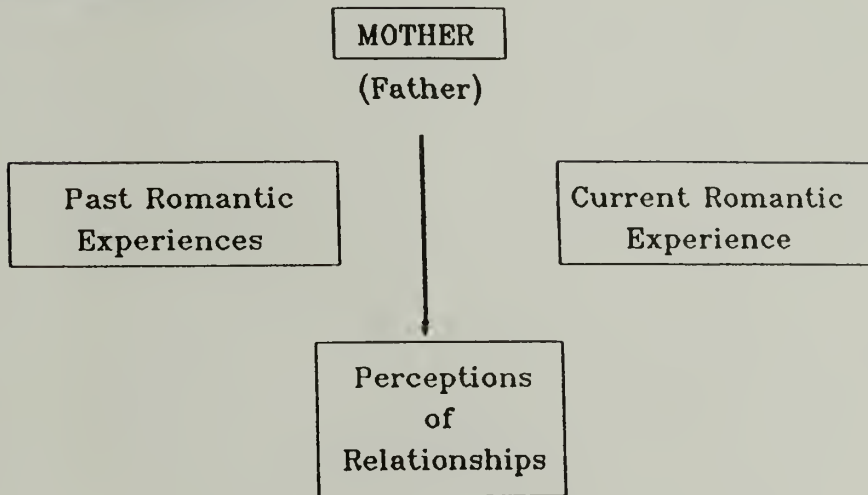
Another possibility is that our internal working models of others are constantly revised and, over time, the influence of early representations diminishes and later adult experiences are incorporated into the schema. In this conception of a modifiable structure of working models, the

relationship with mother remains the first relationship experience which influences our models for close relationships, but later, major adult relationship experiences modify or dilute these representations (Bowlby, 1973). Other structural organizations are possible as well, but these two formed our starting point. The modifiable structure seems the most accurate model of how relationship schemas are structured, as Bowlby (1973) postulated that adult experiences may cause people to "update" their models. Figure 1 shows two possible structural organizations of working models. In the caregiver-based organization of models, models are not updated by later romantic experience. The modifiable organization provides a means for updating working models based on new information.

In the two studies presented, a social cognitive approach was relied on to analyze the impact of working models on perceptions and interpretations of relationships. Each study examined an aspect of social perception. The first study examined the relative impact of different others on perceptions of an ambiguous, imagined relationship, and a current relationship. The second study examined the relative impact of subjects' model of mother and information about a hypothetical partner on perceptions and memory for a non-ambiguous imagined relationship.

INTERNAL WORKING MODELS

Caregiver-Based



Modifiable

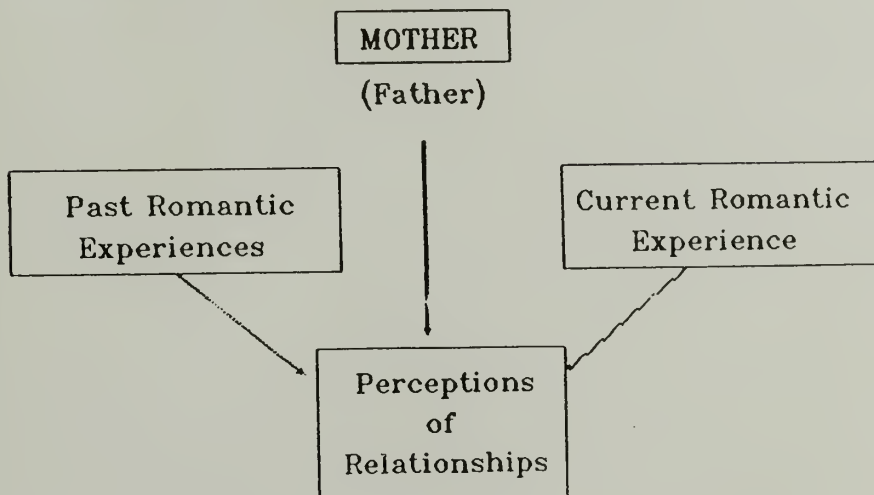


Figure 1. Two possible structural organizations of internal working models.

CHAPTER 2

STUDY 1

The first study extended previous work in several ways. First, Study 1 examined the relative contribution of two working models of others -- a model of the relationship with mother and a model of the current romantic partner -- on perceptions of, and memory for information about, adult romantic relationships. Second, Study 1 diverged from previous work by examining the influence of these different models of others on perceptions of a hypothetical relationship, thus holding constant information about the relationship itself. Previous work (e.g., Collins & Read, 1990; Kobak & Hazan, 1991) has focused primarily on naturally occurring relationships, making it difficult to disentangle whether internal working models or actual experiences in the relationship influence perceptions. To allow comparisons between this study and past work, however, the extent to which each of the two working models was linked to perceptions of a current romantic relationship was also examined.

Different working models of mother and partner were expected to affect the way people responded to a hypothetical relationship and to their own current relationship. On the one hand, if early experiences contribute strongly to later perceptions of adult relationships, then the working model of mother should be the best predictor of relationship perceptions and feelings.

by later experiences, then working models of both mother and current partner should contribute to current perceptions.

This study examined the relative contribution of working models of mother and of current partner to both perceptions of ambiguous information about a hypothetical relationship and perceptions of an real-life current relationship. It may be that the models that best predict perceptions differ depending on the type of relationship examined. That is, for the ambiguous relationship, information is not clearcut, and an a priori model should be used; the model of mother is likely to be the strongest predictor of perceptions in the ambiguous case. For the clearcut, current relationship, however, the model of partner should contribute to perceptions of the relationship in addition to the model of mother. Both working models of mother and partner should be important in perceptions of a current, real-life relationship.

This study set up four groups of subjects who held different combinations of working models of mother and partner; this allowed investigation into which models contributed to perceptions of the two types of relationship information -- ambiguous, and clearcut. One group contained people who had a secure relationship with both mother and adult partner, and a second group had an insecure relationship with both mother and adult partner. A third group of people had an insecure relationship with mother, but a secure relationship with adult partner. The final

but a secure relationship with adult partner. The final group had a secure relationship with mother, and an insecure relationship with adult partner.

Study 1 tested the plausibility of the modifiable structural organization of working models. The questions included whether model of mother contributes to perceptions of romantic relationships, and if so, whether model of partner also contributes, which would show that working models of others are modifiable. Specifically, this study investigated the relative contribution of models of two different others (mother and partner) to perceptions of adult romantic relationships under two kinds of conditions (imagined, ambiguous and current, clearcut).

Method

Subjects

Subjects (N=70) were male and female undergraduates at the University of Massachusetts who were currently in a romantic relationship. Thirteen of the seventy subjects were men. The mean age of the 70 subjects was 21 years; all were heterosexual and not married. Twenty subjects fell into the secure mother-secure partner group; sixteen subjects into the secure mother-insecure partner group; twenty-two into the insecure mother-secure partner group; and twelve subjects into the insecure mother-insecure partner group. All but three subjects who held an insecure model of mother described their mothers as preoccupied. Thus, the insecure model of mother generally refers to a

partner, subjects who held insecure models of partner were more evenly split between a preoccupied model of partner ($n = 16$) and an avoidant model of partner ($n = 11$).¹

Design

Subjects were selected based on their response to two independent measures embedded in a large prescreening questionnaire -- a working model of mother and a working model of partner. Specifically, subjects were selected based on their choice of one of three prototypes (i.e., secure, preoccupied, avoidant) to describe their relationship with their mother and with their partner. These measures were adapted from work by Hazan and Shaver (1987) and Collins and Read (1990). The two insecure categories were collapsed to create a 2 (secure or insecure relationship with mother) X 2 (secure or insecure partner) design. A measure identical to the one used for assessing the model of mother was used to assess the model of father. This work focussed on model of mother because previous studies have shown that model of mother is a better predictor of relationships perceptions than is model of

¹ The prototype measure of model of mother was examined again at the time of the lab study. A modified version of the prototype for avoidant model of mother was used to attempt to detect more subjects with an avoidant model of mother -- few subjects endorsed the first prototype for an avoidant model of mother, which may have been too extreme. The results of the measures taken at time two were used for analysis. Four subjects who had described their model of mother as preoccupied at time one described their model as secure in the lab. Two subjects who had described their model of mother as avoidant at time one described it as preoccupied at time two; one subject who had described her model of mother as preoccupied at time one described it as avoidant at time two. These last three subjects did not change from an insecure model to a secure model; they shifted insecure models.

father (Carnelley, Pietromonaco, & Jaffe, 1993; Hazan & Shaver, 1987). Nevertheless, model of father was measured to include as a covariate in the analyses. These measures are shown in Appendix A.

Procedure

Subjects were invited to the lab. All subjects initially read the same scenario about a hypothetical relationship with an opposite sex partner and imagined themselves in it. This scenario is shown in Appendix B. The scenario included positive, negative, and neutral events and therefore provided an ambiguous stimulus on which subjects could "project" their expectations. Subjects completed several dependent measures that assessed their perceptions and evaluations of the ambiguous relationship task; these measures were a thought listing protocol, structured adjective ratings, and a recall measure.

Immediately after reading the hypothetical scenario, subjects were asked to say aloud all their thoughts, feelings, and reactions to the scenario. These thoughts were audiotaped and transcribed as a measure of thought listing.

Subjects then completed structured adjective ratings that asked subjects to describe their perceptions of the partner, and their feelings about the imagined relationship on a seven-point scale from "not at all" to "strongly" descriptive. In addition, they thought about their own current relationship and completed identical structured

adjective ratings that assessed their perceptions and evaluations of the clearcut, current relationship. These measures are shown in Appendix C.

Subjects then participated in a counting distraction task. The experimenter reminded subjects that she had several lines of research that she planned to explore during the lab session. The experimenter asked subjects to count aloud backwards from 1000 by decrements of 7.

After the distraction task, subjects were asked to recall as specifically as possible the content of the scenario they read. The recall was again audiotaped and transcribed.

Dependent Measures

The primary dependent measures were structured adjective ratings about the partner and the subjects' feelings in both the hypothetical and the current relationships. We also used several unstructured measures to explore finer-grained aspects of processing the hypothetical, ambiguous relationship. These included the thought listing protocol and the recall task.

Structured Measures

The structured dependent measures included 22 adjectives describing the partner, and 21 adjectives describing the feelings experienced about the relationship. Subjects rated these adjectives on a seven-point scale from "not at all descriptive" to extremely descriptive." Four scales were constructed for both the imagined and the

current relationship. The positive partner scale included items such as dependable, open, warm, and trustworthy. The negative partner scale included negative items from the adjective task such as cold, jealous, and distant. The positive affect and negative affect scales included items such as satisfied, contented, and happy, and nervous, sad, and uncomfortable, respectively. Negative items were recoded. As can be seen in Table 1, these scales have high alpha reliabilities which range from $\alpha=.86$ to $\alpha=.92$. The negative partner scales for both the imaginary and current partner are exceptions with reliabilities of .57 and .56, respectively.

Unstructured Measures

Think Aloud Protocol. The content of the entire protocol was coded for each subject. Seven coding categories were created to identify the type of statements made: relationship, jealousy, commitment, trust, abstract-relationship, self-referent, and other (non-informative). Coders derived these coding categories by reading the transcribed material and looking for themes in the data. Table 2 shows examples of statements made in each of these content areas. These statements were also coded as positive or negative. Two coders reached 88% agreement on the type of statement made and 85.2% on the valence of the statement. In the thought listing protocol, judges assessed the number of words spoken, the number of statements made for each content category (e.g. relationship, jealousy, commitment,

Table 1.

Reliabilities for adjective scales for Study 1 (N=70).

Scale	Alpha Reliability
<hr/>	
Imaginary Relationship	
Positive Partner	.94
Negative Partner	.57
Positive Affect	.92
Negative Affect	.89
Current Relationship	
Positive Partner	.86
Negative Partner	.56
Positive Affect	.90
Negative Affect	.88

Note: One item was dropped from each scale because it significantly lowered the reliability. All analyses were run without these items.

Table 2.

Example thought listing statements by category.

Category of Statements	Example
Relationship	-Seems like a nice girl and we have a good relationship together.
Jealousy	-If I happened to see one of my friends, and I waved "hi" or any response to a greeting, she would get jealous and very angry at the same time.
Commitment	-The relationship didn't have much of a future.
Trust	-He is very trustworthy.
Neutral	-I think this happens a lot at university.
Abstract	-I think it is important to start a relationship as friends.
Self-referent	-This relationship with Laura reminds me of a past relationship with another woman.
(Study 2 additions)	
Communication	-I thought they had really good communication and that was good.
Intimacy	-She is open to ideas and open to doing more things with me.

trust, and abstract), and the number of positive and negative statements made in these content categories.

Recall Measure. The scenario was divided into eight blocks of information. The first block of the story was about the subject developing a friendship/romance with the "partner" in the scenario. The second was about the interruption of an intimate moment. Other blocks included their first date, their difficulty in going to parties together because of the "partner's" attractiveness, a camping trip, and graduation decisions. Another block discussed the problem of a new opposite-sex friendship that developed between the subject's "partner" and a classmate. The final block of information dealt with a positive moment in which the couple spent some time outside together.

The number of words spoken about each block recalled was one indication of the amount of time subjects spent recalling and elaborating on specific content areas of the scenario. Two coders reached 96.7% agreement on the number of words spoken about each type of information.

The sentences accurately recalled from the scenario were another indication of the type of information subjects focussed on. Coders reached 92% agreement about sentences accurately recalled. The total number of accurately recalled sentences and the number of accurately

recalled sentences about each of eleven blocks of information in the scenario were tested.²

Coders also made global ratings of subjects' recall protocols on each of three dimensions: clarity, detail, and inference-making. Clarity was rated on a three-point scale from "vague" to "clear". The amount of detail remembered was rated on a three-point scale from "some" to "a lot." Inferences were rated on a four-point scale from "not at all" to "a lot." Coders reached 62.5%, 60%, and 75% agreement, on the clarity, detail, and inference scales, respectively.³

Results

Structured Ratings

In general, this study examined the relative contribution of working models of mother and of current partner to both perceptions of ambiguous information about a hypothetical relationship and perceptions of a real-life current relationship. The primary measures were structured. Two-way analyses of variance were performed on the four adjective scales using the two independent variables --

² After the raters had completed the coding, it became apparent that two of the blocks described earlier should be further broken down. For this analysis, then, several sentences about the strength of the relationship were pulled out of the block about the party difficulties and were grouped separately. Several sentences about expressing love to each other were also pulled from the block about making post-graduation decisions and were grouped separately. Thus, for this analysis, there were eleven blocks of information from which subjects could recall sentences.

³ The judges reached only 40% agreement on the inference-making scale. However, after collapsing it to a three-point scale by combining the second ("few") and third ("moderate") ratings on the scale, the judges reached 75% agreement.

working model of mother (secure, insecure) and working model of partner (secure, insecure). The four scales were the positive partner, negative partner, positive affect, and negative affect described above.

Imagined Relationship. The imagined relationship was ambiguous; it provided little clearcut information. It was hypothesized that for this type of relationship information, model of mother should be more strongly associated with perceptions of the relationship. As expected, working model of mother, but not the model of partner, was associated with subjects' affective reactions to the imaginary relationship. Subjects who had secure relationships with their mothers reported less negative affect, $F(1,66) = 4.18$ $p < .05$, and tended to report more positive affect, $F(1,66) = 3.19$ $p < .08$. Figure 2 shows the results of these analyses. Thus, regardless of their working model for their current partner, subjects who had a secure working model of mother, in contrast to those who had an insecure working model of mother, reported feeling less negatively in the imagined relationship, and marginally more satisfied and happy. To control for the contribution of the model of father, analyses of covariance were also performed. The covariate, model of father, was not significant on any of the four scales, $ps > .05$.

Perceptions of the imagined partner, (e.g., whether he or she was warm, dependable, trustworthy) on either the

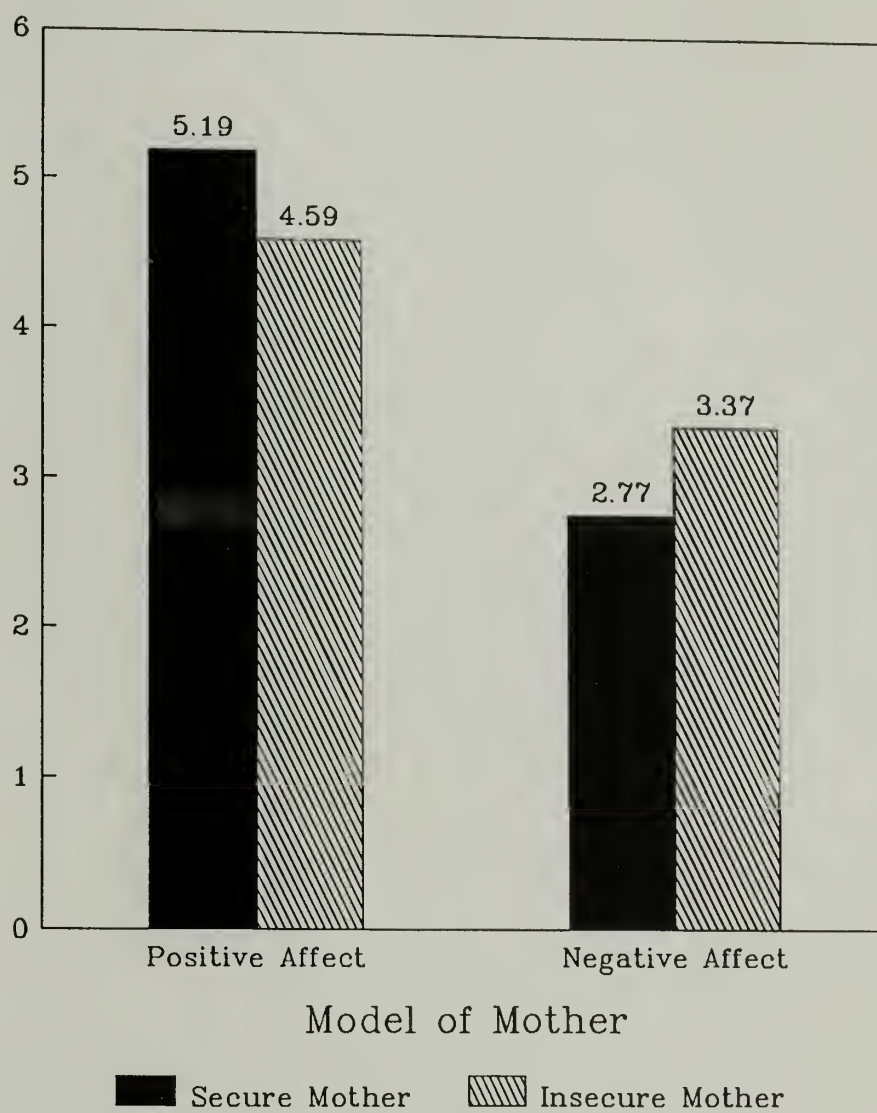


Figure 2. Positive and negative affect for the ambiguous relationship in Study 1.

positive or negative partner subscales did not differ by either the model of mother or partner.

Unstructured Measures for Imagined Relationship

In addition to the structured adjective measures, subjects also provided non-structured reactions to the imagined relationship. Both the think aloud protocol taken immediately after subjects read about the hypothetical relationship and the free recall recorded at the end of the session were coded and analyzed. These were additional measures of the perceptions of the imagined relationship.⁴

Think Aloud Protocol. The thought listing protocol was used to determine which topics subjects who held different working models of mother and partner focussed on in response to the ambiguous scenario. Several components of the thought listing measure were analyzed including: (a) the number of words spoken, (b) the number of statements made for each content category (e.g. relationship, jealousy, commitment, trust, and abstract), (c) the number of positive statements made across and within the content categories, and (d) the number of negative statements made across and within the content categories. Although these measures overlap somewhat, they also tap different aspects of the think aloud protocol.

⁴ Four subjects were not included in the thought listing analyses and five subjects were not included in the recall analyses due to several technical difficulties.

Words spoken. First, the number of words spoken during the thought listing were tested by subjects' models of mother or partner to see whether some groups spoke more or less than others. A marginally significant main effect for model of partner was found for the number of words spoken, $F(1,62) = 3.27$, $p < .08$, such that subjects who perceived their current partners to be secure ($M = 136.23$) spoke more than did those who perceived their current partners to be insecure ($M = 101.88$).

Statements per category. The content of the entire protocol was coded according to the five categories described earlier: relationship, jealousy, commitment, trust, and abstract. Because too few subjects made statements that were coded as neutral or self-referent, analyses were run only on the five remaining categories.

The means displayed in Table 3 show the number of statements made in each category. Two-way analyses of variance (model of mother X model of partner) on the number of thoughts in each category indicated that model of partner was significantly associated with the number of statements made about trust, $F(1,62) = 5.56$, $p < .05$, and marginally associated with statements about commitment, $F(1,62) = 3.00$, $p < .09$. Subjects who had secure partners made more trust and commitment statements than subjects who had insecure partners. No other main effects or interactions were obtained. These analyses examined only the overall number of statements regardless of valence.

Table 3.

Means for Thought Listing Statements by Category for Study 1.

Category of Statements	Model of Mother		Model of Partner	
	Secure	Insecure	Secure	Insecure
Relationship	1.80	1.90	1.9	1.69
Jealousy	1.69	1.74	1.73	1.69
Commitment	1.20	1.68	1.62c	1.12d
Trust	1.66	1.71	1.98	1.23b
Abstract	.14	.23	.10	.31

Means with subscripts a and b are significantly different at $p < .05$.

Means with subscripts c and d are different at $p < .09$.

Positive statements. Analyses of variance were performed on the number of positive statements made in the thought listing. No significant effects were obtained on analyses of the overall number of positive statements across categories, or the number of positive statements made in each of the content categories.

Negative statements. The overall number of negative statements, however, showed a marginally significant interaction, $F(1,62) = 3.57, p < .07$. Scheffe contrasts indicated that subjects who had an insecure mother and an insecure partner made significantly fewer negative statements than any other group of subjects, $ps < .05$. Additionally, a significant interaction was found for the number of negative statements made in the "relationship" coding category, $F(1,53) = 4.90, p < .05$. Subjects who had incongruent models of others (either secure mother-insecure partner or insecure mother-secure partner) made more negative statements in this category than subjects who had congruent models of others (secure mother-secure partner; insecure mother-insecure partner). A marginally significant main effect of model of mother was found for the number of negative statements made about commitment, $F(1,44) = 2.94, p < .10$, such that subjects who had a secure mother tended to make fewer negative commitment statements ($M = 1.25$) than those who had an insecure mother ($M = 1.79$). The means for negative statements are displayed in Table 4.

Table 4.

Means for Negative Thought Listing Statements by Category for Study 1.

Models of Others

Category of Statements	Sec. Mom	Sec. Mom	Ins. Mom	Ins. Mom
	Sec. Part	Ins. Part	Sec. Part	Ins. Part
Relationship	.56a	1.10b	1.06b	.45a
Jealousy	1.53	1.73	2.27	1.57
Commitment	1.43	1.00	1.82	1.71
Trust	1.38	1.00	1.81	1.25
Total Negative	4.00b	4.20b	5.95a	3.00b

Means with subscript a and b differ at $p < .05$.

Recall Measure. The recall protocol was used to identify the topics subjects who held different working models of mother and partner recalled most in response to the ambiguous scenario. Several components of the recall measure were analyzed including: (a) the total number of words spoken, (b) the number of words spoken about each block of information, (c) the number of sentences accurately recalled across and within the blocks of information, and (d) global ratings for clarity, detail, and inference making.

Total words spoken. Again, the number of words spoken during recall were examined by subjects' models of mother or partner. Similar to the findings for the think aloud protocol, model of partner was related to the number of words spoken, $F(1,61) = 5.37$, $p < .05$, such that subjects who had secure partners ($M = 224.62$) spoke more than did those who had insecure partners ($M = 167.92$).

Words spoken per block. Next, the type of information recalled was analyzed. The scenario was coded and examined according to the eight blocks of information described earlier. The number of words spoken about each block of information was analyzed in a two-way analysis of variance. Model of partner was associated with the number of words spoken about the block involving jealousy about an opposite-sex friendship developed by the partner, $F(1,61) = 6.94$, $p < .05$. Subjects who had a secure partner ($M = 49.88$) talked more than did subjects who had an insecure

partner ($\bar{M} = 30.64$). This finding suggests that subjects who perceived their real-life partners to be secure may elaborate more on inconsistent information such as jealousy. A marginally significant main effect for model of partner was also found for the number of words spoken about the first block (the developing romance), $F(1,61) = 2.82$, $p < .10$. Subjects who had secure working model of partner spoke more words ($\bar{M} = 45.90$) than subjects who had insecure model of partner ($\bar{M} = 35.60$). No other main effects were found for the remaining blocks of information. One trend for an interaction was obtained, $F(1,61) = 3.18$, $p < .10$. Subjects who had an insecure model of mother and a secure partner tended to speak more about post-graduation plans than those subjects in other groups.

Sentences recalled. The type of information was further investigated by testing the total number of sentences accurately recalled and the number recalled about each block of information. Few significant effects were obtained, however. The total number of sentences recalled accurately did not differ by group, $ps > .05$. Subjects with secure partners recalled more about the difficulties attending parties with their imagined partners ($\bar{M} = 1.34$) than did subjects with insecure partners ($\bar{M} = .90$), $F(1,61) = 5.31$, $p < .05$. Subjects who had secure partners also tended to recall more sentences about the interruption of an intimate moment ($\bar{M} = 1.66$) than subjects who had insecure partners ($\bar{M} = 1.13$), $F(1,61) = 3.87$, $p < .06$. Again, these

subjects may be recalling more "problems" because this type of experience would be inconsistent for them given their secure model of partner.⁵ No other effects were obtained. Finally, the sentences in the scenario were classified as positive, negative, or neutral. Analyses for the amount each type of sentence was recalled showed no differences between groups, $p_s > .05$.

Global ratings. Two-way analyses of variance were performed on the global ratings of clarity, detail, and inference-making. No differences between groups were found on the clarity or the detail dimensions. A significant interaction was found for inference-making, $F(1,61) = 4.98$, $p < .05$. Subjects who had incongruent models of mother and partner made more inferences than those who had congruent models of mother and partner. That is, subjects who had either secure working models of mother and insecure models of partner ($M = 2.27$) or insecure models of mother and secure models of partner ($M = 2.30$) made more statements that drew conclusions not presented in the scenario than did subjects with secure models of mother and partner ($M = 1.90$) or insecure models of mother and partner ($M = 1.80$).

Current (Actual) Relationship. In the second part of the study, subjects rated their own current romantic

⁵ Subjects may also be recalling this information in a positive way. That is, they may be restructuring the information to be more consistent with their own expectations. Further coding may reveal whether these statements were recalled in a positive or negative manner and whether any positive inferences were made about the inconsistencies.

relationship. It was hypothesized that when clearcut relationship information is evaluated, as in the case of an actual, current relationship, model of partner should be related to the perceptions of the relationship. According to the modifiable structure of working models of others, the model of mother should continue to be associated with perceptions of a clearcut relationship.

Compared to the results from the ambiguous scenario, a different pattern emerged in the analyses of perceptions of the current relationship. Model of the partner was related to negative perceptions of the partner, $F(1,66) = 8.79$, $p < .05$, and both positive, $F(1,66) = 6.52$, $p < .05$, and negative affective reactions, $F(1,66) = 6.44$, $p < .05$. Subjects who had a secure partner reported less negative perceptions of their partner, more positive feelings, and less negative feelings. Model of mother was associated with positive perceptions of the partner, $F(1,66) = 4.03$, $p < .05$.

These main effects, however, were qualified by significant interactions between model of mother and model of partner, which were obtained for all four scales. The pattern of results support our expectations; both models of mother and partner were associated with perceptions of the current partner and feelings in the current relationship. Subjects in the secure mother-insecure partner group held the least positive perceptions of their current partner, $F(1,66)=4.21$, $p < .05$, and had the least positive affect,

$F(1,66) = 4.66, p < .05$. This group also had the most negative perceptions of partner, $F(1,66) = 6.59, p < .05$, and the most negative feelings, $F(1,66) = 7.46, p < .05$. Scheffe contrasts indicated that on each of the four scales, the secure mother-insecure partner group differed from the secure mother-secure partner group, $p < .05$, the insecure mother-secure partner group, $p < .05$, and the insecure mother-insecure partner group, $p < .01$. Again, to control for the contribution of the model of father, an ANCOVA was performed. The covariate was not significant on any of the scales, $ps > .05$. Figures 3 and 4 show the results from these analyses.

Discussion

The goal of this study was to examine the relative contributions of working model of mother and working model of partner to perceptions of relationships. Two kinds of measures were included: structured and unstructured. The results from the structured tasks presented a consistent pattern; the results from the unstructured tasks were less consistent. The results for the structured tasks are discussed first, and then those for the unstructured tasks are considered.

The results from the structured response tasks indicated that an individual's working model of mother contributes strongly to feelings about an imagined, ambiguous relationship. Regardless of their working model for their current partner, subjects who had a secure working

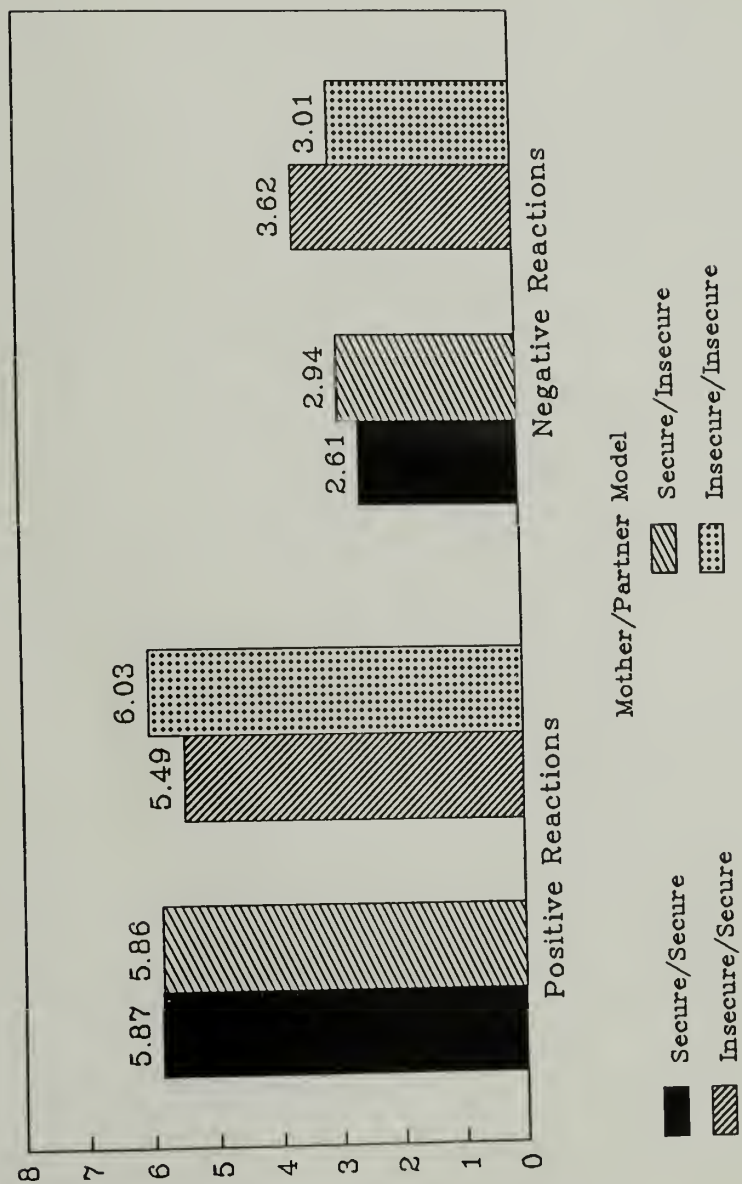


Figure 3: Positive and negative reactions to partner for the current relationship in Study 1.

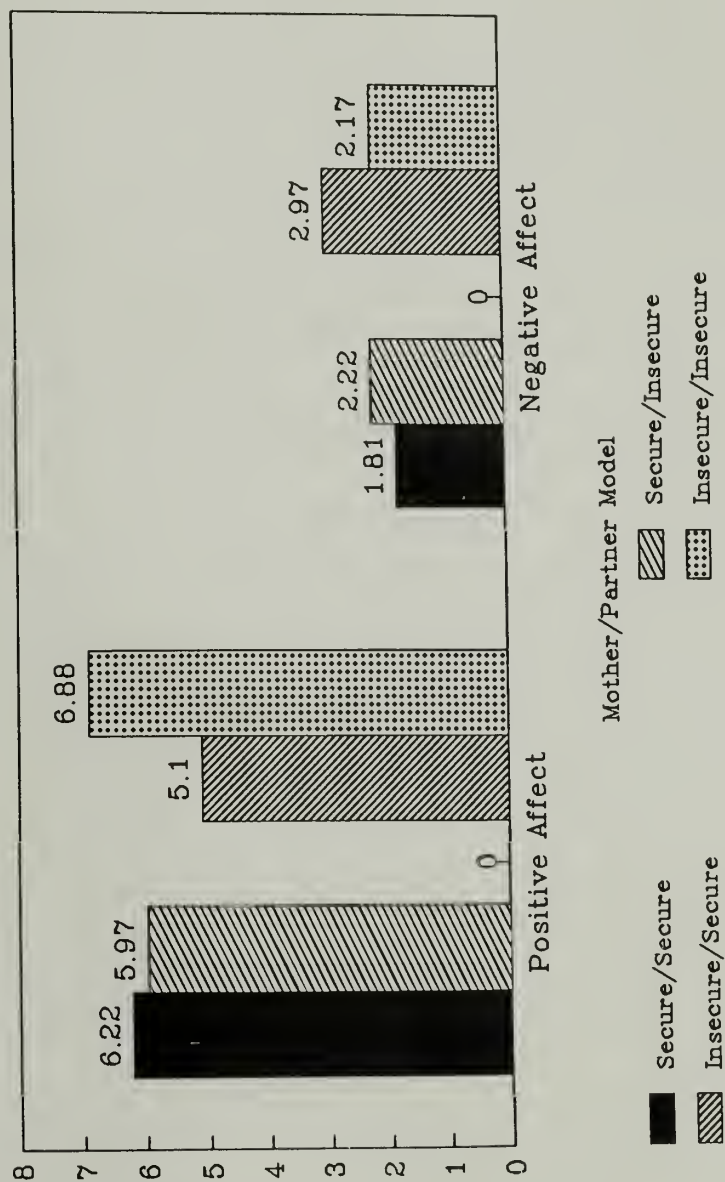


Figure 4: Positive and negative affect for the current relationship in Study 1.

model of mother reported feeling less negatively in the imagined relationship, and slightly more satisfied and happy. This suggests that attachment experiences with one's mother may influence individuals' initial reactions to a relationship. In the absence of clearcut information, as with the ambiguous relationship scenario, the model of mother seems to act as a default model for judgments about the relationship.

Over time, however, the influence of the working model of mother may be modified by experiences with one's adult partner. Our data indicate that perceptions and feelings of one's current relationship are driven by both the model of partner and the model of mother. When subjects have experience with a partner, they appear to take that information into account and do not simply apply their experience with mother alone to their experience with this romantic partner. However, subjects' model of mother did contribute to perceptions and evaluations of subjects' current partner and relationship.

These results suggest that as an individual gains adult romantic experiences, model of mother either may merge with the new information, or become less influential in determining relationship perceptions and feelings. This idea is consistent with recent work (Carnelley, Pietromonaco, & Jaffe, 1993) that has shown that dating college women's working model of mother and their own attachment style contribute to their relationship

functioning, whereas married women's own attachment style, but not their working model of mother is associated with relationship functioning. Both internal working models of mother and partner seem contribute to relationship perceptions and feelings, but that the extent to which one model or another contributes depends on characteristics of the stimulus being perceived. Working models of mother is likely to be more influential in new relationships and when information is less clearcut. Once a relationship is established, however, individuals' conceptions of their romantic partner appear to play a stronger role.

The results from the unstructured measures for the ambiguous relationship were less clearcut. Model of mother only tended to be associated with the number of negative statements made about one category of thoughts -- commitment to the relationship; subjects with a secure model of mother made fewer such statements. Model of partner, however, was associated with several aspects of the unstructured responses. In the thought listing, the model of partner was related to the number of statements made about trust, and tended to affect the number of statements subjects made about commitment, and the number of total words spoken in the thought listing. Subjects with a secure model of partner spoke more total words, and in particular, made more statements about trust and commitment.

For recall, model of partner affected the total words spoken, and specifically, the number of words spoken about

the development of the hypothetical romance, and the development of the imagined partner's friendship with an attractive classmate. Subjects with a secure model of partner spoke more about these issues than did subjects with an insecure model of other. Model of partner was also related to the number of sentences recalled about the difficulties the couple had attending parties because the partner was often sought after by members of the opposite sex, and the sentences recalled about an interruption of an intimate moment. Again, subjects with a secure model of partner recalled more sentences about these issues. Except for the finding that these subjects recalled more about the development of the romance, subjects with a secure model of partner focussed on recalling negative information in the ambiguous scenario. Work on recall of consistent and inconsistent information suggests that they may be recalling more negative information because this type of experience would be inconsistent for them given their secure model of partner (cf. Fiske & Taylor, 1991).

This pattern of results is complicated by two significant interactions. Both model of mother and partner were associated with the number of negative "relationship" statements made in the thought listing task, and the amount of inferences made during recall. Subjects who had incongruent models of mother and partner made more negative statements about the relationship, and made more inferences than those who had congruent models of mother and partner.

Taken together, these interactions provide tentative evidence that subjects with incongruent models interpret the ambiguous relationship negatively. However, the inferences were not coded as positive or negative so the connection is unclear.

One possibility for the discrepancy between the structured and unstructured measures is that the two types of measures tap somewhat different processes. The findings from the structured adjective measures were found on the two affect scales (positive affect, negative affect). The unstructured measures, however, may be tapping into a more cognitive component of evaluation. The free response, measures require the cognitive processes of elaboration, memory and inference, whereas the affect scales may be processed more experientially (cf. Epstein, 1991). The structured, affective, measures were associated with model of mother; the model of partner was associated with the think aloud and recall measures. This suggests that the model of mother may be more experientially-guided and the model of partner may be more cognitively-driven (Epstein, 1991).

There is also a problem inherent in the first study that may have contributed to the confusing results found in the unstructured measures. Although control was introduced to the research by holding constant the relationship being evaluated (the ambiguous scenario), the model of partner that subjects accessed (their own personal experiences)

could not be held constant. This additional element of control was addressed in Study 2.

CHAPTER 3

STUDY 2

It should be easier to tease apart the contribution of different models of others in the case where a consistent pattern of the contribution of both models exists. Of the two relationships examined in Study 1, the current relationship was the one where both models contributed in a consistent way. In Study 1, the current relationship offered a clearcut partner to evaluate, the subjects' own relationship partner. However, it was also the relationship that lacked experimental control (subjects thought about different relationships).

Because the extent to which one model or another contributes to perceptions of relationships seems to depend on characteristics of the stimulus being perceived (e.g. an ambiguous scenario, or a current, more clearcut, relationship), a second study was planned that held constant a clearcut relationship. The focus of the second study examined the contribution of model of mother when information about the partner is clearcut. Subjects were provided with a clearcut relationship to be evaluated. This non-ambiguous scenario provided a way to control the model of other accessed by all subjects. One of three relationship scenarios (one with a secure partner, one with a preoccupied partner, and one with an avoidant partner) provided the model of other and the relationship to be evaluated.

It was predicted that subjects reading about a non-ambiguous partner should show the interaction pattern exhibited by subjects evaluating their own current relationship in Study 1. That is, both model of mother and type of partner should be related to perceptions and evaluations of the relationship. Both structured and unstructured measures of these perceptions and evaluations were examined.

As a secondary focus, Study 2 also explored the contribution of gender to subjects' relationship perceptions. In Study 1, gender was neglected as a contributing factor because too few men were included. However, research shows that gender may influence outcomes in relationship research in general, and attachment research, in particular (see Kirkpatrick & Davis, 1992; Pietromonaco & Carnelley, 1993).

Method

Subjects

Subjects (N=90) were undergraduates at the University of Massachusetts at Amherst. Forty-six of the ninety subjects were men. The mean age of the subjects was 19 years; all were heterosexual and not married. Sixteen subjects fell into the secure mother-secure partner group; eighteen subjects into the secure mother-anxious partner group; sixteen subjects into the secure mother-avoidant partner group. Thirteen subjects fell into the insecure mother-secure partner group; fifteen subjects into the

insecure mother-anxious partner group; and twelve subjects into the insecure mother-avoidant partner group. Few subjects who held an insecure model of mother described that model as avoidant ($n = 5$); most subjects with an insecure model of mother described their relationships with their mothers as preoccupied ($n = 35$).

Design

Subjects were selected based on their response to one measure imbedded in a large prescreening questionnaire -- a working model of mother. Subjects' working models of mother were assessed during a prescreening session at the University of Massachusetts via the same measure used in Study 1. Specifically, subjects were selected based on their choice of one of three prototypes (i.e., secure, preoccupied, avoidant) to describe their relationship with their mother. In the lab, subjects were provided with a paper and pencil, hypothetical partner who displayed behaviors that were characteristics of a secure, preoccupied or avoidant individual (determined by scenario condition). Again, the design is collapsed across the two insecure categories for model of mother, thus creating a 2 (secure or insecure relationship with mother) X 3 (secure, preoccupied, or avoidant hypothetical partner) design.

Procedure

Subjects were invited to the lab to earn experimental credit. Subjects read one of three scenarios about a relationship with an opposite sex partner and imagined

themselves in the hypothetical relationship. These scenarios are provided in Appendix D. In contrast to the scenario in Study 1, those in Study 2 are not ambiguous. Rather, subjects read about a partner who is clearly secure, anxious, or avoidant (these scenarios have been validated for content interpretation; see Pietromonaco & Carnelley, 1993). The three scenarios included a wide range of information about the relationship, the partner, and various activities and conversations and events that take place within the relationship.

Subjects then completed several dependent measures that assessed their perceptions and evaluations of that relationship; these measures include a thought listing protocol, structured adjective ratings, a information-seeking behavioral task, and a recall measure.

Immediately after reading the hypothetical scenario, subjects were asked to say aloud all their thoughts, feelings, and reactions to the scenario. These thoughts were audiotaped and transcribed as a measure of thought listing.

Subjects then completed structured adjective ratings that asked subjects to describe their perceptions of the partner, and their feelings about the imagined relationship on a seven-point scale from "not at all" to "strongly" descriptive. These measures are shown in Appendix C.

Next, a second structured response task, a behavioral measure, was collected. The experimenter asked the subjects

to imagine that they would have the chance to interact with the partner they just read about in the scenario. The experimenter told subjects that their goal was to find out more about the way that partner would act and feel in a romantic relationship. Subjects were given 18 index cards, each with one question printed on it. Subjects choose the five questions they would most like to ask the potential partner by selecting five index cards and placing them in order of importance.

Subjects then participated in a counting distraction task that was identical to the one used in Study 1. After the distraction task, subjects were asked to recall as specifically as possible the content of the scenario they read. The recall was again audiotaped and transcribed.

Dependent measures

The primary dependent measures were the structured adjective ratings about the partner and the subjects' feelings in both the hypothetical and the current relationships. The structured behavioral task was a information-seeking task, adapted from Snyder and Swann (1978b) as an exploratory measure. The unstructured measures again allowed for finer-grained analysis of the evaluation of the hypothetical scenarios; these included the thought listing protocol and the recall task.

Structured Measures

Adjective Ratings. The structured response tasks were similar to those in Study 1, although some improvements and

additions were incorporated. The adjective ratings measured both subjects' perceptions of the hypothetical partner and the subjects' feelings. Four scales were constructed for the imagined relationship--the positive partner scale, the negative partner scale, the positive affect scale, and the negative affect scale. As can be seen in Table 5, these scales have reliabilities that range from $\alpha = .79$ to $\alpha = .90$. The reliability for the negative partner scale was $\alpha = .79$.

Unstructured Measures

Think Aloud Protocol. The unstructured measures in Study 2 required some changes in the coding and analysis procedures. The content of the entire protocol was coded for each subject. Nine coding categories were created to identify the type of statements made: relationship, jealousy, commitment, trust, abstract-relationship, self-referent, communication, intimacy, and other (non-informative). Communication and intimacy were added as categories because they seemed necessary to capture elements of the scenarios in Study 2. Table 1 shows examples of statements made in these two additional categories. Again, too few statements were coded as neutral or self-referent.

Table 5.

Reliabilities for adjective scales for Study 2 (N=90).

Scale	Alpha Reliability

Imaginary Relationship	
Positive Partner	.90 a
Negative Partner	.79 b
Positive Affect	.89 a
Negative Affect	.89 a

a One item was dropped from each scale because it significantly lowered the reliability.

b Two items were dropped from the scale.

Thus, analyses were run only on the seven remaining categories. The statements were also coded as positive and negative. Two coders reached 90% agreement on the type of statement made and 91.8% on the valence of the statement.

Recall Measure. The recall from the three scenarios was analyzed separately in Study 2 because the scenarios for each type of partner varied in content. That is, the blocks of relationship information from the first scenario could not be equated with blocks for the other two scenarios because each of the scenarios contained different content. The scenarios about the secure and the avoidant partners each had ten distinct blocks of information, while the scenario about the preoccupied partner had eleven distinct blocks.

The number of words spoken about each block recalled was again an indication of the amount of time spent recalling and elaborating on specific content areas of the scenarios. Two coders reached 94% agreement on the number of words spoken about each type of information.

The sentences accurately recalled from the provided scenario were another indication of the type of information on which subjects focussed. Coders agreed 92% of the time on this measure. The total number of accurately recalled sentences and the number of accurately recalled sentences about each of the blocks of information in a scenario were tested.

Coders again made global ratings of subjects' recall segment on each of three dimensions: clarity, detail, and inference-making. Coders reached 60% agreement on these three scales.

Behavioral Measure

The behavioral measure of interest was the 5 questions the subjects chose from the 18 possible selections. The questions chosen were expected to confirm the model of other that subjects were currently accessing -- mother or partner. That is, if subjects have a secure model of mother and are provided with an insecure model of partner via the scenario condition in which they are placed, the type of question they ask should expose the model they are using to evaluate the partner.

These questions were placed in one of two groups: those that an individual who held a secure model of other would ask a potential romantic partner and those that an individual who held an insecure model of other would ask a partner. For example, an individual who believes the partner would be dependable might ask "What makes you a trustworthy partner?" An individual who believes the partner would be undependable might ask "What factors make it hard for you to really open up to someone?" These questions are provided in Appendix E.

Results

Structured Measures

This study investigated the contribution of working model of mother to perceptions of clearcut relationship information. It was hypothesized that both model of mother and type of partner should be related to perceptions and evaluations of the relationship.

The primary measures were structured; analyses of variance were performed on the four adjective scales using the two independent variables -- working model of mother (secure, insecure) and working model of partner (secure, insecure). The four scales were the positive partner, negative partner, positive affect, and negative affect described above.

Adjective Rating. To examine the relative contribution of working model of mother and type of partner, 2 X 3 analyses of variance were performed on the four scales (positive partner, negative partner, positive affect, negative affect) using the two independent variables -- working model of mother (secure, insecure) and type of partner (secure, preoccupied, avoidant).

Overall, type of partner was strongly associated with subjects' perceptions, whereas model of mother was not. Type of partner was related to ratings of positive characteristics of the partner, $F(2,84) = 65.18, p < .05$, negative characteristics of the partner, $F(2,84) = 102.04, p < .05$, positive affect, $F(2,83) = 38.90, p < .05$, and

negative affect, $F(2,83) = 38.88$, $p < .05$. Subjects who imagined a secure partner reported the most positive and least negative perceptions of their hypothetical partners, and feelings for the hypothetical relationship. Subjects who imagined a preoccupied partner were less positive and most negative about their partner; subjects with avoidant partners showed the least positive and less negative reactions to the partner. Those subjects who read about preoccupied partners had more positive feelings and less negative feelings than those who read about avoidant partners. The means and results of the analyses are shown in Figures 5 and 6.

In addition, a marginally significant main effect of model of mother was found for the negative affect scale, $F(2,83) = 3.54$, $p < .07$. Subjects who had secure mothers tended to express more negative affect ($M = 3.46$) than did subjects who had insecure mothers ($M = 3.18$).

Again, an analysis of covariance was performed. The covariate, model of father, was not significant on any of the four scales, $ps > .05$.

Gender Effects. A gender difference was found on three of the structured adjective scales -- positive partner, positive affect and negative affect. Regardless of the partner provided for them, men reported more positive reactions to their partner, $F(1,75) = 4.80$, $p < .05$. Additionally, men reported more positive affect and less negative affect than did women, $ps < .05$.

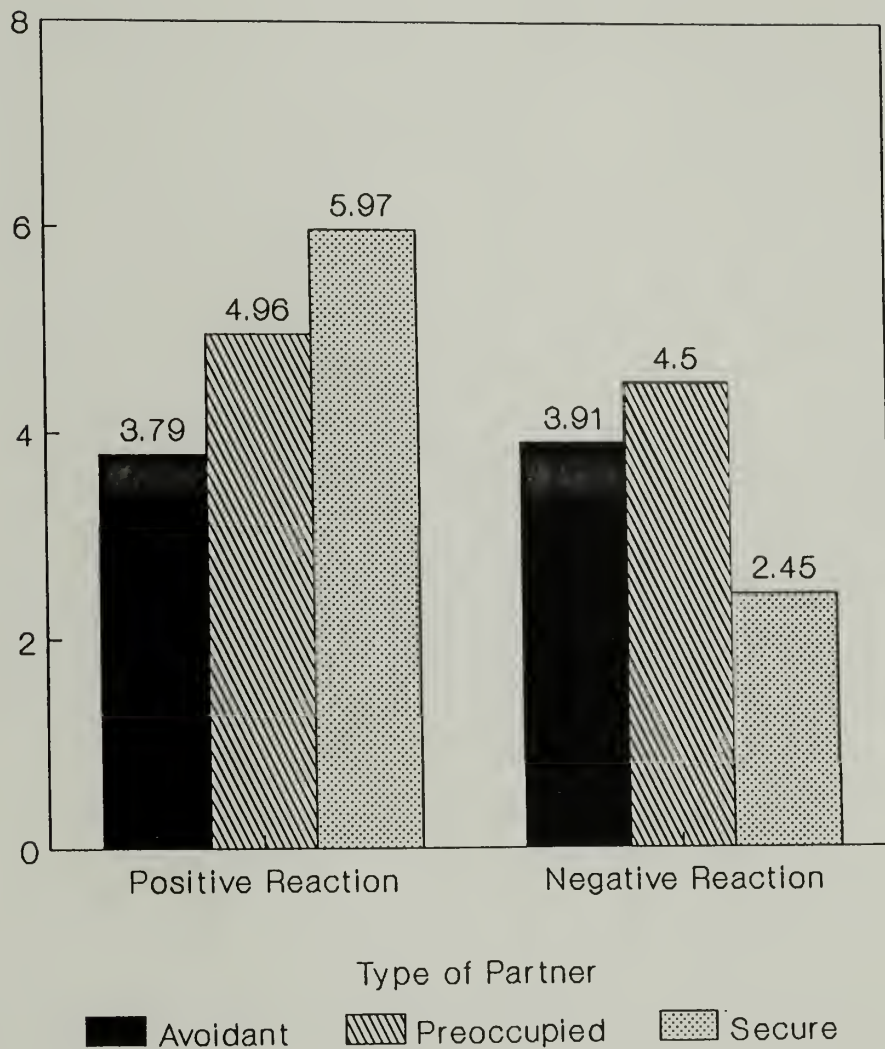


Figure 5. Positive and negative reactions to partner for the non-ambiguous relationship in Study 2.

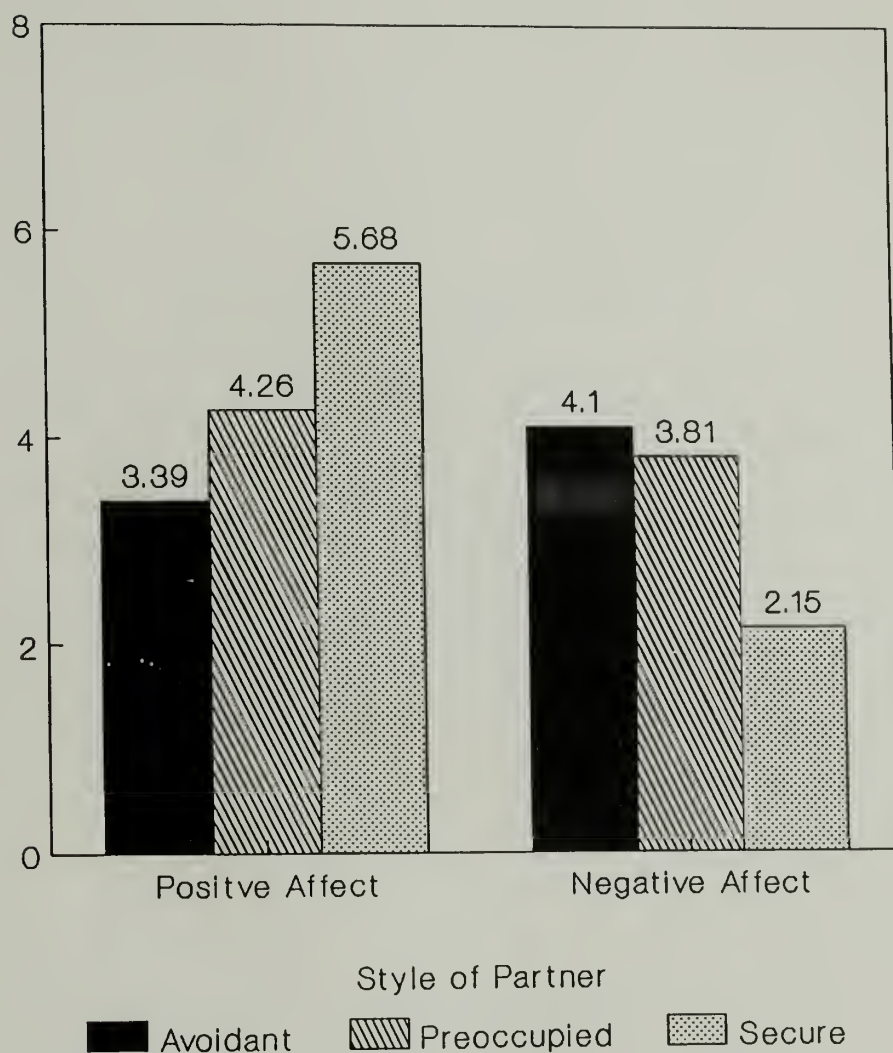


Figure 6. Positive and negative affect for the non-ambiguous relationship in Study 2.

A marginally significant interaction between model of mother and gender qualified the main effect for model of mother found on the negative affect scale, $F(1,74) = 3.05$, $p < .09$. Men who held an insecure model of mother showed the least negative affect in reaction to the scenarios ($M = 2.68$), whereas men who held a secure model of mother ($M = 3.38$) and women who held either a secure model of mother ($M = 3.55$) or an insecure model of mother ($M = 3.60$) show higher levels of negative affect. It is possible that men who held insecure models of mother have dismissive attachment styles. Individuals who have dismissive attachment styles (men are more likely to be dismissive) often idealize others and express little negative emotion.

A three-way interaction between model of mother, type of partner, and gender was obtained on the positive affect scale, $F(2,74) = 2.59$, $p < .05$. The most striking difference is between men and women who held an insecure model of mother and who read about a preoccupied partner. Women who held an insecure model of mother had significantly less positive affect about the relationship than did men who held an insecure model of mother. This finding suggests that gender role stereotypes may influence perceptions of others. In this culture, a preoccupied woman is stereotypically more acceptable than a preoccupied man. Women with an insecure model of mother may have more rigid expectations of partners and experience less positive emotion when faced with man who does not fit gender

stereotypes. The means for this interaction can be seen in Table 6.

Overall, these differences showed that gender provides an overlay on working models of attachment that contributes to subjects' perceptions of relationships.

Unstructured Measures

Again, subjects also provided non-structured reactions to the imagined relationship. These additional measures of the perceptions of the imagined relationship were the think aloud and the recall protocols.⁶

Think Aloud Protocol. The thought listing protocol provided information about the topics on which subjects who held different working models of mother focussed in response to different types of partners. Several components of the thought listing measure were analyzed including: (a) the number of words spoken, (b) the number of statements made for each content category (e.g. jealousy, commitment, trust, etc.), (c) the number of positive statements made across and within the content categories, and (d) the number of negative statements made across and within the content categories.

In general, the type of partner provided in the scenario was strongly associated with perceptions of the hypothetical relationship. There were scattered main effects for model of mother, but overall, subjects'

⁶ Three subjects are not included in the thought listing analyses and five are not included in the recall analyses due to various problems with taping.

Table 6.

Means for 3-way Interaction on Positive Affect Scale for Study 2.

Women:

Model of Mother	Secure	Type of Partner Preoccupied	Avoidant
Secure	4.82	4.18	3.57
Insecure	6.02	3.70	3.12

Men:

Model of Mother	Secure	Type of Partner Preoccupied	Avoidant
Secure	5.86	4.64	3.23
Insecure	6.04	5.20	3.67

perceptions seemed to be overwhelmed by the information provided.

Words spoken. The number of words spoken during the thought listing was analyzed to determine whether the number differed by subjects' model of mother or the type of partner subjects read about. No significant differences were found.

Statements per category. The content of the entire protocol was coded for each subject for each of the seven categories described earlier: relationship, jealousy, commitment, trust, abstract, communication, and intimacy. The means displayed in Table 7 show the number of statements made in each category. Analyses of variance (model of mother X type of partner) were run to examine the relationship between subject's models of others and the type of thoughts they had in response to the non-ambiguous relationships. Type of partner was associated with the number of statements made about the relationship, jealousy, trust, and communication, $ps < .05$. Scheffe contrasts found that subjects who read about the secure partner or the avoidant partner made fewer statements about the relationship and trust and more statements about jealousy than did subjects who read about the preoccupied partner. Subjects who read about a secure or a preoccupied subject made fewer statements about communication than did those who read about avoidant partners.

Table 7.

Means for Thought Listing Statements by Category for Study 2.

Category of Statements	Type of Partner		
	Secure	Preoccupied	Avoidant
Relationship	2.97a	3.58b	2.15a
Jealousy	.04a	1.21b	.00a
Commitment	.67	1.70	1.08
Trust	.07a	.52b	.12a
Abstract	.30	.36	.15
Communication	.67a	.64a	2.58b
Intimacy	.78	1.21	.50

Means with subscripts a and b are significantly different at $p < .05$.

Means with subscripts c and d are different at $p < .09$.

A trend also showed that subjects with insecure models of mother made more statements about the relationship ($\bar{M} = 3.25$) than subjects with secure models of mother ($\bar{M} = 2.45$), $F(1,80) = 3.20$, $p < .08$. No other main effects or interactions were found.

Positive statements. Analyses of variance were run to determine the effect of subjects' working models on the valence of the statements in the thought listing. Type of partner was associated with the overall number of positive statements made, $F(2,80) = 100.487$, $p < .05$. Scheffe contrasts showed that subjects who read about secure partners made significantly more positive statements than subjects who read about preoccupied or avoidant partners. Type of partner also influenced the number of positive statements made about the relationship, commitment, and intimacy, $ps < .05$, such that subjects who were provided with a secure partner made significantly more positive statements about each of these three categories than did those with a preoccupied or avoidant partner. The results of Scheffe contrasts are shown in Table 8.

Negative statements. Type of partner influenced the overall number of negative statements made, $F(2,80) = 26.53$, $p < .05$. Consistent with results about the overall positive statements, Scheffe contrasts showed that subjects who read about secure partners made significantly fewer negative statements than subjects who read about preoccupied

Table 8.

Means for Positive Thought Listing Statements by Category for Study 2.

Category of Statements	Type of Partner		
	Secure	Preoccupied	Avoidant
Relationship	2.35a	.90b	.67b
*Jealousy	.00	.14	.00
Commitment	1.12a	.17b	.17b
*Trust	1.00	.25	.33
Abstract	.86	.60	.33
Communication	1.00	.43	.38
Intimacy	1.50a	.15b	.14b
Total Positive	5.26a	2.24b	3.15b

Means with subscripts a and b are significantly different at $p < .05$.

*Statements not normally distributed across types of partners

or avoidant partners. A main effect for model of mother was also found for the overall number of negative statements, $F(1,80) = 9.525, p < .05$, such that subjects who held a secure model of mother made fewer negative statements ($M = 3.70$) than did subjects who held an insecure model of mother ($M = 5.08$).

Type of partner also influenced the number of negative statements made about the relationship, commitment, and intimacy, $ps < .05$, such that subjects who were provided with a secure partner made significantly fewer negative statements about each of these three categories than did those with a preoccupied or avoidant partner. A significant main effect for type of partner was also found for negative statements about communication. However, in this case, subjects who read about an avoidant partner made more negative statements than did those who read about secure or preoccupied partners. The results of Scheffe contrasts are shown in Table 9.

The model-of-mother main effect found for the overall number of negative statements was supported by only one effect in the content categories -- the relationship. Subjects who had insecure models of mother made more negative statements about the relationship ($M = 1.92$) than did subjects who had secure models of mother ($M = 1.20$), $F(1,75) = 5.68, p < .05$.

Recall. The recall protocol was used to determine which topics subjects who held different working models of

Table 9.

Means for Negative Thought Listing Statements by Category for Study 2.

Category of Statements	Type of Partner		
	Secure	Preoccupied	Avoidant
Relationship	.50a	2.61b	1.67b
Jealousy	1.00	1.57	.00
Commitment	.76a	1.54b	1.39b
*Trust	.00	.92	.67
Abstract	.29	.60	1.00
Communication	.23a	.71a	2.12b
Intimacy	.20a	1.50b	1.57b
Total Negative	1.56a	6.24b	5.50b

Means with subscripts a and b are significantly different at $p < .05$.

*Statements not normally distributed across types of partners

measure were analyzed including: (a) the total number of words spoken, (b) the number of words spoken about each

mother and partner recalled most in response to the ambiguous scenario. Several components of the recall block of information, (c) the number of sentences accurately recalled across and within the blocks of information, and (d) global ratings for clarity, detail and inference making.

Total words spoken. Again, the number of words spoken during recall was examined. Type of partner influenced the number of words spoken, $F(2,78) = 3.16, p < .05$. Subjects who were provided with a preoccupied partner spoke more ($M = 265.48$) than those provided with either a secure partner ($M = 205.44$) or an avoidant partner ($M = 201.54$).

Words spoken per block. Next, the amount and type of information recalled was analyzed. The three different scenarios were coded according to the different number of blocks of information described earlier. The recall from the three scenarios was analyzed separately because the scenarios for each type of partner varied in content. That is, the blocks of relationships information from the first scenario could not be equated with blocks for the other two scenarios because each of the scenarios contained different content. Therefore, one-way analyses of variance were run to examine the amount and type of information recalled for each of the three scenarios. The one factor was the model of mother held by subjects reading about either a secure, preoccupied, or an avoidant partner. The number of words spoken about each block of information was analyzed in a

one-way analysis of variance for each scenario. There were no significant main effects for model of mother in any of the three scenario conditions, $p > .05$.

Sentences recalled. Again, the type of information was further investigated by testing the number of sentences accurately recalled and the number of sentences accurately recalled about each block of information. The total number of sentences recalled accurately did not differ by model of mother for any of the partner types, $ps > .05$.

Model of mother was related to recall for the preoccupied partner. Subjects with a secure model of mother recalled more sentences about a pleasant anniversary dinner ($M = 1.69$) than subjects with an insecure model of mother ($M = .83$), $F(1,29) = 5.17$, $p < .05$. Subjects with a secure model of mother also tended to recall more sentences about a disagreement that occurred at dinner ($M = 2.15$) than did subjects with an insecure model of mother ($M = 1.28$), and more sentences about making post-graduation plans ($M = 1.69$) than did subjects with an insecure model of mother ($M = .94$), $ps < .09$. The subjects with a secure model of mother may have focussed on the dinner, the related disagreement, and the graduation plans because these three sections were not consistently positive or negative. The dinner was a positive experience until the partner became possessive and provoked a fight. Graduation was on the whole exciting and positive, but the partner was overly concerned about the relationships' future. Subjects with a secure model of

mother may have focussed on these events because they have not often experienced such inconsistent situations.

Finally, the sentences in each scenario were classified as positive, negative, or neutral to determine the amount of recall for each sentence type was examined. No differences between groups were found, $p_s > .05$.

Global ratings. Analyses of variance (model of mother X type of partner) were performed on the global ratings for clarity, detail and inference-making. No differences were found on the clarity or the detail dimensions. A significant type of partner main effect was found for inference-making, $F(2,77) = 3.638$, $p < .05$. Scheffe contrasts revealed subjects who read about a secure partner made fewer inferences during recall than did subjects who read about preoccupied or avoidant partners. The two insecure scenarios included negative information, whereas, the secure scenario contained only positive and neutral information. It may be that negative information demands more inference-making.

Behavioral Measure

In this measure, the questions chosen were expected to confirm the model of other that subjects were currently accessing. That is, if subjects have a secure model of mother and read about an insecure partner, the type of question they ask should reveal the model they are using to evaluate the partner. In general, this measure examined whether model of mother or type of partner contributed more

to the evaluation of the hypothetical partner. Analyses of variance (model of mother X type of partner) were performed on the questions subjects selected to "ask" their hypothetical partner. The type of question asked should reflect the expectation held by the subject for the partner.

Results of the analyses showed a main effect of partner for the percentage of insecure questions asked, $F(2,87) = 3.48$, $p < .05$. A marginally significant effect for type of partner for the percentage of secure questions asked also was found, $F(2,87) = 2.81$, $p < .07$. Subjects who had imagined an insecure partner asked more insecure questions and asked fewer secure questions than did those who had imagined a secure partner ($M_{\text{sec}} = 21$ vs $M_{\text{pre}} = 26$, $M_{\text{avd}} = 27$ for insecure questions, and $M_{\text{sec}} = 53$ vs $M_{\text{pre}} = 47$, $M_{\text{avd}} = 46$ for secure questions).

Thus, all subjects, regardless of their working model of mother, asked questions that were likely to confirm their expectations about the partner's attachment style (secure or insecure). This finding is consistent with previous work by Snyder and Swann (1978b) that shows that people use a confirmation bias when they search for information about something for which they already have an expectation.

Discussion

The goal of this study was to examine the role of subjects' working model of mother in perceptions of clearcut, non-ambiguous relationships. Two kinds of measures were included: structured and unstructured. The

results from both the structured tasks and the unstructured measures presented a consistent pattern. The results for the structured tasks are discussed first, including some gender differences. Results for the unstructured tasks are then considered. Finally, the behavioral measure is discussed.

Overall, the results from the structured measures indicated that type of partner was strongly associated with subjects' perceptions, whereas model of mother was weakly associated. Regardless of the working model of mother, type of partner was related to positive and negative ratings of the partner, and positive and negative affect across all three scenario conditions. Subjects who imagined a secure partner reported the most positive and least negative perceptions of their hypothetical partners, and feelings for the hypothetical relationship. Subjects who imagined a preoccupied partner were less positive and most negative about their partner; subjects with avoidant partners showed the least positive and less negative reactions to the partner. Those subjects who read about preoccupied partners had more positive feelings and less negative feelings than those who read about avoidant partners.

In general then, when the information about the relationship was clearcut, type of partner overrode the impact of the model of mother. This suggests that model of partner influences reactions to clearcut relationship information. However, subjects who had a secure model of

mother tended to express more negative affect about the relationship than did subjects who had an insecure model of mother. Model of mother was still in some way associated with the evaluation of the scenarios.

This is consistent with results from the first study that suggest the influence of the working model of mother may be modified by experiences with or information about one's adult partner. In Study 2, subjects seem to take partner information into account and do not simply apply their experience with mother to their experience with a romantic partner. Once a relationship is established (as was simulated by the non-ambiguous scenarios), individuals' conceptions of their romantic partner appear to play a stronger role than the model of mother.

These results are also consistent with research that shows that personality characteristics are less likely to influence reactions when the characteristics of the situation are very strong (Carver & Scheier, 1988). The scenarios presented seem to have overwhelmed any potential impact of subjects' model of mother; it is likely that the situational/partner attributes the scenarios provided were simply too strong to allow much other interpretation.

The results for the structured scales also suggest that gender also plays a role in determining people's perceptions of romantic relationships. Some of the effects were independent of attachment models; regardless of model of mother and partner type, men reported more positive

reactions to the partner, and more positive and less negative affect associated with the relationship. This is consistent with results from another study using a similar paradigm (Pietromonaco & Carnelley, 1993).

Other gender differences revealed a potentially important link between gender and models of attachment. For example, men who held an insecure model of mother showed the least negative affect in reaction to the scenarios. The most compelling evidence for the link between gender and working models of others was seen in a three-way interaction between gender, model of mother, and type of partner. For the subjects who held an insecure model of mother and who read about a preoccupied partner, women had significantly less positive affect about the relationship. It appears that stereotypic expectations of gender roles and characteristics acted in combination with subjects' model of mother to influence subjects' reactions to a particular partner. Several recent studies (Collins & Read, 1990; Kirkpatrick & Davis, 1993; Pietromonaco & Carnelley, 1993) have shown that gender is a moderating variable of attachment. The more partners possess behaviors characteristic of the stereotypical man or woman, the more gender influences outcomes of the relationship (Kirkpatrick & Davis, 1993).

The unstructured measures revealed a pattern of results consistent with the results of the structured measure. In general, the type of partner provided in the scenario was

strongly associated with perceptions of the hypothetical relationship. However, model of mother showed some relationship to perceptions of the relationship.

The think aloud protocols showed that subjects who read about a secure partner made more positive statements and less negative statements overall than subjects who read about either insecure partner. Specifically, subjects who read about a secure partner made more positive statements and fewer negative statements about the relationship, commitment, and intimacy. In addition, subjects who read about the avoidant partner made more negative statements about communication. These results are clearly consistent with the type of reactions expected from individuals dealing with partners with different attachment styles.

Model of mother was also related to two aspects of the think aloud protocols. Subjects who had a secure model of mother made fewer negative statements overall. Although subjects who held an insecure model of mother did not make more negative statements overall, they did make more negative relationship statements (the most encompassing content category coders used for the think aloud protocol). These differences may reflect a general optimism that subjects with secure models of mother have about relationships. Again, this is consistent with expectations from the attachment literature. The interesting finding here is that model of mother was associated in some way with the processing of the very strong partner scenarios.

The analyses for the recall measure showed two partner effects. However, most of the analyses included only one factor (model of mother) because the three scenarios held different content material that did not allow for analyses across partner type. Type of partner was associated with the number of words spoken; subjects who read about a preoccupied partner spoke the most, while subjects who read about an avoidant partner spoke the least. Additionally, subjects who read about an avoidant partner made the most inferences.

Model of mother was associated with several indices of recall for subjects who read about a preoccupied partner. Subjects who held a secure model of mother recalled more sentences about a dinner date, a disagreement that occurred during that dinner, and post-graduation plans. The information contained in these sections of the preoccupied partner scenario were not consistently positive or negative. Subjects who held a secure model of mother may have recalled more about these issues because they may not have often experienced inconsistent situations. These main effects provide evidence that model of mother may continue to influence individuals' evaluations of relationships. Given a less clearcut, but not a truly ambiguous scenario, stronger evidence may appear for the influence of model of mother on developed relationships.

Finally, results from the behavioral measure, the information-seeking task, again show that type of partner

overrode the impact of model of mother. All subjects, regardless of their working model of mother, asked questions that were likely to confirm their expectations about the partner's attachment style (secure or insecure).

CHAPTER 4

GENERAL DISCUSSION

In both studies, the contributions of different working models of others to perceptions and evaluations of relationships were examined. The relative contribution of model of mother and model of partner to both perceptions of an ambiguous, imagined relationship, and a non-ambiguous, imagined relationship were examined. Thus, the type of information provided to subjects in the two studies about the imagined partner and relationship was extremely different. The limitation of these lab studies is that they seemed to fail to capture the type of information individuals usually have about their relationships, a middle-ground of information that is sometimes ambiguous and sometimes very clear. The results suggest that model of mother is associated with evaluating ambiguous information, or perceptions in early stages of relationship development, and model of partner is associated with evaluating very clear information about well-formed relationships. If this is the case, then the interaction expected between model of mother and model of partner should occur when there is both ambiguous and clearcut information. The interaction found for the current real-life relationship subjects evaluated in Study 1 may reflect the fact that in actual relationships, both types of information are encountered. Future lab studies should try to simulate as accurately as possible the

On the other hand, the limitations of these studies may not lie in the stimulus material presented. Several aspects of the design and the coding analysis should be addressed in future work. For instance, the sample size in these studies may have been too small to assess properly the contribution of model of mother and model of partner. In related work, Pietromonaco and Carnelley (1993) had a sample over twice as large as the samples studied here. The additional statistical power provided by a larger sample might clarify the findings.

The coding scheme for the unstructured measures should also be improved. Specifically, the issue of valence needs to be addressed. The coding scheme for the think aloud protocol forced judges to place each statement in either the positive or negative category. These protocols will be recoded to capture statements that should be considered neutral. Results from the think aloud coding showed that working models are associated with different categories of thought statements (e.g. relationships, jealousy, commitment, etc.) when the valence of the statements is disregarded than when valence is considered. Recoding the think aloud protocols including a neutral category should help clarify these results.

On a related issue, the sentences in subjects' recall protocols were not evaluated as positive or negative. That is, two subjects may have recalled the same sentence from the same scenario in a very different way. Subjects may

attach a negative connotation (or a positive connotation) to some part of the scenario they recall, but this is not captured by the coding scheme employed. This might be particularly important for the ambiguous scenario.

One other coding possibility should be considered. To tap into a more affective component of the unstructured measures, the emotional tone of subjects' recordings should be assessed. Again, this could be particularly important for Study 1 because the results from the structured and unstructured measures were quite different. Coding for affect in the protocols might link the unstructured measures to the findings for the affective adjective scales.

Improving the above areas of analysis is an important goal because it would remove a confound. Currently, the structured measures appear to be tapping into affective responses and the unstructured measures appear to be more cognitive. In both studies, model of partner was the model most associated with the unstructured measures. It is unclear whether this is because model of partner is actually more involved in processing the relationship information or because model of partner is simply more cognitively-driven. If the later is true, accessing model of mother under these conditions may have been difficult because it is a model that is more experientially linked to evaluations. Epstein (1991) suggests that such distinctions are critical to understanding human processing.

The research presented about attachment models of others, specifically model of mother and model of partner, provides some clues as to the role they play in the perceptions of romantic relationships. The association of model of partner with many outcomes in these studies suggests that the conception of a modifiable structure for working models of others is the more appropriate description of the way people incorporate new information into their relationship schemas. The evidence reported does not advance the care-giver based conception, the more extreme version of the structure of working models. That is, model of mother is certainly not the only contributor to perceptions of relationships.

Additional research should provide stronger evidence for a modifiable structure that allows both model of mother and model of partner to contribute to perceptions of adult romantic relationships. In the lab, studies should assess models of others on-line while subjects evaluate a relationship. If the researchers provided information in a way so that subjects begin with relatively ambiguous information about the partner and are gradually provided with more clearcut information, researchers could assess the contributions of model of mother and model of partner during different types of information processing. Similarly, researchers could provide subjects with alternatively affective and cognitive information about a relationship and assess the contribution of model of mother and model of

partner in evaluating the two types of information.

Ideally, lab studies should be performed simultaneously with longitudinal studies about real-life relationships.

Longitudinal studies can examine shifts in the way individuals' perceptions of relationships reflect their model of mother and their model of partner. The most constructive approach seems to be integrating research paradigms to best investigate the role of working models of others in perceptions of relationships.

APPENDIX A

PROTOTYPE MEASURES FOR WORKING MODELS OF MOTHER AND PARTNER

1. Which of the following BEST DESCRIBES your relationship with your mother? (Please check ONE only)

A. _____ She was fairly cold and distant, and sometimes rejecting. She was not very responsive to my needs. She had other priorities that sometimes came before me; her concerns were often elsewhere.

B. _____ She was noticeably inconsistent in her reactions to me, sometimes warm and sometimes not; she had her own agendas which sometimes got in the way of her receptiveness and responsiveness to my needs; she definitely loved me but didn't always show it in the best way.

C. _____ She was generally warm and responsive; she was good at knowing when to be supportive and when to let me operate on my own; our relationship was almost always comfortable, and I have no major reservations or complaints about it.

2. Now rate the extent to which each paragraph describes your relationship with your mother while you were growing up.

A.	Not at all Descriptive									Strongly Descriptive
	1 2	3	4	5	6	7				8 9

B.	Not at all Descriptive									Strongly Descriptive
	1 2	3	4	5	6	7				8 9

C.	Not at all Descriptive									Strongly Descriptive
	1 2	3	4	5	6	7				8 9

1. Which of the following BEST describes your partner's feelings in romantic love relationships? (Please check ONE only)

_____My partner is somewhat uncomfortable being close to others; she/he finds it difficult to trust them, difficult to allow her/himself to depend on them. She/he is nervous when anyone gets too close, and often, she/he feels that I want her/him to be more intimate than she/he feels comfortable being.

_____My partner finds that others are reluctant to get as close as he/she would like. My partner often worries that I don't really love her/him or won't want to stay with her/him. My partner wants to get very close to me.

_____My partner finds it relatively easy to get close to others and she/he is comfortable depending on others and having them depend on her/him. My partner doesn't often worry about being abandoned or about someone getting too close to her/him.

2. Now rate the extent to which each paragraph describes your current partner's feelings in romantic love relationships.

A.	Not at all							Strongly
	Descriptive							Descriptive
	1	2	3	4	5	6	7	8 9

B.	Not at all							Strongly
	Descriptive							Descriptive
	1	2	3	4	5	6	7	8 9

C.	Not at all							Strongly
	Descriptive							Descriptive
	1	2	3	4	5	6	7	8 9

APPENDIX B
AMBIGUOUS SCENARIO FOR STUDY 1

The following passage describes a relationship from its beginning and follows it through many developments. Selected moments in the relationship are presented to give you an idea about some issues that are faced in this relationship. As you read on, imagine that you are the person involved with Sue.

You and Sue meet in sculpture class and soon become friends. You spend a lot of time together cooking dinner for each other, and discussing class projects. You secretly have a crush on Sue but aren't sure if she feels the same way about you. Over the course of the semester the two of you become very close. One night you go to Sue's house to watch television. The two of you are cuddling up together on the couch watching a late night movie. Sue leans over and kisses you and you kiss her back. The two of you became quite passionate. While this is happening, Sue's roommate comes home unexpectedly. She sits down to watch the movie with you and you decide you'd better go home. Sue kisses you goodnight, gives you a warm smile and says she'll talk to you tomorrow. The next day Sue wants to discuss this new turn of events, and your feelings about it.

Two days later you talk to Sue on the phone. After talking for about a half hour, the two of you decide to go out to dinner together next Friday night. The dinner

conversation touches on typical topics such as school, politics, relationships, friendship, and movies.

Eventually, you get together on weekends and start going to concerts and parties. You and Sue now have been going out for several months and look forward to the time you spend together. You have a strong relationship and feel close to each other. You are invited to a party that one of your friends is having. Going to parties with Sue has been difficult in the past because she happens to be extremely attractive and men are always trying to pick her up. There are a lot of people at the party and you lose Sue in the crowd. You don't mind too much because you are having a good time socializing with your friends. After a while you start to feel tired and want to leave. You start to look for Sue and when you find her you see that a man is coming on to her.

. During spring break, you and Sue go camping in Maine. It is the longest time the two of you have spent together alone. The countryside is beautiful and there are many opportunities for swimming and hiking. On the trip home, you both regret having to go back to school.

Over the past year, you have grown close, and have expressed feelings of love for each other. The two of you like to spend time alone, but you often have a problem finding a place to be together. Because you both have roommates, you feel as though you have no privacy and rarely can find a place to be alone. This problem has put some

stress on the relationship. You and Sue try to discuss this problem.

Recently, Sue has become close friends with an attractive man in her English class named Roger. Sue and Roger have lunch after their class three times a week and sometimes talk on the phone about class assignments. Sue and Roger are also part of a study group that meets every Thursday night. Sue tells you that she thinks Roger has a crush on her but she only likes him as a friend. One day you pass by Sue and Roger in the hall and they don't see you. You overhear Roger ask Sue to a movie Friday night. But you were in a rush to get to class so you leave and are unable to hear her reply.

Later, you and Sue get together and since it is such a nice day, the two of you decide to spend it outdoors. You want to play tennis but she insists on finding a warm place where you can spread out a blanket and just relax. Sue lies down on the blanket and snuggles up against you.

APPENDIX C

STRUCTURED ADJECTIVE RATINGS FOR HYPOTHETICAL, AND CURRENT RELATIONSHIP FOR STUDY 1 AND STUDY 2

1A. If you were actually in this relationship, how much would each of the following describe your relationship with Sue?

[Please rate them on a scale from 1 to 7 where 1=Not at all Descriptive, and 7=Strongly Descriptive]

	Not at all Descriptive					Strongly Descriptive	
Close	1	2	3	4	5	6	7
Conflictual	1	2	3	4	5	6	7
Both Equally Involved	1	2	3	4	5	6	7
Confining	1	2	3	4	5	6	7
Mutually Satisfying	1	2	3	4	5	6	7
Consistently Rewarding	1	2	3	4	5	6	7

1B.. How much does each of the following describe Sue?
[Rate them using the same scale as above]

Dependable	1	2	3	4	5	6	7
Open	1	2	3	4	5	6	7
Rejecting	1	2	3	4	5	6	7
Warm	1	2	3	4	5	6	7
Inconsistent	1	2	3	4	5	6	7
Responsive to my needs	1	2	3	4	5	6	7
Cold	1	2	3	4	5	6	7
Dependent	1	2	3	4	5	6	7
Predictable	1	2	3	4	5	6	7

Trustworthy	1	2	3	4	5	6	7
Willing to talk about personal issues	1	2	3	4	5	6	7
Reliable	1	2	3	4	5	6	7
Jealous	1	2	3	4	5	6	7
Overly Demanding	1	2	3	4	5	6	7
Caring	1	2	3	4	5	6	7
Accepting	1	2	3	4	5	6	7
Distant	1	2	3	4	5	6	7
Overly Independent	1	2	3	4	5	6	7
Committed to the relationship	1	2	3	4	5	6	7
Faithful	1	2	3	4	5	6	7
Worried about the relationship	1	2	3	4	5	6	7
Supportive	1	2	3	4	5	6	7

1C. How much does each of the following describe how you would feel if you were actually involved in this relationship?

	Not at all Descriptive				Strongly Descriptive			
Nervous	1	2	3	4	5	6	7	
Satisfied	1	2	3	4	5	6	7	
Indifferent	1	2	3	4	5	6	7	
Angry	1	2	3	4	5	6	7	
Secure	1	2	3	4	5	6	7	
Sad	1	2	3	4	5	6	7	
Uncomfortable	1	2	3	4	5	6	7	
Calm	1	2	3	4	5	6	7	
Trusting	1	2	3	4	5	6	7	
Anxious	1	2	3	4	5	6	7	
Uninvolved	1	2	3	4	5	6	7	
Jealous	1	2	3	4	5	6	7	
Open	1	2	3	4	5	6	7	
Happy	1	2	3	4	5	6	7	
Distant	1	2	3	4	5	6	7	
Depressed	1	2	3	4	5	6	7	
Annoyed	1	2	3	4	5	6	7	
Contented	1	2	3	4	5	6	7	
Dependent	1	2	3	4	5	6	7	
Warm	1	2	3	4	5	6	7	
Rejecting	1	2	3	4	5	6	7	

3A. Are you currently in a romantic relationship?

___Yes ___No

3B. If yes, when did the relationship begin?

Month_____ Year_____ [If NO, go to # 4A]

3C. How much does each of the following describe your relationship with your current partner?

[Please rate them on a scale from 1 to 7 where 1=Not at all Descriptive, and 7=Strongly Descriptive]

	Not at all Descriptive				Strongly Descriptive			
Close	1	2	3	4	5	6	7	
Conflictual	1	2	3	4	5	6	7	
Both Equally Involved	1	2	3	4	5	6	7	
Confining	1	2	3	4	5	6	7	
Mutually Satisfying	1	2	3	4	5	6	7	
Consistently Rewarding	1	2	3	4	5	6	7	

3D. How much does each of the following describe your current partner? [Rate them using the same scales as above]

Dependable	1	2	3	4	5	6	7
Open	1	2	3	4	5	6	7
Rejecting	1	2	3	4	5	6	7
Warm	1	2	3	4	5	6	7
Inconsistent	1	2	3	4	5	6	7
Responsive to my needs	1	2	3	4	5	6	7
Cold	1	2	3	4	5	6	7
Dependent	1	2	3	4	5	6	7

Predictable	1	2	3	4	5	6	7
Trustworthy	1	2	3	4	5	6	7
Willing to talk about personal issues	1	2	3	4	5	6	7
Reliable	1	2	3	4	5	6	7
Jealous	1	2	3	4	5	6	7
Overly Demanding	1	2	3	4	5	6	7
Caring	1	2	3	4	5	6	7
Accepting	1	2	3	4	5	6	7
Distant	1	2	3	4	5	6	7
Overly Independent	1	2	3	4	5	6	7
Committed to the relationship	1	2	3	4	5	6	7
Faithful	1	2	3	4	5	6	7
Worried about the relationship	1	2	3	4	5	6	7
Supportive	1	2	3	4	5	6	7

3E. How much does each of the following describe how you feel in your current relationship?

	Not at all Descriptive				Strongly Descriptive			
Nervous	1	2	3	4	5	6	7	
Satisfied	1	2	3	4	5	6	7	
Indifferent	1	2	3	4	5	6	7	
Angry	1	2	3	4	5	6	7	
Secure	1	2	3	4	5	6	7	
Sad	1	2	3	4	5	6	7	
Uncomfortable	1	2	3	4	5	6	7	
Calm	1	2	3	4	5	6	7	
Trusting	1	2	3	4	5	6	7	
Anxious	1	2	3	4	5	6	7	
Uninvolved	1	2	3	4	5	6	7	
Jealous	1	2	3	4	5	6	7	
Open	1	2	3	4	5	6	7	
Happy	1	2	3	4	5	6	7	
Distant	1	2	3	4	5	6	7	
Depressed	1	2	3	4	5	6	7	
Annoyed	1	2	3	4	5	6	7	
Contented	1	2	3	4	5	6	7	
Dependent	1	2	3	4	5	6	7	
Warm	1	2	3	4	5	6	7	
Rejecting	1	2	3	4	5	6	7	

(STUDY 2 MODIFICATIONS)

1A. How much does each of the following describe Mary?

[Please rate them on a scale from 1 to 7 where 1=Not at all Descriptive and 7=Strongly Descriptive]

	Not at all Descriptive				Strongly Descriptive			
Dependable	1	2	3	4	5	6	7	
Open	1	2	3	4	5	6	7	
Rejecting	1	2	3	4	5	6	7	
Warm	1	2	3	4	5	6	7	
Dependent	1	2	3	4	5	6	7	
Nervous if someone gets too close	1	2	3	4	5	6	7	
Responsive to my needs	1	2	3	4	5	6	7	
Cold	1	2	3	4	5	6	7	
Trustworthy	1	2	3	4	5	6	7	
Willing to talk about personal issues	1	2	3	4	5	6	7	
Reliable	1	2	3	4	5	6	7	
Jealous	1	2	3	4	5	6	7	
Overly Demanding	1	2	3	4	5	6	7	
Caring	1	2	3	4	5	6	7	
Accepting	1	2	3	4	5	6	7	
Distant	1	2	3	4	5	6	7	
Overly Independent	1	2	3	4	5	6	7	
Committed to the relationship	1	2	3	4	5	6	7	
Faithful	1	2	3	4	5	6	7	
Worried about the relationship	1	2	3	4	5	6	7	

Unsure of feelings for you	1	2	3	4	5	6	7
Possessive	1	2	3	4	5	6	7
Supportive	1	2	3	4	5	6	7

1B. How much does each of the following describe how you would feel if you were actually involved in this relationship?

	Not at all Descriptive				Strongly Descriptive			
Nervous	1	2	3	4	5	6	7	
Satisfied	1	2	3	4	5	6	7	
Indifferent	1	2	3	4	5	6	7	
Angry	1	2	3	4	5	6	7	
Secure	1	2	3	4	5	6	7	
Sad	1	2	3	4	5	6	7	
Uncomfortable	1	2	3	4	5	6	7	
Trusting	1	2	3	4	5	6	7	
Anxious	1	2	3	4	5	6	7	
Uninvolved	1	2	3	4	5	6	7	
Jealous	1	2	3	4	5	6	7	
Open	1	2	3	4	5	6	7	
Happy	1	2	3	4	5	6	7	
Distant	1	2	3	4	5	6	7	
Depressed	1	2	3	4	5	6	7	
Annoyed	1	2	3	4	5	6	7	
Contented	1	2	3	4	5	6	7	
Warm	1	2	3	4	5	6	7	
Rejecting	1	2	3	4	5	6	7	

APPENDIX D
NON-AMBIGUOUS SCENARIOS FOR STUDY 2

SECURE

You have been involved in an exclusive intimate relationship with Mary for the past seven months. The two of you met at a mutual friend's party and hit it off well from the start. As you read on, imagine that you are the person involved with Mary.

You spend most of the party talking to Mary; she is intelligent, up on current issues, and seems to enjoy talking to you quite a bit. At the end of the evening you and Mary exchange phone numbers and agree to talk again soon.

Two days later you talk to Mary on the phone. After talking for about a half hour, the two of you decide to go out to dinner together next Friday night. The dinner conversation touches on typical topics such as school, politics, relationships, friendship, and movies. Mary is easy to talk to and doesn't have any trouble discussing "touchy" issues including her particular political views or past relationships. After a few more dates, the two of you begin to see each other exclusively.

You enjoy many good times together, and a strong fondness grows between you and Mary. The two of you do many things as a couple, but Mary maintains that it is also important for each of you to keep your separate friends and

interests. For example, she supports your participation on an intramural softball team despite the fact that it means spending 2-3 nights per week apart. In addition to having different friends, you and Mary have mutual friends. She always has fun when you all do something together, and is also quite glad that she has maintained her old friendships. It comes as no surprise that she's kept her friends in the midst of a serious relationship because she has always had a way with people.

You and Mary make plans to see a movie together. It was a sad tale about a young woman who loses her naive notions about love when her first relationship ends. Afterwards the two of you discuss how much you both enjoyed the movie, although it was quite a sad story. You both recognize the tragedy of the main character's situation, but your interpretations of the director's implications are quite different. An interesting and somewhat heated discussion ensues. While not convinced she is wrong, Mary concedes that both interpretations are plausible. She then suggests that the two of you stop for ice cream on the way home; that's surely an agreeable idea. You realize that this is fairly indicative of Mary in general. She values open communication, respecting and valuing both your similarities and your differences.

One night you and Mary go to a musical put on by the university theater guild. You both dress up for the occasion and enjoy the production very much. During the

walk home there is a sudden downpour and you find yourselves running through the rain laughing. That night you and Mary sleep together for the first time.

During spring break, you and Mary go camping in Maine. It is the longest time the two of you have spent together alone. The countryside is beautiful and there are many opportunities for swimming and hiking. On the trip home you both regret having to go back to school.

For your six month anniversary, you and Mary go out to dinner at a fancy restaurant. For the most part dinner conversation consists of reminiscing. You talk about the good times you've had together, and about how much you mean to each other. Mary says how glad she is to have met you and how she enjoys feeling that she can depend on someone. You think of how well you've gotten to know Mary in the past six months. This is probably because she can open up to others so easily.

At dinner you mention that you have been considering taking an internship this summer, but you'd have to move out of state to do it. Since you know that she can't go with you (there is a class that she must take at the university this summer), you are a bit wary of her response to the proposition. She replies that although she doesn't exactly like the idea of you moving away for the summer and would miss you very much, you should take the internship if it's what you really want. "If it's best for you in the long

run, then you should do it. Besides, we could still visit on weekends," she says.

Both of you are graduating in the following spring, and neither of you have definite post-graduate plans. Although the future is uncertain, you and Mary discuss possible future scenarios. Mary is very honest in expressing how she feels about the future in general, and about the future of your relationship in particular. She mentions that she notices some tension between the two of you; it's probably due to the uncertainty of what is to come. She has mentioned the possibility of staying together and has even talked about marriage, albeit very casually. Mary seems to have a very open attitude regarding your future together.

ANXIOUS

You have been involved in an exclusive intimate relationship with Laura for the past seven months. The two of you met at a mutual friend's party and hit it off well from the start. As you read on, imagine that you are the person involved with Laura.

You spend most of the party talking to Laura; she seems to have a keen interest in you, and can hardly take her eyes off of you all night. When you talk to each other, she gazes deeply into your eyes, seemingly paying the utmost attention. At the end of the party you exchange phone numbers and agree to talk again soon.

Two days later you talk to Laura on the phone. After talking for about a half hour, the two of you decide to go out to dinner next Friday night. The dinner conversation touches on typical topics such as school, politics, movies, music, and in particular relationships. Laura asks you many questions - for example, about your past relationships, your expectations in a relationship, and your future plans. As it turns out she is impressed with your replies because you begin to see each other exclusively.

You enjoy many good times together, and a strong fondness grows between you and Laura. The two of you seem to be getting closer all of the time, and Laura says that she doesn't know what she would do without you. One night you and Laura go to a musical put on by the university theater guild. You both dress up for the occasion and enjoy

the performance very much. During the walk home there is a sudden downpour and you find yourselves running through the rain laughing. That night you and Laura sleep together for the first time.

You and Laura make plans to see a movie together. It's a sad tale about a young woman who loses her naive notions about love when her first relationship ends. Afterwards the two of you discuss how much you both enjoyed the movie, although it was quite a sad story.

During spring break you and Laura go on a week long camping trip to Maine. It is the longest time the two of you have spent alone together. You and Laura have a wonderful time. During the drive home, she is in a particularly good mood; it has been an exciting week and she is pleased that she suggested the one-on-one week in the woods. However, as you near home, you mention that you'll be glad to see some of your friends and that maybe you'll make a few calls when you get home to see if anyone wants to go out. Apparently Laura is not too happy with the idea because her light, happy mood suddenly becomes sullen. After your return home from the camping trip she wants to spend even more time together than you have in the past, citing the wonderful closeness of the camping trip.

Soon after spring break is the six month anniversary of your relationship with Laura. Laura suggests that you celebrate your six month anniversary by going out to a fancy restaurant for dinner. The two of you go out to dinner, and

the conversation affectionately touches upon the events of the past six months. It is a pleasant evening and you're glad that Laura remembered the anniversary. During dinner you mention that you are thinking of joining an intramural softball team this semester. Laura asks how often you'd be playing. You reply, "Oh, about 2 or 3 nights a week."

Laura is quite upset that you'd be spending evenings apart and even suggests that if you want to break up, why not just say it outright. Your assurance that you don't want to break up seems to fall upon deaf ears. Laura certainly has no problems conveying her feelings.

On Tuesdays and Thursdays you and Laura typically meet for lunch in the campus center. This is always a nice break from classes for the two of you and you both look forward to these lunch dates. Today you have an appointment with a professor during your regular lunch time with Laura, so in the morning you tell her that you won't be able to meet her for lunch today. When you see her in the evening, she is extremely upset. Naturally, you ask her what's wrong. She replies that she knows that you skipped lunch with her to be with another woman. When you respond that she knows very well that you had an appointment with a professor she tells you to save your excuses. She goes on to say that she saw you walking with another woman at the time of your alleged appointment and that you were "quite friendly" with her. When you reply that you were just walking with a friend to

your professor's building (which was the truth) she just rolls her eyes. Apparently she doesn't buy it.

Both of you are graduating in the spring and neither of you are sure what you are going to do next. Graduate school is a possibility but neither of you have committed to anything definite yet. While both of you are thinking about future career goals. Laura also is quite concerned about the future of your relationship. She would like to include you in her plans.

AVOIDANT

You have been in an exclusive intimate relationship with Sarah for the past seven months. The two of you met at a mutual friend's party and hit it off well from the start. As you read on, imagine that you are the person involved with Sarah.

You spend most of the party talking to Sarah. She is intelligent, up on current issues, and seems to enjoy talking with you. At the end of the party you and Sarah exchange phone numbers and agree to talk again soon.

Two days later you run into Sarah in the campus center coffee shop and decide to have lunch together. You enjoy each other's company again and agree to meet for lunch again tomorrow. After several dates over the next few weeks, the two of you make plans to go to a movie together. When the two of you arrive at your house after the movie, you ask if she'd like to come in for a little while. She accepts your offer. You sit down close together on the couch and you start talking. Sarah doesn't really have much to say when you ask her personal questions, but when you say how much you like her, she replies that she enjoys spending time with you as well. Perhaps this just isn't the time to talk because before long you and Sarah kiss for the first time. Sarah seems to become uncomfortable and says that she has to leave. You ask if something happened to upset her. She just skirts the issue and asks if you will meet her for lunch at the usual time next week. At your lunch date you

talk about your feelings toward Sarah, and try to encourage her to talk about her feelings about you. However, she's reluctant to disclose her deep feelings and simply says that she likes you.

One night you and Sarah go to a musical put on by the university theater guild. You both dress up for the occasion and enjoy the production very much. During you walk home, there is a sudden downpour and you find yourselves running through the rain laughing. That night you and Sarah sleep together for the first time. In the morning Sarah seems strangely distant. You ask her if everything is alright, and she replies that everything is just great. However, you get the feeling that she isn't telling you something.

You and Sarah make plans to see a movie. It's a sad tale about a young woman who loses her naive notions about love when her first relationship ends. You both enjoy the film and talk about it afterwards. You both agree that it was an emotionally charged film. Sarah has very little to say about how the movie made her feel, but has much to say regarding the formal features of the film and its symbolism. You realize this to be fairly indicative of Sarah in general; it is often hard to get her to discuss her emotions, especially concerning your relationship. This aspect of her personality might explain, at least partly, why the two of you are not as close as you could be. Although somewhat lacking in closeness, your relationship

with Sarah is quite stable; she offers good advice in practical matters and makes few demands on your time.

During spring break you and Sarah decide to go camping for a week in Maine. The countryside is beautiful and there are many opportunities for swimming and hiking. On the drive home you both regret that you have to go back to school.

For your six month anniversary, you and Sarah go out to dinner at a fancy restaurant. For the most part, dinner conversation consists of reminiscing. You talk about the good times you've had, and about how much she means to you. You also say that you hope the relationship will continue. Finally you realize that you've done all of the talking, and Sarah has barely said two sentences concerning how the relationship has affected her. When you inquire about her lack of disclosure she replies, "You know how I feel." In fact, you don't. Sarah seems to get defensive when you ask her about her feelings.

Both of you are graduating in the spring, and neither of you have long term plans for after graduation. You have asked Sarah on several occasions what she plans to do and if you figure into the picture. She typically responds, "Well, we'll see what happens," or "Let's talk about it later." Having a good relationship, it seems only natural to be concerned or at least curious about the future of the relationship, but Sarah hasn't expressed very much concern. However, she has been a bit more uptight lately, perhaps due

to the decisions that the two of you will have to make for the future. Your questions regarding the future seem to make her uneasy.

APPENDIX E

INFORMATION-SEEKING TASK FOR STUDY 2

1. Think about times when you felt jealous. What events brought on these feelings?
2. What events make you feel close to a romantic partner?
3. What makes you a trustworthy partner?
4. Tell me the ways that you show a partner how much you care.
5. What factors make it hard for you to really open up to someone?
6. Think about the times when you needed more space than your partner was giving you. Give me an example.
7. In what ways do you give support to your partner?
8. What do you think are the advantages of being distant in a relationship?
9. What do you think are the disadvantages of being distant in a relationship?
10. Do you tend to pick up hobbies and interests that your partner is interested in?
11. Describe to me a type of romantic situation that invariably makes you feel ill at ease and awkward. What is it about such situations that makes you feel uncomfortable?
12. Tell me about a time where you did really caring things for a romantic partner.
13. What would you do if someone really wanted to open up to you?
14. What would you do if you really wanted to open up to someone?
15. What would you do if you really wanted to be close to someone?
16. What would you do if you really wanted someone to be close to you?
17. What do you think the advantages are of being independent of a partner?

18. What do you think the disadvantages are of being independent of a partner?

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