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**How Representations of the Parental Marriage Predict Marital Quality  
Between Partners During the Transition to Parenthood**

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**How Representations of the Parental Marriage Predict Marital Quality  
Between Partners During the Transition to Parenthood**

by

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## **Dedication**

This dissertation is dedicated to Dan, my parents, Anne, and Fish.

Many thanks for all your words and acts of encouragement.

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**How Representations of the Parental Marriage Predict Marital Quality  
Between Partners During the Transition to Parenthood**

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This study examined how couples' representations of the parental marriage predict emotional attunement between marital partners prenatally and following the transition to parenthood, 24 months postpartum. Couple partners (N = 121) were interviewed individually about their parents' marriage prenatally. Two aspects of these representations were assessed: content (memories of conflict, affection, and communication in the parents' marriage) and process (making connections between their own and their parents' marriage and presenting a believable, consistent picture of the parents' marriage). Emotional attunement (i.e., dyadic emotional communication and connection) was rated from couple interactions observed prenatally and at 24 months

(N = 89 couples). Surra and Bohman (1991) proposed that during relatively stable times in couple relationships, individuals use lower order, automatic processing when evaluating relationships, whereas their thinking during relatively unstable times is characterized by higher order, extensive processing. Thus, it was hypothesized that individuals would automatically recreate the content of the marital patterns they recalled from childhood in their own marital interactions prenatally, since this is assumed to be a relatively stable time compared to the postnatal period. Based on attachment theory and methods (Bowlby, 1973, 1980, 1988; Main, Goldwyn, & Hesse, 2002), it was also hypothesized that individuals high on process would score higher on emotional attunement both prenatally and postnatally, since they should view their parents' marriage more objectively and work on avoiding negative aspects of their parents' marriage at any time. The role of content during the relatively unstable postnatal period is less clear, however. When high-processing individuals automatically draw on recollections of the parental marriage, will they recreate positive recollections, or will positive memories result in disappointment and reduced emotional attunement? Results from path analyses revealed that prenatally, husbands and wives high on process showed higher emotional attunement toward their partner. Postnatally, wives who recalled low content using high process showed a greater increase in emotional attunement toward their partner than did wives in other groups, indicating that for high processing women, anticipating some problems and stresses about marriage following the transition to parenthood may result in greater attention to the marital relationship.

## Table of Contents

|   |    |
|---|----|
| Introduction.....   | 1  |
| Times of Instability and Stability During the Transition to Parenthood.....   | 4  |
| Changes in the Marriage During the Transition to Parenthood .....   | 9  |
| Expectations and Actual Division of Childcare and Household<br>Labor During the Transition to Parenthood .....                      | 11 |
| Changes In Marital Quality During the Transition to Parenthood.....   | 13 |
| Representations of the Parental Marriage.....   | 17 |
| The Intergenerational Transmission of Marital Patterns .....  | 17 |
| Memories from the Parents’ Marriage.....  | 17 |
| Two Types of Processing Information about Relationships.....  | 19 |
| Relation of Representations of the Parental Marriage to Emotional<br>Attunement .....   | 23 |
| How Partners Respond to One Another: Current Research and Methodology ...   | 29 |
| Method.....   | 32 |
| Participants.....   | 32 |
| Procedures.....   | 33 |
| Measures .....  | 33 |
| Emotional attunement prenatally .....   | 33 |
| Emotional attunement at 24 months .....   | 35 |
| Representation of the parents’ marriage .....   | 37 |
| Relational life events.....   | 39 |
| Sample size at each phase and attrition .....   | 40 |
| Plan for Analysis.....  | 42 |
| Results.....  | 47 |
| Descriptive Statistics and Correlations .....   | 47 |
| Length of Marriage as a Covariate.....  | 47 |
| Relational Life Events as a Test of the Greater Instability of the Transition to<br>Parenthood Compared to the Prenatal Period..... | 48 |
| Explanation of Path Analysis and Fit Indexes .....  | 49 |
| Presentation of Results from Path Analysis.....   | 51 |
| Separate Path Analysis Models for Husbands and Wives Where Content is<br>Low and Process is High.....                               | 51 |
| Separate Path Analysis Models for Husbands and Wives Where Content is<br>High and Process is High.....                              | 52 |
| An Overview of Multiple Group Analysis: Comparing Husbands and Wives....  | 54 |
| Multiple Group Analysis Between Husbands and Wives.....   | 56 |



|   |     |
|---|-----|
| Discussion.....   | 58  |
| Tables.....   | 68  |
| Figures.....  | 75  |
| Appendices.....   | 84  |
| Appendix A: Scale for Coding Marital Interactions Prenatally and at 24 months.....  | 84  |
| Appendix B: Interview Questions for Grandparent Marriage Interview.....   | 87  |
| Appendix C: Scales for the Grandparent Marriage Interview.....  | 88  |
| Appendix D: Examples of GMI Scores, Ranging from Low, Medium, and High.....   | 93  |
| Appendix E: Effects Coding Syntax.....  | 108 |
| Appendix F: Means and Standard Deviations for Groupings of Content and Process in Relation to Emotional Attunement at 24 months for Husbands, Where the Reference Group is Low Content and High Process.....  | 112 |
| Appendix G: Means and Standard Deviations for Groupings of Content and Process in Relation to Emotional Attunement at 24 months for Wives, Where the Reference Group is Low Content and High Process.....     | 113 |
| Appendix H: Means and Standard Deviations for Groupings of Content and Process in Relation to Emotional Attunement at 24 months for Husbands, Where the Reference Group is High Content and High Process..... | 114 |
| Appendix I: Means and Standard Deviations for Groupings of Content and Process in Relation to Emotional Attunement at 24 months for Wives, Where the Reference Group is High Content and High Process.....    | 115 |
| References.....   | 116 |
| Vita.....   | 126 |

## List of Tables

|   |    |
|---|----|
| Table 1: Percentage of Prenatal Family Income Reported by Husbands and Wives.....   | 68 |
| Table 2: Frequencies of Prenatal Family Income Reported by Husbands and Wives<br>who had Separated or Divorced by 24 months ..... | 69 |
| Table 3: Intercorrelations among Grandparent Marriage Interview (GMI) Scales for<br>Husbands.....                                 | 70 |
| Table 4: Intercorrelations among Grandparent Marriage Interview (GMI) Scales for<br>Wives .....                                   | 71 |
| Table 5: Descriptive Statistics of Grandparent Marriage Interview (GMI)<br>Variables .....  | 72 |
| Table 6: Model Fit Statistics for the Path Models of Husbands and Wives .....   | 73 |
| Table 7: Multiple Group Analysis for Husbands and Wives.....  | 74 |

## List of Figures

|   |    |
|---|----|
| Figure 1: Combinations of Content and Process from Representations of the Parental<br>Marriage.....                             | 75 |
| Figure 2: Proposed Path Model for Husbands Where the Reference Group<br>(not visible) is Low Content and High Process .....     | 76 |
| Figure 3: Proposed Path Model for Wives Where the Reference Group<br>(not visible) is Low Content and High Process .....        | 77 |
| Figure 4: Proposed Path Model for Husbands Where the Reference Group<br>(not visible) is High Content and High Process.....     | 78 |
| Figure 5: Proposed Path Model for Wives Where the Reference Group<br>(not visible) is High Content and High Process.....        | 79 |
| Figure 6: Results from Path Model for Husbands Where the Reference Group<br>(not visible) is Low Content and High Process ..... | 80 |
| Figure 7: Results from Path Model for Wives Where the Reference Group<br>(not visible) is Low Content and High Process .....    | 81 |
| Figure 8: Results from Path Model for Husbands Where the Reference Group<br>(not visible) is High Content and High Process..... | 82 |
| Figure 9: Results from Path Model for Wives Where the Reference Group<br>(not visible) is High Content and High Process.....    | 83 |

## **Introduction**

For the majority of couples, having children is a natural and normal part of the adult life cycle (Sanders, Nicholson, & Floyd, 1997). Yet, for nearly every married couple, becoming a new parent poses challenges. Couples experiencing the birth of a new baby must cope with sudden changes in division of childcare and household labor (Belsky, Spanier, & Rovine, 1983; MacDermid, Huston, & McHale, 1990; Nomaguchi & Milkie, 2003), spend less time talking to one another than do nonparents (McHale & Huston, 1985), become less satisfied with their marriage over time (Huston & Holmes, 2004), and report declines in marital adjustment, including aspects of satisfaction, communication, affection, similarity of values, and global adjustment (Wallace & Gotlib, 1990). The purpose of the current study is to assess how representations of the parental marriage predict a measure of marital quality called emotional attunement both before and after the birth of the couples' first child.

Past research has identified some individual factors that reliably predict marital interactions, although not necessarily during the transition to parenthood. One such factor includes the intergenerational transmission of marital patterns experienced in the partners' families of origin (e.g., Belsky & Isabella, 1985; Caspi & Elder, 1988). Representations of the parental marriage consist of the memories individuals report about their parents' marriages (termed content), as well as how individuals talk about their parents' marriages (termed process). With such a conceptualization, both the perspective of the individual and the perspective of the objective observer are assessed in the measurement of representations of the parental marriage. In this study, I explore how

representations of the parental marriage, in terms of both content of memories and process of recall from the parental marriage, influence emotional attunement between couples both before and 24 months after the birth of their first child.

Emotional attunement is defined as how partners listen to, respond to, and validate one another during nonconflictual and conflictual marital interactions and tasks. For example, the following interaction is typical of couples who are high on emotional attunement:

Wife: "I know my family is difficult to deal with."

Husband: "I hate them."

Wife: "What is it about them that you hate?"

Husband: "They're a nightmare, they just aren't normal people. I don't know. I always feel anxious about them. OK, so I don't hate them, I hate dealing with them."

This couple expresses both positive and negative emotions directly, they share their feelings with one another, and they listen to one another. In contrast, consider an interaction of a couple who is very low on emotional attunement:

Husband: "Well, I think you need to be more confident and assertive."

Wife: "You already told me that before."

Husband: "Why can't you be more like Jane instead of more like Mary?"

Wife: "Well. (laughs) well, well, the one thing I'd change about you..."

Husband (interrupts): "That's another thing I'd change about you. You suck your teeth, you do with every sentence."

Wife: "I try not to do it with every sentence."

Husband (to camera): "Count how many times she does it."

This couple expresses more negative emotions than the first couple; they express their emotions in an antagonistic manner, and they often interrupt and do not listen to one another.

A framework drawing upon cognitive processes in close relationships examined from a developmental perspective (Surra & Bohman, 1991), as well as methods and concepts drawn from attachment theory (Bowlby, 1973, 1980, 1988) and research (e.g., Main, Goldwyn, & Hesse, 2002), were used to examine how representations of the parental marriage relate to emotional attunement during times of stability (prenatally) and times of instability (the transition to parenthood; 24 months after the birth of the first child). In terms of predicting higher emotional attunement between partners, three hypotheses were explored in the study. First, memories of positive content (e.g., of a marriage high in affection, communication and companionship, and low in conflict) should predict higher levels of emotional attunement prenatally. Second, insightful and believable processing of memories of the parental marriage, termed high process, should also predict higher levels of emotionally attunement prenatally.

Third, content and process were categorized into four groups to examine two competing hypotheses: (a) whether memories of negative content in the parental marriage (e.g., of a marriage low in affection and communication, and high in conflict) combined with high levels of processing about the parental marriage should predict higher emotional attunement across the transition to parenthood or (b) whether memories of

negative content in the parental marriage (e.g., of a marriage high in affection and communication, and low in conflict) combined with high levels of processing about the parental marriage should predict higher emotional attunement across the transition to parenthood.

Length of the marriage of the couple will be examined as a possible covariate of emotional attunement between partners both prenatally and at 24 months, because current research indicates that marital quality drops significantly over the first 10 years of marriage, on average, and then drops more gradually in the later years (Glenn, 1998; Vaillant & Vaillant, 1993).

#### Times of Instability and Stability During the Transition to Parenthood

It is a known fact that cognition influences individual behaviors in relationships (Fletcher & Fincham, 1991). Less is known, however, about how cognition influences individual thoughts and behaviors when couples reach a new stage or point in their relationship (Surra & Bohman, 1991). The model outlined by Surra and Bohman (1991) provides a conceptual framework for examining cognitive processing during times of instability and times of stability in the course of relationship development.

Periods of instability in relationships are defined as times when partners become more or less involved in relationships and when dimensions of the relationship, such as attraction, liking, commitment, closeness, behavioral interdependence, and the like are in a state of change (Surra & Bohman, 1991). In contrast, during times of stability, the dimensions of relationships are maintained at a relatively stable level (Surra & Bohman, 1991). Three periods of instability have been defined by Surra and Bohman (1991): (1)

the formation of new relationships, (2) the deterioration of established relationships, and (3) the growth of established relationships. The latter two points articulated by Surra and Bohman (1991) are relevant to the transition to parenthood.

Many couples experience the second form of instability, deterioration, across the transition to parenthood. In one longitudinal study of relatively well-functioning couples having a first baby, 12.5 percent of the parents had separated or divorced by the time the baby was one and a half years old (Cowan & Cowan, 2000). The authors of this study speculated that if this figure were to hold up in studies with a larger number of participants, it would mean that at least 25 percent of American divorces would occur in homes with children who were not old enough to have memories of living with two parents (Cowan & Cowan, 2000). The third type of instability, growth of established relationships, is demonstrated by the findings that parenthood brings many rewards for the couple, including increased social integration spent with relatives, neighbors, and friends (Nomaguchi & Milkie, 2003). This increase in social integration can be considered a period of instability in that partners may become more involved with other individuals, but may also have less time to spend with one another (LaRossa & LaRossa, 1981).

An important point from the Surra and Bohman (1991) paper is that during these times of instability, information processing is higher order, in that cognitive activity about the partner and the relationship during interactions is extensive and processing demands are great. When relationships are unstable, uncertainty about the partner and the relationship is high, and uncertainty can be minimized by increased knowledge and

thinking about the partner. Thus, behaviors exchanged between partners carry information about the others' behaviors and provide information concerning how to evaluate and reconcile the uncertainty one partner is feeling about the relationship.

In contrast, according to Surra and Bohman (1991), during times of relationship stability, information processing is lower order, in that partners process information automatically. This type of processing occurs because behavioral patterns are routinized and their meaning is clear; certainty about how to interpret behaviors is understood. Furthermore, the content and structure of relational knowledge, defined as schemas or knowledge about the other partner and the relationship between the partners, is relatively unchanging because most behaviors are likely to be viewed as consistent with previously existing relational knowledge. While it makes sense that behaviors consistent with prior knowledge are accepted readily, it is also interesting to note that even inconsistent behaviors are absorbed into prior relational knowledge. One such example Surra and Bohman (1991) describe is sentiment override (Weiss, 1980), in which spouses interpret the partners' behaviors to be consistent with their subjective assessments of their marriage, such as how happy or in love they are with one another, even though the behaviors are inconsistent with the way an objective observer would interpret the behaviors (see also Hawkins, Carrere, & Gottman, 2002; Surra & Ridley, 1991). Thus, sentiment override suggests that partners are ignoring or misrepresenting the meaning of behavioral data and relying instead upon what they already know about their partner from their relational knowledge (Surra & Bohman, 1991).



It is important to note that Surra and Bohman (1991) did not operationalize the prenatal period as a time of stability or the transition to parenthood as a time of instability in their article. Instead, it is argued that given the changes that occur during the transition to parenthood, especially in the marriage, the period following the birth of the couples' first child should be a time when partners' uncertainty about the partner and the relationship is likely to be high.

There are, of course, many changes that occur when the female partner is pregnant with the couples' first child (Cowan & Cowan, 2000; Leifer, 1980; Osofsky, 1982; Zajicek, 1981), such as the physical changes during pregnancy. For example pregnant women in their seventh month of pregnancy have reported indigestion, lack of energy, breathlessness, leg cramps, backaches, and tired legs (Zajicek, 1981). There are also psychological changes during pregnancy, including changes in women's and men's moods and concerns (Leifer, 1980; Osofsky, 1982), as well as some sexual difficulties (Cowan & Cowan, 2000). It is not argued that the prenatal period is a time when no changes occur in the couples' relationship, but rather that the prenatal period is a time of relative stability compared to the changes that occur during the transition to parenthood, when the couples have new and changing roles given the birth of their infant.

To test whether or not the transition to parenthood is a more stressful time for couples versus the prenatal period, life events both before and after the birth of the couples' first child were considered. While there are a number of different ways to look at life events, such as the impact of traumatic events or economic/work-related stressors, the focus of the life events in this study was on relationship stressors, since emotional

attunement in the relationship both before and after the transition to parenthood is being examined as the outcome variable. The impact of relational life events such as sexual difficulties, marital separation, major change in arguments with spouse, and divorce was considered both before and after the transition to parenthood. Support would be found for the idea that the transition to parenthood is a time of greater instability for many individuals, whereas the prenatal period is a time of relative stability, if individuals endorse the negative impact ratings of the relational life events specified above to a greater degree postnatally than prenatally.

Taken together, these ideas suggest that during times of instability, such as the transition to parenthood, partners may feel uncertain about their relationship and the roles of their partner, and may be more likely to think about their relationship and partner at a higher order in which their cognitive activity during interaction is more extensive. In contrast, during times of relative stability, such as prenatally, partners should be more certain about their relationship and their partner, and their thinking about the relationship is thus lower order. Specifically, thinking during this time is thought to be automatic, regardless of whether behavior from the partner is consistent or inconsistent with the preexisting relational knowledge. The distinction between times of stability and times of instability is discussed throughout this paper and specific predictions are explored for how representations of the parental marriage relate to emotional attunement during times of stability (i.e., prenatally) and instability (i.e., the transition to parenthood).

### *Changes in the Marriage During the Transition to Parenthood*

In the current study, the transition to parenthood is conceptualized as a time of instability because marital quality varies greatly during this time. When researchers investigate changes in the marriage following the birth of the first child, they find that parenthood may enhance some marriages, undermine other marriages, and have little effect on other marriages (Belsky & Kelly, 1994; Cowan & Cowan, 2000). To understand marital quality after the birth of the first child, it is first important to understand marital quality before the birth of the first child (Belsky et al., 1983; Cowan & Cowan, 2000).

Specifically, couples who reported the most marital difficulties after having a baby were the ones who experienced the most strain in their relationships before they became parents, whereas couples who felt that they had productive ways of working out the differences and difficulties that confronted them reported the least dissatisfaction and distress in the first few years of parenthood (Cowan & Cowan, 2000). Similarly, couples who entered parenthood both before being married and shortly after they were married reported lower marital quality prior to becoming parents compared to couples who had their first baby at the time expected or slightly later (Helms-Erikson, 2001). The results from these data suggest that the differences associated with effects of the transition to parenthood on marriage may, to some extent, reflect differences between the couples who became parents before building a strong relationship foundation (Huston & Holmes, 2004). Thus, the results from these data may be more attributable to couples' lack of relationship building than to simply the effects of parenthood in general (Huston & Holmes, 2004).

In terms of the stability versus instability model described by Surra and Bohman (1991), it may be that couples who have difficult marital relations during times of relative stability (i.e., prenatally) may have an even tougher time relating to their marital partner with positive emotions during times of instability (i.e., the transition to parenthood). In contrast, couples who have fairly harmonious relationships with their partner during times of relative stability (i.e., prenatally) should experience some level of uncertainty regarding their partner and their new family system during times of instability (i.e., the transition to parenthood), but should ultimately continue to have a fairly harmonious relationship with their partner.

Applying these ideas to the current study, it is hypothesized that emotional attunement prenatally is related strongly to emotional attunement at 24 months. Emotional attunement at 24 months is likely to be lower than emotional attunement prenatally, however, especially given the changes that occur in the marriage during the transition to parenthood, such as less time spent talking with one another (McHale & Huston, 1985). Nevertheless, couples who are observed to be emotionally attuned toward their partners prenatally should similarly be emotionally attuned toward their partners at 24 months. In contrast, couples who score at the low end of emotional attunement should be hostile, withdrawn, or use both types of behaviors prenatally, and should increase hostility, withdrawal, or both types of behaviors with their partner at 24 months.

*Expectations and Actual Division of Childcare and Household Labor During the Transition to Parenthood*

One of the most discussed areas of change during the transition to parenthood concerns the division of childcare and household labor (Belsky et al., 1983; MacDermid et al., 1990; Nomaguchi & Milkie, 2003). When compared to couples who do not have children, new parents reported more hours of housework, even after controlling for earlier hours of housework before the baby was born (Nomaguchi & Milkie, 2003). While there are other changes between parents and nonparents, including social integration (time spent socially with relatives, neighbors, and friends outside the neighborhood) and self-efficacy (feeling confident your life will work out the way you want it to), the increased strain of child care and household labor is the area where new parents likely differ from nonparents the most (Nomaguchi & Milkie, 2003).

Additionally, Huston and colleagues have found that when there is a mismatch between new parents' attitudes about appropriate role behavior for men and women, assessed prenatally, and their marital activities, assessed postnatally, individuals reported increased conflict and decreased feelings of love (MacDermid et al., 1990). Given that these changes of increased conflict and decreased feelings of love were not reported by childless couples who had been married a similar amount of time as the new parents, it may be that the stresses of new childcare responsibilities trigger feelings of dissension (MacDermid et al., 1990). Specifically, these feelings of dissension may appear when couples hold traditional attitudes toward marriage but actually take on more nontraditional, or more egalitarian, marital roles (MacDermid et al., 1990). Husbands do

not, on average, increase their contribution to those aspects of the household division of labor that were traditionally viewed as the responsibility of the wife, such as cooking dinner and doing laundry (Belsky et al., 1983).

Furthermore, when asked to rate who will take care of the baby after he or she is born, men's and women's ratings in the last trimester of pregnancy reveal that both husbands and wives think that the wives will be responsible for more of the childcare tasks than the husbands (Cowan & Cowan, 2000). Already both husbands and wives expect less than an equal division in terms of childcare. When the babies are six months old, it turns out that mothers take more care of the baby than either she or her partner predicted (Cowan & Cowan, 2000). The discrepancy between the initial expectations during pregnancy concerning childcare and what actually happens when the baby is born is surprising to both spouses and may translate to disappointment and tension between the partners (Cowan & Cowan, 2000). Additionally, this division in childcare continues into the second year of the baby's life, long past the time when most mothers have returned to work (Cowan & Cowan, 2000).

As attitudes and roles during parenthood change, or fail to change, they can potentially threaten the well being of individual marital partners, as well as the couples' relationship (Sanders et al., 1997). Even though couples generally describe the effects of children in positive ways, such that the children brought them closer by giving them a shared task, increasing interdependence, creating a common goal, and providing shared joys (Hoffman & Manis, 1978), the sum of all positive and negative events of parenthood on the well-being of parents may be weighted in the negative direction (Sanders et al.,

1997). For example, after the birth of the couple's first child, one woman remarked, "Our everyday talk just isn't there any more, because suddenly all the focus is on the baby. And although that brings a lot of joy, you also start to notice those things that have dropped away" (Feeney, Hohaus, Noller, & Alexander, 2001, p. 88).

Similarly, after having a baby, couples have less time to spend with one another (LaRossa & LaRossa, 1981), since they now have to balance multiple roles including that of a parent, partner, worker, etc. A new husband remarked, "...Natalie and I hardly see each other. It seems that while I'm looking after one thing, she's always looking after something else." Natalie, the partner, stated, "I'm so preoccupied with the baby during the day. And I miss our time together as a couple. It takes some time getting used to that by the time each day is over, we just give each other a peck on the cheek and fall into bed like an old married couple" (Cowan & Cowan, 2000, p. 97).

#### *Changes in Marital Quality During the Transition to Parenthood*

Faced with changes in the division of household labor and childcare, in how much time partners can spend with one another, and in how partners react to one another, opportunities to express intimate feelings (e.g., I miss spending time with you) and work out problems (e.g., I would like more help with our son) become even more important. Both in marriage (Noller, 2001) and during the transition to parenthood (Cowan & Cowan, 2000), communication has been described as central to the relationship and to spouses' marital satisfaction. Because emotional attunement, the outcome measure in the present study, is essentially a measure of emotional communication and connection

between marital partners, emotional attunement should similarly be important during the transition to parenthood.

Spouses' ratings of how satisfied they are with the quality of their communication consistently covary with their overall marital satisfaction (Vangelisti & Huston, 1994). Not surprisingly, couples who air their differences, but still listen to and acknowledge one another during marital interactions, have marriages that are stable over time (Gottman, 1994). Similarly, individuals who identify themselves as these types of couples also have greater marital satisfaction than individuals who identify themselves as hostile (Holman & Jarvis, 2003).

In a study that followed couples for six years, predictors of marital stability and increasing marital satisfaction for women included the husbands' expression of fondness toward her, the husbands' high awareness of her and their relationship and her awareness of her husband and their relationship (Shapiro, Gottman, & Carrere, 2000). Other research supports the idea that lack of positive affect in either events-of-the-day or conflict discussions predict later divorcing (Gottman & Levenson, 2000), whereas maintenance behaviors, which are designed to enhance, sustain, or repair relationships, buffer the impact of husbands' negativity on wives' marital satisfaction (Huston & Chorost, 1994). Thus, couples' emotional attunement, that is, how they communicate with one another and connect emotionally, is important to consider when studying marital interactions.

The studies described above are not suggesting, however, that couples with high marital quality do not have conflicts. Nondistressed couples use a variety of constructive



behaviors during videotaped disagreements, including significantly higher levels of empathy, humor, problem solving, smiling, and positive nonverbal behaviors (Weiss & Heyman, 1990). When these couples do complain, the complaint is focused on the partners' behavior rather than on his or her personality (Weiss & Heyman, 1990). Nondistressed couples sometimes use metacommunication to mend errant features in their communication. For example, one partner will note, "You're interrupting me," to which the other partner responds, "I'm sorry. Go ahead." (Gottman, 1994).

In addition to the stable couples who air their differences, but still listen to and acknowledge one another during marital interactions, termed validating, there are other stable couples who minimize conflict, termed minimizing, and other couples who escalate conflict, termed volatile (Gottman, 1994). These three types of couples, validating, minimizing, and volatile, are all considered stable because they have a greater balance of positive to negative behaviors toward one another during marital interactions. It is when couples overwhelmingly respond to one another with negative affect, such as overt hostility, that the stability of the marriage is in jeopardy (Gottman, 1994). A growing body of evidence suggests that hostile conflict between partners is related to distress in the marriage (Weiss & Heyman, 1997), instability of the marriage (Gottman, 1994), and alterations in immunological, endocrine, and cardiovascular functioning (see Fincham, 2003; Fincham & Beach, 1999; and Kiecolt-Glaser & Newton, 2001 for reviews).

Similarly, distressed couples withdraw from one another and do not engage in positive problem-solving behaviors (Christensen & Shenk, 1991). When discussing

problems in the relationship, distressed couples do not suggest possible solutions to problems, often refuse to discuss issues, or physically withdraw from interactions by going to another room or leaving the house. These unhelpful patterns of communication often result in problem issues not being resolved (Halford, Gravestock, Lowe, & Scheldt, 1992).

Applying these ideas to the current study, couples who communicate with one another and stay emotionally connected, that is, individuals who can tell their partners what is bothering them, and know that their partner will be an active listener, and who will not react with withdrawal or hostility, should show higher emotional attunement toward their partner, both before and after the transition to parenthood. Couples who are emotionally attuned are not necessarily those who only have positive exchanges during their interactions, but include couples who have issues with the relationship and who can air these differences with their partner. Given that the positive qualities in marriage (e.g., stability, problem-solving) associated with communication are important to study, emotional attunement, which is defined as how partners listen to, respond to, and validate one another during nonconflictual and conflictual marital interactions and tasks, was examined as the outcome measure.

The next question to be discussed is why some couples are emotionally attuned toward one another, whereas other couples lack emotional attunement by being hostile, withdrawing, or using both types of behaviors with one another, whether the topic of discussion is conflictual or nonconflictual. It is expected that representations of the parental marriage, including both the content of the memories recalled and the process of

thinking about and explaining the parental marriage, should predict emotional attunement during times of both stability (i.e., prenatally) and times of instability (i.e., 24 months after the birth of the first baby).

## Representations of the Parental Marriage

### *The Intergenerational Transmission of Marital Patterns*

There are many ways to conceptualize the notion of beliefs or representations of marital relationships in the family of origin. In this section, first the framework of Surra and Bohman (1991) is used to outline how memories recalled from the parents' marriage will be similarly recreated in the couples' expression of emotional attunement toward one another, especially during times of relative stability such as the prenatal period. Second, two types of cognitive processing about relationships are described: one which focuses on ruminative thoughts about relationships, which is thought to be generally intrusive and aversive (e.g., McIntosh & Martin, 1992), and another which focuses on objective, coherent, honest, nonruminative process about relationships (e.g., Bowlby, 1973, 1980, 1988; Main et al., 2002). These two types of processing are described in relation to how they may influence emotional attunement at 24 months.

### *Memories from the Parents' Marriage*

In terms of recollected memories of the parental marriage, positive aspects of the parental marriage have been found to be transmitted intergenerationally (Belsky & Isabella, 1985; Sabatelli & Bartle-Haring, 2003). Husbands who reported growing up in households in which their parents got along well as spouses were themselves involved in marital relationships that experienced less decline nine months into the transition to parenthood (Belsky & Isabella, 1985).

Both husbands' and wives' perceptions of their family-of-origin experiences emerged as significant factors influencing marital adjustment (Sabetelli & Bartle-Haring, 2003).

In addition to positive qualities, marital conflict has also been found to be transmitted intergenerationally. Longitudinal data from the Berkeley Guidance Study indicated that marital conflict was associated with behavior problems among female children, and when these female children became adults, they exhibited indices of personal instability that were associated with negative relationship qualities (Caspi & Elder, 1988). Data from a national telephone survey indicated that the recollections of an unhappy parental marriage were positively related to marital instability, disagreements, and marital problem behavior for the current marriage of the respondent (Booth & Edwards, 1989). In contrast, recalling an unhappy parental marriage was negatively related to marital happiness and commitment to marriage for the current marriage of the respondent (Booth & Edwards, 1989).

Following the framework proposed by Surra and Bohman (1991), the content of memories from the parental marriage should similarly be recreated in their own marriage during times of relative stability, such as the prenatal period. Considering that cognitions about relationships during times of stability are automatic (Surra & Bohman, 1991), the intergenerational transmission of marital quality should prevail. Specifically, adults who recall negative parental content should similarly recreate these patterns in terms of withdraw, antagonism, or both, with their own marital partner, whereas adults who recall positive memories of their parents' marriage should recreate these patterns in terms of higher emotional attunement toward their partner.

### *Two Types of Processing Information about Relationships*

One type of processing about relationships takes the form of ruminative thinking, which is defined as “thoughts that are conscious, recurrent, instrumentally orientated, and not demanded by the immediate environment” (Martin & Tesser, 1992, p. 21). These thoughts occur repetitively, persistently, are difficult to eliminate, and are deemed to be generally intrusive and aversive (McIntosh & Martin, 1992). In other words, such ruminative thoughts may be considered obsessive worrying about relational issues (Carson & Cupach, 2000). Ruminative thought has been found to correlate positively with unhappiness and negative affect (McIntosh & Martin, 1992). Defined this way, ruminative thought would not seem to bode well for marital relationships.

Although the studies described above did not ask respondents about the parental marriage, it seems likely that if asked to describe the parental marriage, individuals who are already prone to ruminative thought may start to ruminate about their own marriage, especially in terms of negative qualities. Thus, when processing is considered in relation to emotional attunement toward one’s marital partner, individuals who are already prone toward ruminative thought would not show higher emotional attunement toward their partner. Instead, individuals prone to ruminative thought would more likely withdraw, show hostility, or use both types of behaviors with their partner, given their uncertain feelings about the relationship.

In contrast, the second type of processing involves conscious thinking about the parents’ marriage that is objective, coherent, honest, and nonruminative.

Conceptualization of this type of processing of close relationships is taken from

Bowlby's (1973) attachment theory and related research (e.g., the adult attachment interview; Main et al., 2002). According to Bowlby (1973), adults' representations, or working models, of attachment relationships are derived originally from their childhood experiences with their parents. If their parents were loving and responsive to their distress as children, adults will develop a secure representation of attachment such that they will value attachment relationships and provide supportive, nurturing care for their own children. If parents were rejecting or inconsistent in providing care, adults are likely to develop insecure working models and provide unsupportive caregiving to their own children.

While attachment theory suggests that there is continuity from infancy experiences to representations of attachment during adulthood, such representations are nevertheless open to new experiences (Bowlby, 1980). Thus, working models of attachment can be altered (Bowlby, 1988). Attachment researchers have found that earned secure individuals, that is, adults who experienced insensitive, rejecting, or even abusive care during childhood, but who have worked through these experiences and currently have a secure representation of attachment, demonstrate sensitive, empathic parenting practices, in which there is a clear break in the intergenerational cycle (Main & Goldwyn, 1984; Phelps, Belsky, & Crnic, 1998). In their marital interactions, earned secure adults display more positive affect and less withdrawal toward their partners during interactions than insecure adults (Paley, Cox, Burchinal, & Payne, 1999).

Just as child-caregiver interaction patterns can be internalized as representations or working models of attachment, it also seems plausible that parental marital relationships may be

internalized as mental representations of marital relationships, based at least in part on their childhood observations of their parents' own marriage. That is, adults may learn what to expect from and how to treat a spouse based on observations of their own parents' interaction (Jacobvitz & Hazen, 1995). The argument is not that the parental marriage is being internalized as an attachment relationship per se, but that individuals develop representations or working models of marriage based on repeated observations of their parents' marriage.

In the current study, a high level of process is defined as the ability to think openly, honestly, and objectively about the parents' marital relationship, rather than ruminating obsessively about the parents' marital relationship. It is possible for individuals to be high on process if they recall either positive or negative memories of the parents' marriage. In contrast, individuals who spend a long time talking and ruminating about their parents' marriage, but who fail to describe a coherent, consistent picture that describes their parents' marriage would not be considered high on process. For example, such an individual may talk about the current events of the marriage of their stepmother and father for 30 minutes when the interviewer asked about their biological parents' marriage during the respondent's childhood.

While individuals who use ruminative thinking would score low on process regarding the parents' marriage, individuals who spend little time thinking and talking about their parents' marriage would also score low on process. These latter individuals may fail to recall the parental marriage, idealize it, or use both strategies in recalling their parents' marriage. What these two groups of low processing individuals have in common is that they both fail to present a picture of their parents' marriage that is consistent, honest, and objective. While the individuals who could be considered ruminators talk at length about their parents' marriage, like those who discuss little

information about the parental marriage, they fail to connect their own experiences to their parents' marriage and they do not present information that is consistent or coherent.

The second group of individuals who fail to recall, idealize, or use both strategies in describing their parents' marriage may be using defenses (Bowlby, 1973). These defenses may be manifested as idealization, lack of memory, or both, on the adult attachment interview, an interview procedure designed to assess adults' representations of attachment relationships (Main et al., 2002). Some individuals, classified as insecure and dismissing, routinely idealize their childhood relationships with their parents, claiming that their parents were loving or perfect, but are nevertheless unable to recall specific instances to support their claims, to present evidence that contradicts these claims, or both. Individuals classified as dismissing on the adult attachment interview (Main et al., 2002) look different from other individuals in terms of couple interactions. For example, dismissing men were more domineering and showed more stonewalling behavior with their wives than secure men, who spoke openly and objectively about both positive and negative experiences in their childhood relationships with their parents (Babcock, Jacobson, Gottman, & Yerington, 2000). In addition, dismissing wives showed more withdrawal from their husbands during an argument than secure wives (Paley et al., 1999). Also, dismissing female dating partners showed more negative behavior during conflict than secure female dating partners (Creasey, 2002).

Thus, individuals who use defenses such as idealization, lack of memory about their childhood relationships with their parents, or both strategies, may also use these same defenses in their own marriage with their partner. In contrast to the earned secure adults who recognize problems in their childhood relationships with their parents and



who work to break the intergenerational cycle of negativity with their children or their marital partner, individuals using defenses such as idealization, lack of memory, or both, may be more likely to carry forward unwittingly the patterns observed in their parents' marriage and may struggle to reconcile problems in their own marriage.

In sum, high process in the current study refers to the adults' ability to make connections between their own and their parents' marriage and to describe openly, honestly, coherently and objectively the experiences in their own parents' marriage. In contrast, there are two possible manifestations of low process in the current study: (1) speaking at length and displaying ruminative thinking regarding one's parents' marriage and (2) using defenses, that is, failing to recall the parental marriage, idealizing it, or both.

#### *Relation of Representations of the Parental Marriage to Emotional Attunement*

The next question to be addressed is how these ideas by Bowlby (1973, 1980, 1988), that is, the research on earned secure adults and the defenses of idealization and lack of memory, fit into the cognitive processes framework outlined by Surra and Bohman (1991). First, there is empirical support for the intergenerational transmission of two types of aspects from the parental marriage to the current marriage: positive aspects, such as high communication and high affection between partners, and negative aspects, such as high conflict between partners (Belsky & Isabella, 1985; Booth & Edwards, 1989; Caspi & Elder, 1988; Sabatelli & Bartle-Haring, 2003). Given this empirical evidence, it is hypothesized that the content of memories about conflict, affection, and

communication recalled in the parental marriage should be recreated in the couples' own marriage during the prenatal period.

Specifically, individuals who recall positive or harmonious parental content should show higher levels of emotional attunement prenatally, whereas individuals who recall negative parental content should show lower levels of emotional attunement prenatally. The reason why these predictions are made at the prenatal assessment is because this time is presumed to be relatively stable because couples have not yet entered the transition to parenthood and experienced the changes in their marriage expected to accompany the introduction of the new baby. Thus, patterns observed from the parental marriage, whether positive or negative, should be similarly recreated in the couples' own marriage.

In the current study, low conflict was coded as part of positive or harmonious parental marriages because memories of low conflict entailed some problems or issues apparent to the adult being interviewed, but these problems did not pervade the parental relationship. In contrast, high conflict was coded as part of negative parental marriages because memories of high conflict entailed great amounts of visible tension and distress to the parental marriage, which were apparent to the adult being interviewed. Thus, the argument being made is not that conflict is negative for a marriage, but that the perception of great amounts of conflict, articulated by the respondent as pervasive and problematic to the parental marriage, were coded as negative aspects of the parental marriage.

Second, individuals high on process should show higher emotional attunement toward their partner prenatally, whereas individuals low on process should show lower emotional attunement prenatally. Individuals high on process may have an edge over individuals low on process in terms of higher emotional attunement because the former individuals are open to problems in their parents' marriage, in terms of discussing these issues openly and making connections between their own and their parents' marriage. These individuals have not minimized or downplayed marital problems observed in their parents' marriage; instead, they acknowledge these issues and note how such problems may impact them in their own marriage. Individuals with high process should be able to listen to and validate their partner in terms of greater emotional attunement, compared to individuals who feel defensive or angry that their relationship problems are being shared with strangers. The latter individuals may feel that if their marital issues are not discussed out loud with one another, they have no problems in their marriage.

The aforementioned predictions focus on the prenatal assessment, that is, a time of relative stability. But how might representations of the parental marriage impact individuals during the transition to parenthood, a time of relative instability for most couples? When considering that both content and processing of representations of the parents' marriage are important to consider in understanding emotional attunement during the transition to parenthood, the following groups can be formed to examine the combination of content and process: (1) adults who recall high content and who are high on process; (2) adults who recall low content and who are also high on process; (3) adults who recall high content but who are low on process; and (4) adults who recall low

content and who are also low on process. A visual depiction of the four groups is in Figure 1.

Again, it seems that individuals who are high on process should score higher in terms of emotional attunement, whether the time is one of stability or one of instability. Individuals high on process should be able to think coherently and objectively about the parents' marriage and the transition to parenthood should not undermine this ability.

The role of content during the transition to parenthood, however, is less clear. While it seems that individuals lacking process, regardless of the type of content recalled, should show lower emotional attunement because of their unwillingness or inability to portray their parents' marriage in an objective, honest, and consistent way, what role would content play when coupled with high process? It seems that two hypotheses could be tested. First, it is hypothesized that during the transition to parenthood, adults who remember a disharmonious parental marriage (low content) but who are high on process should score higher on emotional attunement at 24 months compared with other individuals. Individuals recalling low parental content who are high on process may have an advantage over individuals who remember high content and who also have high process.

Even though these individuals share high process, that is, they both can talk openly about their parents' marriage and make connections between their own and their parents' marriage, individuals who remember high parental content may not expect marital stress to accompany the transition to parenthood, and thus become disappointed and frustrated with the changes that occur during this time, in particular the unequal

division of household labor and childcare. In contrast, individuals who recall low parental content may already have a model of marriage in which conflict and the lack of affection or communication were evident in the parental marriage, and thus may anticipate similar issues in their own marriage, particularly during stressful times such as the transition to parenthood.

This latter prediction is supported by another study in which the initial level of and change in maintenance, a construct defined as enhancing, sustaining, or repairing relationships, were investigated during the transition to parenthood. Individuals with the most harmonious memories of their parents' marriages (e.g., memories of low conflict, high affection and communication) reported the greatest decline in maintenance during the transition to parenthood (Curran, Hazen, Jacobvitz, & Feldman, in press). It may be that individuals who recall mostly positive qualities between parents are less prepared for the challenges they face with a new baby, whereas individuals' recalling high conflict and low affection and communication in the parental marriage may expect marital problems to occur with major life transitions, and, thus, they may be more inclined than individuals with a harmonious model of marriage to avoid such problems by increasing communication in their marriage.

The second hypothesis is that individuals who remember high parental content and who are high on process may score higher in terms of emotional attunement compared to other individuals. An alternative explanation for the results of the study described above (Curran et al., in press) is that individuals who remember high parental content used maintenance less because they had less need to repair their marriages.

Especially during the transition to parenthood, individuals who recall high parental content and high process may anticipate similar harmony in their relationship as before the transition to parenthood. These individuals may therefore continue to manifest behaviors carried over from this positive model of marriage in their marital interactions.

In summary, it is hypothesized that memories of parental content should be recreated prenatally, in that individuals should mimic positive or negative experiences observed in the parental marriage relatively automatically since the prenatal period should be a time of relative stability. Before the child's birth, emotional attunement should be predicted by memories of high content, that is, memories of high affection and communication and low conflict. If information processing during this time is lower order and thinking is automatic, individuals, in general, should carry over their memories of the parental marriage since they are not likely to think about them deeply (Surra & Bohman, 1991).

In addition, it is hypothesized that individuals with high process, that is, individuals who can talk openly about the parents' marriage and who can make connections between their own and their parents' marriage, may also show higher emotional attunement than individuals low on process prenatally. Even though the prenatal period is apt to be a time of lower order, automatic processing, it is expected that individuals who, in general, process information at a higher level will be less likely to carry over negative models of the parental marriage, even in relatively stable times. This rationale comes from ideas from attachment theory (Bowlby, 1973) and attachment methodology (Main et al., 2002) in that individuals who employ defenses and who are

not able to access openly and discuss their parents' marriage objectively, or who idealize their parents' marriage, may not realize the problems with avoidance of conflict in their own marriage, and may carry forward the model that conflict in marriage is best avoided.

Finally, two competing hypotheses are tested in terms of predicting emotional attunement at 24 months: (1) low content and high process should predict higher emotional attunement at 24 months compared to all other groups because partners may be more likely to anticipate negative changes and stresses during the transition to parenthood, versus (2) high content and high process should predict higher emotional attunement at 24 months compared to all other groups because the marriage should be harmonious already. Given that the transition to parenthood is a stressful time for many couples, and that many changes occur in the marriage between the partners, as described earlier, it is an empirical question as to how memories of the parents' marriage are learned and enacted in the couples' own marriage 24 months after the birth of their first child.

#### How Partners Respond to One Another: Current Research and Methodology

This section briefly outlines the methodological advantages of the current study. In a review of over 100 longitudinal studies of marriage published, the topics of marital satisfaction and stability predominate strongly over other research questions (Karney & Bradbury, 1995). On the other hand, some areas of research have yet to be explored in as much depth. For example, observational studies of marital functioning are still lacking. In a review of over 100 published longitudinal studies of marriage, 77% of these studies gathered data solely using self-report measures (Karney & Bradbury, 1995). Whereas 57% of the longitudinal studies contained data from both spouses, the remaining 43% of

studies included data from only one member of the dyad. Data from married individuals are, of course, acceptable for examining intraindividual components of marriage (e.g., personality), but data from both spouses are necessary for investigating interpersonal aspects of marriage (Karney & Bradbury, 1995).

While self-report measures are important to understanding marriage, they also have the potential problem of common method variance, in which researchers try to explain one questionnaire solely with another questionnaire (Gottman & Notarius, 2002). In any case, what longitudinal research has revealed about marriage is dependent heavily on the self-reported perceptions of married individuals (Karney & Bradbury, 1995). More studies would benefit from the use of observational components of marriage, which can enhance the understanding of marriages by offering more depth into the mechanisms of marriage, and reveal another side to the interactions that lie beyond the usual awareness of respondents, even if they are truthful and objective about their interpersonal interactions (Gottman & Notarius, 2002). Thus, the idea is not to eliminate self-report measures by respondents, but to include multiple methods, including self-reports by both husbands and wives and observational coding by independent raters, in studying marriages (Gottman & Notarius, 2002).

When these observations of marital partners are being done, they are usually taking place within laboratories. Indeed, there have been very few studies of marital interactions outside the laboratory setting, and this direction needs further exploration (Gottman & Notarius, 2002). A typical paradigm of observational studies has been to focus on conflict discussions and the negative behaviors that identify unhappy and happy



couples. Now, researchers are being encouraged to look beyond conflict to understand better the contribution that positive affect and positive behaviors (e.g., affection, intimacy) have on marriages (Gottman & Notarius, 2002). In sum, current research needs to build upon past research by including both members of the couple, more naturalistic observational components of the marriage, and assessments of both positive and negative aspects of marriage to explain why partners treat each other the way they do.

In the current study, dyadic emotional attunement between husbands and wives was observed both prenatally and 24 months after the birth of the couples' first child in the home of the couple. In addition, individuals were interviewed about their parents' own marriage, allowing them to self-identify the content of memories recalled from the parents' marriage from their own perspective and allowing objective observers to assess whether or not they openly examine their parents' marriage and to identify how well they can make connections between their parents' and their own marriages. These methodological components take into consideration the points raised by other researchers concerning the value of using multiple methods (self-reports, interviews, marital observations), observation of positive affect between partners, and a naturalistic setting (i.e., the couples' home).

## Method

### *Participants*

A total of 125 couples were recruited from the greater Austin, Texas, area to participate in a larger longitudinal study investigating family relationships across the transition to parenthood. Couples who were living together and expecting their first child were recruited through birthing classes, public service radio announcements, and flyers distributed at maternity stores. Of the couples in the sample, 94.4% were married.

Demographic questions were asked of each individual at the prenatal assessment. For husbands, the most commonly endorsed family income was \$45,001 to \$60,000, with 26.6% of husbands reporting this category. For wives, the most commonly endorsed family income was \$30,001 to \$45,000, with 32.5% of wives reporting this category. See Table 1 for other family incomes reported by husbands and wives. Reports from husbands and wives occasionally differed, although overall the relationship between husbands and wives about family income was relatively high ( $r = .89, p < .001$ ).

The median age for husbands was 30 years, with husbands ranging in age from 19 to 50 years. The median age for wives was 29 years, with wives ranging in age from 16 to 42. The majority of participants reported education beyond high school, with 60% earning a bachelor or graduate degree and 30% reporting some college or trade/business school coursework. Ethnic distribution was predominantly Caucasian (85%) with 8% Hispanic, 3% African American, and 4% biracial or other.

In return for their participation, couples were offered a \$50 savings bond for their child at each phase, bimonthly project newsletters, and other gifts, such as children's

books and t-shirts for the toddler. The purpose and procedures of the research project were explained, questions were answered, and written informed consent was secured in accordance with the stipulations of the Institutional Review Board at the University of Texas at Austin.

### *Procedures*

Data were collected at five time points: prenatally (when the woman was in her third trimester of pregnancy), 8 months postpartum, 12 to 15 months postpartum, 24 months postpartum, and 7 years postpartum. Only the results from the prenatal and 24 month visits are reported here. At the prenatal visit, adults completed separately the Grandparent Marriage Interview (Jacobvitz, 1992). Prenatally and at 24 months, each couple was videotaped in their home during several ten-minute discussion tasks. Prenatally, individuals completed the Grandparent Marriage Interview first and then participated in the ten-minute discussion tasks.

### *Measures*

*Emotional attunement prenatally.* Each couple was videotaped during three, ten-minute discussion tasks in their home. First, couples were asked to discuss the ways in which their relationship with each other had changed since the pregnancy. Second, each individual was asked to write down independently the answers to several questions pertaining to their relationship, prior to the videotaping the couples' discussion. Questions included "What do you like about your partner?"; "Please name the way you get along best with your partner"; "What would you like to change about your partner?"; and "Please name the area in which the two of you have the most differences."

This second task was done for the purposes of informing the researcher of possible topics toward which to guide the couples' discussion. Knowing how both individuals had responded on the written questionnaires, the researcher tried to guide the discussion toward areas of substantial conflict as noted in their responses. The couples were then asked to either discuss an agreed upon area of greatest difference or attempt to come to an agreement on the greatest source of disagreement in their marriage. The third task required that the couples plan an activity that they would do together. The individuals typically sat beside each other on a couch and were filmed with a stationary camera. The researcher left the room for each ten-minute discussion task.

The couples' videotaped behaviors were analyzed and coded at the dyadic level according to a macro-analytic scale called emotional attunement by two trained coders. When coding emotional attunement, moments of conflict were emphasized, as well as overall quality of the interaction. In other words, emotional attunement was not coded additively, according to frequencies of positive versus negative affect, or responsive versus nonresponsive behaviors, but in a more holistic way, in which the overall quality of the couples' emotional communication was assessed. Thus, this scale examined the global quality of emotional attunement across tasks and thus was not very task-dependent.

Low scores on dyadic emotional attunement reflect a distant or inflamed emotional tone. Low scores may reflect a high degree of antagonism and defensiveness; there is a sense that these couples do not experience pleasure or a positive regard for the other. Alternatively, low scores may reflect emotional distance; there may be excessive concern for the task parameters such that the couple is unable to sustain interaction for

the duration of the tasks, or their concern for the tasks exceeds that for one another. In contrast, high scores on the dyadic coding of emotional attunement reflect a sense of emotional connectedness as noted in verbal and nonverbal cues of emotional responsiveness and availability. The couple tolerates a wide range of affect without escalation or disengagement. See Appendix A for complete coding criteria.

Two coders independently rated each videotaped interaction and discrepancies were resolved by discussion between the two coders. Raters were blind to the study hypotheses and 100% of the videotapes were double coded. Four interactions could not be rated because the tapes were inaudible. Thus, there were 121 couples who were coded on this measure. The intraclass correlation coefficient between the two coders for 110 couples was .95.

*Emotional attunement at 24 months.* Each couple was videotaped during two ten-minute discussion tasks in their home. First, couples were asked to discuss the most striking similarity between the spouses' relationship with his or her parents and how the spouse interacts with his or her own child. The wife was asked to talk about a similarity between the husbands' relationship with his mother or father during childhood and the way he relates to their own child. Then the husband was asked to discuss whether or not he agrees with the wife. The couple was then asked to reverse roles, whereby the husband talked about a similarity between the wives' relationship with her own mother or father during childhood and the way she relates to their own child. Then the wife discussed with the husband whether or not she agreed with him.

For example, one wife discussed how she thought her in-laws read a lot of books to her husband when he was a child, and now she sees that the husband reads a lot of books to their son. She remarked that because his parents read so much to him as a young child, he now reads a lot of books to their son. She then asked him if he agreed with her assessment. The husband remarks that yes, his parents did read a lot of books to him and that her explanation made sense as to why he reads to their son. In addition, he tells his wife that over the years he has really grown to appreciate the time he spends reading and that he wants to share that love of reading with his son, which is why he really enjoys reading to him. Then the husband discusses a similarity between her relationship with her own parents and her relationship with their son. The researcher stated that the order of who went first was not important.

The second task addressed the issue that raising a child takes a lot of time and energy. Couples were asked to discuss whether or how they would like to change the way they divide up the household and child care tasks in their household. Similar to other studies examining the transition to parenthood (Cowan & Cowan, 2000; Feeney, Alexander, Noller, & Hohaus, 2003), the tasks were changed from the prenatal to postnatal period to have couples discuss issues that were most relevant to them at that time.

Once again, the individuals typically sat beside each other on a couch and were filmed with a stationary camera. The researcher left the room for each of the two ten-minute discussion tasks. Coding of these 24 month interactions followed the same coding system described above for prenatal emotional attunement. (See Appendix A for

complete coding criteria). A different set of coders from the prenatal assessment rated each videotaped interaction independently and discrepancies were resolved by discussion between the two coders. Raters were blind to the study hypotheses and 90% (82 out of 91) of the videotapes were double coded. The intraclass correlation coefficient between the two coders on 82 couples was .95. Thus, there were 91 couples who were coded on this measure.

*Representation of the parents' marriage.* To assess adults' recollections of the quality of their parents' marriage, a semi-structured interview, the Grandparent Marriage Interview, or GMI, was developed (Jacobvitz, 1992). Each member of the couple was interviewed separately for about 30 to 40 minutes and asked to describe their parents' marital relationship, to name three adjectives that describe their parents' marriage, and to support them with episodic memories. (See Appendix B for the complete interview questions). Interviews were audiotaped, transcribed, and rated on five 7-point scales (1 = low or absent to 7 = high). Three of the five scales assessed the quality or content of their parents' marriage: conflict, affection, and communication.

Low scores on conflict reflect very open, frequent, and fairly severe conflict which was extremely problematic for the marriage, as indicated by the individual being interviewed. In contrast, high scores on conflict reflect little or no mention of conflict in the parents' marriage or statements that while conflict was present, it was minor, infrequent, and not problematic to the marriage. Low scores on affection reflect statements that there was no affection between the parents, whereas high scores on affection reflect reports of high and spontaneous displays of verbal affection and

sentimentality, physical affection and sentimentality, or both. Low scores on communication and companionship, hereafter referred to as communication, reflect no shared activities, mutual discussions, or fun times together, whereas high scores on communication reflect open discussions of parenting or marital issues, dates, or having fun together.

The other two scales, insight and richness, measured how participants talk about their parents' marital quality, or process. Low scores on insight reflect no indication of a link between similar characteristics found in the parents' marriage to the current marriage. Conversely, high scores on insight reflect a strong focus or connection between the parents' marriage and how it has affected the individual as a person, as a couple in their marriage, or both. Finally, low scores on richness reflect an inability to provide a believable picture of the parents' marriage, whereas high scores on richness reflect a consistent, detailed picture of the parents' marriage with several supporting episodic examples (i.e., the adults' story, overall, is very believable). The defenses described by Bowlby (1973), whereby individuals selectively exclude information from their memory, are manifested as lack of insight and richness about the parental marriage as coded by the observers. (See Appendix C for complete coding criteria, and see Appendix D for examples of interviews that would be considered low, medium, and high for each of the five scales i.e., conflict, affection, communication, insight, and richness).

Two coders independently rated each transcript and discrepancies were resolved by discussion between the two coders. Raters were blind to the study hypotheses and 100% of the videotapes were double coded. Intraclass correlation coefficients between



coders were .95 for conflict, .94 for affection, .94 for communication, .88 for insight, and .92 for richness. Two couples could not be coded because of inaudible videotapes. Thus, there were 123 couples, or 246 individuals, who were coded on this measure.

*Relational life events.* To test whether or not the transition to parenthood is a more stressful time for couples versus the prenatal period, life events both before and after the birth of the couples' first child were considered. Individuals were asked to complete separately the Life Events Survey (LES; Sarason, Johnson, & Siegel, 1978). Only the items concerning relational life events were included in this analysis. Those items included sexual difficulties, marital separation, major change in arguments with spouse, and divorce.

Individuals were asked to respond to only those events which they had experienced in the past year and then to rate that event in terms of the extent to which they found the event either having a positive or negative impact on their life. For example, a rating of -3 indicated a very negative impact, a rating of 0 indicated no impact positive or negative, and a rating of +3 indicated a very positive impact. Scores were recoded in that ratings of -3, -2, and -1 were considered a negative life impact and received a score of 1, whereas ratings of 0, 1, 2, and 3 were considered no impact or a positive impact and received a score of 0. The full range of negative ratings was not used because it was only of interest to note whether or not individuals felt the impact of the event was negative or neutral/positive. Thus, individuals, after the recoding, could receive a score of either 1 (negative impact) or 0 (neutral or positive impact). The four relational items were summed together to form a relational total score, with a range of 0 to 4. There were 250

individuals who completed this measure prenatally and 102 individuals who completed this measure at 24 months.

*Sample size at each phase and attrition*

In terms of sample size prenatally, there were two couples missing the Grandparent Marriage Interview and four couples missing emotional attunement prenatally. Of the four couples missing emotional attunement prenatally, however, two couples were also missing the GMI prenatally. Thus, the sample size prenatally was 121 couples.

In addressing attrition at 24 months, several factors need to be considered. First, the original sample size was 125 couples. Second, there were 32 couples who had emotional attunement data prenatally, but who did not have emotional attunement data at 24 months. Third, there were 18 couples who had separated or divorced by the 24 month assessment who did not participate in marital interactions; these divorced or separated couples are included in the number of couples without emotional attunement at 24 months. Thus, the number of people who dropped out due to attrition (divorce/separation or any other reason) was 32 couples.

Couples without data at 24 months ( $N = 32$  couples) did not differ from couples who did have data at 24 months in terms of husbands' or wives' scores on any of the study variables (prenatal and 24 month emotional attunement, content, process, grouping of content and process), prenatal employment status, prenatal individual income, being a student prior to pregnancy, option of maternity/paternity leave, ethnicity or education. Couples without data at 24 months did differ from couples with data at 24 months in

terms of prenatal family income, in that individuals who reported lower prenatal family incomes (i.e., \$0 to \$15,000 and \$15,001 to \$30,000) were less likely to have emotional attunement data at 24 months compared to individuals who reported incomes at higher levels,  $X^2(4, N = 122) = 12.45, p < .05$  for husbands and  $X^2(4, N = 122) = 17.78, p < .05$  for wives, respectively. Separate chi-square statistics are reported for wives and husbands in terms of attrition because prenatal family income was asked of each individual and there was some disagreement about family income. For the couples who were divorced or separated by 24 months ( $N = 18$ ), their prenatal family income is reported in Table 2. For this group of separated or divorced individuals, reports of family income were correlated,  $r = .87, p < .001$ .

The actual sample size at 24 months differed slightly from the attrition rate described above for two reasons. First, in addition to the 32 couples who dropped out by 24 months, there were two couples who did not have emotional attunement data prenatally or at 24 months, but did have GMI data prenatally. These two couples were not included in the attrition count because they did not match the description of attrition. Specifically, these two couples did not have emotional attunement data prenatally, whereas the couples included in the attrition count did have emotional attunement prenatally but not at 24 months. Second, there were two other couples who were missing emotional attunement data prenatally and the GMI prenatally because of inaudible tapes, but who had emotional attunement data at 24 months. Thus, the sample size at 24 months was 89 couples.

### **Plan for Analysis**

To present a parsimonious picture of the recollections of the parental marriage from the Grandparent Marriage Interview, or GMI, composite scores were used. Specifically, the scores on conflict, affection, and communication were summed together to produce a content scale. Additionally, insight and richness were summed together to produce a process scale. For husbands, the reliability of the content scale was  $\alpha = .59$  and the correlation between insight and richness for the process scale was  $r = .69, p < .001$ . For wives, the reliability of the content scale was  $\alpha = .70$  and the correlation between insight and richness for the process scale was  $r = .46, p < .001$ . Correlations among the GMI scales for husbands and wives are presented in Table 3 and Table 4, respectively. For husbands and wives, content was positively related to conflict, affection and communication, and process was positively related to insight and richness. Interestingly, content was not significantly related to process for husbands, whereas content was negatively related to process for wives.

To look at the joint impact of content and process on emotional attunement, individuals were separated into four groups based on their scores on the GMI: (1) individuals high on content and high on process, (2) individuals low on content and high on process, (3) individuals high on content and low on process, and (4) individuals low on content and low on process. (See Figure 1). Content and process were categorized as high or low based on median splits. Scores of content or process at or above the median were placed in the high group, whereas scores of content or process below the median were placed in the low group. Thus, the main effects of content and process were

estimated, along with the joint impact of different combinations of content and process in relation to emotional attunement.

When combining parental content and process from the GMI into the four groups (high content-high process; low content-high process; high content-low process; and low content-low process), effects coding was used to categorize individuals into their respective groups. Effects coding uses -1, 1, and 0, with the purpose of contrasting subgroups with a sample average, whereby the regression coefficient for any group represents the difference between the expected value for that group and the unweighted mean of the expected values for all subgroups (Hardy, 1993). See Appendix E for the syntax used to set up the effects coding for the groups. There were two different reference groups in this study: the first reference group recall low parental content and are high on process and the other reference group recall high parental content and are also high on process.

Path analyses in AMOS were used to test the previously discussed hypotheses. While the separate path models specify husband predictor variables (i.e., husband content, husband process, and the combinations of husband content and husband process) and wife predictor variables (i.e., wife content, wife process, and the combinations of wife content and wife process), the hypothesized paths between these individual predictors and dyadic outcomes are the same. There were no predicted gender differences.

The analyses for husbands and wives are presented separately because there is no current reason to assume husbands or wives would recall their parents' marriages differently. In a review of the longitudinal research on marriage, there was little support

for gender differences (with the exception of income and employment) on variables such as marital satisfaction, sexual satisfaction, age at marriage, current age, education, unhappy childhood memories, and parental divorce (Karney & Bradbury, 1995). To test the equality of the proposed models between husbands and wives, a multiple group analysis in AMOS was used.

In terms of the prenatal period, two hypotheses are made. First, following Surra and Bohman's (1991) framework of cognitive processes during times of stability, content should predict prenatal emotional attunement. Thus, there is a direct path from content to prenatal emotional attunement (but not to 24 month emotional attunement). Second, following the theoretical constructs from attachment theory (Bowlby, 1973, 1980) and attachment methodology (Main et al., 2002), process should predict prenatal emotional attunement. Thus, there is a direct path from process to prenatal emotional attunement (but not to 24 month emotional attunement).

For the predictions involving the combinations of content and process in terms of emotional attunement at 24 months, the following models are explored. In one model, along with the predictions above for the prenatal assessment, individuals low in content and high in process will show a greater increase in emotional attunement at 24 months compared to other adults. In a separate model, and along with the predictions above for the prenatal assessment, individuals who are high in content and high in process will show a greater increase in emotional attunement at 24 months compared to other adults.

To explore these hypotheses and models described above, six models were tested separately. In all of the models, it is hypothesized that content will be recreated prenatally

and high process will predict higher emotional attunement prenatally. There are, however, different tests that involve combinations of content and process, as described below. Also, the group that is expected to show a greater increase in emotional attunement at 24 months (either low content and high process or high content and high process, depending on the model specified) is referred to as the reference group. This group is not seen in the diagrams of the path models.

- The first model involves the predictions of content and high process described above. Here, it is hypothesized that low content and high process will predict a greater increase in emotional attunement at 24 months. This model is tested for husbands. (See Figure 2).
- The second model involves the same predictions as the model specified above. The only difference is that this model is tested for wives. (See Figure 3).
- The third model involves the predictions of content and high process described above. Now it is hypothesized that high content and high process will predict a greater increase in emotional attunement at 24 months. This model is tested for husbands. (See Figure 4).
- The fourth model involves the same predictions as the model specified above. The only difference is that this model is tested for wives. (See Figure 5).
- The fifth model is the multiple group analysis between husbands and wives, involving the predictions of content and high process described above. Here it is hypothesized that low content and high process will predict a greater increase in emotional attunement at 24 months.

- The sixth and final model is also a multiple group analysis between husbands and wives. The only difference is that here, it is hypothesized that high content and high process will predict a greater increase in emotional attunement at 24 months.

In addition to these models and their specific predictions, length of marriage will be tested as a possible covariate to determine whether or not it impacts emotional attunement prenatally, at 24 months, at both times, or at neither time. If length of marriage is indeed related to the outcome variable or variables of emotional attunement, it will be included as an additional variable in each of the six path models proposed above.

In summary, the data should show that (1) content recalled from the parents' marriage should predict emotional attunement prenatally, (2) individuals high on process regarding the parents' marriage should show more emotional attunement prenatally, (3) one of two competing hypotheses are supported: individuals recalling low content and high process should show a greater increase in emotional attunement at 24 months compared to other adults; or individuals recalling high content and high process should show a greater increase in emotional attunement at 24 months compared to other adults.



## Results

### *Descriptive Statistics and Correlations*

Descriptive statistics for husbands and wives on the GMI are in Table 5. Significant gender differences were found for GMI richness, indicating that wives were richer in their recollections of the parents' marriage than husbands,  $t(122) = -2.16, p < .05$ , and also were higher in process (more insightful and more rich) on the GMI,  $t(122) = -2.47, p < .05$ . Marginally significant gender differences were found for GMI insight, indicating that wives were marginally significantly more insightful than husbands,  $t(122) = -1.74, p = .085$ , and wives remembered marginally significantly higher amounts of parental conflict on the GMI than husbands,  $t(122) = -1.85, p = .067$ .

### *Length of Marriage as a Covariate*

Length of the marriage of the couple was examined as a possible covariate of emotional attunement between partners both prenatally and at 24 months. Correlations done separately between husbands and wives in terms of length of marriage and emotional attunement prenatally and at 24 months showed the following results. Length of marriage was not significantly related to emotional attunement prenatally for either husbands ( $r = .12, p = .20$ ) or for wives ( $r = .14, p = .12$ ). In contrast, length of marriage was marginally significantly related to emotional attunement at 24 months for both husbands ( $r = .19, p = .069$ ) and for wives ( $r = .19, p = .075$ ). Thus, length of marriage was considered in terms of emotional attunement at 24 months in the models being tested in AMOS, but length of marriage was not considered for emotional attunement prenatally.

*Relational Life Events as a Test of the Greater Instability of the Transition to Parenthood Compared to the Prenatal Period*

Surra and Bohman (1991) proposed different patterns of cognitive processing during times of stability versus times of instability in relationships. This framework, however, was not specific to the transition to parenthood or to the prenatal period of the couples' relationships. Thus, it was necessary to test whether or not couples viewed the transition to parenthood as a greater time of instability and the prenatal period as a time of relative stability. The impact of four negative relational life events (e.g., sexual difficulties, marital separation, major change in arguments with spouse, and divorce) were summed together to produce a total score of negative relational life events both prenatally and at 24 months. If individuals reported a greater mean of negative relational life events at 24 months, this finding could provide support for the idea that the transition to parenthood might be considered a time of greater instability for many couples.

A repeated measures ANOVA was performed separately for husbands and wives, in which there were two levels of relational life events (life events prenatally and life events at 24 months). For husbands, the mean of negative relational life events was .37 (SD = .60,  $N = 102$ ) prenatally and .53 (SD = .79,  $N = 102$ ) at 24 months. The results from the repeated measures ANOVA for husbands show the difference between these means was marginally significantly different,  $F(1, 101) = 3.87, p = .052$ . For wives, the mean of negative relational life events was .48 (SD = .61,  $N = 102$ ) prenatally and .73 (SD = .87,  $N = 102$ ) at 24 months. The results from the repeated measures ANOVA show the difference between these means was significantly different,  $F(1, 101) = 7.65, p < .01$ .

Taken together, these results suggest that husbands (albeit, marginally) and wives report more negative relational life events at 24 months compared to prenatally. Thus, there is support for the idea that the transition to parenthood may be a greater time of instability for individuals rather than the relatively stable prenatal time.

#### *Explanation of Path Analysis and Fit Indexes*

The proposed models were assessed using path analysis. First, the model was tested for husbands and then the model was tested for wives. Next, the multiple group analysis was tested to ascertain whether there were differences in the model between husbands and wives. All models were estimated using Amos 5.0 (Arbuckle, 2003) with direct maximum likelihood using all available data, thereby allowing for the ability to maximize the sample size for the study.

Given that each of the various goodness-of-fit indices operates on different assumptions, it has been suggested by many authors that multiple indexes of overall fit, conveying a consistent evaluation, be included (Hoyle & Panter, 1995; Kline, 1998; Tanaka, 1993). The  $\chi^2$  test, along with the degrees of freedom, sample size, and  $p$ -value typically assess how well the model fits the data, with optimal fit indicated by a value of 0 (Hoyle & Panter, 1995). Other fit indexes typically assess the degree to which the proposed model is superior to an alternative model, usually the null or independence model, with larger values indicating greater improvement of the model being tested over the null model (Hoyle & Panter, 1995). These fit indexes include the Tucker Lewis index (TLI), the Incremental fit index (IFI), the Normed fit index (NFI), and the Comparative fit index (CFI).

Specifically, the TLI and the IFI compare the lack of fit of the proposed model to the lack of fit of a baseline model, usually the independence or null model (Hoyle & Panter, 1995). The NFI and CFI assess the proportion in the improvement of the overall fit of the proposed model relative to the null model; the CFI may be less affected by sample size than the NFI (Kline, 1998). Finally, the root-mean-square-error-of-approximation (RMSEA) is a measure of approximate fit and tests the hypothesis that the population RMSEA parameter is less than 0.05 (Browne & Cudeck, 1993). In sum, the following fit indexes were used to assess model fit:  $\chi^2$  test, along with the degrees of freedom, sample size, and *p*-value, TLI, IFI, NFI, CFI, and RMSEA.

A single index only reflects a particular aspect of fit and a favorable value on one index does not indicate good fit by itself. Even the finding of favorable values on several indexes does not necessarily demonstrate good fit. The reason is because fit indexes reflect only the overall fit of the model (Kline, 1998). Thus, when evaluating the fit indexes, the following criteria can be used as a general guideline. When interpreting the  $\chi^2$  test, the null hypothesis under test is that the model fits the data, so it is preferable to find a small, nonsignificant chi-square value. Although the cutoffs for interpreting this statistic vary, in general, a  $\chi^2$  ratio ( $\chi^2$ /df) between 1 and 3 indicates adequate fit (Arbuckle, 2003). Although there is some debate regarding cutoffs, .90 stands as the agreed-upon cutoffs for the overall fit indexes (Hoyle & Panter, 1995). Thus, .90 represents adequate fit between the data and the proposed model for the CFI, NFI, IFI, and TLI. Finally, when interpreting the RMSEA, a favorable value is less than .06 (Hu & Bentler, 1999).

### *Presentation of Results from Path Analysis*

Regression coefficients from the path analysis are reported in Figures 6 to 9 and fit statistics are reported Table 6 for each model. Additionally, when examining groups based on combinations of content and process in terms of predicting emotional attunement at 24 months, mean differences among groups are reported in Appendix F to Appendix I.

### *Separate Path Analysis Models for Husbands and Wives Where Content is Low and Process is High*

The first model tested was for husbands, in which it was hypothesized that high content should predict high emotional attunement prenatally, high process should predict high emotional attunement prenatally, and low content and high process should predict a greater increase in emotional attunement at 24 months. Thus, individuals with low content and high process are the reference group and are not visible in the model. Length of relationship was a covariate in terms of emotional attunement at 24 months

Figure 6 illustrates the results of this path analysis. Of the hypothesized paths, only process was significantly related to emotional attunement prenatally ( $\beta = .24, p < .01$ ). Examination of the fit statistics in Table 6 suggests a mixed picture for this model. The chi-square test was marginally significant and the RMSEA was above .06, suggesting a less than adequate fit. On the other hand, the CFI, NFI, IFI, and TLI were all above .90, suggesting an adequate fit. Taken together, this model for husbands, with the reference group of low content and high process, suggests a less than adequate fit to the data.

The second model tested was for wives, in which it was hypothesized that content should be recreated in terms of emotional attunement prenatally, high process should predict emotional attunement prenatally, and low content and high process should predict a greater increase in emotional attunement at 24 months. Thus, individuals with low content and high process are the reference group and are not visible in the model. Length of relationship was a covariate in terms of emotional attunement at 24 months

Results of this path analysis are shown in Figure 7. Of the hypothesized paths, process was marginally significantly related to emotional attunement prenatally ( $\beta = .15$ ,  $p = .098$ ) and wives remembering low parental content and low process showed a significantly greater decrease on emotional attunement at 24 months ( $\beta = -.30$ ,  $p < .01$ ). Examination of the fit statistics in Table 6 suggests the model fits the data adequately well. Although the RMSEA is above .06, the significance level of the chi-square test is not significant, and the CFI, NFI, IFI, and TLI are all above .90. Taken together, this model for wives, with the reference group as low content and high process, suggests an adequate fit to the data.

#### *Separate Path Analysis Models for Husbands and Wives Where Content is High and Process is High*

The third model tested was for husbands, in which it was hypothesized that content should be recreated in terms of emotional attunement prenatally, high process should predict emotional attunement prenatally, and high content and high process should predict a greater increase in emotional attunement at 24 months. Here, individuals with

high content and high process are the reference group and are not visible in the model. Length of relationship was a covariate in terms of emotional attunement at 24 months.

Results of this path analysis are illustrated in Figure 8. The results from this model were almost identical to the previous model for husbands in which individuals with low content and high process represented the reference group. Once again, of the hypothesized paths, only process was significantly related to emotional attunement prenatally ( $\beta = .24, p < .01$ ). Examination of the fit statistics in Table 6 again suggests a mixed picture. The model was marginally significant in terms of the chi-square test and the RMSEA was above .06, suggesting a less than adequate fit. On the other hand, the CFI, NFI, IFI, and TLI were all above .90, suggesting an adequate fit. Taken together, this model for husbands, with the reference group of low content and high process, suggests less than an adequate fit to the hypotheses.

The fourth model tested was for wives, in which it was hypothesized that content should be recreated in terms of emotional attunement prenatally, high process should predict emotional attunement prenatally, and high content and high process should predict a greater increase in emotional attunement at 24 months. Here individuals with high content and high process are the reference group and are not visible in the model. Length of relationship was a covariate in terms of emotional attunement at 24 months.

Figure 9 illustrates the results of this path analysis. This model was similar to the model for wives in which individuals with low content and high process were the reference group, with one exception. Once again, of the hypothesized paths, process was marginally significantly related to emotional attunement prenatally ( $\beta = .15, p = .098$ )

and individuals recalling low content and low process showed a significantly greater decrease on emotional attunement at 24 months ( $\beta = -.28$ ,  $p < .01$ ). The difference between this model and the last model for wives, however, was that wives remembering low parental content and who were high on process showed a significantly greater increase on emotional attunement at 24 months ( $\beta = .22$ ,  $p < .05$ ). Examination of the fit statistics in Table 6, once again, suggests the model fits the data adequately well. Although the RMSEA is still above .06, the significance level of the chi-square test is not significant, and the CFI, NFI, IFI, and TLI are all above .90. Taken together, this model for wives, with the reference group as high content and high process, suggests an adequate fit to the data.

#### *An Overview of Multiple Group Analysis: Comparing Husbands and Wives*

A multiple group analysis was conducted to test the equality of the proposed models between husbands and wives. Two additional analyses were conducted. Similar to the models described above, it was hypothesized that content should be recreated in terms of emotional attunement prenatally, high process should predict emotional attunement prenatally, and either low content and high process would predict a greater increase in emotional attunement at 24 month (one test) or high content and high process would predict a greater increase in emotional attunement at 24 months (another test).

To set up the first multiple group analysis, the following steps were performed in AMOS. First, within the same AMOS program, two groups were created: Husbands and Wives. Second, within the same AMOS program, two different models were created; these models were separate from the groups of husbands and wives. In the first of the two



models, the covariances (i.e., the correlations about the independent variables), variances, and predicted paths, or regression weights, of husbands were constrained to equal the covariances, variances, and regression weights of wives. In the second of the two models, the predicted paths and the two variances of the two dependent variables (emotional attunement prenatally and 24 months) were allowed to vary between husbands and wives (i.e., were not constrained between husbands and wives), whereas the covariances and variances of the exogenous variables (i.e., the independent variables) were constrained to be equal between husbands and wives. After the two groups, husbands and wives, had been specified, and the two models, all constrained (i.e., equal loadings) and partially constrained were created, the models were compared. In this analysis, it was hypothesized that low content and high process would predict a greater increase in emotional attunement at 24 months and thus, the reference group was low content and high process.

In the second analysis, the same groups were specified: Husbands and Wives. The same models were created, all constrained (i.e., equal loadings) and partially constrained, where the predicted paths and the two variances of the two dependent variables allowed to vary between husbands and wives. The only difference between this analysis and the first analysis is that here, it was hypothesized that high content and high process would predict a greater increase in emotional attunement at 24 months and thus, the reference group was high content and high process. In sum, the two additional models analyzed as part of the multiple group analysis include:

- A comparison of an all constrained model versus a partially constrained model, in which the predicted paths and the two variances of the two dependent variables were allowed to vary between husbands and wives in the latter model. When looking at the variables in the model, and the combination of content and process, the reference group is low content and high process.
- A comparison of an all constrained model versus a partially constrained model, in which the predicted paths and the two variances of the two dependent variables were allowed to vary between husbands and wives in the latter model. The difference between this model and the other model is that when looking at the variables and the combination of content and process, the reference group is high content and high process.

For each analysis, the following fit statistics are presented for the models (all constrained, partially constrained, and the actual nested model comparison): the chi-square test, degrees of freedom, the probability value of the chi-square test, the NFI, IFI, and TLI. When comparing two nested models, a probability less than .05 means that the models are significantly different from one another. If the probability is greater than .05, there is no evidence that the models are different; they are instead equal to one another.

*Multiple Group Analysis Between Husbands and Wives*

In the first analysis, predictions were the same as earlier models, in which the predicted paths and the two variances of the two dependent variables were allowed to vary between husbands and wives in the partially constrained model, and where the reference group for the content-process combinations was low content and high process.

As seen from the fit statistics of the nested model comparison in Table 7, the  $p$ -value was greater than .05, suggesting that the model of husbands is equal to the model of wives.

In the second analysis, there were the same predictions and constraints as the test above, but the reference group was high content and high process. The results from this analysis were nearly identical to the results above, suggesting that husbands and wives do not differ on this model.

## **Discussion**

This study investigated how representations of the parental marriage predicted emotional attunement between marital partners both before and after the transition to parenthood. Emotional attunement was defined as how partners listen to, respond to, and validate one another during nonconflictual and conflictual interactions. Representations of the parental marriage were divided into content and process. Content refers to recalled memories of the parental marriage, such as conflict, affection, and communication. Process refers to the ability to make connections between their own and parents' marriage, and the ability to relate a believable, coherent, and consistent picture of the parents' marriage.

The current study expanded on the framework by Surra and Bohman (1991) by arguing that the transition to parenthood is considered a time of instability relative to the prenatal period for most couples. As expected, both husbands and wives reported more negative relational life events at 24 months compared to prenatally. Specifically, husbands and wives reported a higher negative impact of events such as sexual difficulties, marital separation, major change in arguments with spouse, and divorce.

The current study also expanded on attachment theory (Bowlby, 1973, 1978, 1988) and related research (Paley et al., 1999). As hypothesized, individuals high on process showed higher emotional attunement toward their partner prenatally. Also, both wives who recalled low parental content and who were high on process, as well as wives who recalled high parental content and who were also high on process, showed a greater increase in emotional attunement toward their partner 24 months postpartum compared to

other wives who recalled low parental content and who were low on process. In addition, wives who recalled low parental content and who were high on process showed a greater increase in emotional attunement toward their partner compared to wives who were also high on process, but who instead recalled high parental content.

These results provide strong support for the idea that high process is important for wives and husbands, both prenatally and during the transition to parenthood, in terms of positive communication between partners. These findings add to attachment theory and literature in that speaking openly and consistently about early experiences, whether it be in terms of parent-child relationships or the parental marriage, contribute to the well-being of marital interactions.

Additionally, the finding that richness was important for men during the prenatal period was interesting, given that, on average, men had significantly lower means on process compared to women. Thus, it may be that individual differences in process are particularly important for men during relatively stable periods, since men who are higher on process may be more likely to reflect on the marital relationship and thus are more likely to express their emotional availability and responsiveness to their wives during marital interactions, aiding in the demonstration of higher emotional attunement between the partners. Individual differences in process may be less dramatic in predicting individual differences in emotional attunement for women prenatally, since women are more likely to be high on process in general, and thus may be high-processing enough even during relatively stable times to show relatively high emotional attunement.

Other findings were also important to understanding how early experiences in the family of origin impact later romantic relationships. Specifically, it was found that wives who recalled low parental content and high process showed a greater increase in emotional attunement at 24 months compared to wives with low content and low process, as well as wives with high content and high process. It was expected that individuals with high process, coupled with either low or high parental content, would show a greater increase in emotional attunement toward their partner compared to individuals with low content and low process. It was less clear, however, whether low or high content, coupled with high process, would predict a greater increase in emotional attunement after the transition to parenthood. In other words, while it was thought that high process would be important to understanding marital quality between partners, what role did content play when coupled with process in terms of predicting emotional attunement?

Two ideas were considered in answering this question. First, it was hypothesized that low content and high process might actually help individuals with the transition to parenthood, in that such individuals may already have a model of marriage in which disharmony during unstable times is expected, and where they know they need to work on their relationship with their partner to continue the quality of the relationship during times of transitions, such as after the birth of the couples' first child. Second, it was hypothesized that high content and high process might result in couples showing a greater increase in emotional attunement during the transition to parenthood because they had models on which to rely, and which to expect from their partners. When these two hypotheses were tested, there was support for the first hypothesis.

The transition to parenthood was conceptualized as a time of instability, a period in which Surra and Bohman (1991) argued that information processing, along with uncertainty about the partner and relationship, is more extensive and cognitions are higher order. During such times, deterioration of established relationships may be likely and uncertainty about the partner can be minimized by increased knowledge and thinking about the partner. Not surprisingly, Surra and Bohman (1991) argued that behaviors exchanged between partners are important in the information they convey between partners concerning how to evaluate and deal with uncertainty about the relationship.

Thus, it is even more interesting that individuals who recall a disharmonious parental marriage, and seem most likely to display a greater increase in negative behaviors, are the ones who show a greater amount of emotional attunement at 24 months, if they are also high on process. Taken together, individuals recalling low parental content but who have high process may be able to reduce uncertainty in the relationship by demonstrating to the partner that while there are times of disharmony and continued changes in their own marital relationship given the introduction of their new baby, there is also the realization that with times of instability there is the need to work on the marriage for the benefit of both partners.

Although there were no gender differences anticipated, and the models did not differ statistically in terms of husband and wives, it is still interesting to note that the combination of content and process was not influential in predicting emotional attunement at 24 months for husbands. Because the measure of emotional attunement was coded on a dyadic level, individual differences between husbands and wives could not be

observed. Models separating distant/withdrawn and antagonistic/angry behavior between partners during marital interactions may be able to detect any gender differences. Given that the direction of path coefficients were generally in the same direction for husbands and wives in terms of the predicted relationships, however, and that researchers have not found reliable differences between husbands and wives on several indices of marital quality (Karney & Bradbury, 1995), it seems plausible to conclude that gender differences were not found in this study.

While content considered with process showed some interesting results for wives, content specified alone did not relate to emotional attunement prenatally for either husbands or wives. There was no support for the finding that memories of the parents' marriage were recreated in the couples' marital interactions prenatally, a time of relative stability. This lack of a relationship between content and emotional attunement prenatally is puzzling considering that other researchers have found an association between the intergenerational transmission of marital quality and current marital quality (Belsky & Isabella, 1985; Booth & Edwards, 1989; Caspi & Elder, 1988; Sabatelli & Bartle-Haring, 2003).

The differences between the lack of a relationship found in this study versus the relationship found in other studies may be explained partly by the methodological differences of the studies. Specifically, in the current study, couples were observed interacting with one another during both conflictual and nonconflictual interactions, whereas in the other studies, couples were asked to complete self-report questionnaires about their marriage.



Specifically, couples may act one way when involved in face-to-face interactions, but respond differently when filling out questionnaires about their marriage. Defenses used during recall of the parental marriage may be used similarly when answering questions on a self-report form about their own marriage. It may be easier to idealize or fail to recall problems about the current relationship when questions are being asked on paper, but more challenging to present an emotionally attuned relationship when actually interacting with the partner, and especially when talking about areas of conflict in the relationship.

As support for this idea, individuals using defenses (e.g., often reporting extremely positive relationships with parents but failing to recall specific memories about these positive experiences) concerning parent-child relationship showed marked increases in skin conductance levels from a baseline level (no questions posed) compared to when they were asked to recall experiences of separation, rejection, or threats from parents (Dozier & Kobak, 1992). While the study above assesses parent-child relationships, which are different than marital relationships, the point should be made that it may be easier to keep feelings of anger or the need to withdraw inside when answering questions about the relationship on a questionnaire, but more difficult to keep these feelings in check when actually interacting with the partner.

The current study was strong methodologically for the following reasons. First, representations of the parental marriage were assessed before the child was born, adding to the concepts and methodology from attachment theory and research in demonstrating the importance of representations of the parental marriage. Second, in the current study,

interviews, self-report items, and marital interactions between partners were observed. Third, the couples were observed in their homes, providing a natural environment and the outcome variable of the study, emotional attunement, concerned positive marital quality. Fourth, the current study included length of marriage as a covariate in the model of how representations of the parental marriage impact emotional attunement at 24 months.

Nevertheless, some limitations in the present study should be noted. The sample was predominantly Caucasian and about two-thirds of the sample was middle class, which may impact the generalizability of the results to other races/ethnicities and socioeconomic groups. When possible attrition biases have been examined in longitudinal studies of marriage, participants who are younger, poorer, less educated, and from minority backgrounds were less likely to be included in the final longitudinal analyses (Karney & Bradbury, 1995). In the current study, wives who reported the lowest family incomes were more likely to drop out of the study by 24 months compared to wives reporting higher family income levels. On the other hand, husbands did not report a similar finding and there were no attrition differences on age, education, or ethnicity for either husbands or wives.

The findings in this study may have been strengthened by using additional measures of marital quality. For example, in addition to emotional attunement, as mentioned above, separate indexes of distance and antagonism may be helpful when determining if there are gendered differences in how partners respond to one another, especially during conflictual interactions and when discussing issues experienced by the husbands or wives (Heavey, Layne, & Christensen, 1993). Also, other researchers have

used daily diaries of activities with couples (MacDermid et al., 1990; Surra & Longstreth, 1990); items from the diaries could be used to lead discussions between the couples, to determine issues that are relevant for couples and for whom the issue is most important.

In addition, conflict resolution was not explored as part of adults' memories of the parental marriage. Given the relationship between conflict resolution and the processes by which children and young adults cope with adults' anger (Cummings, Ballard, El-Sheikh, & Lake, 1991), how individuals saw parents resolve, or fail to resolve, conflict may have implications for how much emotional attunement they use with their partner.

Further, the focus of the study was on the marriage during the transition to parenthood, but no direct or indirect assessments were made concerning the impact on their children. For example, after the transition to parenthood, do adults lacking believable memories of the parental marriage, who scored lower on emotional attunement toward their partner prenatally, also show hostility, withdraw, or both types of behavior with their child? How do such marital and family patterns change with continuing transitions, such as the birth of a second child?

In sum, the findings of this study demonstrate links between how individuals talk about their parents' marriage and how combinations of memories recalled from the parental marriage and the ability to make connections and to think clearly and objectively about the parents' marriage predict greater emotional attunement between partners prenatally and at 24 months. The findings not only suggest the importance of representations of early family relationship experiences in predicting emotional attunement, but also suggest that early experiences are not necessarily transmitted across

generations. Memories of a negative parental marriage do not predict low emotional attunement between partners across the transition to parenthood, but rather, lacking access to these memories or denying their importance, predicts problems with emotional attunement. These ideas are consistent with studies of adult attachment and parenting that indicate that secure representations of attachment predict discontinuity in negative patterns of child-rearing among earned secure adults, that is, adults who report poor childhood care but who have coherent representations of attachment and provide sensitive care to their own children (Phelps et al., 1998) and marital partners (Paley et al., 1999).

These data potentially have implications for couple interventions designed to ease the transition to parenthood. For example, in an intervention study (Cowan & Cowan, 1995), small groups of husbands and wives met with a staff couple during weekly meetings where the couples explored joys, hardships, and dilemmas experienced as individuals, couples, and new parents. In contrast to the drop in marital satisfaction found in most longitudinal studies for couples entering the transition to parenthood, the intervention couples experienced stability of marital satisfaction between 6 and 18 months postpartum. Additionally, compared to the 12.5% separation and divorce rate of the nontreatment couples at 18 months postpartum, all of the marriages of the couples in the treatment conditions were intact.

The results from this intervention study are very interesting in that the sample used by the Cowans was similar demographically to the sample in the current study. In both studies, the couples were having their first child, the mean age of the parents was in

the late twenties, and the socioeconomic status ranged from working or lower-middle class to upper-middle class. Also, both samples would most likely be considered low-risk.

Cowan and Cowan (1995) speculated that the intervention parents' discovery that most couples in their group experienced similar challenges as new parents helped create a safe environment to explore intimate and troubling family matters that couples might not discuss on their own. Applied to the results of the present study, similar interventions may encourage emotional attunement for adults who lack rich memories, as well as adults who hold mostly positive models of their parents' marriage, by helping them to understand that the transition to parenthood is likely to be a time of relative instability when stress and difficulties in the relationship of the couple are normal and expected.

## Tables

Table 1

*Percentage of Prenatal Family Income Reported by Husbands and Wives*

---

| Family Income        | <u>Husbands</u><br>% | <i>N</i> | <u>Wives</u><br>% | <i>N</i> |
|----------------------|----------------------|----------|-------------------|----------|
| \$0 to \$15,000      | 5.6%                 | 7        | 8.1%              | 10       |
| \$15,001 to \$30,000 | 16.9%                | 21       | 11.4%             | 14       |
| \$30,001 to \$45,000 | 25.0%                | 31       | 32.5%             | 40       |
| \$45,001 to \$60,000 | 26.6%                | 33       | 25.2%             | 31       |
| \$60,000 and up      | 25.8%                | 32       | 22.8%             | 28       |

---

*Note.* *N* = 124 for husbands. *N* = 123 for wives.

Table 2

*Frequencies of Prenatal Family Income Reported by Husbands and Wives who had Separated or Divorced by 24 months*

---

| Family Income        | <u>Husbands</u> | <u>Wives</u> |
|----------------------|-----------------|--------------|
|                      | <i>N</i>        | <i>N</i>     |
| \$0 to \$15,000      | 3               | 4            |
| \$15,001 to \$30,000 | 7               | 4            |
| \$30,001 to \$45,000 | 2               | 5            |
| \$45,001 to \$60,000 | 4               | 3            |
| \$60,000 and up      | 2               | 2            |

---

*Note.* *N* = 18 husbands and 18 wives.

Table 3

*Intercorrelations among Grandparent Marriage Interview (GMI) Scales for Husbands*

| Variable     | 1  | 2    | 3      | 4      | 5      | 6      | 7      |
|--------------|----|------|--------|--------|--------|--------|--------|
| 1. Conflict  | -- | .22* | .27**  | -.26** | -.27** | .73*** | -.29** |
| 2. Affection |    | --   | .54*** | .06    | .27**  | .74*** | .18*   |
| 3. Comm.     |    |      | --     | .14    | .28**  | .78*** | .23*   |
| 4. Insight   |    |      |        | --     | .69*** | -.06   | .91*** |
| 5. Richness  |    |      |        |        | --     | .08    | .93*** |
| 6. Content   |    |      |        |        |        | --     | .02    |
| 7. Process   |    |      |        |        |        |        | --     |

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

$N = 123$ .



Table 4

*Intercorrelations among Grandparent Marriage Interview (GMI) Scales for Wives*

| Variable     | 1  | 2      | 3      | 4     | 5       | 6      | 7      |
|--------------|----|--------|--------|-------|---------|--------|--------|
| 1. Conflict  | -- | .47*** | .40*** | -.21* | -.31*** | .84*** | -.31** |
| 2. Affection |    | --     | .51*** | -.08  | -.01    | .81*** | -.05   |
| 3. Comm.     |    |        | --     | -.03  | .03     | .74*** | .01    |
| 4. Insight   |    |        |        | --    | .46***  | -.15   | .85*** |
| 5. Richness  |    |        |        |       | --      | -.16+  | .86*** |
| 6. Content   |    |        |        |       |         | --     | -.18*  |
| 7. Process   |    |        |        |       |         |        | --     |

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

$N = 123$ .

Table 5

*Descriptive Statistics of Grandparent Marriage Interview (GMI) Variables*

|                   | Mean for<br>Husbands (SD) | Mean for<br>Wives (SD)   |
|-------------------|---------------------------|--------------------------|
| GMI Conflict      | 4.94 <sup>+</sup> (1.78)  | 4.50 <sup>+</sup> (1.94) |
| GMI Affection     | 3.06 (1.33)               | 3.10 (1.48)              |
| GMI Communication | 3.51 (1.41)               | 3.27 (1.23)              |
| GMI Insight       | 3.72 <sup>+</sup> (1.16)  | 3.93 <sup>+</sup> (1.03) |
| GMI Richness      | 3.58* (1.30)              | 3.93* (1.09)             |
| GMI Content       | 11.51 (3.37)              | 10.87 (3.73)             |
| GMI Process       | 7.30* (2.26)              | 7.85* (1.82)             |

<sup>+</sup> Marginally significant difference between husbands and wives,  $p < .10$ . \* Significant difference between husbands and wives,  $p < .05$ .

$N = 123$ .

Table 6

*Model Fit Statistics for the Path Models of Husbands and Wives*

| Fit Statistic Name | Reference Group is<br>Low Content<br>and High Process |              | Reference Group is<br>High Content<br>and High Process |              |
|--------------------|---|--------------|--|--------------|
|                    | <u>Husbands</u>                                       | <u>Wives</u> | <u>Husbands</u>  | <u>Wives</u> |
| $\chi^2$           | 11.65   | 10.57        | 11.65  | 10.57        |
| df                 | 6   | 6            | 6  | 6            |
| $\chi^2/df$        | 1.76  | 1.94         | 1.76   | 1.94         |
| <i>p</i> value     | .070  | .103         | .070   | .103         |
| CFI                | .985  | .989         | .986   | .988         |
| NFI                | .972  | .976         | .974   | .975         |
| IFI                | .986  | .990         | .987   | .989         |
| TLI                | .910  | .934         | .916   | .989         |
| RMSEA              | .087  | .078         | .087   | .078         |

Table 7

*Multiple Group Analysis for Husbands and Wives*

| Fit Statistic Name                               | Reference Group is<br>Low Content<br>and High Process | Reference Group is<br>High Content<br>and High Process |
|--|---|--|
| <u>All Constrained/<br/>Equal Loadings Model</u> |   |  |
| $\chi^2$   | 63.88   | 63.88  |
| df   | 42  | 42   |
| <i>p</i> value                                   | .016  | .016   |
| <u>Partially Constrained Model</u>               |   |  |
| $\chi^2$   | 59.18   | 59.18  |
| df   | 33  | 33   |
| <i>p</i> value                                   | .003  | .003   |
| <u>Nested Model Comparison</u>                   |   |  |
| $\chi^2$   | 4.71  | 4.71   |
| df   | 9   | 9  |
| <i>p</i> value                                   | .859  | .859   |
| NFI  | .005  | .005   |
| IFI  | .006  | .006   |
| TLI  | -.025   | -.025  |

## Figures

|         |      | Process                            |                                   |
|---------|------|------------------------------------|-----------------------------------|
|         |      | High                               | Low                               |
| Content | High | High Content &<br>High Process (1) | High Content &<br>Low Process (3) |
|         | Low  | Low Content &<br>High Process (2)  | Low Content &<br>Low Process (4)  |

Figure 1. Combinations of Content and Process from Representations of the Parental Marriage.

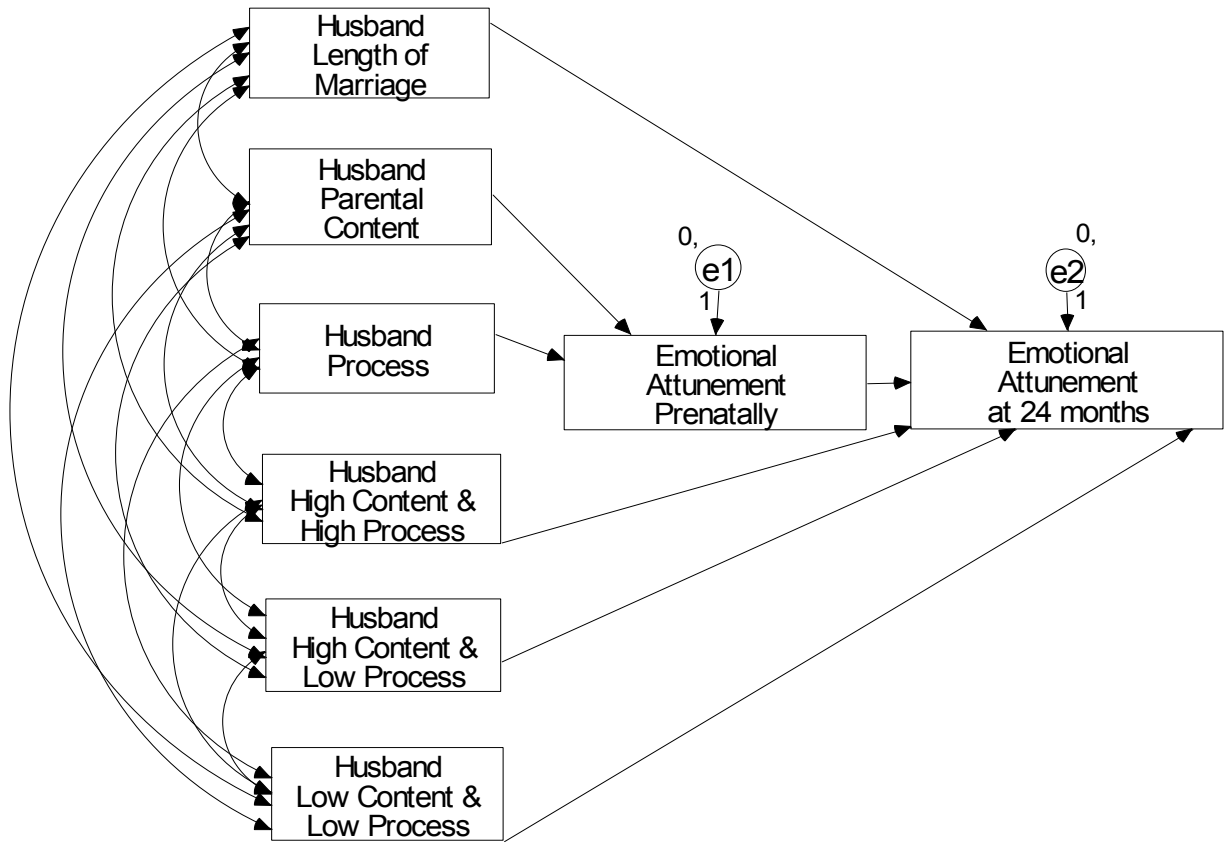


Figure 2. Proposed Path Model for Husbands Where the Reference Group (not visible) is Low Content and High Process.

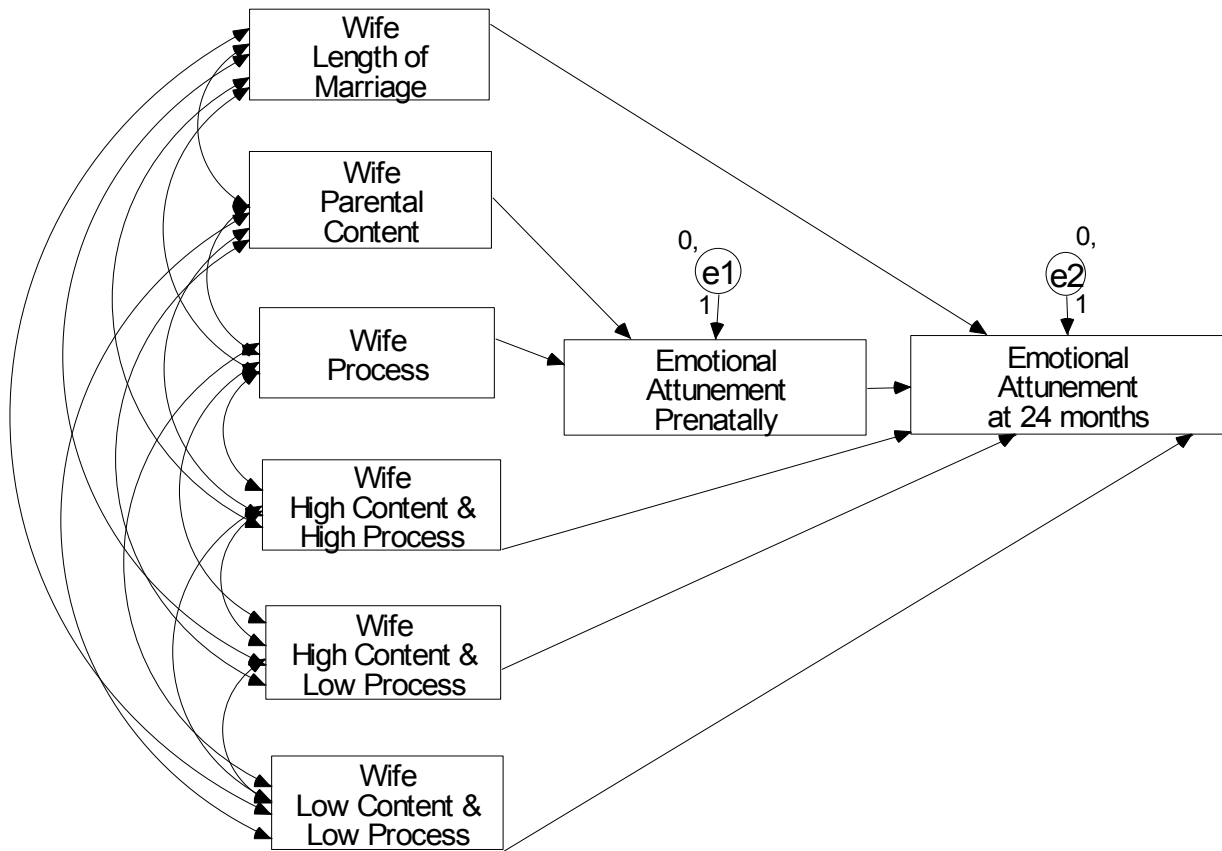


Figure 3. Proposed Path Model for Wives Where the Reference Group (not visible) is Low Content and High Process.

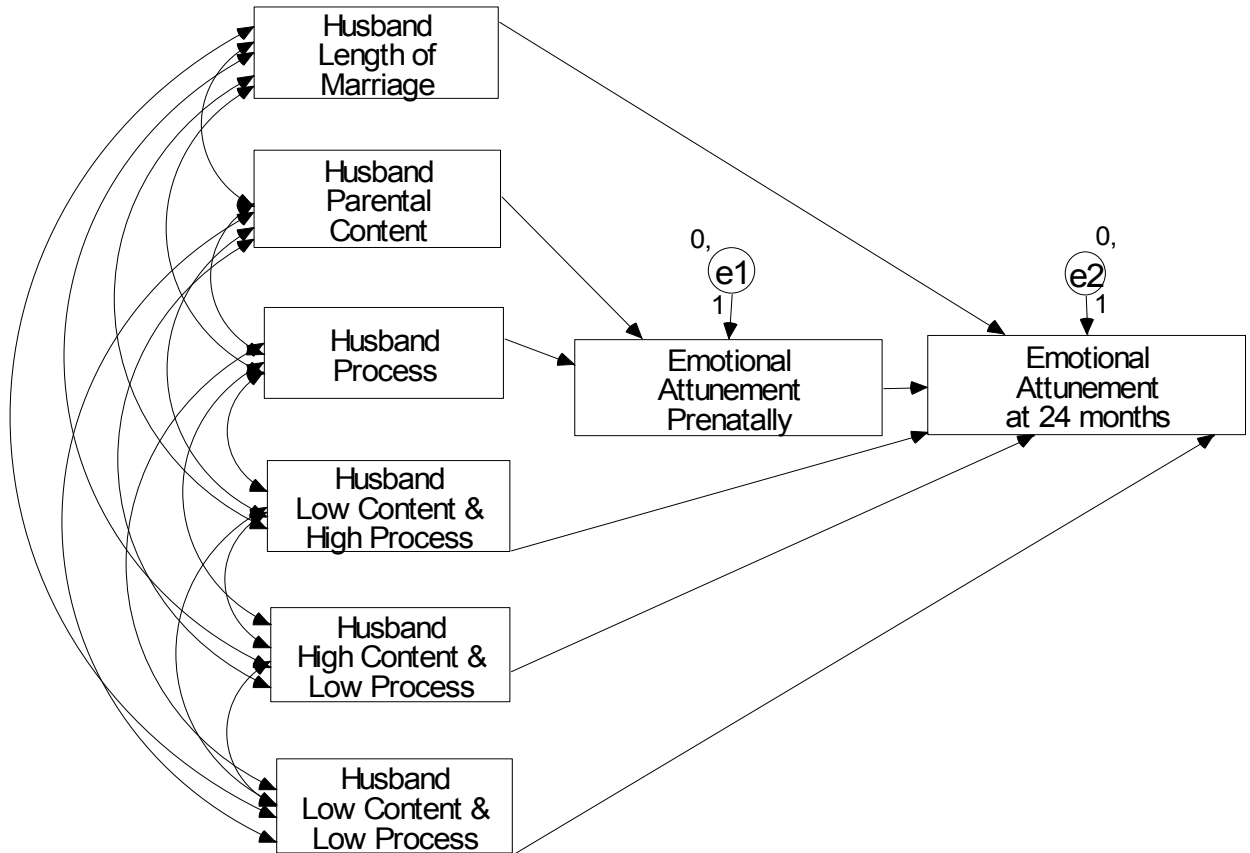


Figure 4. Proposed Path Model for Husbands Where the Reference Group (not visible) is High Content and High Process.



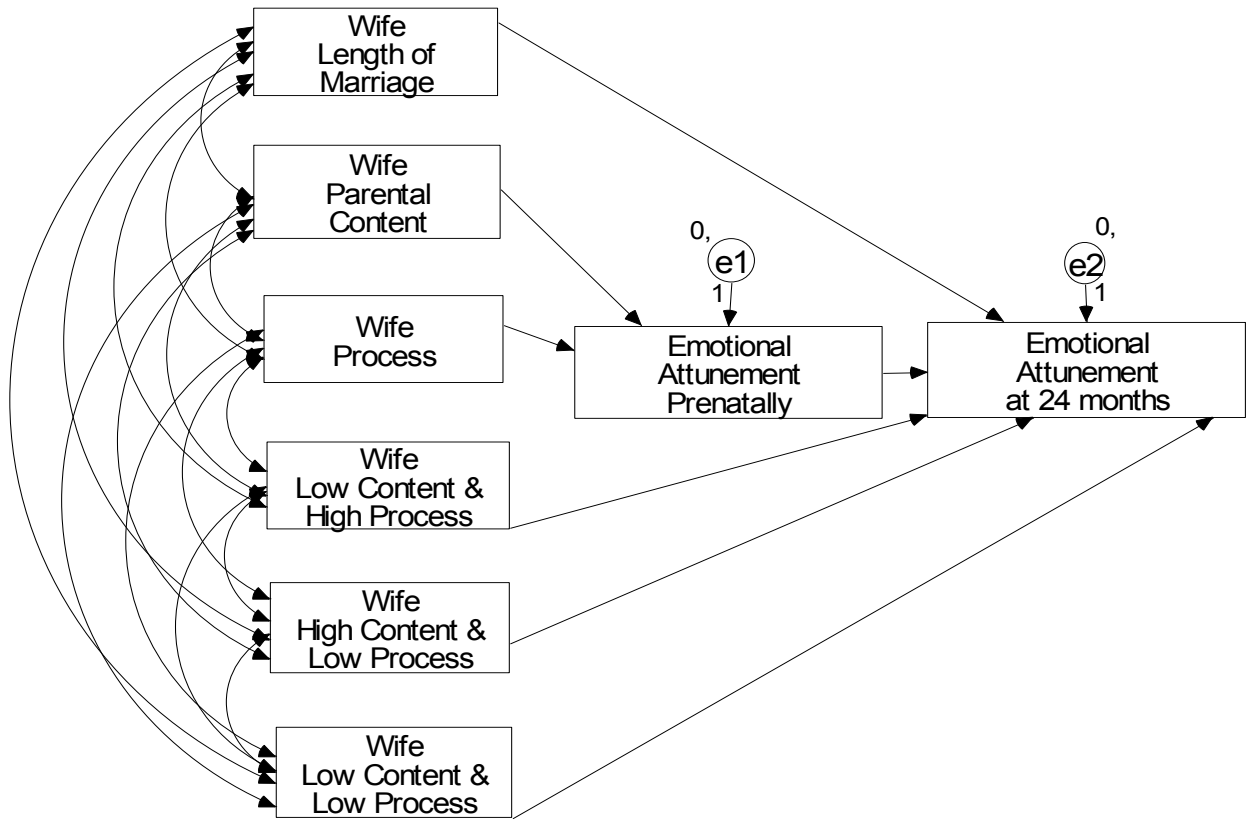


Figure 5. Proposed Path Model for Wives Where the Reference Group (not visible) is High Content and High Process.

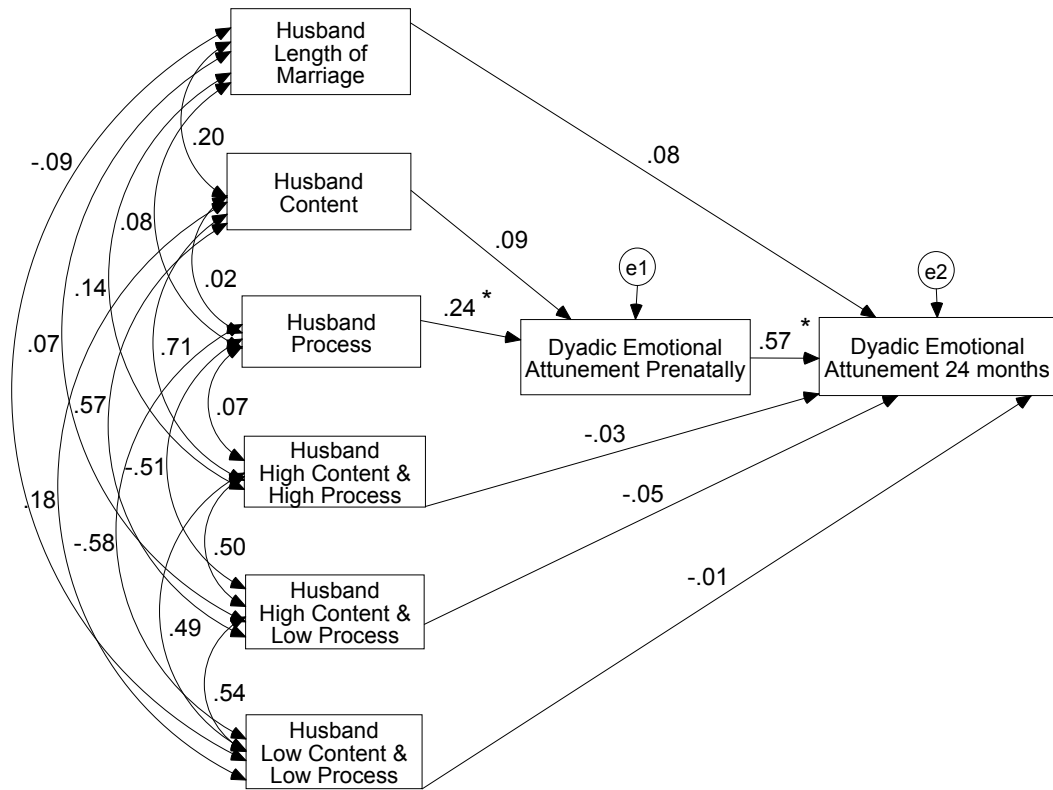


Figure 6. Results from Path Model for Husbands Where the Reference Group (not visible) is Low Content and High Process.

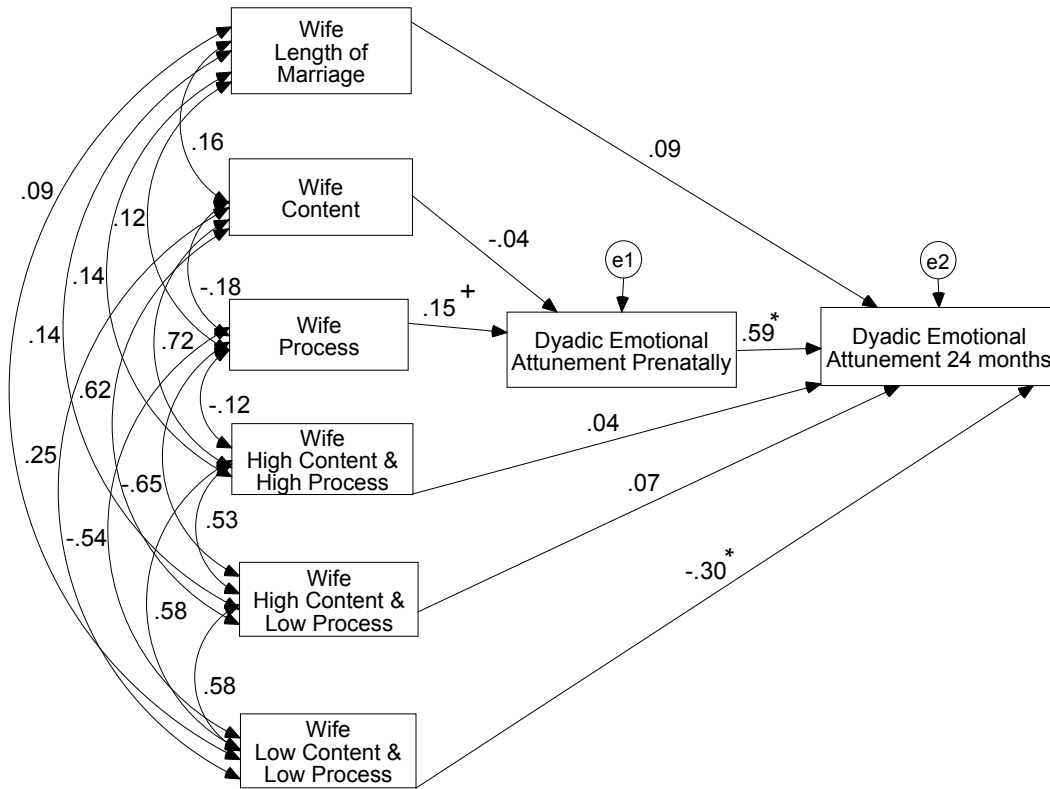


Figure 7. Results from Path Model for Wives Where the Reference Group (not visible) is Low Content and High Process.

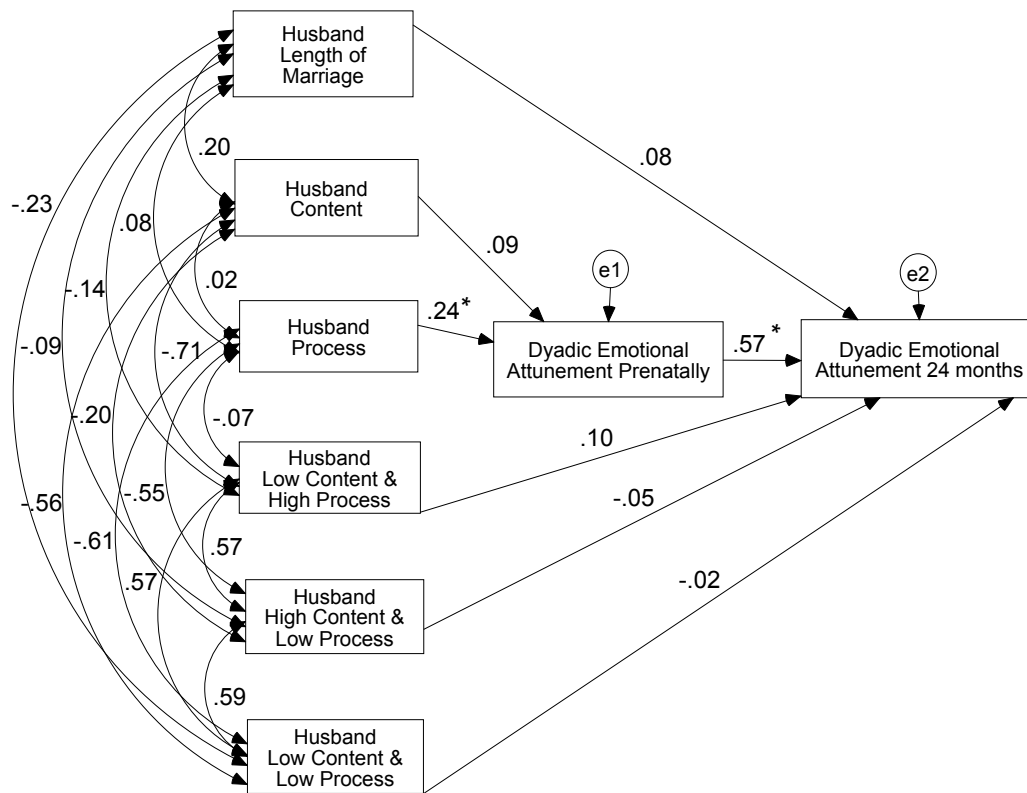


Figure 8. Results from Path Model for Husbands Where the Reference Group (not visible) is High Content and High Process.

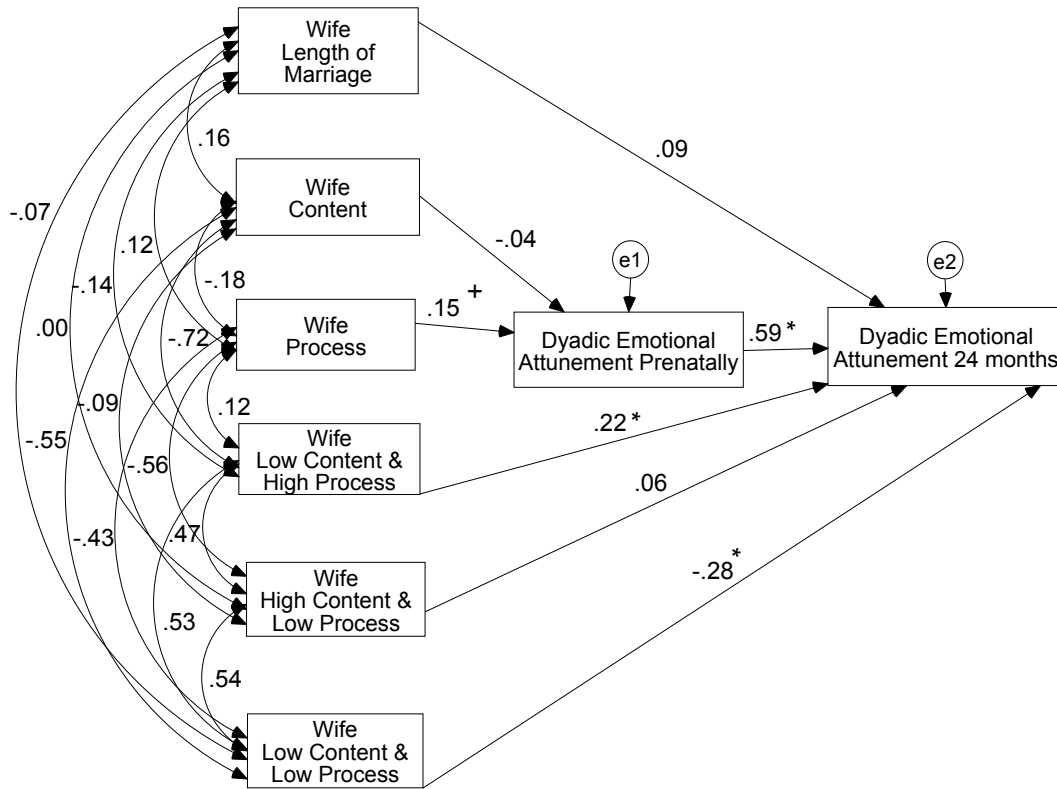


Figure 9. Results from Path Model for Wives Where the Reference Group (not visible) is High Content and High Process.

## Appendix A

### Scale for Coding Marital Interactions Prenatally and at 24 months

#### Emotional Attunement/Engagement

#### Dyadic Coding Criteria

#### 7 – Highly emotionally attuned/engaged

1. The couple gives the impression that the experience of interacting with their partner is pleasurable and one in which there is a sense of emotional connection. “We” statements are frequent with elaboration of future goals, and expectations of themselves as a couple. There is a sense that each partner tends to listen to the other’s perspective without disruptive interruptions. Timely contributions from the partner will appear as smooth transitions of topics. Partners are likely to rephrase the other as an indication of their listening. Partners are likely to physically orient to each other, show repeated and enduring eye contact or physical contact, or demonstrate a patient calmness with each other.

2. There is a high reciprocity of affective expression and shared affect. They are able to generate discussion without excessive concern for the parameters of the task and are comfortable with silences.

3. The couples tolerate a wide range of affect without escalation or disengagement. Use of humor is active and genuine. Laughter and joking will appear to be a mutual recognition and acceptance of their differences. Humor may be used to lighten a potentially difficult or conflictual topic.

#### 6 – Markedly emotionally attuned/engaged

1. The couple demonstrates comfort with each other, yet the comfort expressed is less expressive than at a level 7. It is apparent that each partner listens to the other, however, occasional interruptions occur which require redirection by one partner to the conversation. There may be occasional rephrasing of the partner’s comments.

2. There is a high to moderate reciprocity of affect. There are 1-2 incidences where there is a sense of disengagement or malattunement. The couple is able to generate discussion without excessive concern for the parameters of the task, with occasional moments of discomfort.

3. The couple tolerates a wide range of affect with 1-2 incidences of brief disengagement. Use of humor is mutual with occasional one-sided humor used to point out the partner’s liabilities. Humor may be used to deflect the intensity of the discussion.

#### 5 – Moderate emotional attunement/engagement

1. A sense of comfort with each other is evident at least 75% of the time. Periods of indifference (interruptions, distraction, ignoring, resistance) become more evident with occasional incidences of malattunement, e.g., criticism or blaming.
2. Shared affect occurs 75% of the time. There is a sense of disconnection or indifference 25% of the time. There may be lags in the conversation during which the couple reestablishes connection.
3. There is a notable tendency to avoid strong affect, either positive or negative. The couple tolerates moderate to mild intensity of affect. The couple may have a tendency to disengage 25% of the time.

#### 4 – Low emotional attunement/engagement

1. There is a sense of connection with one another (especially when in agreement). 50% of the time there is indifference or 1-2 incidences of initiating a conflictual topic in a critical or blaming manner or in a manner which appears hostile. Listening seems to be occurring approximately 50% of the time, especially when there seems to be agreement. There is a tendency to seem as if not listening as the topic increases in difficulty and when differences arise. There may be several indices when a partner does not pick up on a seemingly significant statement by the partner.
2. One does not get the sense of emotional connection 50% of the time. Shared affect may seem superficial and anxious. Individual's agendas predominate. There may be excessive concern for task parameters, such that it disrupts the flow of conversation occasionally.
3. The affective mood is dulled with little range. The couples are occasionally uncomfortable, negative affect may appear briefly, but it is avoided or escalates into blaming.

#### 3 – Minimal emotional attunement/engagement

1. There is minimal connection and sense of pleasure in being with each other 75% of the time. The couples may seem more preoccupied with task parameters and performance as research subjects than in engaging and in discussion with each other. Talking to the camera is more notable. There may be an increase in criticism and blaming. There appears to be a very superficial, fluctuating, degree of listening occurring. Neither partner rephrases the other's statements and minimal inquiry is made to clarify or ask for a perspective. The couple appears to be listening because they seem to stay on topic, but

they are likely to miss the subtleties of the partner's comment and/or misunderstand facial statements.

2. A sense of connection may occur about 25% of the time. Disengagement and/or self-preoccupation predominate. These couples may seem as if they do not seek comfort or responsiveness from one another. They may be physically distant from each other and have limited eye contact or touching. They may be instances of triangulation whereby the couple units to disparage another person, e.g., a coworker or family member.

3. Very low emotional tone (resulting from distance) to interactions with occasional (1-2 incidences) of negative or uncontrolled escalation; or nervous or attacking humor. Or couples may appear enmeshed such that one partner's anger/hostility results in the other's attempts to appease such that it halts the interaction.

#### 2 – Marginally emotional attuned/engaged

1. There may be a sense that the couples rarely experience pleasure with one another and interactions are antagonistic or defensive. Instances of active listening occur less than 25% of the time, mostly when they agree on something. Interruptions occur frequently with occasional obvious disruptions to the flow of conversation. Conversations will lack a sense of negotiation or revision of opinions based upon what a partner contributes. It is as if there has only been superficial acknowledgement of the other's comments followed by other's own agenda.

2. The couple seems disconnected most of the time. There are rare instances of connection and are likely to be focused around mutual criticism of others (triangulation).

3. The emotional tone reaches extremes of dullness or highly inflamed or anxious.

#### 1 – Not emotionally attuned/engaged

1. There is a sense that they do not experience pleasure with one another; that their relationship is mostly a burden. Antagonism and defensiveness predominate. Or there may be a sense of distance.

2. There does not appear to be any shared affect of depth. A sense of disconnection predominates.

3. The emotional tone may be distant or inflamed. Or there may be a sense that either or both partners are excessively concerned about performing adequately or about pleasing the other.



## Appendix B

### Interview Questions for Grandparent Marriage Interview

1. Describe your parent's marital relationship with one another during your early childhood.
2. Please list three adjectives that best describe your parent's marital relationship during your early childhood. Then I'll ask you why you chose each adjective.
3. You said (Adjective #1). Is there a particular memory or time that you remember your parents being (Adjective #1) during your early childhood?
4. You said (Adjective #2). Is there a particular memory or time that you remember your parents being (Adjective #2) during your early childhood?
5. You said (Adjective #3). Is there a particular memory or time that you remember your parents being (Adjective #3) during your early childhood?
6. How do you think your parent's marital relationship has affected you?
7. How do you think your parent's marital relationship has affected the way you relate to (name of marital partner)?
8. Has your parent's marriage changed over time, that is, from your childhood to the present?

## Appendix C

### Scales for the Grandparent Marriage Interview

#### **Conflict**

How problematic was conflict remembered to be in their parent's marriage.

**1**

#### **No Conflict**

Inability to indicate conflict in the parents' marriage

OR if there was a negative constellation of adjectives, but no mention of conflict, rate as

1

**2**

Conflict was minor and infrequent; Not problematic to the marriage

**3**

Conflict is more apparent but in regard to normal life stressors. Not too frequent or severe (ex: money, in-laws, etc.)

**4**

Conflict was apparent (not frequent, minor) but may or may not be problematic to the marriage. It was obvious to the R that tension/anger was present (conflict could be dealt with avoidantly- no escalation)

**5**

Conflict is more frequent and open than in #4, over more serious marital content (ex: parenting). It may be over 1 event, last shorter period of time. Child may indicate that parental fighting affected him or her as a child.

**6**

Conflict is frequent, more severe, and constant. There is open anger and tension (more so than in #4 or 5). Marriage is problematic, could also be due to avoidance (ex: infidelity, abuse)

**7**

#### **High Conflict**

Conflict was open, very frequent and fairly severe; extremely problematic for the marriage.

**Must have supporting evidence for this scale!**

## Affection

Physical/Other expressions of affection (hugs/kisses/cards/notes) remembered in their parent's marriage.

1

### No Affection or Negative Affection

Negative expressions of affection, physically or verbally (disrespect, cursing, abuse)  
Adjectives of parental marriage are all negative

2

No mention of affection or statement that there was no affection between parents but no negativity either; or, episodes of both negative and positive affection

3

Speaking to each other with respect, celebration of anniversaries, birthdays, etc., but no real verbal or physical expressions of affection  
(Obligatory nonphysical affection, such as phone calls, postcards sent while partner away on business travel)

4

Affection is there but rare  
Displays of affection at expected times (ex: at departures and reunions, birthdays or special events), seemingly obligatory.  
Use of pet names like "honey", "dear".  
Material gifts

5

More spontaneous displays of affection. Not as personal & heartfelt as 6

6

High expressions of verbal *or* physical affection or outward expressions of sentimentality but not necessarily both.  
More marked, memorable  
Frequency or intensity more marked than 5

7

### High Affection & Sentimentality

High and spontaneous displays of verbal *and* physical affection & sentimentality (ex: At unexpected times- while watching television, cooking dinner, hand-holding, leaving cards or notes- not apologetically)

**Must have supporting evidence for this scale!**

## **Communication/Companionship**

How much parents looked to each other to make important decisions, mutuality, spending time together, talking to each other as friends, support the other's endeavors.

**1**

### **No communication/companionship**

No mention of, or mention that there were no, shared activities, mutual discussions, or fun times together.

**2**

Seemingly independent lives. Some (very little) support of partner, usually when involves home, or family well-being. Avoidance of each other, tension, negative feelings not expressed—behind closed doors  
Purposeful avoidance

**3**

Spend some time together but don't make mutual decisions. Some support of other and little mutual interests. Able to get instrumental tasks done together (i.e. Getting kids to school)

**4**

Don't spend very much time together (because of kids, job; not avoidance). Don't discuss important issues much (probably inferred), but seem to get along well when together in front of kids, **spend time as family**. Mention family vacations or family outings. Because of kids/work, parents cannot spend time together (but not because they're angry with each other).

**5**

May not be able to spend very much time together (due to work, etc.) but have good times when do (explicit). Partners *try* to set aside time to spend **alone** (vacations, weekends) and without kids

**6**

**Discuss feelings/thoughts** regarding stressful events, **important issues** (i.e. kids); spouse listens to other's point of view. Have fun together. New level of communication/companionship. Prefer each other's company.

**7**

### **High Communication/Companionship**

Openly discuss parenting and/or marital issues, spend time together (dates), have fun together (could be implicit), support of partner's career efforts, religious beliefs, etc.

## **Insight**

How much the individual draws from his/her parent's marriage as influencing them as a person and their marriage.

**1**

### **No insight**

Does not indicate any similar characteristics or influences from parent's marriage

**2**

Sees similar/influential/conflicting characteristics in the parent's marriage and self or current marriage but does not indicate influence or link

**3**

Sees similar/influential/conflicting characteristics in the parent's marriage and self or current marriage and can make link but vague. May not be specific to own family and marriage (ex: I won't get divorced easily because my parents weren't divorced). Say things NOT specific to their family, marriage, or self.

**4**

Can see similar/influential/conflicting characteristics and make the influence link, but only provide global descriptions, little or no details  
Specific to their family or marriage (ex. We didn't have kids until later because my parents had kids too early and we didn't want to make mistakes).

**5**

Similar to a 4 score, but able to provide more details and clearer links

**6**

Makes a connection from the parent's marriage. Focus is **either** on the self or the marriage but not both. **Metacognitive personally; can tell they've really thought about it**

**7**

### **Strong Insight**

Similar to a 6 score, but focus is on relationship and marriage roles. **Metacognition both personally and in marriage.**

Unique statements

## Richness

How well the individual is able to indicate their memory of their parent's marriage.  
Do I feel like I have a good picture of the marriage?

1

### **Vague**

Inability to provide more than 1 adjective, and a supporting memory. Or, inability to provide a picture of the parent's marriage

2

May provide adjectives, but provides little or no support for them (fail to support picture).  
Or, is unable to indicate a consistent picture of the parent's marital relationship

3

Uses superficial, weak, adjectives and contradictory or unsupportive memories. Or, describes a general, consistent, but not detailed picture of the parent's marital relationship.  
Or describes a backwards or contradictory picture of the parent's marriage.

4

Picture of marriage but very few details. Uses at least 2 adjectives, may use same memory but it does support the adjectives.

5

Provides a general, consistent, picture of the parent's marital relationship, may provide some details. There is separate support for the adjectives

6

Uses three distinct adjectives with strong supportive memories, but not necessarily 3 distinct memories. Or, is able to provide a clear, consistent, picture of the parent's marital relationship, with some details.  
**Some concrete supportive examples**

7

### **Rich**

Uses 3 distinct adjectives and supports them with strong, distinct memories, or at length is able to provide a clear, detailed picture of the parent's marital relationship  
**with more concrete supportive examples.**

## Appendix D

### Examples of GMI Scores, Ranging from Low, Medium, and High

#### Conflict

##### Low scores = High conflict

- score of 1 on conflict

For adjective of *violent*: “He (stepfather) was terribly violent. He was drunk a lot. Incredible temper.”

For adjective of *uncertain*: “Never knowing how, in what sort of frame of mind he was going to be in. I can remember waiting with her (mom) wondering ‘Is he gonna come in and start drinking or is he going to be in a very good mood and everybody’s gonna have a real nice time.’”

- score of 1 on conflict

“My mom was married to my real father and they divorced when I was 12, 13... Their relationship wasn’t any good. They got married when she was 16 and he was 17 because I was on the way so it was pretty much a shotgun wedding/ So they weren’t very close at all.”

Adjectives about parental marriage: *Unhappy, unfamiliar, and unsatisfying.*

*Unhappy*: “Lots of fighting. He cheated on her several times.”

*Unfamiliar*: “Since they were fighting and stuff they just avoided each other a lot.”

*Unsatisfying*: “Obviously neither of them were satisfied.”

- score of 1.5 on conflict

“Since they divorced so young and were separated a lot of the time, the most I can remember is when I was very young, like 3 or 4... My memories are they kind of fought a lot, partied a lot, and were very young... So, they were kind of on again off again relationship quite a bit. They’d separate but then they’d kind of get back together and so it was definitely on again off again for a while.”

Adjectives about parental marriage: *Wild, inconsistent, and dysfunctional*

*Inconsistent*: “How they would be together then they would have a fight, and their fights were pretty dramatic and they would break up for a while and then get back together. I always thought that puts a strain on the relationship... My dad drank a lot. He drank a lot and would come home drunk and I remember once my mom throwing a huge bucket of cold water on him on the couch. I don’t know how old I was. I don’t remember any words being exchanged I just, I remember it was pretty, when they did fight it was intense. It wasn’t kidding and stuff like that but it was a lot of yelling, and water throwing and saying “Get out!” [[Interviewer: How old were you?]] I want to say about five.”

### **Middle scores = more normal life conflict**

- 3 on conflict

For adjective of *division*: “Again, the picture that came to mind was about the time we were getting ready to leave Long Island. We were moving to the Midwest. I became aware, and it could have been there the whole time, but I became aware that my father and my mother’s mother, his mother-in-law, weren’t the best of friends, didn’t get along that well and I don’t have a specific experience but I do remember hearing arguments about her, my grandmother, getting in the middle of how we were being raised and sticking your nose in where it doesn’t belong.. And it seemed to create a division, in my mom especially, wanting to be a good daughter and wanting to be a good wife.

[[Interviewer: Is that a division between your parents or a division between your mother or... ?]] I think it, I’m not a psychiatrist or anything, but I think it was creating a division between my mom and my dad. That’s how I sensed it at 5 or 6 years old or however old I was at the time. I sensed that it was causing friction between the two of them, and that they weren’t dealing with it well at all. And I didn’t understand it, but I felt it. I *felt* like that there was some kind of division there that was causing trouble between the two of them.”

### **High scores = low conflict, if conflict at all**

- score of 7 on conflict

“I just don’t remember anything special one way or the other really that I can, I mean either particularly positive or negative. I don’t remember them being particularly intimate or you know hugging or anything and but I don’t remember anybody yelling at each other or anything.”



## Affection

**Lowest scores = Negative expressions of affection, physically or verbally**

- 1 on affection

“He’d party a lot and drank a lot and I think that was very stressful on my mom because she wasn’t used to that type, going out. I know my mom had threatened divorce several times because he’d get so drunk he’d come home and start asking her to do stuff, beating on her. I think my mom was really dependent on my dad. I feel she was very dependent on him at the time but also he kind of brainwashed her into thinking she was inadequate, stupid, but she wasn’t a very, she was independent I think but didn’t know it, didn’t have confidence in herself.”

Adjectives about parental marriage: *unhappy; dependency; unsatisfying*

**Low scores = No mention of affection or statement that there was no affection between parents but no negativity either**

- 2 on affection

Describing adjective of *not warm*.

“Ya well I don’t ever remember them being warm um hugging or anything like that I don’t remember them doing any of that it didn’t seem very touchy feely toward each other or anything hugging or kissing I don’t remember any of that with them.”

- 2 on affection

Describing adjective of *lack of love*.

“I don’t think, in fact I know, I never saw them kiss once. Never saw them hug. I doubt if I even saw them put their arms around one another.”

**Middle scores = Affection is there but rare**

- 4 on affection

“There wasn’t much affection that was shown in public or in front of us kids.... I always thought since they never showed much affection in public or in front of us kids, I do remember *occasionally* seeing them hold hands and kiss every once in a while, but not very often. But I did have a feeling that they loved each other.”

- 4 on affection

“They weren’t very affectionate to each other, every now and then you’d see them kiss or hug or scratch each other’s back but that wasn’t that often.”

**Higher scores = High expressions of verbal *and/or* physical affection or outward expressions of sentimentality**

- 71 wife: 6 on affection

“They always told each other they loved each other they were very open about telling each other they loved each other. Buying each other nice gifts and cards that said “I love you” and were very sentimental and they held hands.”

- 3 husband: 6 on affection

“They never locked the doors so that they could hug and kiss and touch each other; they did that in front of the kids. I remember as a small kid in a small house, having to push by them and say ‘take it in the bedroom.’”

- 6 wife: 6 on affection

“It was very obvious to me always how much they loved each other and cared for each other.”

Describing adjective of *loving*:

“Constantly hearing them tell each other how much they loved each other. Especially my father, I remember him constantly telling my mother that he loved her, how beautiful he thought she was. I just remember hearing him say things like that a lot.”

- 41 wife: 6 on affection

Describing adjective of *affectionate*:

“They always hugged each other, kissed each other, said I love you. They hold hands, always have, put their arms around each other.”

- 100 female: 6.5 on affection

“They were very loving towards each other; there was a lot of love in the house and a lot of playfulness.”

Describing adjective of *loving*:

“They were always kissing and hugging and joking around and involving us in all that too so basically I just remember a lot of hugging and kissing and my dad telling my mom how pretty she was and things like that he liked something in particular she was wearing is that loving.”

## Communication/Companionship

**Lower scores = no shared activities or discussions; seemingly independent lives.**

- 1 on communication/companionship

“He was more flighty, would go off and do his own things and he was an only child so he was told that he did nothing wrong, so I guess he didn’t help out around at all. My mom would be eight months pregnant and out mowing the lawn. He just wasn’t there as a father I think during those years.”

- 2 on communication/companionship

“I don’t remember them interacting that much, it seemed like he was gone all the time (for work purposes). I don’t remember seeing the two together very much and I don’t remember them two alone. My dad liked to play cards so *we’d* play cards but the only time I saw the two together interacting was on weekends if we went to the park and my mom wasn’t an outdoors person so she didn’t enjoy going to the park, so *she’d sit in the car* and then my dad and mostly it was me, my sister was like my mom, she’d sit in the car with her, and we’d go do what we wanted to do. But basically I don’t remember much about how they interacted. I think they wanted different needs and they could not meet them or didn’t know how to. They really didn’t enjoy any leisure activities, I mean it’s like when I think back, I don’t know what they had in common. It’s like they fell in love and had children. But leisure activities... I don’t know what they had in common. On my dad’s side, I know he wanted my mom to be more adventuresome. To go out and hike or go swimming. She didn’t like to swim either and she didn’t like animals. He was like, he loves animals and so I think they couldn’t meet each other’s needs. They weren’t the person, they weren’t compatible. “

**Middle scores = do not spend much time together, but because of family demands, not because of avoidance; spend more time as a family than as a couple**

- 4 on communication/companionship

“We always did things as a family... We did everything together and there was a lot of talking and togetherness. [[Interviewer: Can you give me an example?]] They enjoyed coming home and talking about how their days had gone.”

- 4 on communication/companionship

“Now my parents do more as a couple, but when there were five of us (kids) growing up that’s it; they were devoted to their family. They never took just for the two of them... We would go on family vacations, but they wouldn’t go out by themselves when we were still young... “

**Higher scores = discuss feelings thoughts/spend time together (dates)**

- 6 on communication/companionship

“They kind of dated one another. I remember babysitters, my cousins used to babysit us and they used to make a point to date. (*companions*)

They just talked to one another about how they felt and if one was angry, I mean they made a point to let each other know how they felt if one was scared or hurt the other one was there (Interviewer: Was there one particular time?) When my dad broke his arm I was three he fell of a ladder he had surgery and that was the first time I really remember mom taking care of him and pampering him. They just had a really neat, unique relationship” (*communicate*)

- 6 on communication/companionship

Describing the adjective of *mutual love*:

“They hug and kiss they had fun they go do things together they enjoy camping together, they enjoy getting out and most of the time they’re together, they usually don’t like going places separate.”

- 6 on communication/companionship

“They seemed to support each other very closely. Their decisions, they’d consult with one another and make their decisions. They were very consistent in their direction of me and my sister. They did talk with one another about how we should be raised. And they tried to be as consistent as possible. They would complement one another on all their accomplishments at work. They were always talking if they had problems, to get rid of their problems.”

## Insight

**Lowest scores = No or low insight (no links made)**

- 1 on insight

Interviewer: How has your parent's marital relationship affected you?

"No effect."

Interviewer: How has your parent's marital relationship affected your relationship with your partner?

"Well, we haven't been married that long and I don't... I don't see from the times... I would no because I never equate the two together really. As growing up as a little kid their relationship you are now... no. No relationship. I can't see how they equate to each other." (*Richness was also a 1*)

- 1 on insight

Interviewer: How has your parent's marital relationship affected you?

"I feel a lot like my stepmother came between me and my dad. I felt between me and my father I could not even talk to him. I made her mad, it didn't matter what it was in. It's a lack of, he doesn't like conflict, he still doesn't like conflict. He'll get mad and cuss and walk out of the room. My mom still disagrees on different things."

Interviewer: How has your parent's marital relationship affected your relationship with your partner?

"Yeah, because like I said I had seen them fight a couple times and my dad was always tough. He'd tell someone exactly what he thinks. Because my mom, yeah sometimes people think I'm kind of rude so I tell them why this, why that. But, they're still together. The difference between my mom and Stephanie (his partner) is that my mom would back down to my dad and Stephanie never backs down. I think she's tougher than me, is what is, she doesn't care. Whereas me, I see the example of me doing it. That's just what her dad used to do with her."

*--no connections are being made here; he talks a lot, but just kind of rambles*

**Low to middle insight = sees links but vague; no details**

- 2.5 on insight

Adjectives used to describe parental marriage: *accommodating, loving, caring/fair*  
But then later in teens, parents bought a family business, a truck stop, and the pressures of that made them grow apart until they finally divorced; dad's job 1 week away and 1 week home

Interviewer: How has your parent's marital relationship affected you?

"Probably made me stronger, more independent. When they divorced when I was 17. It affected me more then, made me more independent, stronger-willed, stronger personality to succeed in whatever I wanted to do (Interviewer: Tell me how the divorce affected you). It made me rely on myself in a vulnerable time in my adolescence, I guess. Made me pull on inner strength and rely on myself, not that I can't rely on other people or anything but I was doing it at such an early age that it comes natural to me now."

Interviewer: How has your parent's marital relationship affected your relationship with your partner?

"I don't think it has at all to tell you the truth. We're independent people, I think. I am, my actions are from my parents and I don't model my marital relationship from what they did, it's just me and Cindy. I really can't think that they had any influence or impact to that at all. (Interviewer: Has that been a conscious decision on your part?) I'm my own self and it's just the way we interact with each other."

*--he sees results to his self due to parent's divorce, BUT there is nothing about the affect from the parent's marriage (which was portrayed as very positive..) and nothing connected about parent's marriage to his own marriage; he denies any links...*

- score of 3.5 on insight (Adjectives about parent's marriage: violent, uncertain, and some ways productive)

Interviewer: How has your parent's marital relationship affected your relationship with your partner?

"Since it was a negative experience, overall I had a hard time learning to trust men. And I had a hard time trusting David's (husband's) anger. Letting him be angry without me freaking out."

*--a link is there but not really specific to the marriage*

**Middle to higher insight = Can see similar/influential/conflicting characteristics and make the influence link, and able to provide adequate (not deep) links and some examples**

- 4.5 on insight

Interviewer: How has your parent's marital relationship affected you?

"Well, I can't really say because I don't, my memories, I don't have a lot of them being married. It's always been of them being separated and dad, seeing him on weekends, so I can't really say how it's affected me because I don't know, I'm different. [[Interviewer: How has their separations or their inconsistencies in their relationship affected you?]] It's probably made me more consistent and try harder for consistency because I want that. I don't know if I want it more because I never had it or wasn't used to it or I'm not sure if that's why I want it so bad, but I think it has something to do with it."

Interviewer: How has your parent's marital relationship affected your relationship with your partner?

"It made me value a good relationship, which what I have with Peter, a really good relationship. I really value it because I know it's not, I means I feel it's not a common thing and it can go away. It's always important to work on it, because I don't feel like they ever worked on their relationship and that's why it's pttthh...."

- score of 5 on insight (Adjectives about parent's marriage: *cooperative, affectionate, parental*)

Interviewer: How has your parent's marital relationship affected you?

"Well generally when I think of marriage that's what I think about is this how you're married. Specifically, I think because my father was willing to take on more of a feminine role and because they were more cooperative with each other that I have an idea of marriage being more of a teamwork kind of things where we both work together to accomplish certain things as opposed to Robby (his wife) being my subordinate and helping me to bring home the bacon and supply for my family."

*--this connection is about a 4 or 5*

Interviewer: How has your parent's marital relationship affected your relationship with your partner?

"Well, we work together well, able to discuss. Well we don't have traditional roles. I think that, well I guess we both have an idea that our role is to support one another than to have certain job duties in the marriage or in the house. So we put more towards that support role than say something else."

*--score would be higher if he tied this information back to parental marriage*

- score of 5.5 on insight (Adjectives about parent's marriage: *quote unquote perfect, normal, domination, i.e., man rules the wife and kids; he had final say*)

Interviewer: Will you illustrate an example of how you sometimes relate with Bill (follow up to impact relationship with partner question):

"I've gotten a lot better at handling sometimes." (*vague*)

"I think he does some stupid ass things I just he does little things sometimes that tick me off (*vague*) and sometimes I can overlook and I've noticed lately I've been like last week was a really bad week with the holidays and my parents and my family wasn't here so I was depressed and I knew that things were really bothering me then and it was more of a follow through type behavior and we had a big fight. I slept on the floor but this was the first big fight we've had in a long time and it was because of follow through behavior or something we started with something stupid and that's *when I realized that it came from my childhood* because I could see it wasn't so much the task it was the, Bill just didn't follow though we had agreed on something and he just did the same thing and I said no and I just got really angry and I ran into a rage and I tried to control myself and I couldn't and I knew it came from the holidays and this and that and it just all built on me but then after and I told him the truth and I realized it wasn't the task *it was the feelings when I felt betrayed as a child* but we worked it out."

--realizes that some events come from her childhood and makes this connection (see *bolded items above*), but doesn't really discuss how her parent's **marriage** impacted her own marriage; more about her childhood experiences...

- score of 5.5 on insight (adjectives include *unselfish, loving and giving*)

Interviewer: How has your parent's marital relationship affected you?

"It gave me a lot of confidence in myself because of their relationship and how they felt about each other, they always made me feel very loved and because of that I have a lot of confidence in myself and feel good about myself. Also it made me realize when I was first dating and thinking about getting married, that I wanted a relationship where I felt as loved as they felt. I maybe sought that out."

Interviewer: How has your parent's marital relationship affected your relationship with your partner?

"My father died one year after I married, so it didn't affect that. It affected me in a positive way because they really loved Don and were happy for us and would have done anything for us and to help us out. [[Interviewer probe]]. I tend to be very vocal about how I feel about Don. I'm always telling him I love him and appreciate him and I tell that to other people and talk about him in a very endearing way to my friends and people at work and I think that's probably because my parents did that and that's what I grew up hearing. Also seeing their relationship made me realize that Don is the most important person in my life. As much as I love my parents I could see how they really depend on each other and how to cling to that person. I think I appreciated that."



*--she makes connections between her parent's marriage and how it affected her as well as her relationship to her partner –good!  
--she uses new information for each question (doesn't repeat the same information for both questions)*

**High insight = Makes a connection from the parent's marriage. Focus is on self and marriage. Metacognitive personally, can tell they've really thought about it**

- 6.5 on insight

Interviewer: How has your parent's marital relationship affected you?

"I think it's made me I felt like, especially the older I got, the more I felt like that my mom really wasn't using all her talents that she could be using because the system at that point, and I won't blame it on the system, but she believed in the system I guess, and the system was that she took care of the kids and she was a homemaker and that was it. And I think she didn't feel very fulfilled or like she was accomplishing all she could have accomplished, and she didn't really know what to do about it. My point is, the way it affected me is, like in my relationship with Shelley, I try to encourage her if there's something that she wants to do then, by God, today's the day to do it... You got to go out and get after it and accomplish what you want to accomplish. So on one hand, it's made me more sensitive to making sure my partner has the opportunities they want. Our society is kind of geared toward giving men opportunities for some reason, which I've never understood, but that's the way the system is. And it's better; it's better than it was when I was a kid. I think that's had a big effect on me."

"Their affections towards each other and towards me, has always encouraged me to be fairly affectionate with people I'm involved with. The things that caused their division, as a kid, to use that adjective, as a kid, now I whenever I feel that feeling or see those that thing happening I try to stop and talk it out right then and there because to me, was the only weakness in their relationship. Both of them would have things they wanted to talk about. As far as I could tell they didn't talk it out and share their own feelings. They just kind of went along day by day..... I think as I got older, they drifted apart because they didn't talk about what was going on and how they were feeling and how they were changing and how they felt about their lives. So that's, it kind of sensitized me to make sure that I do, even though I don't want to, to stop and talk about how I'm feeling and where I'm going and how are you feeling and where are you going and how are we, is there weaknesses that have developed in our relationship that we haven't noticed because we've been so busy, those kind of things. We try to go away and literally get away from everything a couple, three times a year where we go out to Northern California or go someplace we haven't gone... just by ourselves, have some fun, kind of regroup ourselves, get in touch with one another, make sure we're staying in touch with each other." *--makes connections to self, but more connections to his relationship. He realizes that his parents had some problems (mom was an alcoholic; Dad's parents were very "Victorian") and talks about how he tries to make his own marriage work.*

## Richness

### Low scores = vague; no picture of parental marriage

- 1 on richness

“Well I mean during your early childhood you can’t remember that much... Keeping all five of us (brothers and sisters) and then of course we were moving a lot so I really didn’t see much of analyze it, their relationship, because of my young age or anything.

[[Interviewer: And when you were say a little older did you see a relationship between them?]] Uh no, I guess not really. I didn’t, they were man and wife and raising a family. I guess I didn’t even know what kind of relationship I’d be looking for other than the one I’d always know to be as my parents and together for that reason.”

Adjectives about parental marriage: *loving to each other and to us; concerned security; moving*

*Loving to each other and to us:* “Just a lot of little things that my father used to do. He used to bring home little things for my mom and for all of us kids at the same time also. I guess really that’s all about, that’s the memory I have.”

*Concern for the family’s well being:* “Well as you can imagine with five of us how many cuts, scraped knees, stitches. My sister got a bee stuck in her ear one time. Whatever it took, one of them would stay with some of us and the other would run around to the doctor with the other and take them to the hospital. Whatever needed to be done to make them well whether they were sick or whatever. I guess that’s it. A lot of medical stuff basically so, I remember that.”

*--not about the parent’s marriage*

*Moving:* “Ummm, the only thing I can remember that is consistent with all the times we moved was we were always kind of made at the movers for losing something to the movers. Movers stole all the time, every move there were items lost. [[Interviewer: Okay, then I’m just trying to get the sense of how you saw that affect their marriage or how they dealt with it as a couple]]. There really wasn’t much, it was lost, that’s it.”

*--no picture, no details, no examples*

**Middle richness = A picture is starting to emerge, but very few details of the parent's marriage**

- score of 3.5 on richness

Adjectives about the parental marriage: *accommodating, loving, caring/fair*

“But then later in teens, parents bought a family business, a truck stop, and the pressures of that made them grow apart until they finally *divorced*; dad's job 1 week away and 1 week home.”

*Accommodating*: “Father understood being away 1 week at a time was a big strain on my mother and that's why he came back and we spent a good portion of what he made going on trips to get her out of the house. She'd be there a week with us at a time. They were just proud to watch us grow up. Bragged on us.”

--*not really about parent's marriage...*

*Loving*: “When they drove around in the car or truck they always sat really close to each other rather than distant, 1 by 1 door and 1 by the other, that's the example I can think of. My mother always sat in the middle instead of by the door.”

(No probe for caring/fair)

--*I don't feel like have a very good picture of the parent's marriage. He really doesn't share that much. Also, if the parents were accommodating, loving, caring/fair, why did they divorce when they started a new business? Was there really no conflict early on, or is he idealizing the parent's marriage earlier on?*

- score of 4.5 on richness

Adjectives: *one-directional or one-way; non-intimate*

*One-way*: “Well, as far as kind of in the same of... my father was very much the father of the house and even though my mother did work most of the time she lived with us, um, it's a funny way of putting it. So I, but he was still very much the breadwinner, or at least that was kinda the feeling we got. *I remember one day* when he came home in a new car and that was, well it wasn't a new car, '68 back in '75, but it was a new car to the family so it was kind of like that was the thing he went out and decided to get a car to the family. So it was kind of like that was the thing he went out and decided to get a and he was paying for it type-thing and so I didn't really get the... the.. my mom's job didn't seem like it was the primary income but also in the sense that as far as decisions kinda like buying the car, tended to be very much made by my father as far as you now, just running the house type things...”

*Not being intimate:* Yeah, I don't, it occurred when I was trying to think kinda back to that period before the divorce it occurred to me that I remember at a fairly young age and let's see. I have a pair of cousins who at about the age of 8 or 9 I remember that they were, she was the daughter of my uncle so I was out at the farm for a vacation... And I can remember you know when I was young enough, 8 or 9, that they were a few years of marriage, you know, I can remember them kinda a hug-type thing, not that 20-year old marriages don't do that, that kinda thing you kinda think of as somewhat more newlywed type thing I just remember kinda being you know childishly embarrassed by that and that occurred to me that I don't remember anything along those lines with my parents. And as I mentioned before I remember far better my parents sleeping apart ....

(No third adjective; interviewer didn't probe for third adjective)

*--picture not solidified about parent's marriage*

- score of 5.5 on richness

*Cooperative, affectionate,* is there a list I can choose from? (laughing). Parental, they were *parental*.

*Cooperative:* "Nothing real specific I couldn't describe the conversation. Just that this general memory that they would talk with one another. One wouldn't make a decision without another just you know parental stuff."

*Affectionate:* "You know they never locked the door so they hugged and kissed. We lived in a small house when I was younger. And I remember I had to push by and say "take it to the bedroom."

*Parental:* "Parental part would be yelling at us for getting in trouble, spanking us or dressing us to take us to church. All those parental things..."

*--there is definitely a consistent picture; I can believe parents had a positive marriage and there are some details, BUT I don't know see concrete supporting examples*

**Higher richness = Able to provide a clear, detailed picture of the parent's marital relationship with concrete supportive examples.**

- 6 on richness

Adjectives: *loving, interested, and division*

*Loving:* "I would have been probably four years old. My brother was in little league. The picture that come to my mind was my mom, my dad, and myself were at one of his games... We were all sitting watching the game and I went wandering around to play with my friends and looking back and they were sitting in the bleachers holding hands and they just looked like two kids in love; two people very much in love. They weren't kids by any means... I remember thinking, and I was really little, but I remember thinking they looked pretty cool up there."

*Interested:* "Yeah, I remember my dad, after we had a, we bought a house out in Long Island. They had had the second girls, there was four of us now and the house was getting a little cramped, and I remember Dad decided he was going to turn the two-car garage into a game room or family room/den. I remember she (Mom) was very involved, where the word 'interested,' in helping him to get it done. He would ask her "How do you want this?" "Where would you like that?" or "Do you think a window would look good here." As a kid, it was neat to see them, figure them making all the decisions you have to make when you do something like that. My mom was very interested and supportive of, I remember at that point, of his work, the work he was doing. She would go to the functions, the parties and the things that he went to in a business sense, and enjoyed it and was very supportive of the people that he worked with... And both of them seemed very interested in us, and I realize that probably the things we were interested in were not the most fascinating things to adults but they always seemed interested...."

*Division:* "Again, the picture that came to mind was about the time we were getting ready to leave Long Island. We were moving to the Midwest. I became aware, and it could have been there the whole time, but I became aware that my father and my mother's mother, his mother-in-law, weren't the best of friends, didn't get along that well and I don't have a specific experience but I do remember hearing arguments about her, my grandmother, getting in the middle of how we were being raised and sticking your nose in where it doesn't belong.. And it seemed to create a division, in my mom especially, wanting to be a good daughter and wanting to be a good wife. (Interviewer: Is that a division between your parents or a division between your mother or... ?)

I think it, I'm not a psychiatrist or anything, but I think it was creating a division between my mom and my dad. That's how I sensed it at 5 or 6 years old or however old I was at the time. I sensed that it was causing friction between the two of them, and that they weren't dealing with it well at all. And I didn't understand it, but I felt it. I felt like that there was some kind of division there that was causing trouble between the two of them."

## Appendix E

### Effects Coding Syntax

For Husbands. The median of content (rcont) is 12 and the median of process (proc) is 7

The reference group is represented by -1.

The reference group here is low content and high process.

The contrast group is represented by 1.

The groups not in the contrast are represented by 0.

```
if (rcont >= 12 & proc >= 7) hihi = 1 .  
if (rcont < 12 & proc >= 7) hihi = -1 .  
if (rcont >= 12 & proc < 7) hihi = 0 .  
if (rcont < 12 & proc < 7) hihi = 0 .  
execute.
```

```
if (rcont >= 12 & proc >= 7) hilow = 0 .  
if (rcont < 12 & proc >= 7) hilow = -1 .  
if (rcont >= 12 & proc < 7) hilow = 1 .  
if (rcont < 12 & proc < 7) hilow = 0 .  
execute.
```

```
if (rcont >= 12 & proc >= 7) lolow = 0 .  
if (rcont < 12 & proc >= 7) lolow = -1 .  
if (rcont >= 12 & proc < 7) lolow = 0 .  
if (rcont < 12 & proc < 7) lolow = 1 .  
execute.
```

## Effects Coding Syntax

For Wives. The median of content (rcont) is 11.5 and the median of process (proc) is 8.

The reference group is represented by -1.

The reference group here is low content and high process.

The contrast group is represented by 1.

The groups not in the contrast are represented by 0.

```
if (rcont >= 11.5 & proc >= 8) hihi = 1 .  
if (rcont < 11.5 & proc >= 8) hihi = -1 .  
if (rcont >= 11.5 & proc < 8) hihi = 0 .  
if (rcont < 11.5 & proc < 8) hihi = 0 .  
execute.
```

```
if (rcont >= 11.5 & proc >= 8) hilow = 0 .  
if (rcont < 11.5 & proc >= 8) hilow = -1 .  
if (rcont >= 11.5 & proc < 8) hilow = 1 .  
if (rcont < 11.5 & proc < 8) hilow = 0 .  
execute.
```

```
if (rcont >= 11.5 & proc >= 8) lolow = 0 .  
if (rcont < 11.5 & proc >= 8) lolow = -1 .  
if (rcont >= 11.5 & proc < 8) lolow = 0 .  
if (rcont < 11.5 & proc < 8) lolow = 1 .  
execute.
```

## Effects Coding Syntax

For Husbands. The median of content (rcont) is 12 and the median of process (proc) is 7

The reference group is represented by -1.

The reference group here is high content and high process.

The contrast group is represented by 1.

The groups not in the contrast are represented by 0.

```
if (rcont >= 12 & proc >= 7) lohid = -1.  
if (rcont < 12 & proc >= 7) lohid = 1 .  
if (rcont >= 12 & proc < 7) lohid = 0 .  
if (rcont < 12 & proc < 7) lohid = 0 .  
execute.
```

```
if (rcont >= 12 & proc >= 7) hilod = -1 .  
if (rcont < 12 & proc >= 7) hilod = 0 .  
if (rcont >= 12 & proc < 7) hilod = 1 .  
if (rcont < 12 & proc < 7) hilod = 0 .  
execute
```

```
if (rcont >= 12 & proc >= 7) lolod = -1 .  
if (rcont < 12 & proc >= 7) lolod = 0 .  
if (rcont >= 12 & proc < 7) lolod = 0 .  
if (rcont < 12 & proc < 7) lolod = 1 .  
execute.
```



## Effects Coding Syntax

For Wives. The median of content (rcont) is 11.5 and the median of process (proc) is 8.

The reference group is represented by -1.

The reference group here is high content and high process.

The contrast group is represented by 1.

The groups not in the contrast are represented by 0.

```
if (rcont >= 11.5 & proc >= 8) lohid = -1 .
if (rcont < 11.5 & proc >= 8) lohid = 1 .
if (rcont >= 11.5 & proc < 8) lohid = 0 .
if (rcont < 11.5 & proc < 8) lohid = 0 .
execute.
```

```
if (rcont >= 11.5 & proc >= 8) hilod = -1 .
if (rcont < 11.5 & proc >= 8) hilod = 0 .
if (rcont >= 11.5 & proc < 8) hilod = 1 .
if (rcont < 11.5 & proc < 8) hilod = 0 .
execute.
```

```
if (rcont >= 11.5 & proc >= 8) lolod = -1 .
if (rcont < 11.5 & proc >= 8) lolod = 0 .
if (rcont >= 11.5 & proc < 8) lolod = 0 .
if (rcont < 11.5 & proc < 8) lolod = 1 .
execute.
```

## Appendix F

*Means and Standard Deviations for Groupings of Content and Process in Relation to Emotional Attunement at 24 months for Husbands, Where the Reference Group is Low Content and High Process*

| Emotional Attunement 24 months  |      |      |    |
|---|------|------|----|
| The Variable is Husband High Content & High Process   | Mean | SD   | N  |
| -1 (Reference Group)  | 4.76 | 1.66 | 23 |
| 0 (Contrasts Not Compared to This Group)<br>Here, High Content and Low Process<br>and Low Content and Low Process   | 4.23 | 1.47 | 37 |
| 1 (Contrast Group)<br>Here, High Content and High Process   | 4.93 | 1.58 | 29 |
| The Variable is Husband High Content & Low Process  |      |      |    |
| -1 (Reference Group)  | 4.76 | 1.66 | 23 |
| 0 (Contrasts Not Compared to This Group)<br>Here, High Content and High Process<br>and Low Content and Low Process  | 4.62 | 1.54 | 46 |
| 1 (Contrast Group)<br>Here, High Content and Low Process  | 4.35 | 1.60 | 20 |
| The Variable is Husband Low Content & Low Process   |      |      |    |
| -1 (Reference Group)  | 4.76 | 1.66 | 23 |
| 0 (Contrasts Not Compared to This Group)<br>Here, High Content and High Process<br>and High Content and Low Process | 4.69 | 1.60 | 49 |
| 1 (Contrast Group)<br>Here, Low Content and Low Process   | 4.09 | 1.33 | 17 |

## Appendix G

*Means and Standard Deviations for Groupings of Content and Process in Relation to Emotional Attunement at 24 months for Wives, Where the Reference Group is Low Content and High Process*

| Emotional Attunement 24 months  |      |      |    |
|---|------|------|----|
| The Variable is Wife High Content & High Process  | Mean | SD   | N  |
| -1 (Reference Group)  | 4.98 | 1.36 | 27 |
| 0 (Contrasts Not Compared to This Group)<br>Here, High Content and Low Process<br>and Low Content and Low Process   | 4.24 | 1.56 | 38 |
| 1 (Contrast Group)<br>Here, High Content and High Process   | 4.73 | 1.74 | 24 |
| <hr/>   |      |      |    |
| The Variable is Wife High Content & Low Process   |      |      |    |
| -1 (Reference Group)  | 4.98 | 1.36 | 27 |
| 0 (Contrasts Not Compared to This Group)<br>Here, High Content and High Process<br>and Low Content and Low Process  | 4.47 | 1.65 | 39 |
| 1 (Contrast Group)<br>Here, High Content and Low Process  | 4.35 | 1.65 | 23 |
| <hr/>   |      |      |    |
| The Variable is Wife Low Content & Low Process  |      |      |    |
| -1 (Reference Group)  | 4.98 | 1.36 | 27 |
| 0 (Contrasts Not Compared to This Group)<br>Here, High Content and High Process<br>and High Content and Low Process | 4.54 | 1.69 | 47 |
| 1 (Contrast Group)<br>Here, Low Content and Low Process   | 4.07 | 1.44 | 15 |

## Appendix H

*Means and Standard Deviations for Groupings of Content and Process in Relation to Emotional Attunement at 24 months for Husbands, Where the Reference Group is High Content and High Process*

| Emotional Attunement 24 months   |      |      |          |  |
|--|------|------|----------|--|
| The Variable is Husband Low Content & High Process   | Mean | SD   | <i>N</i> |  |
| -1 (Reference Group)   | 4.93 | 1.59 | 29       |  |
| 0 (Contrasts Not Compared to This Group)<br>Here, High Content and Low Process<br>and Low Content and Low Process  | 4.23 | 1.47 | 37       |  |
| 1 (Contrast Group)<br>Here, Low Content and High Process   | 4.76 | 1.66 | 23       |  |
| The Variable is Husband High Content & Low Process   | Mean | SD   | <i>N</i> |  |
| -1 (Reference Group)   | 4.93 | 1.59 | 29       |  |
| 0 (Contrasts Not Compared to This Group)<br>Here, Low Content and High Process<br>and Low Content and Low Process  | 4.48 | 1.54 | 40       |  |
| 1 (Contrast Group)<br>Here, High Content and Low Process   | 4.35 | 1.60 | 20       |  |
| The Variable is Husband Low Content & Low Process  | Mean | SD   | <i>N</i> |  |
| -1 (Reference Group)   | 4.93 | 1.59 | 29       |  |
| 0 (Contrasts Not Compared to This Group)<br>Here, Low Content and High Process<br>and High Content and Low Process | 4.57 | 1.62 | 43       |  |
| 1 (Contrast Group)<br>Here, Low Content and Low Process  | 4.09 | 1.33 | 17       |  |

Appendix I

*Means and Standard Deviations for Groupings of Content and Process in Relation to Emotional Attunement at 24 months for Wives, Where the Reference Group is High Content and High Process*

| Emotional Attunement 24 months   |      |      |          |
|--|------|------|----------|
| The Variable is Wife Low Content & High Process  | Mean | SD   | <i>N</i> |
| -1 (Reference Group)   | 4.73 | 1.74 | 24       |
| 0 (Contrasts Not Compared to This Group)<br>Here, High Content and Low Process<br>and Low Content and Low Process  | 4.24 | 1.56 | 38       |
| 1 (Contrast Group)<br>Here, Low Content and High Process   | 4.98 | 1.36 | 27       |
| <hr/>  |      |      |          |
| The Variable is Wife High Content & Low Process  | Mean | SD   | <i>N</i> |
| -1 (Reference Group)   | 4.73 | 1.74 | 24       |
| 0 (Contrasts Not Compared to This Group)<br>Here, Low Content and High Process<br>and Low Content and Low Process  | 4.65 | 1.44 | 42       |
| 1 (Contrast Group)<br>Here, High Content and Low Process   | 4.35 | 1.65 | 23       |
| <hr/>  |      |      |          |
| The Variable is Wife Low Content & Low Process   | Mean | SD   | <i>N</i> |
| -1 (Reference Group)   | 4.73 | 1.74 | 24       |
| 0 (Contrasts Not Compared to This Group)<br>Here, Low Content and High Process<br>and High Content and Low Process | 4.69 | 1.52 | 50       |
| 1 (Contrast Group)<br>Here, Low Content and Low Process  | 4.07 | 1.44 | 15       |

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## Vita

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