

Exploratory Study of Decision-Making in Low-Income Couples

Technical Report



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In consultation with Shelly J. Lundberg, University of Washington



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I. INTRODUCTION AND BACKGROUND

The Exploratory Study of Decision Making in Low-Income Couples (CDM) was designed to gather information that may ultimately help shape content, service delivery, and outcome measurement in programs serving economically disadvantaged families, particularly parents eligible for public assistance and social services. The study uses survey data, direct observation of couple interaction, and physiological measurement to provide a detailed look at the functioning and decision-making processes of a small sample of married and unmarried low-income couples.

In this chapter, we describe the policy context and motivation for the study, outline the research questions, and provide a framework for exploring the questions. The second chapter describes the study's methods and procedures. In Chapter III we present a detailed picture of the observed interaction and decision-making styles of low-income couples, while in Chapter IV we examine the association of these patterns with contextual factors. The report concludes with a discussion of the results and hypotheses for future research.

A. Policy Context and Study Purpose

Improving our understanding of how low-income couples function may suggest strategies for achieving programmatic and policy goals. A variety of questions can be explored that have the potential to inform strategies for reaching these goals. For instance, do couples' dynamics affect their ability to take up and benefit from services, such as those that seek to involve fathers, strengthen families, and improve children's outcomes? Do these influences suggest specific behaviors that could be usefully addressed in programs that serve couples? Are unmarried women receiving TANF likely to be influenced by their romantic partners in such key decisions as going to work or enrolling a child in a Head Start program? If so, would involving these partners in services improve participation and possibly outcomes?

1. Delivery of Social Services

Aside from relationship-skills education programming, most social services for low-income families focus on addressing the needs of an individual rather than couples. Services such as nutritional assistance, employment training, health care, early childhood education, and responsible fatherhood programs are typically targeted to either low-income mothers or low-income fathers, but not to couples. Yet because of the rise of cohabitation and nonmarital childbearing, many single parents today are in partner relationships and raising children together. Even when low-income individuals are married, they are likely to be served individually rather than as couples. If the individuals in these couples influence each other's decisions, it may be useful to address the opinions or concerns of the client's partner in delivering social services, and in some cases to deliver services to both partners if needed. For instance, a recent study suggested that employment programs may produce better outcomes when both individuals in a couple participate than when only one of them does (Gordon and Heinrich 2005). However, little research has been conducted in this area, and none has examined the extent to which clients of social services are influenced by their partners when making program-related decisions.

2. Programs for Strengthening Low-Income Couples

There is little research that examines the extent to which relationship dynamics in low-income couples are similar to or different from those of more advantaged couples. Most programs for low-income couples, including those that aim to help them develop relationship skills, have been based

on studies of interaction among middle-class samples. Thus, insight into the nature and quality of couple interaction in low-income groups could provide information for enhancing or developing the content of programs that aim to work with these couples.

It is plausible that the circumstances of low-income individuals play a role in their interactions as couples. One might expect, for example, that low-income couples would experience higher levels of interpersonal conflict as a result of the multiple pressures and challenges often faced by them. Low-income individuals differ from others in ways beyond earnings and income. In addition to their lower average levels of employment and education (McLanahan et al 2001; Fein 2004), they tend to be at higher risk for depression, psychological distress, health problems and disabilities (Danziger et al. 2000; Lennon et al 2001) and are often members of minority groups and subject to experiences of racial discrimination (Zedlewski and Loprest 2001). They are less likely to be married and more likely to have children outside of marriage, to live with children from their own or their partner's prior unions (Carlson and Furstenberg 2006; Carlson et al. 2004), and among those who are married, to be at higher risk of divorce than couples with higher incomes (Fein et al. 2004).

3. Measurement of Relationship Outcomes

The number of programs aiming to increase father involvement and stabilize low-income couples' relationships has expanded substantially in recent years, and the outcomes of these programs are typically assessed using established survey measures of couple functioning. Some of the measures were developed from studies that examined the measures' validity by comparing them to what is often considered the gold standard—direct observation of couple interaction—but subjects in these earlier studies were primarily married middle-class couples. It is unclear whether such survey measures adequately capture low-income couples' relationship dynamics and quality. Comparing such survey measures against observations of low-income couples' interactions could provide information about the validity of measures used in numerous program evaluations.

To explore these and related issues, the Office of Planning, Research, and Evaluation, in the Administration for Children and Families at the U.S. Department of Health and Human Services, contracted with Mathematica Policy Research and its subcontractor, the Relationship Research Institute, to conduct an in-depth descriptive study of the interaction processes of low-income couples, particularly those in which at least one partner is receiving social services. Because no research to date has directly examined the interactions of couples receiving public assistance, nor the processes by which they make decisions, this study was intended to be strictly descriptive and exploratory in nature, representing only a first step in identifying implications for policy and programming. The main purpose of the study is to improve knowledge about and understanding of the quality and functioning of low-income married and unmarried couples by observing their interactions in a natural setting. Combined with other data, the results could be expected to lead to the formation of hypotheses for testing in further research related to programming, service delivery, and outcome measurement.

B. Research Questions

In this study we sought to address the following questions:

1. What Patterns of Affective Behavior are Displayed by Low-Income Individuals When Interacting With Their Partners?

Psychologists generally agree that affect underlies much of human social behavior. Prior research with middle-class couples indicates that specific patterns of behavior that have their roots in emotion reliably predict the long-term quality and stability of marital relationships (Gottman and DeClaire 2001). It is likely that such behavior also matters for the decisions couples make, because individuals are unlikely to negotiate and compromise with their partners unless they feel secure in the relationship.

A distinction can be made between affect (emotions such as sadness or fear) and affective behavior, which is the outward expression of emotions. For example, anger can be expressed as hostility or contempt, such as attacking a person's character, or using put-downs. Fear can be expressed as defensiveness, such as negatively interpreting someone's behavior. Frequent displays of affective behaviors like contempt and defensiveness have been shown to damage the quality and stability of relationship interaction. Although it may not be possible or desirable to change our emotions, research has shown that people can learn to manage and express their feelings in ways that are constructive rather than destructive to the relationship. Such training is at the heart of many relationship skills programs, and likely extends beyond the marital dyad to such other human relationships as parent-child and supervisor-employee.

In our sample of low-income couples, we ask:

- How much positive versus negative affective behavior is displayed when couples discuss a topic on which they disagree? Do interaction processes differ for low-income married versus unmarried couples? (See Chapter III, Section A1.)
- How do these patterns relate to each partner's reports of satisfaction with the process and outcome of the observed interactions? (See Chapter III, Section A2.)
- How likely are low-income individuals to be influenced by their partners' affective behavior during discussion of a disagreement? (See Chapter III, Section A3.)
- How do the observed interaction patterns compare to those of middle-income couples in prior studies that use the same methods? How does acceptance of affective influence compare to levels found in prior studies of other higher-income populations? (See Chapter III, Section A4.)

The boxes labeled "Affective Behavior during Interaction" and "Self-Reported Outcomes" in Figure I.1 show the specific areas we explore to address these research questions.

2. What Decision-Making Styles and Preferences Are Observed In Low-Income Couples?

A key purpose of this study is to understand the extent to which, if at all, low-income individuals are influenced by their partners, particularly when it comes to key decisions of interest to policymakers and practitioners. This question is particularly relevant to the relationships of unmarried individuals, who may differ in their commitment and dynamics from married couples.

Influence in couples' relationships can be understood and assessed in several ways. To address this question we ask:

- To what extent do individuals move away from their individual preferences and toward consensus once they engage in a joint decision-making task? Do individuals appear to prefer cooperation or do they more frequently seek to compete with their partners? (See Chapter III, Section B1.)
- How much do individuals invite their partner's influence and include them in a joint activity; how much do they instead use controlling behaviors? (See Chapter III, Section B2.)

The boxes labeled "Decision Making Behavior and Preferences" in Figure I.1 indicate the specific domains we examined to address this set of research questions.

3. What Contextual Factors Influence Couple Interaction and Decision-Making Processes?

In past research, a wide range of external influences have been hypothesized as predictors of couple interaction and decision making. To explore whether couples' decision making is linked in predictable ways to these factors we explore:

- How does the potential contribution of each partner's material and non-material resources appear to affect couples' interactions? (See Chapter IV, Section B1.)
- How does physical and psychological health of individuals affect couples' interactions? (See Chapter IV, Section B2.)
- Do those individuals who perceive that they have alternatives to their current relationships differ in their interactions with their current partner from those that don't perceive such alternatives? (See Chapter IV, Section B3.)
- To what extent are aspects of self-reported relationship quality (such as trust, commitment, and relationship happiness) associated with direct observations of couples' behavior? (See Chapter IV, Section B4.)
- Will those individuals whose relationship expectations are not met differ in their interactions with their current partner from those whose relationship expectations are met? (See Chapter IV, Section B5.)
- Do attitudes about gender roles or perceptions about the relationship (such as expectations that a partner will cheat) predict the quality of interaction and decision making? (See Chapter IV, Section B6.)
- Does marital status or multiple partner fertility affect couples' interactions? (See Chapter IV, Section B7.)

The boxes shown along the lower part of Figure I.1 labeled "Self-Reported Contextual Factors" indicate the specific constructs addressed in examining this set of research questions.

C. Conceptual Framework

To address the questions detailed above, we assess three general aspects of decision making in couples: context, process, and outcome (Godwin and Scanzoni, 1989). Research on contextual factors (such as the contribution of material resources) often looks at only the effect on decision

outcomes, such as which partner's preferences will ultimately prevail (Blood and Wolfe 1960). Process-oriented research, on the other hand, particularly when focused on the influence of couple dynamics on such relationship outcomes as satisfaction, often fails to consider the possible influence of contextual factors or the decision outcomes. In this study, we measure, analyze and describe how all three of these aspects of decision making—context, process, and outcome—operate and work together.

Based on a review of theories and evidence related to couple interaction and decision making from multiple perspectives, including economics, sociology, and psychology, we selected relevant constructs and organized them into a logic model for exploring decision making in low-income couples (Figure I.1). The constructs selected for study do not include every potentially relevant factor; they were chosen on the basis of our research questions, past literature, and study constraints. Below we briefly describe past research and our rationale for the inclusion of the concepts we are examining. Details regarding the selection and construction of specific measures suggested by the model are presented in Chapter II.

1. Contextual Factors

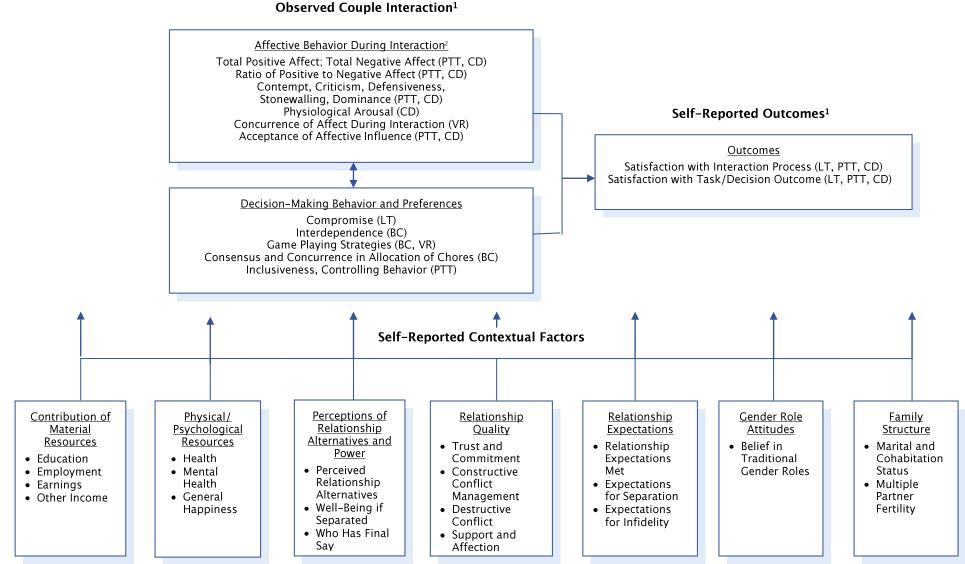
Several theoretical perspectives, including bargaining theory, the theory of family power, social exchange theory, and theories of marital interaction, suggest factors that may shape the way couples interact and the decisions they reach. We introduce these factors below, briefly discussing their underlying concepts and relevant research.

Material Resources. Economic models of decision making typically assess each partner's level of material resources and prospects, such as income and earnings, education, and assets (Lundberg et al. 1997; Beegle et al. 2001; Pollak 2005), to identify each partner's relative "bargaining power." In general, the partner with the most control over resources is predicted to have the most influence in the couple's decision making. The theory would predict, for example, that the partner with greater control of material resources would be less likely to move away from his or her individual preferences to reach consensus in decision making.

Physical/Psychological Resources. The resource theory of family power extends the economic model described above to include psychological and other resources that may increase relative bargaining power and make leaving the relationship more possible or desirable (Scanzoni and Polonko 1980; Kulik 1999). These include such resources as mental health, physical health, social support, and religiosity.

Relationship Alternatives and Power. The study of relationship alternatives suggests that the more individuals perceive that they have good alternatives to their current relationships, the less willing they are to make personal sacrifices for the sake of the relationship (Van Lange et al. 1997). A meta-analysis of studies examining the association between perceived relationship alternatives and current relationship commitment shows strong and consistent support for this phenomenon (Le and Agnew 2003; Rusbult 1980). Other researchers have found that perception of relationship alternatives is associated with relative bargaining power (McElroy and Horney 1981; Manser and Brown 1980).

Figure I.1. Logic Model for Exploring Interaction and Decision-Making in Low-Income Couples



¹ LT=Lottery Task; BC=Behavioral Choices Task; CD=Conflict Discussion; PTT=Paper Tower Task; VR=Video Recall Task.

² All measures in this domain drawn from coded interaction during Conflict Discussion and Paper Tower Task or participant ratings of affect during video replay of the conflict discussion.

Perceptions of relationship alternatives may systematically differ in low-income compared to middle-income families. Some economically disadvantaged groups have imbalanced sex ratios (Fossett and Kiecolt 1993; Wilson 1996). Relatively lower numbers of available men would suggest that men have greater options outside of their current relationships; this could reduce female partners' bargaining power within the relationship (Guttentag and Secord 1983). The costs of terminating a nonmarital relationship, common in low-income families, may be less than those associated with terminating a marital relationship (Anderson 1990); bargaining and exchange theories suggest that collaboration and sacrifice will be less likely when the cost of leaving relationships is low.

A related line of research suggests that an individual's perception of his or her power in the relationship is just as important or more important than their actual control over resources in determining willingness to engage in cooperative decision making (Rutter and Tanfer 2007; Harvey and Bird 2004); these perceptions of power are typically assessed by asking each individual which partner tends to have the "final say" in decision making (Blood and Wolfe 1960).

Relationship Quality. Perceptions of relationship quality are likely to be important influences on couple interaction during decision making. Numerous studies of couples' affective style of interacting have predicted perceptions of relationship quality, satisfaction, and happiness (Gottman et al. 1998; Carstensen et al. 1995; Gottman and Levenson 2002; Adams 2004; Driver and Gottman 2004; Shapiro et al. 2000; Roberts and Krokoff 1990; Gill et al. 1999). Couples with high levels of trust and commitment are likely to view relationship alternatives as less desirable and may be less likely to disagree about decisions and invoke strategies based on control over resources. Couples who are skilled in managing their conflicts and who have high levels of friendship and intimacy are likely to negotiate their decision-making differences more effectively.

Relationship Expectations. Some research suggests that individuals have generalized expectations or "standards" for how they expect to be treated in a relationship. Baucom et al. (1996) showed that when such standards are not met, an individual is more likely to report greater negative responses to actual problems that arise in the relationship.

Expectations for where the current relationship is headed--toward marriage, divorce, or separation--may also affect couples' interactions and decision-making processes. Those who have frequent thoughts about leaving their partner, for example, may be less inclined to cooperate; those who believe they are moving toward marriage may be more cooperative. Similarly, expectations for the partner's infidelity may be a marker of the individual's level of trust and may affect interactions.

Gender Role Attitudes. In social exchange models, relationships are thought to be influenced by beliefs, norms, and cognitions for what constitutes socially acceptable relationship behavior. These include such attitudes and values as fairness, reciprocity, and equity (Walster et al. 1978). Belief in traditional gender norms has been found in prior studies to be related to couple interaction and decision making. For example, in a large-scale survey of married couples, DeMaris and Longmore (1996) found partners' negotiations about housework were constrained by gender role beliefs.

Family Structure. Many low-income families with children are not married, yet most research on relationship quality, power, expectations, and interaction processes has been conducted with married, middle-class couples. It is plausible that levels of relationship commitment and trust may differ in unmarried couples and affect how they engage in cooperative decision making (Rhoades et al 2006; Stanley et al. 2004). According to Edin and Kefalas (2005), poor economic prospects for

low-income men may reduce women's trust in their partners' ability to fulfill conventional husband/father provider roles. This lack of ability to provide financial resources may reduce men's bargaining power (Burton et al. 1998).

The presence of children by multiple prior partners, common in low-income families (Carlson and Furstenberg 2006), may be a factor in a couple's interaction. There is little research on how multiple-partner child-bearing may affect the balance of power and influence in unmarried couples. When one partner is not the biological parent of a child in the household, his or her influence might be lower in household decision making, particularly regarding child-related matters. On the other hand, it may be greater, since the nonbiological parent may be at an advantage in attracting relationship alternatives.

2. Observed Couple Interaction

There are multiple frames from which to assess interaction and decision making processes in couples. Researchers have studied the role of affective behavior and communication in interaction, negotiation and compromise, preferences for interdependence, and the influence of individual personal gain in cooperation versus competition. This section briefly describes the literature related to these domains.

Affective Behavior During Interaction. The role of positive and negative affect in couple interaction has received much attention and led to the identification of specific affective behaviors that predict key outcomes.

Direct observation of the affective quality of couple interaction has been found to longitudinally predict such outcomes as marital satisfaction, happiness, instability, and divorce. Displays of positive affect, such as humor and warmth, have been associated with marital satisfaction (Driver and Gottman 2004; Hawkins et al. 2002), especially when positive affect is used to de-escalate conflict and soothe physiological arousal (Gottman et al. 1998). Specific forms of negative affect, on the other hand, (such as expressions of contempt, criticism, defensiveness, and stonewalling, collectively known as the "four horsemen of the apocalypse") have been identified as powerful predictors of marital instability and divorce (Shapiro et al. 2000; Gottman and Levenson 2000). Some research has focused on a balance model of affect, which suggests that what is most important is the relative amount of positive to negative affect (Gottman et al. 1998; Gottman and Levenson 2002).

It is likely that these behaviors are associated with decision making in couples, including decisions that are of interest to social service providers, such as whether to enroll a child in Head Start or engage in fatherhood programming or welfare-to-work services. If the partners of clients in unmarried couples influence each other's decisions through affective behavior, for example, taking the partner into account in attempts to engage the client could be useful for promoting positive program outcomes.

Researchers often examine the role of affective behavior in relationship functioning primarily by directly observing how couples deal with conflict. In this paradigm, couples are asked to discuss a real topic on which they disagree, while their conversation is recorded. Trained researchers later code the recorded discussions based on observed speech patterns, voice tone, facial expression, gestures, body movements, and other indicators of affective behavior. In some cases, physiological changes such as heart rate and perspiration are also recorded during the discussion to identify each partner's ability to regulate physiology and activation of the fight or flight system. Researchers have observed variation in people's ability to accept influence from their partners. Recent advances in the analysis of data coded from direct observation of behavior permits examination of whether it is the sequence of the two partners' emotional behavior that matters for decision outcomes—that is, how they appear to affect one another—rather than the ratio or total quantities of positive and negative affect. Patterns such as reciprocity of positive or negative affect, and escalation and de-escalation of negativity, for example, can be examined through nonlinear difference equation modeling of couple interaction (Cook, 1995; Gottman 1999; Gottman et al 2003; Ryan et al 2000). In this modeling, each partner's affective behavior is paired with that of his or her partner, and the individual's reaction is estimated as an effect of the partner's immediately preceding behavior, the individual's own preceding behavior, and an uninfluenced steady state.

It is possible that couple interaction and some of the factors predictive of decision making in middle-class families may operate differently in low-income couples. Krokoff et al. (1989) for example, found that blue-collar couples were more likely to show negative affect during problem solving compared to white-collar couples, suggesting that models of affective style may differ across social class. This possibility has not, however, been widely researched.

Decision-Making Styles and Preferences. Because of the inevitable differences in individuals' values, desires, and preferences, all couples are confronted with the need to negotiate and compromise on some level. Some research has directly observed the extent to which individuals are willing to accommodate their partners' wishes during interaction. To do so, many studies have employed variations of what is known as the "revealed differences" research paradigm (Strodtbeck, 1951), which permits an assessment of each individual's movement toward consensus in a joint task. In one variation of this paradigm, individuals rate their preferences for various alternatives, then come together as a couple, attempt to reach a joint decision, and rate their joint preferences. Tasks involving numerical data, such as the allocation of money, permit computation of the "distance traveled" between an individual's initial preferences and the joint consensus reached during interaction with the partner. The magnitude of the distance provides a quantifiable measure of how much the individual is willing to accommodate the desires of his or her partner, and may reveal the extent to which partners choose to exercise their bargaining power.

Interdependence refers to the concept that an individual's behavioral choices are a result of both his or her own preferences and the behavior of the partner. Following a behavior exchange framework for measuring and analyzing power in dyads using concepts originally proposed by game theorists, Kelly (1979) developed a theory of interdependence. He assessed the extent to which individuals prefer interdependence by analyzing each partner's expected "payoff," or satisfaction with a set of interdependent behavioral choices. In his method, couples were asked to rate how satisfied they would be with various choices, for example housecleaning: (1) he cleans but she doesn't, (2) she cleans but he doesn't, (3) they both clean, and (4) neither cleans. Analysis of the resulting data indicates how much difference on average individuals make in their payoff by varying their own behavior (reflexive control), how much their payoff is affected by their partner's behavior (fate control), and how much their payoffs depend on combinations of each individual's own behavior and that of his or her partner's behavior (behavioral control, i.e. interdependence).

Closely related to bargaining theory, game theoretic models assess whether a dyad follows a cooperative approach when making decisions rather than a competitive process where one or both of the partners seeks to "win" at the other partner's expense (Lawler and Yoon 1993; Lundberg and Pollak 2001; Pollak 2005). The latter can be thought of as playing a "zero-sum game," while the former is a process that allows both partners to feel positive about the interaction and progress toward consensus. Partners who tend to play zero-sum games may be experiencing serious

relationship distress because in this case a zero-sum game indicates that one partner becomes happy when the other becomes unhappy and vice versa—and such a result would have implications for intervention. If, on the other hand, the couple is cooperative but structural barriers stand in the way, intervention at the contextual-factors level may be more useful.

3. Self-Reported Outcomes

Along with our interest in the process of couple interaction and decision making, we include in our logic model an assessment of the decision outcomes from each individual's perspective. It is not realistic to expect that couples will reach agreement on a major issue during a short observed discussion; it is possible, however, to assess the extent to which each partner was satisfied with the interaction during the activity and with whatever outcome emerged.

II. METHOD AND PROCEDURES

The CDM study employed multiple research methods to gather and analyze information related to interaction and decision-making processes in low-income couples. It involved a combination of procedures that permit direct observation of individuals as they interact with their partners in a setting familiar and comfortable to them, as well as structured interviewing techniques. The selected procedures and measures represent a combination of well-established and new measures developed specifically for this study. In this chapter, we describe the study's sample design, subject recruitment and selection, and the data collection methods and procedures. We conclude with a discussion of the selection and development of measures for the CDM study.

A. Sample

Because the CDM project represented a first step in exploring relationship dynamics in lowincome couples, the sample was not intended to be nationally or locally representative, but rather to be generally reflective of the population served by the Administration for Children and Families' (ACF's) programs and related social services (ACF funded this project). In addition, the in-depth nature of data collection planned for the study limited the number of couples that would be practical to study. A target of 40 couples was set and was exceeded: 46 couples participated in a telephone survey, and 45 of them completed all or part of a home visit during which they engaged in several joint tasks while being observed. To facilitate the observational component of the study, conducted by the Relationship Research Institute (RRI) in Seattle, all couples were recruited from the Seattle area. To examine differences by marital status, a mix of married and unmarried couples was targeted. Both same sex and opposite sex couples were eligible for the study, although neither were specifically targeted. All study procedures and measures were reviewed and approved by an Institutional Research Board (Public/Private Ventures).

1. Recruitment

Low-income couples were recruited for the study through several methods. Couples who had been recruited for another study¹ but had not met that study's eligibility criteria were contacted and asked if they would be interested in participating. Management staff at local community-based organizations were asked to refer to RRI couples who might be interested. Flyers advertising the study were posted; staff visited community events and neighborhood locations, placed radio advertisements, and posted recruitment notices online.

Couples were offered \$100 for participating in the study (\$10 for each member of the couple participating in the telephone interview and \$40 for each member participating in the home visit). Interested couples were referred to Mathematica and screened for eligibility. Appendix A provides additional detail on materials used for recruitment.

The following criteria were used to obtain a sample relevant to the population served by ACF programs:

¹ Couples Together Against Violence (CTAV) was a study being conducted at RRI, which targeted low-income couples experiencing situational violence. Applicants who were not eligible for that study and who were not experiencing violence of any kind could be referred to the Couples' Decision Making study.

- Income level, as demonstrated by participation in means-tested programs. For a couple to be eligible, the female partner had to report that she or her children had received at least one of the following in the last 12 months: public assistance or other government benefits, such as Medicaid, WIC, food stamps, housing assistance, or subsidized school lunch. Eligibility depended on the female rather than the male's receipt of such benefits, since relatively few men receive them even though they may have low income.²
- **Relationship Status.** We sought couples in romantic relationships; therefore, we excluded couples who were not living together or who had been together as a couple for fewer than three months to ensure participants were in a romantic relationships (rather than just friends, for example) and were more likely to have established stable patterns of interaction.
- **Parental Status.** Families with children and expectant parents are most likely to be served by ACF programs, and the well-being of children is an important factor that motivates interest in functioning as a couple. For this reason, we recruited couples in which at least one partner had a biological child living in the home.
- Age. Eligibility for this study was restricted to couples in which both partners were at least 18 years old.
- **Participation in Other Studies.** We excluded couples who had received couples counseling, participated in a research study about couples, or received in the past 12 months other services designed to help couples with relationships. These exclusions were intended to minimize the influence of these external factors on couples' interaction styles.
- English Language Ability. Due to the exploratory nature of this study and relatively small sample size, it was not feasible to collect data in languages other than English. Therefore, we recruited only couples who could complete the telephone interview and observation tasks in English.
- Absence of Domestic Violence. Multiple steps were taken to avoid including couples who may have been involved in domestic violence. During the telephone interview, females were asked two questions to identify whether domestic violence might be present in the relationship.³ Positive responses disallowed the couple from the study and the female was offered a hotline number and shelter information. For couples considered eligible for the home visit, we administered a second screen: an in-depth in-person query with each female (separate from her partner) before the home visit began.⁴ If this screening suggested any domestic violence existed in the relationship, one portion of the in-home assessment the conflict discussion (discussed below) was not administered, and the female was given safety information, contacts, and resources.

² One male same-sex couple was recruited; one of the partners was receiving public assistance.

³ See Appendix B, Exhibit B1, questions D1r and D1s.

⁴ See Appendix B, Exhibit B2, document 1.C.

These protocols were developed in consultation with a domestic violence expert external to the research team.⁵

2. Sample Characteristics

Forty-five of the 46 couples who completed telephone interviews participated in all or part of the home visit (Table II.1). Of the 45 couples, 21 were married and 24 were unmarried. A total of eight couples were excluded from the conflict discussion portion of the home visit due to concerns about domestic violence, as assessed during the initial part of the home visit. Three couples were same-sex relationships – two female same sex couples, one male same sex couple.

	Completed Ho	ome Visit, n=37	Completed Partial Home Visit (excluded from conflict discussion due to concerns about DV), (n=8)		
	Married	Unmarried	Married	Unmarried	Total
Opposite Sex	19	17	2	4	42
Same Sex	0	1	0	2	3
Total	19	18	2	6	45

Characteristics of the eight couples excluded from the conflict discussion due to concerns about domestic violence differed from the 37 couples completing all components. The eight couples were less likely to be married (25 percent) compared to the completers (51 percent), and more were of the same sex (25 percent versus 3 percent).

Table II.2 shows characteristics of couples who completed both the telephone survey and at least part of the home visit (45 couples). The majority of study participants were non-Hispanic white, had at least a high school education or GED, and were 30 years of age or older. The average age of females was 33 and males was 35. Slightly more couples were unmarried and cohabiting than married. About half of the males earned less than \$15,000 annually; more than three-quarters of women earned less than \$15,000. While the number of years couples had been together varied, the average time together was 6 years.

B. Data Collection Procedures

Data were collected using two modes: a structured telephone interview which focused on contextual factors, and a home visit, which included observations of couple interactions, to collect data on the processes and outcomes of decision making. Telephone interviews were completed first for methodological reasons (so contextual measures collected during the telephone survey would not be influenced by the interaction), to encourage higher completion rates, and to reduce costs if

⁵ The domestic violence screener was administered in the home to both partners for the three same-sex couples.

couples did not complete both components. Data collection started in April 2009 and was completed in October 2009.

	Ge	nder	
Characteristic	Males (n=45) ^a	Females (n=45)	
Age (%)			
Younger than 30	28.9	37.8	
30 to 39 40 and older	40.0	37.8	
40 and older	31.1	24.4	
Highest level of education (%)			
No high school diploma	13.3	11.1	
High diploma or GED	37.8	33.3	
Some college	33.3	26.7	
Four-year college degree or more	15.6	28.9	
Earnings (annual) (%)			
None	11.1	20.0	
Less than \$5,000	20.0	22.2	
\$5,000-\$10,000	11.1 6.7	20.0 13.3	
\$10,000-\$15,000 \$15,000-\$20,000	6.7 13.3	4.4	
More than \$20,000	37.8	20.0	
Income from other sources (monthly) (\$)	\$300	\$641	
Total income from all sources (monthly) (\$) ^b	\$1,884	\$1,465	
Race–ethnicity (%)			
Non-Hispanic black	26.7	15.5	
Non-Hispanic white	42.2	60.0	
Hispanic	13.3	15.5	
Other or mixed race	17.8	9.0	
Marital/Cohabitation/Fertility Status (%)	Co	uple	
Married		6.7	
Cohabiting	5	3.3	
Either partner has child with another partner	6	0.0	
Number of years couple has been together(%)			
Fewer than 4 years	42	2.2	
4 to 7 years		6.7	
8 or more years	3	1.1	

Table II.2. Characteristics of Sample by Gender

^a For the three same-sex couples, one partner was randomly coded as "female" and one as "male" for the purposes of this table.

^b Total income is a proxy measure because earnings were measured in categories over the prior 12 months, while other income was reported for the previous month on a continuous scale. We selected the mid-point of the earnings response, divided by 12 and combined with monthly income from other sources.

In this section, we focus on the procedures associated with data collection activities. Information about the constructs and variables derived from both the survey and the observed tasks is presented in Section C of this chapter.

1. Telephone Interview

A total of 141 couples were referred to Mathematica for eligibility assessments. For each eligible participant, Mathematica conducted a 30-minute structured telephone interview. Of the 79 couples deemed eligible for the study, telephone interviews were completed with 46 couples (58 percent). Seven couples declined participation in the telephone interview and one couple declined the home visit after participating in the telephone interview (10 percent). The remaining couples could not be contacted after repeated attempts (32 percent).

The telephone survey gathered individual-level data on contextual factors believed to influence couples' decision making, including: partners' relative resources, relationship status, relationship quality, relationship standards and expectations, gender role attitudes, and family structure.

All data were collected by trained interviewers via telephone, and were recorded using a paper and pencil questionnaire. Data were entered into a data entry program and open-ended responses were coded after the interview. The complete telephone survey is shown in Appendix B.

2. In-Home Observation

Once a telephone interview was completed with both members of a couple, respondents were referred to RRI so a home visit could be scheduled. Home visits were completed with 45 of the 46 couples who completed a telephone interview. Each visit was scheduled with the goal of completing it within two weeks of the telephone interview and all visits were conducted by trained RRI staff.

The home visit consisted of the tasks summarized below. Greater detail regarding each task is presented in Appendix B.

- **Pre-task Procedures**. The home visit began with an oral history interview. This interview was not meant to provide data for the analysis, but to lay the foundation for the observation of partners' interaction. The aim was for the interviewer to get to know and develop rapport with the couple so more natural interactions could be facilitated. This procedure has been used in multiple prior studies (Carrere et al. 2000; Gottman and Levenson 1999).
- Behavioral Choices (Household Chores) Task. After the oral history interview, couples were separated and asked to rate their preferences for a hypothetical set of behavioral choices about relationships and decisions. On a 0-10 scale, each partner was asked to rate his or her individual satisfaction with completing six household chores (for example, housecleaning, going to work, paying the bills) in each of four possible scenarios: (1) he completes it alone, (2) she completes it alone, (3) they complete the chore together, and (4) neither completes the chore.⁶ Data were analyzed in several ways, as described in Section C. The purpose of this task was to assess each couple's level of interdependence—the extent to which an individual's satisfaction is influenced by their partner's behavior, their own behavior, or a combination of both partners' behavior.

⁶ Same-sex couples were given the same instructions for completing the task as were opposite-sex couples.

- **Paper Tower Task.** Couples were asked to construct a free-standing tower. To complete the task, the couple was given a box containing construction paper; scotch and masking tape; magic markers and crayons; materials for decorating, such as ribbon, sparkly glue, cellophane; string; stapler with staples; and cardboard. The couple had 20 minutes to complete this task, which was video-recorded and later coded as described in Section C. This task was designed to provide an opportunity for positive as well as negative affect to be expressed. It gauges the couple's ability to work collaboratively on a creative challenge that that involves many small decisions.
- Lottery Task. In this exercise, the couple began by imagining that the family had won \$5,000 in a lottery. Each individual separately indicated how she or he would prefer to spend that money across 10 different categories and indicated their preferred allocations by placing 50 poker chips (each worth \$100) onto a board that visually depicted each of the 10 categories (vacation, paying off debt, saving for a vehicle, and so on). The couple was then brought together to engage in a discussion about how to spend the money and jointly placed the chips on the board to designate their allocations. This task permitted an assessment of each partner's relative power or influence in the decision by examining how closely the couple's joint decision matched each person's previously stated preferences.
- **Conflict Discussion**. In this exercise, the partners were asked to discuss an actual topic of disagreement in their relationship. Prior to the conflict discussion, RRI staff had asked each partner to separately complete a "problem inventory" to identify major conflict areas in the relationship. A trained RRI interviewer used the results of the problem inventory to help the couple select a conflict that was real, current, and concrete, and one that both partners felt comfortable discussing. This discussion also allowed the interviewer to clarify the objectives of the task. The couple was given 10 minutes to discuss the area of conflict and attempt to come to a decision. As with the paper tower exercise, the interaction was video-recorded and later coded for affective quality and behavior. The purpose of the conflict discussion was to identify patterns of affective behavior, particularly those that may influence a partner's behavior and decisions.
- **Psycho-Physiological Measurement.** During the conflict discussion, RRI staff collected continuous indicators of heart rate, ear pulse transit time (blood flow to the ear), and skin conductance (perspiration). The purpose was gain insight into the individual's emotional experience, in particular the ability to regulate physiology and activation of the fight or flight system. Emotion regulation has a direct impact on interaction and decision making processes. For example, during a disagreement, one or both partners might become "flooded," as evidenced physiologically by an increased heart rate and sweating. In this state, couples' decisions are less likely to be calm and rational, and they are more likely to fall into patterns of reciprocated negativity. Prior to the conflict discussion, each couple's baseline physiology was recorded for five minutes.
- Video Recall Task. After completing the conflict discussion, each partner separately but simultaneously viewed a play-back recording of the interaction and used a rating dial to provide a continuous self-report of how he or she felt from moment to moment during the interaction. Each partner rated the video twice, once for how he or she felt during the interaction and again for how each thought the partner felt. The order of ratings was counterbalanced so about half of the couples rated themselves first and the other half rated the partners first. The dial traversed a 180-degree path, with the dial

pointer moving over a nine-point scale anchored by the legends "extremely negative" and "extremely positive," with "neutral" in the middle. Partners were instructed to adjust the dial continuously so it always represented how each was feeling in the interaction. One important purpose of these data was to gain an understanding of each partner's emotional payoff, which was used to capture cooperative versus competitive decision-making strategies.

3. Self-Reported Outcomes

After completion of the lottery task, paper tower task, and conflict discussion, each partner was asked to rate his or her satisfaction with the process and the decision outcome on a 0 to 10 Likert scale (0=not satisfied and 10=very satisfied). The satisfaction measure allowed us to not only observe whose preferences prevailed, but also identify when couples were able to create solutions that satisfied both partners.

C. Development of Measures

In selecting constructs and their measures to include in this study, we were guided by four general criteria:

- **Relevance to Study Goals.** We focused on constructs and measures directly related to the study objectives and hypotheses drawn from the theories and research discussed in Chapter I.
- Appropriateness for the Study Population. Whenever possible, we selected survey measures that were relevant for low-income couples who were married or unmarried. For example, some items pertaining to relationship quality were drawn from a large-scale evaluation of programs to enhance the relationship skills of low-income couples. Many well-tested and widely used measures have not, however, been tested with low-income populations (for example, measures of which partner typically has the final say in decision making). For this reason, one of the goals of this study was to assess the relevance of existing and new measures in both the telephone survey and home visit.
- Extent to Which the Measures Were Tested and Proven. We looked for measures that were tested and found to have good psychometric properties, preferably in populations similar to that being sampled for this study. In particular, for the survey, we selected items used in other telephone surveys of low-income and/or unmarried couples including the Building Strong Families Study (BSF), the Fragile Families and Child Wellbeing Study (FF), a survey of recipients of welfare cash assistance, and the National Survey of Families and Households (NSFH) when possible. Most of the observational measures, particularly the conflict discussion and video recall task, have been used in several prior studies and have demonstrated good reliability and predictive validity (Driver and Gottman 2004; Gottman and Levenson 1999 and 2000; Gottman and Driver 2005).
- Suitability for a Short Telephone Survey or Observation. The telephone survey was short to minimize respondent burden. Hence, we sought measures that could be administered relatively quickly and could be easily understood over the telephone. In some cases, self-report measures had to be adapted to be appropriate for telephone administration. New or modified observational measures (the lottery task and paper

tower task) were included, in addition to the established conflict discussion procedure which has been found in prior research to elicit natural behavior and capture a couple's typical interaction style,. Besides learning how the data from these new tasks may inform our research questions, an important purpose of including them was to assess whether the new measures themselves are relevant and appropriate for understanding decision making in this population.

1. Telephone Survey Measures

Measures included in the telephone survey were designed to provide individual-level contextual data on factors that are thought to influence interaction and decision making. A summary of constructs and a description of how they were measured are shown in Table II.3.

2. Observational Measures and In-Home Activities

Measures included in the home visit were designed to measure affective behavior displayed during the interactions, decision-making behaviors and preferences, and self-reported outcomes (each individual's satisfaction with the process and decision). Table II.4 summarizes these constructs by task and describes how they were defined.

Assessment of affective behavior bears further discussion here. This assessment involved assigning codes to characterize a range of observed behaviors as positive, negative, or neutral. The first 10 minutes (600 seconds) of interaction during the paper tower and conflict discussion tasks were video-recorded and later coded by trained RRI staff using the Specific Affect (SPAFF) coding system (Gottman et al. 1996), which is based in part on Ekman and Friesen's Facial Action Coding System. In this system, codes are assigned for each individual based on a combination of behavior expressed through voice tone, facial expression, gestures, body movements, and speech content. Every second is coded and a code may be assigned at any time. The code best describing the affect of a partner is active until a change in behavior occurs such that another code better reflects the partner's affective state. Negative behaviors include such dynamics as anger, fear/tension and dominance; positive behaviors include interest, affection, and joy. In past research, four negative behaviors--contempt, criticism, defensiveness, and stonewalling—have predicted relationship dissolution (Gottman and DeClaire, 2001), termed the "four horsemen of the apocalypse" by Gottman (1994).

SPAFF Reliability. Couples' interactions were coded by a team of four independent coders who were deemed reliable on the SPAFF coding system prior to coding for the current project. All coders were blind to specific information about each couple and were not primary interviewers on in-home visits for the couples they were responsible for coding. Each interaction was first viewed once so that coders could observe the overall content/level of interaction displayed by individuals, and then viewed a second time for coding of one partner, followed by a third and final time to code the second partner.

To assess inter-rater reliability, approximately 20 percent of the interactions were randomly selected to be double-coded (8 out of 37 of the conflict discussions, and 8 out of 40 of the paper tower tasks). Inter-rater reliability was computed in two ways: percent agreement and free marginal kappa. Calculation of percent agreement between coders provides the percentage of agreed upon codes divided by the total frequency of all codes. Although percent agreement provides information regarding the overall level of agreement between coders, it does not take into account the level of agreement that would be expected due to chance. Thus, free marginal kappas were also calculated to

assess whether the coders were in agreement above and beyond what one would expect due to chance. Free marginal kappas adjust the level of agreement to correct for the number of coding categories (i.e., SPAFF codes). Coders agreed with each other 93 percent of the time (free marginal kappa of .93) during the paper tower task, and 67 percent of the time (free marginal kappa of .66) during the conflict discussion, which is deemed adequate evidence of reliability according to Bakeman and Gottman 1986.

New Measures. To focus specifically on processes used in making decisions, several new procedures and measures were developed and used in this study. As indicated in Table II.2, these include (1) interviewer ratings of each partner's inclusiveness and controlling behavior during the paper tower task, (2) self-ratings of individual satisfaction with the interaction process and outcome, (3) a measure of the distance each partner travelled from their individual allocations for spending hypothetical lottery winnings to joint allocations, (4) the couples' degree of consensus and concurrence for how to divide up a set of household chores, and (5) measures of game-playing strategies applied to data from the behavioral choices (household chores) and video recall tasks.

Table II.3. Telephone Survey Measures

Construct	Description		
Domain: Material Resources			
Education	One item which asks each respondent to provide the highest grade or year of regular school completed (used in Fragile Families Survey).		
Employment	Item assessing whether currently working. Adapted from the TANF survey.		
Earnings	Earning from job in the past 12 months (used in Building Strong Families baseline survey).		
Other Income	Income received in past month from public assistance, food stamps, SSI or SSDI, unemployment benefits, child support, and other not from employment (used in TANF survey).		
Domain: Physical/Psychologi	cal Resources		
Health	One item asking whether respondents consider their general health to be excellent, very good, good, fair, or poor (from the National Health Interview Survey).		
Mental Health	Sum of the six survey items that make up the Kessler K6 scale: in the past 30 days, how often felt that (a) nothing could cheer you up, (b) nervous, (c) restless, (d) hopeless, (e) everything was an effort, and (f) worthless. Responses were reverse-coded so that 0=none of the time and 4=all of the time so higher scores indicate the presence of more symptoms. On a possible range of 0 to 24, scores above 13 indicate the likelihood of serious mental illness; scores of 9 to 12 are considered to be in the medium distress range (Kessler et al 2003). The measure was internally consistent in the CDM sample, with a coefficient alpha of .76.		
General Happiness	One item measuring global positive affect ("Taking all things together, how would you say things are these days?") with a scale ranging from 1=very unhappy to 7=very happy. This item was developed by the Institute for Social Research at Michigan for use on the Detroit Area Quality of Life Survey (DAQLS).		
Domain: Perceptions of Relat	ionship Alternatives and Power		
Perceived Relationship Alternatives	Average of four survey items taken from the larger Cubbins Trust Scale (Cubbins et al 2007): how likely it is that during the next year the respondent (a) could get a better spouse/partner, (b) could get a spouse/partner as good as the current one, (c) would be sad but would get over it, and (d) there are many other men/women the individual could be happy with. The original scale uses different response categories (impossible, possible, probable, and certain); we modified these for telephone administration so 1=not at all likely to 4=certain. The coefficient alpha in the Cubbins 2007 study, which had a sample of about 1,600 individuals was .70; the alpha in the CDM sample was 0.59.		
Perceptions of Well-Being if Separated	Average of four survey items taken from the National Survey of Families and Households: In what ways would your life be different if you were separated from partner: (a) overall happiness, (b) being a parent, (c) sex life, and (d) economic security. The response categories were broken up to make this measure work for phone administration. Items were first asked as a main question (better, worse, same), followed by a probe to identify whether it would be a little or much (better/worse). The final response categories ranged from 1=much worse to 5=much better. The alpha for this sample was 0.59.		

Construct	Description			
Perceptions of Final Say	Average of four items from the Intergenerational Panel Telephone Survey (IPTS): who has most say in making various decisions—do you, your partner, or both of you have the same say in (a) how much is spent on major purchases, (b) how much is spent on things for children, (c) how much is spent on food per week, and (d) who does household chores. We recoded the responses from 1=you, 2=partner, or 3=both to 1=partner, 2=both, 3=you so higher scores mean greater perceived power in decision making. The coefficient alpha for the CDM sample was 0.72.			
Domain: Relationship Quality	y			
Trust	Average of two survey items taken from the larger Dyadic Trust Scale (Larzelere and Huston 1980) and used in the Building Strong Families 15-month telephone survey: (a) my partner can be counted on to help me and (b) I can trust my partner completely. Responses were reverse-coded so higher scores represent greater trust on a 1–4 scale, with 1=strongly disagree and 4= strongly agree. The alpha for this sample was 0.77.			
Commitment	Average of three survey items taken from the larger Stanley and Markman Dedication subscale (Stanley and Markman 1992) and used in the Building Strong Families 15-month telephone survey: (a) I may not want to be with my partner a few years from now, (b) my relationship with my partner is more important to me than almost anything else in my life, and (c) I want this relationship to stay strong no matter what rough times we may have. Except for item a, responses were reverse-coded to 1=strongly disagree to 4=strongly agree so that higher equals more commitment. The alpha for this sample was 0.64.			
Constructive Conflict Management	Average of seven survey items used in the Building Strong Families 15–month telephone survey. The items draw on three sources: Gottman's Sound Relationship House scale, the Interpersonal Relationship Scale (Guerney), and the Stanley and Markman Relationship Dynamics Scale. The responses categories for the Gottman questions were modified from yes or no to a four-category scale and the number of responses to the Guerney scale was reduced from five to three. For all the scales, some of the wording was also adapted to make the questions more easily understood by people with lower levels of education. The items were (a) partner understands what going through, (b) feel appreciated by partner, (c) feel respected when disagree, (d) keep sense of humor when argue, (e) good at solving differences, (f) good at taking breaks when arguing, (g) good listeners even when coming from different positions, and (h) partner good at calming me. Responses were reverse-coded to 1=never to 4=often so that higher equals more constructive conflict resolution. The alpha for this sample was 0.79. The same measure used with the BSF sample yielded an alpha of 0.88.			
Destructive Responses to Conflict	Average of nine survey items drawn from the same sources as the constructive conflict scale and also used in the Building Strong Families 15-month survey. The items were (a) partner blames for things that go wrong, (b) partner acts as if totally wrong, (c) say something will regret when argue, (d) when argue feel personally attacked, (e) get very upset when argue, (f) little arguments turn into ugly fights, (g) partner puts down opinions, (h) partner views my words or actions negatively, and (i) when argue one withdraws. Responses were reverse-coded from 1= never to 4=often so that higher equals more destructive conflict resolution and averaged. The alpha for this sample was 0.86; the same measure in BSF yielded an alpha of 0.87.			
Support and Affection	Average of eight survey items used in the Building Strong Families 15-month survey, drawn from various sources: (a) talk about things that happen during the day, (b) enjoy doing day-to-day things together, (c) partner knows and understands me, (d) partner listens to me, (e) partner respects me, (f) partner encourages or helps me, (g) partner shows love and affection, and (g) satisfied with sexual relationship. Responses were reverse-coded to1=strongly disagree to 4=strongly agree so higher equals more support and affection. The alpha for this sample was 0.85. The same measure used with the BSF sample yielded an alpha of 0.94.			

Construct	Description			
Relationship Happiness	One item asking respondents to rate, all things considered, the happiness in the relationship (1=not at all happy to 10=perfectly happy). This item was adapted from the first item in the widely used Locke–Wallace measure of marital satisfaction, which used a 7-point scale. We used a 10-point response scale because we viewed it as simpler to understand over the telephone.			
Domain: Relationship Expecta	tions			
Expectations Met	Average of seven items from the 32-item Marital Comparison Level Index (MCLI). The questions ask the respondent how his or her current experience with the partner or spouse compares to general beliefs about relationships, in terms of (a) amount partner trusts you, (b) time you spend together, (c) amount of affect partner shows you, (d) amount partner criticizes you, (e) physical attractiveness of partner, (f) amount couple argues, and (g) commitment you get from partner. For ease of telephone administration the original response scale (7 point scale, -3 to +3, meaning worse than I expect to better than I expect) so that 1=a lot worse than you expect, 2=somewhat worse than you expected, 3=about what you expected, 4=somewhat better than you expected, 5=a lot better than you expected. Higher scores indicate more favorable evaluation of outcomes derived from the current relationship compared to expectations. The alpha for this sample was 0.73.			
Expectations for Separation or Marriage	Two items, including one asking respondents whether they anticipate separating in the near future (taken from the Oklahoma Statewide Baseline Survey). A second item, used in the Building Strong Families baseline survey, asked what th respondent thinks the chances are that he or she will marry the current partner some day (if not already married).			
Expectations for Infidelity	Four items related to infidelity, used in the BSF 15-month survey, were treated separately (not formed into a scale). The first item asked responded whether they had cheated on their partner (yes/no). Three additional items asked respondent to rate on a 1-4 scale the likelihood that (1) their partner has cheated in the past, (2) their partner will cheat in the future and (3) the respondent will cheat in the future.			
Domain: Gender Role Attitude	S			
Belief in Traditional Gender Roles	Average of five survey items from the NSFH: (a) important decisions should be made by the man of the house, (b) it is better if the man earns a living and the woman takes care of the home, (c) preschool children are likely suffer if the mother is employed, (d) it is OK for mothers to work full time when the youngest child is under 5 years old, and (e) a mar whose partner works full-time should spend as many hours doing housework. Responses were coded from1=strongly agree to 4=strongly disagree so that higher scores indicate more traditional attitudes (reverse-coded for items a, b and c). The alpha for this sample was 0.64.			
Domain: Family Structure				
Marital/Cohabitation Status	One item, used in BSF, asked current status of relationship (married, not married but romantically involved, divorced or separated, just friends, not in any kind of relationship).			
Multiple Partner Fertility	One item asked how many children the respondent has had with other partners or spouses and how many of those children live in the household now. These items were adapted for use on this survey from the FF and the BSF surveys.			

Table II.4. Observational Measures by Task

Construct	Task	Description	
Domain: Affective Behavior During Interactiona			
Total Positive Affect	Paper Tower Task, Conflict Discussion	The amount of time (in seconds) that each partner displayed positive affect during interaction. Using the SPAFF system, positive codes included interest, validation, affection, humor, and joy.	
Total Negative Affect	Paper Tower Task, Conflict Discussion	The total amount of time (in seconds) that each partner displayed negative affect during interaction. Using the SPAFF system, negative codes included contempt, belligerence, defensiveness, anger, disgust, fear, criticism, domineering, whining, sadness, and stonewalling.	
Ratio of Positive to Negative Affect	Paper Tower Task, Conflict Discussion	The ratio of total positive affect to total negative affect (described above) was calculated for couples during interaction. To avoid denominators of zero, the overall ratio of (pos/(pos+neg) was divided by (1-ratio).	
Four Horsemen: Contempt, Criticism, Stonewalling, Defensiveness	Paper Tower Task, Conflict Discussion	The amount of time each partner spent displaying each of four specific affective behaviors represented by SPAFF codes—contempt, criticism, stonewalling, and defensiveness. These behaviors have been found in prior research to be associated with long-term marital satisfaction and stability. A summary code was also created to represent the total amount of time each partner displayed any of these behaviors, called the four horsemen of the apocalypse.	
Dominating Behavior	Paper Tower Task, Conflict Discussion	The total amount of time each partner spent displaying low or high dominating behavior. Because of the relevance of dominating behavior for decision-making, we include this code as a specific focus for analysis. In this study we combine the standard SPAFF codes for low and high dominating due to the low rate of high-dominating behavior.	
Concurrence of Affect	Video Recall Task	Correlation between each partner's self-reported ratings of one's own affect and perceived ratings of partner's affect during video replay of conflict discussion. Can be interpreted as a measure of the likelihood that the couple's level of positive or negative affect is in concurrence (higher scores reflect higher agreement/concurrence).	
Regulation of Negative Affect and Physiological Arousal	Conflict Discussion	Data were obtained from physiological measurement to provide specific information about each partner's ability to regulate both physiology and activation of the fight or flight system during the conflict discussion. We collected continuous indicators of heart rate, ear pulse transit time, and skin conductance. Individuals were classified as "aroused" (coded as 1), "normal" (coded as zero and equal to the baseline reading), or "calm" (coded as -1), based on the amount of time spent in each state. Cases in which two or more of the three measures were in the upper quartile of the distribution were classified as aroused. When all three measures were in the lower quartile, participants were classified as calm. When all three measures remained within the two middle quartiles, they were classified as normal/neutral (comparable to baseline scores). In this way, variables were created for the fraction of time aroused and fraction of time calm. Three additional measures were created by subtracting average responding during the baseline from average responding during the conflict discussion, yielding measures of heart rate reactivity, skin conductance reactivity, and ear pulse transit time reactivity (see Appendix C, Table 3 for more information).	

Table II.4 (continued)

Construct	Task	Description		
Acceptance of Partner's Affective Influence	Paper Tower Task, Conflict Discussion	SPAFF codes derived from the conflict discussion were used in an analysis to test whether it is the sequence of affective behavior between partners that matters for couple decision outcomes, as opposed to (for example) the total level or ratio of positive to negative affect expressed by individuals. To assess the influence of affective behavior, we used nonlinear difference equation modeling (Gottman 1999 and Gottman et al. 2003). In this mathematical modeling approach, each individual's affective behavior was paired with that of his or her partner, and the individual's reaction was estimated as an effect of the partner's immediately preceding behavior, the individual's own preceding behavior, and an uninfluenced steady state. Assessing whether individual affective behavior is tied to the immediately preceding behavior of the partner permits an examination of whether and how one partner influences the other–for example whether an individual reciprocates his or her partner's negativity with negativity (potentially escalating the conflict) or with positivity (potentially de–escalating the conflict).		
Domain: Decision-Making Beha	avior and Preferences			
Inclusiveness	Paper Tower Task	A three-item rating of each partner's level of inclusiveness during the paper tower task. 'Inclusiveness'		
(new measure)		was defined as (1) asking questions/seeking partner opinion/clarification, (2) attempting to work jointly with partner, and (3) accepting and responding to engagement attempts made by the partner. Each of the three items was analyzed individually and summed together to create an overall measure of inclusion. Independent observers rated each individual's attempts to include the partner during interaction. Unlike SPAFF coding, in which codes are assigned moment by moment across the interaction, these ratings were completed once at the conclusion of the interaction.		
(new measure) (new measure) (2) overt battling partner for control over task, and (3) indirect or subtle the three items was analyzed individually and summed together to create Independent observers rated each individual's attempts to control or do interaction. Unlike SPAFF coding, in which codes are assigned moment b		A three-item rating of each partner's display of controlling behavior during the paper tower task. 'Controlling behavior' was defined as (1) assuming leadership of the task/delegating a plan/direction, (2) overt battling partner for control over task, and (3) indirect or subtle challenges for control. Each of the three items was analyzed individually and summed together to create an overall measure of control. Independent observers rated each individual's attempts to control or dominate the partner during interaction. Unlike SPAFF coding, in which codes are assigned moment by moment across the interaction, these ratings were completed once at the conclusion of the interaction.		
Movement Toward Consensus (new measure)	Lottery Task	A measure of the "distance travelled" by each partner away from their individual allocations for spending lottery winnings toward consensus/joint allocations. Bray Curtis distance was used to measure movement toward consensus/joint allocations. ^b Two variables were calculated: male partner movement toward joint consensus and female partner movement toward joint consensus. A third measure was created to reflect relative power. The relative power of the female relative to the male was calculated using the ratio of her Bray Curtis coefficient to that of her partner. A ratio greater than one implies that she had less influence than her partner over the decision (moved more toward consensus), while a ratio below one implies the inverse, that she moved less toward consensus and thus had more decision-making power.		
Consensus and Concurrence of Preferences for Completing Household Tasks (new measures)	Behavioral Choices (Household Chores) Task	Two measures developed from individuals' preferences/satisfaction with the division of labor for a set of household chores. Consensus was defined as the number of situations in which both members of the couple agree on the most preferable way to divide up responsibility for the set of household tasks. Concurrence was defined as the correlation between male and female preferences for dividing up the chores.		

Table II.4 (continued)

Construct	Task	Description
Preferences for Interdependence	Behavioral Choices (Household Chores) Task	A measure of the extent to which one partner's preferences are dependent on the other partner's preferences (interdependence). Following Thibaut and Kelly (1978), partners' preferences for completing chores were examined using an analysis of variance model to assess the couple's degree of interdependence. The analysis breaks interaction into three components: reflexive control, or the degree to which a partner's payoffs depend on his or her own actions; fate control, or the degree to which a partner's payoffs depend on the other's actions; and behavioral control, the partner interaction effect. Behavioral control is also known as interdependencethe extent to which Partner A's "payoff" (that is, preference) is dependent on Partner B's payoff (see Appendix B for more information).
Observed Game-Playing Strategies (new measures)	Behavioral Choices (Household Chores) Task, Video Recall Task	Using the preference ratings from the behavioral choices task as "payoffs," we assessed whether couples played a cooperative, zero-sum, or a mixed game. Using the behavioral choice concurrence score described above, we constructed a matrix to summarize the relationship of one partner's payoffs to the other partner's payoffs across all the tasks. When the plot of his by her payoffs over the interaction had a statistically significant negative slope, the interaction was deemed to be competitive (zero-sum). When the slope was significantly positive for the payoffs over time, the interaction was considered cooperative. When the slope was not significantly positive or negative, it was classified as a mixed game. Using the same method, we constructed a game-playing variable using the consensus score from the video recall task, construing payoff as each partner's affective response to perceptions of his or her partner's behavior during video replay across the entire conflict discussion. As in the analysis for the behavioral choice task, a significantly positive slope for payoffs over time was considered a cooperative game, while significantly negative slopes were deemed zero-sum, and nonsignificant slopes were classified as mixed.
Domain: Outcomes		
Satisfaction with Interaction Process (new measure)	Paper Tower, Lottery Task, Conflict Discussion	Individual self-ratings of satisfaction with the interaction process during each home visit activity, using a scale ranging from 1 to 9, with 1=very negative, 9=very positive, and 5=neutral.
Satisfaction with Outcome of Interaction/Decision (new measure)	Paper Tower, Lottery Task, Conflict Discussion	Individual self-ratings of the outcome of the interaction/decision-making activity on a scale ranging from 1 to 9, with 1=very negative, 9=very positive, and 5=neutral.

^a See Appendix for further details regarding the SPAFF coding system, physiological measures, and marriage modeling.

^b The Bray-Curtis distance is a metric similar to the Euclidian distance. It compares two vector sets of measurements and always lies between 0 and 1, with 0 indicating identity and 1 indicating complete dissimilarity. The formula for vectors (a, b, ...) and (x. y ...) is (|a - x| + |b - y| + ...) / (|a + x| + |b + y| + ...). We opted to go with the Bray Curtis distance rather than Euclidian because Bray-Curtis can be calculated based on unequal totals across participants, which more adequately reflected the CDM data.

III. OBSERVATIONS OF INTERACTION AND THE DECISION-MAKING PROCESS

Involving the partners of clients in social services makes sense only to the extent that partners have the potential to influence clients' decisions and actions. The CDM study represents the first time, to our knowledge, that researchers have closely studied the interaction behavior of low-income couples receiving public assistance to determine the degree to which individuals in such relationships affect each other's behavior, preferences, and decisions. We applied established methods for studying couple interaction and supplemented them with new or modified measurement techniques as described in Chapter II. In this chapter we present our findings about low-income couples' interactions and decision-making styles. We provide details about couples' behavior during each of the home visit activities, including how their behavior relates to their ratings of satisfaction with the process and outcome, and compare their interaction patterns to those of middle-income couples who participated in an earlier study. We begin first with the findings regarding affective behavior during interaction, followed by a description of decision-making styles and preferences.

Analytical approach. To develop a basic understanding of interaction and decision-making processes in low-income couples, we take a simple descriptive approach. Means and standard deviations are presented, in addition to t-test comparisons of two subgroups (gender and marital status) to address the research questions. Correlations were computed to shed light on the extent to which partners may reciprocate affective behavior and to address questions about the relationship between interaction and decision making processes and participants' level of satisfaction with the process and outcome. Nonlinear equation modeling was used to assess predictors of affective behavior during interaction. We report the significance level of the correlations without formal adjustments for multiple tests because of low statistical power, however, we restrict our analysis to findings that are significant at the p=.05 level or lower. For the analyses presented in this chapter, the members of same-sex couples were included in their respective gender groups.

All results discussed in this chapter were statistically significant between p=.000 and p=.05. The results for each analysis are presented in tabular form in Appendix C, Tables 1 to 16, which indicates the specific p-level for each (with near-significant results defined as between p=.05 and p=.10).

A. Assessment of Affective Behavior Interaction Patterns in Low-Income Couples

Using codes generated by the SPAFF system described in Chapter II, we analyzed the data to characterize the affective behavior patterns of sample couples. This section describes the results of analyses that focus on the measures represented in the box titled Affective Behavior During Interaction in Figure I.1. Results are shown in Appendix C, Tables C.1 to C.14.

1. Observed Affective Behavior and Physiological State

• Low-income couples' affect remained mostly neutral when engaging in the joint exercise of building a paper tower.

Affective behavior during paper tower task. SPAFF codes derived from the paper tower task showed that, overall, couples did not exhibit a great deal of positive or negative affect during the task. They remained fairly neutral for much of the time (Table C.1). Males and females displayed very low levels of the behaviors known as the four horsemen of the apocalypse—contempt,

criticism, stonewalling, and defensiveness.⁷ A single statistically significant gender difference emerged: females displayed more positive affect than males during the paper tower task (t=-3.08).

• Low-income couples showed both negative and positive affect during discussion of a disagreement; males exhibited more defensiveness than females.

Affective behavior during conflict discussion. Males and females showed much more affective behavior during the conflict discussion than during the paper tower task. Individuals displayed more negative than positive affect during the discussion, as expected, given the task context (t=4.35 for males; t=5.10 for females). Males and females spent about 18 percent of the time showing negative affective behavior, about 4 percent of the time displaying positive affective behavior, and 78 percent of the time displaying neutral affect. Mean levels of total positive affect and total negative affect did not differ significantly across gender (Table C.2). However, males showed more of the four horsemen behaviors than females during the conflict discussion (t=2.25), particularly defensiveness. Males were significantly more likely than females to display defensiveness (t=2.62).

Physiological indicators can suggest an individual's internal emotional experience. Elevated heart rates, blood flow to the ear, and perspiration (Table C.3) indicated that participants were in a state of physiological arousal during much of the discussion, as would be expected given the context. For example, 19 of the females were classified as aroused (that is, at least two of their three physiological measures were in the upper quartile of the distribution for more than 50 percent of the conversation). Twenty-two of the 37 couples who participated in the conflict discussion had at least one member who was classified as aroused for more than 50 percent of the conversation (5 of the 10 minutes). Physiological reactivity (that is, the difference in arousal from baseline measurements) indicated that most participants moved from a calm state to an aroused state during some part of the conflict discussion.

• Unmarried females displayed significantly more contempt than married females, but this was the sole difference in affective behavior by marital status.

Affective behavior by marital status. Comparisons of affect behavior displayed by married versus unmarried couples during the conflict discussion and during the paper tower task (Tables C.4 and C.5) showed only one statistically significant difference. Unmarried females displayed significantly more contempt toward their partners during the conflict discussion than did married females (t=2.02).

• Both males and females displayed significantly more four horsemen behavior, domineering, and negative affect during the conflict versus neutral task.

Comparing affective behavior during paper tower task versus during conflict discussion. Both males and females showed significantly more of the four horseman (t=-5.20; t=-5.31, respectively) during the conflict discussion than during the paper tower task. Both genders showed

⁷ In past research, four negative behaviors--contempt, criticism, defensiveness, and stonewalling—have predicted relationship dissolution (Gottman and DeClaire, 2001), termed the "four horsemen of the apocalypse" by Gottman (1994).

significantly more negative affect (t=-6.67 for males; t=-7.53 for females) during the conflict discussion versus the paper tower task. Males showed significantly more domineering behavior during the conflict discussion than during the paper tower task (t=-4.52; the same was true for females (t=-5.10.) The ratio of positive to negative behavior displayed by couples was significantly higher in the paper tower task compared to the conflict discussion (t=3.29). However, males displayed significantly more positive affect during the conflict discussion than during the paper tower task (t=-2.13).

2. Links between Interaction Patterns, Physiological Reactivity, and Outcomes

Bivariate correlations were computed to assess relations between patterns of affective behavior and physiological reactivity displayed by low-income males and females and their individual satisfaction with the process and outcome of the paper tower task and the conflict discussion. The correlations suggest that affective behavior and physiological indicators were linked to satisfaction in several ways.

• Participants' affective behavior during interaction and physiological reactivity was often significantly related to their self-reported ratings of satisfaction with the process and outcome.

Links from affective behavior to individual's own satisfaction during paper tower task and conflict discussion. With regard to the conflict discussion, female affective behavior was significantly associated with female satisfaction ratings, while male behavior was significantly associated with male satisfaction ratings. Females who were more negative were less satisfied with the process, and females who showed more of the four horsemen behaviors were less satisfied with both the process and the outcome of the conflict discussion. Males who were more positive were more satisfied with the process and outcome, and males showing more negativity and domineering behavior were less satisfied with the process (Table C.6). Men's ear pulse transit time and skin conductance were significantly and negatively related to their self-reported satisfaction with the outcome of the conflict discussion (Table C.7), and approached significance for men's satisfaction with process.

• Female behavior during interaction frequently predicted men's satisfaction ratings, while men's effect on women's satisfaction was limited to displays of the four horsemen and ear pulse transit time.

Links from affective behavior to partner's satisfaction during paper tower task and conflict discussion. Female displays of affective behavior during both tasks often were significantly related to male ratings of satisfaction with the process and outcome. Displays of the four horsemen behaviors by women (Table C.6) during the conflict discussion were significantly negatively related to male satisfaction ratings (process and outcome). Also during the conflict discussion, female positive behavior predicted greater male satisfaction with the process and outcome. Female displays of domineering behavior and total negative behavior during the paper tower task were significantly and negatively correlated with males' satisfaction with the process. The correlation between female heart rate reactivity and men's satisfaction with the process of the conflict discussion approached significance.

Male displays of the four horsemen behaviors were significantly negatively related to female satisfaction with the process. This was the only significant association between male behavior and

female satisfaction for either the conflict discussion or paper tower task. However, male ear pulse transit time was strongly negatively related to female satisfaction with the outcome of the conflict discussion (r=-0.54) and was significantly negatively related to female satisfaction with the process (r=-0.28) (Table C.7).

3. Acceptance of Affective Influence

• Patterns of affective behavior suggested that males and females tend to reciprocate positive and negative affect.

Acceptance of affective influence during paper tower task and conflict discussion. A correlational analysis of male and female behavior observed during both the paper tower task and the conflict discussion revealed a strong and consistent pattern of significant relations, suggesting that individuals reciprocate affect (Table C.8). In the conflict discussion, each affective behavior displayed by men was significantly related to affective behavior shown by women. For instance, displays of negative affect by men were significantly correlated with displays of negative affect, contempt, and defensiveness by women (r=0.47, r=0.34 and r=0.52, respectively). Male and female displays of the four horsemen behavior were significantly correlated, with some relationships extremely strong—e.g., contempt by males was strongly related to stonewalling in females (r=0.90); criticism by males was strongly linked to defensiveness in females (r=0.70).

A similar pattern was observed in data from the paper tower task. Displays of the four horsemen by men were significantly related to every measure of affective behavior by women except positive affect. Male and female positive affect were significantly correlated. Several correlations were strong. For example, displays of male and female negative affect were related at r=0.80, male and female domineering were related at r=0.85; and female displays of the four horsemen were correlated with male defensiveness at r=0.93. These patterns suggest reciprocity of affect between the couples (for example, when one is negative, the other is likely to be negative), however it is important to remember that this analysis does not match up individuals with their partners, rather the correlations relate data for all females to that of all males.

• Nevertheless, an individual's initial emotional state upon entering into interaction was more predictive of his/her affective behavior than the partner's behavior.

Role of initial affective state during paper tower task and conflict discussion. Nonlinear equation modeling of couples' affective behavior, which pairs data from each individual with that of the partner and then analyzes their second-by-second affective behavior, showed that in the majority of couples, the best predictor of affective behavior was the individual's initial state of affect rather than the partner's behavior. This means that a large majority of each individual's affective behavior during interaction was, in most cases, determined by his or her starting state and proclivity toward a certain type of affect. This does not necessarily mean that the individual accepts zero influence from the partner (although this is a possibility); instead, it means that it was easiest to define the individual's affective behavior without considering the partner's influence.⁸ Thus, for example, even

⁸ Within a margin of error that is generally low but varies across couples; the mean per 6-second turn of conversation was 0.34.

if a female's emotional state is dominated by her affinities, she may still be influenced by her partner's affective behavior during interaction.

Results from the paper tower task indicated that for 90.2 percent of males and 85.4 percent of females, the individual's affective behavior was determined by his or her initial state of emotion.⁹ The mathematical modeling analysis showed that for 97.3 percent of males and 83.7 percent of females participating in the conflict discussion, the initial state was a better predictor of affective behavior than the partner's behavior.¹⁰ (Table C.9). These results are similar to those derived from analysis of a sample of married, middle class couples in prior research, as described below.

In considering participant satisfaction with the process, we opted not to use the parameters describing emotional exchange in subsequent analyses and instead used only the parameters describing their initial emotional states, because couples showed independence regarding exchange of affect within each task. Bivariate correlations between these initial state parameters and participant satisfaction with process and outcome ratings (pertaining to the conflict discussion for both males and females) revealed no significant relations, suggesting that the initial emotional state did not covary with or predict satisfaction with the task (Table C.10).

4. Comparison to Middle-Class Sample

To compare patterns of couple interaction between low- and middle-income couples, we used a sample of 133 middle-class married couples who had previously completed a conflict discussion and video recall task similar to that of the current study--Gottman's "Marital Discord: Proximal Change Investigation" Study (Driver et al. 2003), also known as the QPPHI Study.¹¹ Differences in the background characteristics of the QPPHI and CDM samples include:

Race/Ethnicity, Age, and Health. The middle-income QPPHI sample was more homogenous than the low-income couples in our current study. QPPHI participants were primarily white; the CDM sample was more diverse, with higher percentages of mixed-race couples and black couples. Participants in the QPPHI study were, on average, about five years older than CDM participants. CDM participants reported somewhat poorer health compared to QPPHI participants.

Education. The QPPHI participants were more highly educated than CDM participants. In the middle-income sample, 40 percent of females had completed college compared to 18 percent of CDM females. About 38 percent of QPPHI males had completed college; 30 percent of CDM males had done so.

⁹ Generally, the paper tower task was characterized by neutral affect. Although the models could be fit to the data, it is not clear that the fits are meaningful, as this is not the type of data that the math models were designed for (with such low variability of affect). Thus, findings should be interpreted with caution.

¹⁰ Math model summaries for the conflict discussion excluded same-sex couples. Two of the three same-sex couples were excluded from the conflict discussion because of suspected domestic violence. The single same-sex couple who participated in the conflict discussion showed zero influence when analyzed within the models.

¹¹ Q, P, and PHI are used to stand for perception, behavior, and physiology in a theory known as the "core triad of balance," described in the book "What Predicts Divorce?" (Gottman 1994).

Employment and Earnings. Low-income female participants reported higher instances of full-time employment compared to QPPHI female participants, although male participants in both studies were almost equally likely to be employed full time. The majority of low-income female participants earned less than \$10,000 yearly and the majority of low-income males earned less than \$20,000. Approximately 11 percent of CDM males and 20 percent of CDM females reported having no earnings in the prior year. In contrast, the majority of QPPHI participants made more than \$30,000 annually.

Family structure and relationship quality/duration. All QPPHI participants were married and only about half of the CDM couples were married, yet the couples in the two samples were about equally satisfied with their relationships. The middle-income study participants had been in their intimate-partner relationships for much longer than the CDM couples. QPPHI couples had been together for an average of 11.63 years, compared to an average of 6 years among low-income couples. All low-income couples had children under the age of 18 living with them (an eligibility criterion), while only half of QPPHI participants had children.

• Levels of affective behavior in CDM couples were similar to those in a sample of married, middle-income couples.

Affective behavior during conflict discussion. Despite the differences listed above, the CDM couples displayed affective interaction patterns during discussion that were comparable to those of the QPPHI couples (Tables C.11 and C.12). A series of independent sample t-tests was conducted to compare levels of affective communication displayed during conflict discussion by low-income couples versus those displayed by middle-class couples. Levels of positive and negative affect exhibited by individuals, as well as couples' ratios of positive to negative affect were no different across the two samples (that is, t-values for all tests ranged from 0.0 to 0.8; all p-values were above .05). The percent of time that couples spent exhibiting both positive and negative affect, therefore, was highly similar across low- and middle-income couples. Individuals' self-reported ratings of their affect (that is, video recall/rating dial) during the discussion also did not differ significantly across samples.

• The initial emotional state was also the best predictor of affective behavior in both CDM couples and in prior studies of middle-income couples.

Role of initial affective state in conflict discussion. The math modeling results for the CDM sample are similar to those of prior studies of middle-income couples. With middle-income QPPHI couples, we observed that in 94.2 percent of husbands and 91.4 percent of wives, the initial emotional state was a better predictor of the individual's behavior during interaction than the partner's behavior (compared with 97.3 percent of males and 83.7 percent of females in CDM, as previously discussed). The stable points of interaction¹² during the conflict discussion between middle- and low-income couples were also remarkably similar. Both were clustered near the origin (that is, where they start). The couples had stationary interaction points that were highly similar

¹² Stable points of interaction, also known as stationary or steady states, represent constant emotional states at which the couples is likely to remain over time (i.e., throughout the interaction). For example, a couple with a stationary state of female=1.5 and male=-2 would suggest that the female is usually happy while the male is usually unhappy during the interaction.

(middle-class couples: M=-0.076, -0.013; SD=0.37, 0.29) (low-income couples: M=-0.025, 0.002; SD=0.28, 0.25^{13} ; see Figure C.1 for a comparison of stationary points). Stationary points for men and women did not differ significantly across the middle- and low-income couples.

B. Decision-Making Behavior and Preferences

To focus more closely on decision-making styles and assess the extent to which such perspectives as game theory may apply, we included measures of negotiation and compromise, levels of consensus and concurrence, preferences for interdependence, and levels of inclusiveness and controlling behavior. We analyzed data to assess the extent to which couples could be characterized as playing a zero-sum, cooperative, or mixed game during their interactions. This section discusses results with respect to the decision-making constructs shown in the box labeled Decision-Making Behavior and Preferences in the study logic model (Figure I.1).

1. Compromise, Interdependence, and Cooperativeness

• The decision-making styles of low-income couples were generally marked by a preference for cooperation and collaboration rather than competition.

Movement toward consensus in lottery task. Results from the lottery task data suggest that most of the couples did move away from their initial, individually allocated preferences for spending hypothetical lottery winnings, although there was variability in how far they moved (Table C.13). There was a significant difference in how far individuals moved across genders (t=-3.63), with females (M=0.43) moving farther than males (M=0.26). These results suggest that low-income men and women in married and unmarried relationships are likely to consider their partner's preferences in making joint decisions about spending money, at least in a hypothetical scenario.

• Both males and females were most satisfied when they chose to work interdependently.

Level of interdependence in completing household chores task. Couples expressed a preference for interdependence—individual satisfaction with completing household tasks was rated highest when couples chose to work together. Analysis of the behavioral choice ratings show that an individual's satisfaction/payoff depends on the couple's collective actions (that is, interdependence). For each chore, payoff ratings (that is, levels of satisfaction with each option) for both males and females were highest for the option of working together to accomplish the chore (that is, both my partner and I do the task), and were lowest for the option that neither would complete the task (that is, neither myself nor my partner completes the task; see Table C.14 for levels of satisfaction across chores.) This implies that an individual's satisfaction/payoff depends on a couple's collective actions. There was no evidence of preference for fate control (when one partner controls the other's actions for completing chores) or reflexive control (when individuals act independently and are most satisfied when they complete tasks themselves and don't consider the partner's actions).

¹³ The first mean and SD in each set refers to females, while the second refers to males. The data are reported in this fashion because female and male affects are not independent variables in this analysis.

In game theory terms, results from the analysis of couples' behavioral choice ratings suggest that the Nash equilibrium is a better fit to the data than a von Neumann-Morgenstern equilibrium point. The Nash equilibrium would predict that couples will behave so as to maximize payoffs for themselves as a unit—not as individuals—whereas the von Neumann-Morgenstern perspective would predict that they will act so as to minimize their losses. In any case, the behavioral choice findings imply that the *couple* is the decision making unit, not the individual.

• CDM couples rarely played zero-sum games, instead favoring cooperative or mixed strategies.

Game playing strategies during household chores task and video recall. Analysis of participants' behavioral choice (household chores task) ratings and video recall task indicated that the low-income couples in this sample very rarely played zero-sum games and tended to favor cooperative strategies. In the behavioral choices task, 33 percent of couples played a mixed game and 64 percent played a cooperative game. Only one couple played a zero-sum game. According to individuals' perceived and reported levels of affect during replay (that is, video recall) of the conflict discussion, 31 percent played a mixed game and 69 percent played a cooperative game; none played a zero-sum game. This suggests that the majority of couples in the CDM sample preferred cooperation. This result differs from middle-class couples, where zero-sum games have been somewhat more prevalent. According to unpublished data collected by the Relationship Research Institute, who oversaw the aforementioned QPPHI study, as many as 5-10 percent of middle-class couples in prior research played zero-sum games during their conflict discussions.

During the video recall activity, both members of each couple tended to indicate (using the rating dial) very similar levels of positive affect (payoffs). Overall, the payoffs were low when either or both members acted negatively or when one member was acting negatively and the other was acting positively (Table C.15). When either member was acting neutrally or when both were acting positively, the payoffs were higher. There were no significant differences between the partners' payoff matrices. These results underscore that the majority of individuals in the current sample preferred cooperative interactions.

It is important to note that although it is possible to consider the behavioral choice and video recall findings from the perspective of game theory, the activities were not technically a game because partners were not observed interacting and responding directly to their partner's actions. In the behavioral choices activity, for example, the satisfaction ratings could simply reflect some predetermined arrangement the couple made regarding allocation of household chores.

Consensus and concurrence during household chores task and video recall. Participants' independent ratings of preferences for completing each of the six household chores in the behavioral choices task indicated that couples were in agreement regarding their preferences on average 3.56 times out of a possible six (SD=1.62). Concurrence scores—correlations between male and female preferences for who should complete the chores—show that couples were generally in agreement (M=.39, SD=.29), although scores ranged from -0.46 to .82, suggesting that not all couples agreed. This implies that the two partners are likely to have similar preferences for cooperativeness; however it may also be the result of previously negotiated roles.

Agreement between self and perceived partner affect reported during the conflict discussion (obtained via video recall rating dial data) was lower than agreement regarding preferences for completion of household chores. Correlations were positive but generally low between each individual's self-ratings of how s/he felt during the conflict discussion and their ratings of how the partner felt during at that same time. Correlations for females' self and partner ratings ranged from .30 to .88 (M=.16, SD=.28); correlations for males ranged from -.36 to .60 (M=.14, SD=.24). This suggests that on average, individuals tended to perceive their partners as feeling the same way as they themselves are feeling, whether that feeling is positive, negative, or neutral.

2. Inclusion and Control during Observed Interaction

Inclusiveness and controlling behavior during paper tower task. According to observer ratings of inclusiveness and controlling behavior during the paper tower task, both males and females tried to include their partners and also attempted to exert some control (Table C.13). T-tests suggest a difference in mean levels of overall inclusion shown by males versus females (t=-2.04), with females being more inclusive on average than males. The level of overall inclusiveness displayed by females was significantly positively correlated with inclusiveness displayed by males; similarly, overall control displayed by females was positively related to control displayed by males during the interaction. This suggests that couples are exhibiting reciprocal behavior where one responds with behavior similar to that of the partner (that is, when the male is inclusive, the female is also inclusive).

• When individuals used controlling behavior, they were less satisfied with their interactions.

Associations between controlling behavior and satisfaction with interaction during paper tower and lottery tasks. Bivariate correlations computed between patterns of decision making (inclusion and control during the paper tower task, and movement toward consensus in the lottery task) and levels of satisfaction with the process and outcome for these decision tasks revealed several significant relations involving the controlling behavior of both males and females (Table C.16).

Males' "overt battles for control" and overall controlling behavior during the activity were negatively related to their satisfaction with the process, and female "assumption of leadership/delegation/direction" were negatively related to female satisfaction. Movement toward consensus on the lottery task, however, was not related to either partner's satisfaction ratings.

Differences in decision-making behavior by marital status. Within the CDM sample, there were no statistically significant differences between married and unmarried couples in movement toward consensus or levels of consensus in the lottery task; concurrence during the behavioral choices (household chores) or video recall tasks; or inclusiveness or controlling behavior during the paper tower or lottery task.

3. Assessment of New Measures

Many of the decision-making measures discussed above were developed specifically for this study. We assessed the validity of each of these measures by examining their correlations with established observational or survey measures with which we would expect them to be related.

- Interviewer ratings of inclusiveness and controlling behavior during the paper tower task. The one-time observer ratings of male and female behavior at the conclusion of the paper tower task were meant to tap into the extent to which one partner attempts to take control of the task versus including the other. The closest SPAFF code that represents this dimension is dominance. As expected, females' controlling behavior was significantly correlated with female dominance, (r=0.33), while female inclusiveness was negatively correlated with dominance by men (r=0.49), but the correlation with men's inclusive behavior was not significant (r=-0.07).
- Movement toward consensus in the lottery task. Movement toward consensus and away from individual preferences should logically be related to the couple's ability to manage disagreements and conflicts. As expected, females' movement toward consensus was positively correlated with the couple's self-reported positive conflict management on the telephone survey (r=0.35; the correlation with men's movement toward consensus approached significance (r=0.25). Female movement toward consensus was negatively related to female use of destructive conflict strategies (r=0.36), and positively related to female use of positive conflict management (r=0.41).
- Game playing strategies from behavioral choices (household chores) and video recall tasks. Although more of an analysis than a measure, the game playing strategies observed in two very different tasks were similar. In the behavioral choices task, 64 percent of couples appeared to be playing a cooperative game¹⁴ while 69 percent did so in the video recall task. Only one couple played a zero sum game in the behavioral choices task, while no couples did so in the video recall task.
- Satisfaction with task process and outcome. As discussed above, female affective behavior during the conflict discussion was significantly associated with female satisfaction ratings in the expected direction, while male affective behavior was significantly associated with male satisfaction ratings.

¹⁴ As noted earlier in this chapter, some may argue that because the men and women were not observed actually deciding who should do what task, their recorded preferences should not be construed as a "game" because the correlation between their preferences could be the result of already negotiated roles prior to the study.

IV. CONTEXTUAL FACTORS AND COUPLES' INTERACTION BEHAVIOR

The results described in Chapter III imply that couples bring characteristics and attitudes to their interactions that are likely to influence their affective and decision-making behaviors. Understanding how contextual factors operate may provide insight for both the content and delivery of a variety of social services. If, for example, males in low-income families tend to have greater control of material resources relative to their partners--and this control is associated with less willingness to compromise or collaborate in decision making, there could be implications for programming. Services traditionally provided to low-income mothers might consider involving these male partners in some way, even if the couple is not married. Fatherhood programs might want to consider including a focus on how lack of compromise can damage a relationship. In this chapter we first describe characteristics and attitudes like control of material resources or attitudes toward gender roles, which we call contextual factors, then we examine how they relate to observed interaction and decision-making behavior and preferences.

A. Contextual Factors Posited to be Associated with Couple Interaction

Following the logic model (Figure I.1) that described the framework and constructs hypothesized to be associated with couple decision making, we begin by describing the circumstances, attitudes, expectations, and perceptions of the individuals and couples in the CDM sample in seven domains: (1) contribution of material resources, (2) physical and psychological resources, (3) perceptions of relationship alternatives and power, (4) relationship quality, (5) relationship expectations, (6) gender role attitudes, and (7) family structure. For each of the measures, Table IV.1 displays the means¹⁵ and standard deviations for females, males, and, when relevant, couples.

Contribution of material resources. Most of the partners in CDM couples were far from equal in their economic contribution to their families. In about 44 percent of couples, the male was the sole earner; in 18 percent, the female was (Table IV.1). While women brought in more income than men from sources other than employment, such as public assistance or child support, men had more total income. Despite their lower earnings, women more often had a higher level of education (42 percent) than their partners (22 percent). In 29 percent of the couples neither was employed; in about 25 percent both partners were working.

Physical and psychological resources. When rating their overall health on a scale of 1 (excellent) to 5 (poor), CDM couples averaged approximately 2.5 (between good and very good). Averaging across men and women, 53.5 percent of the CDM sample reported being in excellent or very good health¹⁶ (Table IV.2).

¹⁵ Although gender differences between mean levels of contextual factors are discussed in this section, these differences were not tested for statistical significance.

¹⁶ This is somewhat lower than the national estimates for individuals in the same age groups, which are 66.9 percent for ages 25 to 34, and 63.5 percent for ages 35-44 (CDC 2005)

	Females	Males	Couples	
	Percentage	Percentage	Mean or Percentage	
Material resources Education (%) Has more education than partner Both have same education	42.2	22.2	35.6	
Earnings (%) Has higher earnings than partner Both have same earningsª	17.8	44.4	37.8	
Employment (%) Only one individual working Both are working Neither is working	15.6	28.9	26.7 28.9	
Difference in income from other sources (female minus male) (\$)			341.00	
Difference in total income ^c (female minus male) (\$)			-418.00	
N	45	45	45	

Table IV.1. Means and Standard Deviations for Relative Measures of Material Resources

Source: CDM telephone survey.

Note: See Chapter II for description of variable construction.

^aSame earnings is defined as both partners being within two categories of the earnings distribution.

^bOne respondent is missing data

Approximately 27 percent of females and 16 percent of males reported moderate to high levels of symptoms associated with a diagnosis of serious mental illness, such as depression or anxiety disorders. These rates are similar to those reported for females (26 percent) and males (21 percent) in another study of low-income couples, Building Strong Families (BSF)¹⁷ (Dion et al 2010).

¹⁷ BSF is an evaluation of a relationship-skills education program that enrolled a large sample of low-income unmarried couples. The BSF sample differs from CDM in that all BSF couples were younger, shared a biological child, and were together an average of three years compared to six years in CDM. The BSF sample was also more racially diverse, and while the majority received some form of public assistance, all CDM couples received such assistance.

	Females		Males	
	Mean or Percentage	SD	Mean or Percentage	SD
Physical and Psychological resources				
Overall health status (range=1- 5)	2.6	0.9	2.4	1.1
Moderate or high distress (%) ^a	26.7	1 1	15.6	1 1
Overall happiness (range=1-7)	5.0	1.1	5.2	1.1
Perceptions of Relationship Alternatives and Power				
Perceived relationship alternatives (range=1-4)	1.7	0.5	1.8	0.6
Perceptions that self has final say (range=1-3)	2.4	0.4	1.7	0.4
Relationship Quality				
Support and affection (range=1-4)	3.4	0.4	3.5	0.5
Trust (range= $1-4$)	3.3	0.7	3.7	0.5
Commitment (range=1-4)	3.5	0.5	3.5	0.5
Relationship happiness (range 1–10)	7.5	1.5	7.6	1.2
Constructive conflict management (range=1-4)	3.2	0.5	3.4	0.5
Destructive conflict management (range=1-4)	2.5	0.6	2.4	0.7
Relationship Expectations				
Relationship expectations are met (range= $1-5$)	3.5	0.6	3.5	0.7
Expectations for separation (range= $1-5$)	1.5	0.9	1.3	0.6
Perceived wellbeing if separated (range=1-5)	2.1	0.7	2.0	0.6
Perceptions that partner will cheat (range= $1-4$)	1.5	0.6	1.4	0.6
Gender Role Attitudes				
Belief in traditional gender roles(range=1-4) ^b	2.1	0.6	2.0	0.6
Ν	45		45	

Table IV.2. Means and Standard Deviations of Contextual Variables, Excluding Material Resources

Source: CDM telephone survey.

Note: See Chapter II for description of variable construction and psychometric statistics.

^a The Kessler K–6 Scale has a possible range of 0 – 24. Scores above 13 indicate likelihood of serious mental illness; scores of 9 to 12 are considered to be in the medium distress range (Kessler et al 2003).

^bOne respondent is missing data

Perceptions of relationship alternatives and power. In terms of their perceived ability to attract a better partner, males and females appeared to be quite equal. On a four-point scale from very likely to not at all likely, both genders reported it was between somewhat likely and not at all likely that they could find a better alternative to their current relationship. On multiple dimensions, most couples perceived life would not be better if they separated from their partners.

Females' average scores on an assessment of which partner is more likely to have the final say on several household decisions indicated that they perceived themselves to have more power than their partners. Household decisions included major purchases, expenditures for children and food, and allocation of chores. On a scale of 1 to 3, where 1 means the male has final say, 2 means the partners have equal say, and 3 means the female has the final say, women scored 2.4 on average, somewhat higher than men, who scored 1.7.

Relationship quality. On nearly all measures of relationship quality, CDM couples reported moderate to high levels of characteristics associated with positive relationship quality, including

support and affection, trust, commitment, and relationship happiness, averaging between agree and strongly agree on each of those scales. Levels of constructive conflict management were also high, although couples also reported using some destructive strategies in response to conflict.

This sample is similar to other low-income couples in terms of relationship quality. Average self-reported levels of constructive conflict management and support and affection were very similar to levels for couples in the afore-mentioned Building Strong Families control group (Wood et al. 2010). Reported levels of destructive responses to conflict were slightly higher in the BSF control group (2.8 versus 2.4 in CDM). Nevertheless, CDM couples reported somewhat lower levels of overall relationship happiness than couples in BSF, averaging 7.6 on a 1 to 10 scale versus an average of 8.3 in the BSF sample.

Relationship expectations. Scores on several questions indicated that many participants thought that their relationship expectations were met, that they did not expect separation. Both men and women reported that their current partner met or exceeded their expectations for a relationship, scoring an average of 3.5 on a 1 to 5 scale. Men and women alike thought there was a low chance of separating, reporting an average of 1.4 on a scale of 1 to 5. Expectations that their partner would cheat in the future were similarly low, with average scores of 1.5 out of 4.

Gender role attitudes. On a scale of 1 to 4, with higher scores representing more traditional gender role attitudes, CDM participants averaged approximately 2.1. Couples were most likely to disagree with statements that indicated the man should make the important decisions in the household or be the sole breadwinner. Most felt it was acceptable for a mother to work outside of the household when her children are young and that couples who both work should share household chores.

Family structure. Forty-seven percent of the sample was married; the remainder was unmarried but cohabiting. In 60 percent of all couples, either the female or the male had at least one child from a previous romantic partner (referred to as multiple-partner fertility).

B. Relationship between Contextual Factors and Affective and Decision-Making Behavior

To assess the association between couples' self-reported characteristics and their observed affect, behavior, and preferences, we examined bivariate correlations between the circumstances, attitudes, and perceptions described above and a subset of the observational measures of process presented in Chapter III. To assess the associations with the affective behavior, we selected the following SPAFF codes from the conflict discussion (not the paper tower task):

- Total positive affect and total negative affect
- Criticism, contempt, defensiveness,¹⁸ and dominance

To assess the association of contextual factors with decision-making behavior and preferences, we selected:

¹⁸ Three of the four horsemen; a fourth (stonewalling) was not included because only three couples displayed it.

- Observer ratings of influence behavior during the paper tower task--summary measures of controlling and inclusive behavior
- Total distance traveled (or "movement toward consensus") from initial preferences toward joint consensus during the lottery task
- Cooperation versus competition (game-playing measure derived from behavioral choices, i.e. household chores, task)
- Concurrence of affect during video recall task (correlation between self-ratings of affect and perceived affect of partner, also called synchronicity of affect)

Analytical approach. The small sample size of this study, necessitated by the in-depth nature of the observational data collection, presents a challenge to fully exploring the large number of hypotheses related to contextual factors. The number of couples falling into specific categories (such as the number of cases in which females earn more than males) means that some results should be interpreted with caution. For these reasons, we present only bivariate correlations rather than conducting multivariate analyses. We report the significance level of the correlations without formal adjustments for multiple tests because of low statistical power, however, we restrict our analysis to findings that are significant at the p=.05 level or lower.

All results discussed in this chapter were statistically significant between p=.000 and p=.05. The correlations for all analyses are shown in Appendix D, Tables 1 to 7, which indicates the specific p-level for each (with near-significant results defined as between .05 and .10). We show results by male and females, except for cooperation vs. competition, which is a couple-level variable assessing which game-playing strategy the couple used. In the analysis of control over material resources, we include one additional measure, which is the relative distance moved in the lottery task within couples (females minus males) because the hypotheses being addressed in that domain are primarily about which partner has the most control in the relationship. For these analyses, two females and one male, who were part of the three same-sex couples, were randomly classified as a member of the opposite sex.

1. Control over Material Resources

The CDM study provided little support for the hypothesis that an individual who controls the most material resources will have greater power and be less likely to accommodate his or her partner—(for example, moving away from a personal preference to reach a consensus in decision-making activities or including the partner in a joint task) (Table D.1).

• There was mixed support for the hypothesis that greater control of material resources would be associated with less movement toward consensus.

Association of material resources with consensus behavior. The lottery task results are the most straightforward operationalization of the material resources hypothesis. Contrary to the hypothesis, there were no significant correlations with movement toward consensus when males had greater control of material resources, in terms of greater education, earnings, employment, or total

income.¹⁹ Movement toward consensus was also not associated with females' greater earnings or total income relative to males. The more likely it was that a female was the sole earner, the *more* likely she was, rather than less likely, to move toward consensus in the lottery task (r=0.31).²⁰ Females were also *more* likely to be inclusive the more they had greater total income than males (r=0.32).

In other ways, however, the hypothesis appears to play out as expected. When females and their male partners were both employed, females were less likely to move toward consensus(r=-0.30). In terms of income derived from sources other than employment (such as public assistance), the hypothesis is supported: the greater a female's income from other sources relative to her partner's income from other sources, the less likely she was to move toward consensus with her partner (r=-0.31), and the more likely males were to be inclusive during the paper tower task (r=0.34).

Association of material resources with displayed affective behavior. In two cases, affective behavior was significantly associated with lack of unemployment for both partners. The more likely it was that neither partner was employed, and the more likely males were to show defensiveness during the conflict discussion (r=0.45), and the less likely females were to be in sync with their partners' affect in the rating dial activity (r=-0.34).

2. Physical and Psychological Resources

• Individuals with better health and mental health were not less accommodating of their partners.

Association of physical health with displayed behavior. Individuals who were healthier and happier were expected to have more bargaining power and therefore show less accommodating behavior during interaction and decision making. The CDM couples provided little support for this hypothesis (Table D.2). The more likely it was that a male had a partner who suffered from poor health, the more likely he was to show positive affect and the less likely he was to show negative affect. Poorer physical health among females was significantly associated with less negative affect by males (r=-0.37), dominance (r=-0.32) and controlling behavior (r=-0.49) by males.

Lower levels of health among females was also associated with less negative affect among females themselves (r=-0.33), particularly less defensiveness (r=-0.35). Females' health, however, was also negatively related to female inclusiveness during the paper tower task (r=-0.34).

Association of psychological health with displayed behavior. There was a single statistically significant association between psychological distress and affective or decision making behavior: females with more psychological distress were more likely to show positive affect (r=.34).

¹⁹ Total income is a proxy measure and not shown in correlational tables.

 $^{^{20}}$ These results may, however, be affected by the relatively small number of cases in which females but not males were employed (n=7), and where females had greater earnings than males (n=7).

3. Perceptions of Relationship Alternatives and Power

• The more males perceived better alternatives to their current relationship, the more they were dominant, and the less they were inclusive and positive during interaction.

Association of perceived relationship alternatives with displayed behavior. The hypothesis that perceptions of positive relationship alternatives would be linked to less cooperative behavior with the current partner was supported, particularly among men (Table D.3). The more men perceived a high likelihood of finding a better partner if their current relationship were to end the less likely they were to be inclusive during the paper tower task (r=-0.30); also, they were less likely to show positive affective behavior (r=-0.40) and the more likely they were to show dominance (r=0.33) during the conflict discussion. Female perceptions of better relationship alternatives were negatively associated with male displays of dominance during the conflict discussion (r=-0.42). These results are consistent with those of prior research on relative bargaining power and perception of relationship alternatives (McElroy and Horney 1981; Manser and Brown 1980).

• *Male perceptions that they would be better off if separated were correlated with displays of contempt and dominance.*

Association of perceived well-being if separated with displayed behavior. The more men thought they would be better off if separated, the more they showed contempt during the conflict discussion task (r=0.33), and the less females showed dominance (r=-0.38). The more females perceived that they themselves would be better off if separated, the less likely they were to be in sync with perceptions of their partner's affect during the video recall task (r=-0.43).

Association of perceived power (who has the "final say") with displayed behavior. Neither partner's perception of who has the final say in household decisions was significantly correlated with any affective or decision-making behaviors, providing no support for the hypothesis that perceptions of power rather than actual control of material resources determines an individual's willingness to engage in cooperative decision making (Harvey and Bird 2004). (Due to the absence of any significant relationships, Table D.3 does not show correlations for the "final say" variable.)

4. Relationship Quality

• Females self-reporting higher levels of relationship quality showed more positive and less negative and controlling behavior during interaction, but similar associations for men did not reach statistical significance.

Women's reports of relationship quality were frequently correlated with observations of their affective behavior in expected ways, but this pattern did not hold for men. That is, men's self-reports were not associated with their observed behavior during interaction.

Association of self-reported support and affection, trust, commitment, and relationship happiness with one's own displayed behavior. Female reports of quality were related in expected ways to their own affective behavior; but male reports of trust, commitment, support/affection, and happiness were not significantly associated with male affective behavior (Table D.4). Females' higher levels of relationship happiness (r=-0.43) and perceived support and affection (r=-0.40) were associated with lower levels of controlling behavior during the paper tower task, and higher levels of

relationship happiness reported by women were linked to significantly less criticism by women during the conflict discussion (r=-0.32).

Association of individually-reported conflict management style with one's own displayed behavior. Self-reported conflict management styles were expected to align most strongly with behaviors exhibited during the conflict discussion, but also the lottery and paper tower tasks, and this expectation was strongly supported for females, but not for males (Table D.5). Females who reported more positive conflict management styles moved further than other females on the lottery task (r=0.41). They also exhibited less negative affect (r=-0.40), in particular dominance (r=-0.35), during the conflict discussion. Similarly, higher levels of females' self-reported destructive behavior in response to conflict were associated with higher levels of controlling behavior during the paper tower task (r=0.31), less movement in the lottery task (r=-0.36), and lower levels of synchronicity of affect in the video recall exercise (r=-0.33). No statistically significant correlations were observed between males' reports of conflict management and their affective behavior during interaction.

Association of individually-reported relationship quality with partner's displayed behavior. The associations between individuals' self-reported relationship quality and their partner's behavior were mostly, but not all, in the expected direction. Female reports of constructive conflict management were negatively correlated with displayed negative affect among men during the conflict discussion, in particular, dominance, r=-0.38. Male reports of constructive conflict management were negatively correlated with criticism by females during the conflict discussion (r=-0.48). Male reports of relationship happiness were positively related to females' inclusiveness during the paper tower task (r=0.31). However, higher levels of destructive conflict behavior from males were associated with fewer displays of contempt by females (r=-0.35), and the higher the level of female trust (r=-0.38) the less males displayed positive affect during the conflict discussion.

Association of the couples' reported relationship quality with displayed behavior. Couple happiness (derived by averaging the two partners' self-reported scores) was significantly associated with lower levels of displayed criticism (r=-0.34) and controlling behavior (r=-0.29) among females, although the latter was driven solely by the female's happiness. Higher levels of average couple commitment were associated with the male moving a smaller distance in the lottery task relative to other males (r=-0.34). Higher trust among couples was associated with less positive behavior among men relative to other males (r=-0.41). Greater positive conflict management reported by couples was positively associated with female movement to consensus (r=0.36).

5. Relationship Expectations

The hypothesis presented in Chapter I was that individuals who have expectations for their relationships that are not met, or those who expect their relationship will not survive, or that their partner will cheat, may be more likely to display negative interaction and decision-making styles. That hypothesis was supported in some correlations but not others.

• Linkages between relationship expectations and affective behavior were mixed.

Association of relationship expectations with displayed behavior. The more females reported that their relationship expectations were being met, the less they were inclusive during the paper tower task (r=-0.30). No other correlations with relationship expectations were significant.

Association of expectations for separation with displayed behavior. Male perceptions of the likelihood of separation were linked with negative affective behavior, but female perceptions were linked with positive affective behavior. The more males perceived that separation was likely, the more both members of the couple showed contempt for each other (r=0.41 for females and r=0.40 for males) (Table D.6). But the more females perceived separation was likely, the more likely both members of the couple were to display positive affect (r=0.55 for females and r=0.32 for males).

Association of expectations for infidelity with displayed behavior. The more either partner thought the other would cheat, the less females displayed inclusive behaviors during the paper tower task (r=-.31 for females; r=-0.29 for males). Yet the more females thought their partners would cheat, the more positive females were during the conflict discussion, (r=0.32).

6. Gender Role Attitudes

• No consistent pattern was found for the association of traditional gender role attitudes with interaction behavior.

Association of gender role attitudes with displayed behavior. One might expect that women with more traditional gender role attitudes would be more accommodating of their partners' wishes, and that men with such attitudes would display more dominance or controlling behavior. For example, DeMaris and Longmore (1996) found partners' negotiations about housework to be constrained by gender role beliefs. In the CDM study, however there were just three significant correlations; two of these were in the expected direction. The more likely it was that males had traditional attitudes, the less likely they were to be inclusive (r=-0.35), and the less likely females were to demonstrate controlling behavior (r=-0.30), during the paper tower task. In contrast, the more females endorsed traditional attitudes, the more likely they were to show contempt during the conflict discussion (r=0.34).

7. Family Structure

• Family structure and behavior were mostly not correlated.

Association between marital status and displayed behavior. Differences between married and unmarried CDM couples with respect to observed interaction behavior were presented in Chapter II, and showed that unmarried females were more likely than married females to display negative affect (contempt). This was the only significant association between marital status and observed interaction behavior.

Association of multiple-partner fertility with displayed behavior. There were no statistically significant associations between multiple-partner fertility and observed interaction or decision-making behaviors.

V. SUMMARY AND FUTURE RESEARCH

The results of this study, if confirmed in future research, have implications for the delivery, content, and outcome measurement of social services for low-income families. Overall, the study findings suggest that individuals in low-income couples—whether married or unmarried—affect each other's decisions. These patterns of influence may extend to the kinds of decisions that are central to the objectives of social services. The findings also reveal how self-report survey measures of couple functioning may reflect actual behavior of low-income couples. In this chapter, we summarize the results of analyses that describe the observed patterns of couple interaction and decision making and the contextual factors that may influence them. We then discuss the further research that would be needed to draw implications for policy and practice.

A. Summary of Results

The CDM study focused on three key research questions expected to provide insight for the content and delivery of social services. We examined the patterns of affective behavior displayed by low-income couples during direct interaction, their decision-making styles and preferences, and the contextual factors that are associated with these patterns.

1. Affective Behavior

For the most part, affective behavior in our sample was similar to that of a prior sample of middle-income couples. The low-income married and unmarried couples in CDM displayed levels of positive and negative affective behavior, including behavior associated with relationship dissolution, that were similar to those observed in married, middle-income couples. CDM males displayed significantly more defensiveness than female partners, on average, as did males in the middle-income sample. Acceptance of affective influence was also similar to that in the prior study.

Patterns of affective behavior between men and women in the study sample suggest that these individuals tend to reciprocate affect. Negative behavior displayed by men was strongly linked to negative behavior by women; the same was true for positive behavior. Specific behaviors were linked across men and women in patterns seen in prior studies: for example, male criticism was strongly related to female defensiveness; female contempt was highly associated with male defensiveness. Although the individual's initial emotional state was more predictive of interaction behavior than was the partner's affective behavior, the results nevertheless suggest that low-income individuals in couple relationships, whether or not they are married, influence each other's emotional behavior.

2. Decision-Making Styles and Preferences

In general, the decision-making styles of low-income couples were marked by a preference for cooperation and collaboration rather than competition. Very few couples preferred to maximize their own payoffs or satisfaction at the expense of their partner. Couples' preferences for completing household tasks were aligned in ways that suggested interdependence of partners—each partner's satisfaction with the allocation of chores was dependent on a combination of their partner's behavior and their own, rather than being driven by a desire to maximize their own payoffs. Preferences for completing household chores were moderately correlated between men and women. There were a few gender differences in decision-making styles: women were more inclined to include their partners during interaction and move away from their own initial preferences toward consensus, but overall gender differences were not common.

When individuals behaved in ways that were unlikely to be helpful to problem solving, they generally reported less satisfaction with their interactions. Those displaying negative affective behaviors were often less satisfied with their experience. Participants also appeared to influence their partners' satisfaction with the interaction, a pattern especially pronounced among women. Female expressions of positive affect were positively linked to male satisfaction, while female displays of negative behaviors were associated with reduced satisfaction among men. Similarly, using controlling behavior during a neutral joint task (i.e. the paper tower building task) by men and by women left them less satisfied with the interaction process. However, either partner's movement toward consensus did not correlate with whether the partner was satisfied or dissatisfied with the process.

3. Contextual Factors

Mixed support was found for the idea that individuals would be less or more cooperative depending on their control of economic resources. There were no significant associations with interaction behavior when either partner had more earnings or total income than the other. Females with more non-earnings income than their partners were, however, less accommodating during an economic decision making activity (and their partners more accommodating). Yet males with more education or earnings than their partners, or who were the sole breadwinners in the family, did not appear to exercise their bargaining power.

Non-economic resources – specifically physical and mental health – were also not associated with interaction behavior in ways that would be predicted from bargaining theory. Individuals whose partners had poorer levels of health were less likely, rather than more likely, to display negative behavior during interaction. Poorer health among women was associated with less dominance and controlling behavior by men.

Beliefs about the extent to which an individual could get a better partner, however, was predictive of affective and decision-making behavior, especially for men. Males who perceived better alternatives to their current relationship were more likely to display dominance and less likely to show positive affect and inclusive behaviors. Females who perceived better relationship alternatives for themselves were less likely to move away from their individual preferences toward consensus. The more males thought they would be better off if separated, the more they displayed such behaviors as contempt and dominance.

Beliefs about gender roles were associated with affective behavior in the expected way for males but not for females. Men who were more traditional in their attitudes tended to be less inclusive of their partners, and their female partners were less likely to try to control interactions. Counter to expectations, however, females endorsing more traditional attitudes tended to show greater contempt.

Unmarried females also displayed more contempt toward their partners during discussion of a disagreement relative to married females. Contempt—a key predictor of dissolution in prior research—was negatively associated with commitment among unmarried females and positively correlated with their belief in traditional gender roles.

Associations between relationship quality as measured through self-report and observed couple interaction were mostly as expected for women, but not for men. Female reports of relationship happiness, positive conflict management, destructive responses to conflict, support and affection, and commitment were significantly correlated with multiple observations of female affective behavior in the expected directions. However, no aspect of relationship quality reported by males was significantly associated with observations of men's behavior during the discussion of a disagreement.

4. Limitations and Future Research

The CDM study provides some tentative insights into the functioning of low-income couples' relationships, but the results should not be considered conclusive. To confirm these findings, the analyses should be repeated with a larger and more representative sample of low-income couples. A larger sample would permit multivariate analyses and thus the ability to parse out relationships among variables. For example, the role of moderators, such as marital status, could be more reliably examined to confirm and clarify counterintuitive findings. A larger sample would also permit controls for multiple comparisons, thereby increasing our confidence in the results, and would also increase generalizability of the findings.

Although all participants or their partners were recipients of public assistance, the Seattle population from which the sample was drawn is unlikely to be representative of the overall population of low-income individuals receiving such services. In particular, the sample was somewhat older and slightly better educated than many public assistance recipients. In addition, study procedures were rigorous in screening out and excluding couples that might be experiencing even low levels of intimate partner violence, thus it is possible that the relatively harmonious relationships observed in the CDM sample resulted in part from excluding couples with highly conflicted relationships.

B. Discussion

If replicated and confirmed, the results of this study would have implications for policy, program practice, and evaluation. In particular, they may suggest a more holistic approach to serving the needs of low-income families, whether the needed services involve decisions related to finding work, raising children, planning families, involving fathers, or improving relationship skills.

1. What Do the Results Suggest about Involving Partners in Social Services?

Taken together, the results of this study suggest that the behavior and decisions of low-income individuals are influenced by their intimate partners; that is, when low-income individuals are in married or unmarried relationships, it is the couple rather than the individual that will tend to be the decision-making unit. This was observed in several tasks including the interdependence preferred by couples in the division of household chores, the reciprocity of affective behavior during discussion of a disagreement, and the movement toward consensus and away from individual preferences for spending lottery winnings.

Moreover, the findings suggest that married and unmarried low-income couples function much like married middle-income couples. Levels and patterns of interaction behavior were strikingly similar, despite differences in the background characteristics of low- and middle-income couples that could be expected to alter their dynamics. These results suggest that low-income individuals affect their partners' decisions in ways that are similar to other couples.

The study results imply that the influence of spouses and partners may either support or undermine the goals of social services provided for clients. This influence may be relevant for employment programs, parenting classes, father involvement, and family planning decisions, for example, and could play a role in clients' program-related decisions, such as whether to enroll, participate, and take action to modify targeted behavior. More research is needed to determine whether and under what circumstances partners may undermine or support the program-related behavior and decisions of program clients. For instance, studies may determine whether partner support varies by the length or quality of relationships.

It may be useful for program developers, service providers, and front-line workers to consider strategies for addressing the role and influence of intimate partners and spouses when working with individuals in program-related plans or decisions. Programs could address partner influence in a variety of ways. One set of strategies could involve the partner in program planning, goal setting, or program services. In this way, the preferences and concerns of partners could be discussed openly and addressed in ways that make it more likely that partners would support the program and clients would engage and complete it. For example, a mother who is ready to work full-time may have a partner who prefers that she work part-time so that she is more available to their children. Engaging the father/partner and perhaps addressing his concern by obtaining access to high-quality early childhood education might facilitate the mother's entrance to full-time work and increase the probability of achieving program outcomes. As another example, if the father is also in need of employment services, both partners could be served together in the same program, in a way that coordinates their preferences for work schedules and child care, and addresses the transportation needs of both parents. Working with both parents together may have the potential to both remove barriers and increase the partners' mutual supportiveness of their own and the program's goals.

Considering the influence of partners and spouses, however, may or may not mean that they should always be involved in service delivery. Decisions about whether and how to involve partners in programs should be made based on both individual and contextual factors and the nature of the program's goals. In one study, mothers involved in the same work support program as their male partners demonstrated stronger short-term gains in employment and earnings than did mothers who participated alone (Gordon and Heinrich 2005). But a recent experimental study in a non-US setting showed that when married women were offered access to contraceptives alone versus in the presence of their husbands, they were more likely to visit a family planning nurse and accept a concealable form of contraception, leading to a large reduction in unwanted births 9 to 14 months later (Ashraf et al 2009).

2. What Do the Results Suggest About the Content of Relationship-Skills Programs for Low-Income Couples?

Though it will be necessary to confirm with further research, the finding that middle- and lowincome couples display similar levels and patterns of positive and negative affective behavior suggests that the fundamental concepts embodied in evidence-based programs to improve the affective quality of interactions among middle-class couples are likely to be similarly relevant for low-income couples. This study found that the majority of low-income couples prefer to work together and are unhappy when their interactions involve negative affect. These findings suggest that skills-building programs for improving communication and conflict management may be welcomed by such groups, whether or not they are married.

The observational data in this study provide a great deal of rich descriptive information that could be useful in suggesting what interventions low-income couples might need to make the best decisions for themselves and their families and to keep their relationships together. The results regarding inclusion, control, dominance, consensus, and contempt are particularly relevant for intervention. For example, the finding that unmarried females display significant levels of contempt toward their partners may, if confirmed in further research, suggest that programs for unmarried couples increase the focus on addressing contempt—one of the most important predictors of relationship instability and dissolution.

3. What Do the Results Imply About Measurement of Relationship Interaction and Quality in Low-Income Families?

The CDM results increase our confidence in the ability of female self-reports of relationship quality to adequately capture the interaction behavior of low-income women. Female reports of quality were significantly associated with many observed female affective behavior. However, the complete lack of correspondence between male reports of relationship quality and observed interaction behavior is puzzling. Further research is needed to confirm this finding. If confirmed, the results would call into question whether certain self-report measures of relationship quality, many of which were adapted from survey measures constructed for married middle-income couples, may be appropriate substitutes for direct observation of couple interaction, at least with regard to male self report measures.

The CDM study tested several observational protocols for assessing the relationships of lowincome couples and found that some worked better than others. The conflict discussion paradigm worked in generally the same way for CDM couples as it has in other studies of higher-income couples, eliciting observable demonstrations of affective behavior, especially negative behavior. The lottery task appeared to engage couples in a meaningful way and provided a useful method for testing predictions from bargaining theory. The paper tower task, however, was not as effective as had been hoped in its ability to engage couples and elicit displays of positive or negative behavior. It is possible that extending the time allotted for the task to 30 minutes, and providing cash incentives for doing a "good job" (which, of course, would need to be defined) would yield better results in terms of eliciting affective behavior.

An examination of the validity of the new measures developed for this exploratory study revealed associations with established measures that tended to be significant and in the expected direction, but low enough to suggest they are measuring distinct dimensions of behavior. Interviewer ratings of inclusiveness and controlling behavior were related to SPAFF-coded displays of dominance. Movement toward consensus in the lottery task was related to self-reports of the couple's ability to manage disagreements and conflict. These associations suggest that the new measures performed satisfactorily in this study, and may be useful in further research on decision making in couples. Validating the measures and examining their predictive validity in such further research would be important.

4. Future Research

Future research should focus on developing and testing programmatic strategies that take partner influence into account. Program models could be developed that suggest how the influence of partners and spouses—in support of or counter to program goals—can be taken into account in ways that are likely to enhance program objectives and improve outcomes for families. Randomly assigning clients to either a partner-influence model or services as usual would permit determination of whether addressing partner influence is more or less effective than a traditional approach that does not consider the partner's influence. Although further investigation is needed, the main implication of this study for human service programming is that low-income partners and spouses appear to influence each other in much the same way as other couples and therefore they and/or their influence may need to be taken into consideration.

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APPENDIX A

RECRUITMENT AND ELIGIBILITY

As described in Chapter II, RRI identified and recruited low-income couples in Seattle, Washington using a variety of strategies. Interested individuals were referred to Mathematica via a "consent to contact" form (Exhibit A.1) which authorized Mathematica to contact the couple. During that initial telephone contact, Mathematica interviewers administered a short screener to determine if the couple was eligible for the study and to assess potential willingness of the both members of the couple to participate in the two components of the study: the survey and the inhome visit. If the couple was eligible and agreed to participate, the interview proceeded with the telephone survey (the telephone survey, including the eligibility screener, is included in Appendix B, Exhibit B.1). Once the interview was completed with both members of the couple, they were referred back to RRI so that a home visit could be scheduled. Each member of the couple was asked to read and sign an informed consent form prior to participation in the home visit.

In total, 141 couples were referred to Mathematica for an eligibility assessment. Of these, 62 were deemed ineligible for the study; 21 were considered ineligible because they had recently participated in a research study about couples or had received couples counseling; 22 because they had no biological children; 2 because they could not complete the interview in English; 26 because they did not receive public assistance; and 2 because the initial telephone screening suggested that there may be domestic violence in the relationship.

A. Screening for Pre-Existing Domestic Violence

In addition to determining whether the couple met the eligibility criterion outlined in Chapter II, we employed a two-step method to screen couples for pre-existing domestic violence. In the first step, females were asked two screener questions as part of the telephone survey to identify whether domestic violence might be an issue in the relationship (items D1r and D1s in the survey assessing fear of partner). Because of their sensitivity, we placed these items within a broader set of questions about the relationship. An affirmative answer to either question meant that the couple was ineligible to continue with the study. In this case, interviewers read an exit script which informed the couple that they were not a good fit for the study. The female partner was offered a hotline number and shelter information. Two couples were screened out of the study based on these questions.

In the second step, couple were separated and asked to complete some questionnaires in private early in the home visit. During this time, a clinician administered an in-depth face-to-face domestic violence screener to the female partner only (see Appendix B, Exhibit B.2). For the same sex couples, the screener was administered to both partners (in one case, to two males, and in the other cases, to two females). Simultaneously, but in a separate room, the male completed a questionnaire related to father involvement, their partner's personality, and their relationship. If this screening suggested that there was any domestic violence in the relationship, the conflict discussion was not administered, and the female was provided with information and resources for attaining safety. These protocols were developed in consultation with a domestic violence expert external to the research team, and all procedures and materials were reviewed and approved by an independent Institutional Research Board (Public/Private Ventures). Eight couples did not receive the conflict discussion because they did not pass the domestic violence screener administered during the home visit. In addition, all couples were debriefed at the end of the home visit to obtain a general sense of how each partner is feeling about their participation and determine if there have been any adverse experiences as a result of participation.

EXHIBIT A.1. COUPLES' COMMUNICATION STUDY

WHAT IS THIS STUDY ABOUT?

The Couples' Communication Study is a research project sponsored by the U.S. Department of Health and Human Services (DHHS). The study is conducted by Mathematica Policy Research, Inc., and the Relationship Research Institute. The purpose of the study is to learn more about how couples make important decisions. Your taking part in the study will be vital to helping DHHS improve its programs and services.

WHAT IS EXPECTED OF ME IF I DECIDE TO TAKE PART?

If you take part in this study, we will first ask you and your partner some questions over the phone. We will determine if you qualify for the study in the first few minutes of the phone call. If you quality, you and your partner will be asked to take part in a phone interview. As part of this interview, we will ask you about your health, education, and jobs you may have. We will also ask questions about your relationship, such as how you and your partner talk to each other and handle arguments, how your life would change if you broke up, and whether you have ever been unfaithful. Each interview will take about 20 minutes. You and your partner will be asked the questions separately. Both you and your partner must agree to take part.

Based on your answers, we may then ask you and your partner to take part in a home visit. During the home visit, researchers will come to your home and ask you and your partner to talk about your relationship and answer some questions in private. You will also be asked to take part in some activities together, which may include (1) building a paper tower together, (2) choosing how to spend your winnings if you won the lottery, and (3) talking about something you disagree on. Some of these activities will be videotaped. We will also measure your heart rate and how much you sweat using painless electrodes. The home visit will take about 2 1/2 to 3 hours. Someone from the research team will call you at home within a week to ask you about your experience with the study.

WILL MY ANSWERS BE KEPT PRIVATE?

Everything you tell the research team will be kept private and strictly confidential. Only the researchers will be able to see the answers you give them. Nothing will ever be said about you as an individual. Your partner will not see your answers, and your name will not be listed in any reports published as part of this study. Instead, we will combine information about you with information about everybody else in the study. In rare cases, we may release information if required by law. For example, by law we must report suspected or alleged child abuse or neglect.

IS TAKING PART VOLUNTARY?

Taking part in this study is voluntary. You will not lose access to services now or in the future if you decide not to take part or to leave the study. You may leave the study at any time with no risks or costs.

WHAT ARE THE BENEFITS AND RISKS OF TAKING PART IN THE STUDY?

Many people like talking about their relationship and enjoy taking part in studies like this one. However, you may feel some discomfort while answering questions about yourself and your relationship. You can refuse to answer such questions if you wish, and it will not affect your taking part in the study. Also, if you are male, we may need to shave a very small area of your chest to place the electrodes. It is unlikely but possible that your skin could become slightly irritated where electrodes are placed.

WILL I BE PAID FOR TAKING PART IN THE STUDY?

If you qualify for the study, you and your partner will each be paid \$10 for the phone interview and \$40 for the home visit. If you and your partner take part in both the phone interview and home visit, you will each receive \$50 in cash at the time of the home visit, for a total of \$100. If you both take part in the phone interview but not the home visit, you will each receive a check for \$10 in the mail. No other payment will be given to you for taking part in this study.

EXHIBIT A.2. WHAT IS THE COUPLES' COMMUNICATION STUDY?

The Couples' Communication Study is a research project to learn more about how couples make important decisions.

If you qualify for this study and choose to participate, you and your partner can receive up to \$100. The study includes a telephone interview in which we would ask you and your partner to each spend 20 minutes answering questions about yourself and your relationship (\$10 each); and a home visit with the two of you that would take about 2 1/2 to 3 hours (\$40 each). Both you and your partner/spouse must agree to take part in the study.

	The information on this form is strictly confidential a	and will not	affect your eligi	bility for gover	rnment assist	ance
1.	Are you currently 18 years of age or older?		□ YES			
2.	Are you currently in a romantic relationship and living with your pa	artner?		□ NO		
3.	Have you been in this relationship for at least 3 months?			□ NO		
4.	Are you living with any children under age 18 that are yours or you	our partner's?		□ NO		
5.	Are you able to be interviewed in English?		□ YES			
	a answered "YES" to all five questions above, please fill-in the info mation.	ormation belo	ow and a representat	ive from the stud	y will contact yo	u with more
I, abc	(PRINT FULL NAME) ut this study.	sentative from	the Couples' Commu	nication Study to co	ontact me	
SIGI	ut this study.			nication Study to co	ontact me	
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APPENDIX B

TELEPHONE SURVEY AND HOME VISIT PROTOCOLS

The study was comprised of two data collection components: (1) a structured telephone interview, and (2) a visit to the couple's home to collect observational and other data. Mathematica conducted the 30 minute structured telephone interview with each participant in the study sample. Interviews were completed with each member of the couple individually by telephone. All data was collected by trained interviewers using a paper and pencil questionnaire. Data were entered electronically and open-ended responses were coded (occupation) post-interview. The complete telephone survey is shown in Exhibit B.1.

After the telephone interview was completed with both members of the couple, RRI scheduled a home visit with the couple which lasted approximately 3 hours. Two interviewers, a lead and a support interviewer, conducted each visit. A detailed description of each home visit procedure and copy of measures used is included in Exhibit B.2.

Exhibit B.1

• Telephone Survey

Exhibit B.2

- 1. Pre-Task Procedures
 - Informed Consent
 - The Oral History Interview
 - Behavioral Choices Response Form
 - Individual Survey with Sensitive Questions
- 2. Paper Tower Exercise
 - Satisfaction with Process and Outcome
- 3. Lottery Task
 - Allocation of Money to Each Expenditure
 - Satisfaction with Process and Outcome
- 4. Conflict Discussion
 - Problem Inventory: Areas of Disagreement
 - Psycho-Physiological Measurement (no written response is required by the couple)
 - Satisfaction with Process and Outcome
- 5. Video Recall Procedure (no written response is required by couple)
- 6. Post Discussion Briefing

EXHIBIT B.1

TELEPHONE SURVEY

DATE:

SECTION A: INTRODUCTION

INTERVIEWER: RECORD START TIME AND DATE AT TOP

A1 Hello, may I please speak with [SAMPLE MEMBER]?

My name is [INTERVIEWER'S FULL NAME], and I'm calling from Mathematica Policy Research about the Couple's Communication Study that we are conducting for the Department of Health and Human Services. (You/she/he) said that it would be ok for us to call and tell (you/her/him) more about this project.

SAMPLE MEMBER AVAILABLE01 (GO TO A3) SAMPLE MEMBER NOT AVAILABLE00 (GO TO A2)

A2 When would be a good time to call back and speak with (her/him)?

INTERVIEWER: RECORD CALLBACK TIME ON CONTACT SHEET AND THANK SAMPLE MEMBER. TERMINATE CALL.

After Reaching Sample Member

A3 This study is about how couples communicate with each other and make decisions. I would like to ask you a few questions now to determine if you qualify for the study. If you qualify, I will ask both you and your partner some questions about your health, education, and jobs you may have. I will also ask questions about your relationship, such as how you and your partner talk to each other and handle disagreements, how your life would change if you broke up, and whether you have ever been unfaithful. You will each be paid \$10 for taking part in the phone interview.

Based on your answers, we may then ask you and your partner to take part in a home visit in which researchers would come to your home and ask you and your partner to talk about your relationship and answer some questions in private. You will each receive \$40 if you both take part in the home visit.

The information you provide will be kept confidential and will in no way affect any benefits or services you might be receiving. You may skip any question that you do not wish to answer.

Let's begin by finding out whether you qualify for the study.

Is this a good time to begin? Can you talk to me in private?

PROBE: The interview itself will take about 20 minutes.

IF SAMPLE MEMBER IS NOT IN PRIVATE SETTING: I would like to interview you in private so that you will feel comfortable answering the questions. Can you get to a private room? If not, I can call back at a time when you are alone.

INTERVIEWER: REFER TO QUESTION AND ANSWER SHEET IF SAMPLE MEMBER HAS QUESTIONS ABOUT THE STUDY.

YES01 (GO TO A5) NO00 (GO TO A4)

A4 When would be a good time to call back?

INTERVIEWER: RECORD CALLBACK TIME ON CONTACT SHEET AND THANK SAMPLE MEMBER. TERMINATE CALL. A5 To begin, I would like to make sure we have your name recorded correctly. What is your first and last name?

REFER TO CONTACT SHEET

A6 To verify that I am speaking with the correct person, what is your address?

PROBE: Do you live at or have you ever lived at [READ ORIGINAL ADDRESS FROM CONTACT SHEET]?

REFER TO CONTACT SHEET

INTERVIEWER: DO NAME and ADDRESS M	IATCH OUR RECORDS?	
	ΈSΟ	· /

A7 I'm sorry, but we can only interview people who were selected for this study. Thank you for your time.

INTERVIEWER: END CALL, TERMINATE INTERVIEW.

Eligibility Screener

A8 **INTERVIEWER**: IS THE RESPONDENT MALE OR FEMALE?

MALE0	1
FEMALE	2

A9 **INTERVIEWER**: Can the respondent complete this interview in English?

IF NECESSARY ASK: Can you complete this interview in English?

YES	01 (GO TO A11)
NO	
DON'T KNOW	d (GO TO A10)
REFUSED	r (GO TO A10)

A10 I'm sorry, but we can only interview people in English. Thank you for your time.

INTERVIEWER: END CALL, TERMINATE INTERVIEW.

A11 How old are you?

|___| # of years (18-65)

DON'T KNOW......d (GO TO A12) REFUSEDr (GO TO A12)

INTERVIEWER: IF SAMPLE MEMBER IS AT LEAST 18 YEARS OF AGE GO TO A13. IF SAMPLE MEMBER IS YOUNGER THAN 18, GO TO A12.

A12 I'm sorry, but we can only interview people who are 18 years of age or older.

INTERVIEWER: END CALL, TERMINATE INTERVIEW.

- A13 What is your partner/spouse's first name?
- A14 What is your relationship with [PARTNER/SPOUSE'S NAME] now? Are you ...

Married,	.01 (G	SO T	O A17)
Not married but romantically involved	.02 (G	SO T	O A17)
Divorced or separated,	.03 (G	io t	O A15)
Just friends, or	.04 (G	GO T	O A15)
Not in any kind of relationship	.05 (G	io t	O A15)
PARTNER/SPOUSE DIED	.06 (G	io t	O A16)
DON'T KNOW	d (G	60 T	O A15)
REFUSED	r (G	60 T	O A15)

A15 I'm sorry, but we can only interview people who are currently married or romantically involved with their (partner/spouse). Thank you for your time.

INTERVIEWER: END CALL, TERMINATE INTERVIEW.

A16 I'm very sorry to hear that. Our condolences for your loss. We do not need to ask you any other questions. Thank you for your time.

INTERVIEWER: END CALL, TERMINATE INTERVIEW.

A17 Do you currently live with [PARTNER/SPOUSE'S NAME]...

all of the time,	01 (GO TO A19)
most of the time,	
some of the time, or	
never?	
DON'T KNOW	d (GO TO A18)
REFUSED	r (GO TO A18)

- A18 I'm sorry, but we can only interview people who are currently living with their (partner/spouse). Thank you for your time.
- A19 Do any children under 18 years of age live with you in your household?

YES	01 (GO TO A20)
NO	
DON'T KNOW	d (GO TO A21)
REFUSED	r (GO TO A21)

A20 Are any of these children your biological children or your (partner/spouse)'s biological children?

YES	
NO	
DON'T KNOW	d (GO TO A21)
REFUSED	r (GO TO A21)

A21 I'm sorry, but we can only interview people who are currently living with their child or their (partner/spouse)'s child. Thank you for your time.

INTERVIEWER: END CALL, TERMINATE INTERVIEW.

A22 How long have you and [PARTNER/SPOUSE'S NAME] been together as a couple?

|___| # of years |___| # of months (0-40) (0-11)

DON'T KNOW...... d (**GO TO A23**) REFUSEDr (**GO TO A23**)

INTERVIEWER: IF COUPLE HAS BEEN TOGETHER LESS THAN 3 MONTHS OR RESPONDENT ANSWERS DON'T KNOW OR REFUSED, GO TO A23, OTHERWISE GO TO A24

A23 I'm sorry, but we can only interview people who have been in a relationship with their current (partner/spouse) for at least 3 months. Thank you for your time.

INTERVIEWER: END CALL, TERMINATE INTERVIEW.

A24 How many people live in your household?

PROBE: Include children and adults whether or not they are related to you.

|____| # people in household(2-20)

DON'T KNOWd	
REFUSEDr	

A25 In the past 12 months, have you received couples' counseling, participated in a research study about couples, or received other services designed to help couples with their relationships?

YES	
NO	
DON'T KNOW	d (GO TO A27)
REFUSED	r (GO TO A27)

A26 I'm sorry, but we can only interview people who have not participated in another study, or people who have not received services designed to help couples in the past 12 months. Thank you for your time.

INTERVIEWER: END CALL, TERMINATE INTERVIEW.

INTERVIEWER: ASK A27 IF RESPONDENT IS FEMALE, OTHERWISE GO TO A29.

A27 In the past 12 months, have you received any government assistance for yourself or your children, such as Food Stamps; SSI (Supplemental Security benefits); WIC; Housing assistance; subsidized school lunch; Washington State Children's Health Insurance (SCHIP); Healthy Option Medicaid; or cash assistance--also know as TANF, public assistance, or Work First?

YES	01 (GO TO A29)
NO	00 (GO TO A28)
DON'T KNOW	d (GO TO A28)
REFUSED	r (GO TO A28)

A28 I'm sorry, but we can only interview people who have recently received some form of public assistance in the past 12 months. Thank you for your time.

INTERVIEWER: END CALL, TERMINATE INTERVIEW.

IF ELIGIBLE:

A29 Have you talked to your (partner/spouse) about the study and is (he/she) interested in participating?

YES	01 (GO TO A31)
NO	
DON'T KNOW	d (GO TO A30)
REFUSED	r (GO TO A30)

- A30 If you qualify for the home visit, we will also need to interview your (partner/spouse) over the telephone. We would like to start the interview with you now, and talk to your (partner/spouse) after we finish. We can also talk to him at another time if that is more convenient.
- A31 I would now like to ask you some questions that will take about 20 minutes. As I mentioned before, the information you provide will be kept confidential and will in no way affect any benefits or services you might be receiving. Your participation will be important in helping the U.S. Department of Health and Human Services improve programs and services for couples. You may skip any question that you do not wish to answer.

Is it OK to continue?

PROBE: You and your (partner/spouse) will each receive \$10 for participating in the telephone interview.

SECTION B: NUMBER OF CHILDREN

To begin, I would like to ask you some questions about your children and other relationships you may have had.

B1 How many children do you have with [PARTNER/SPOUSE'S NAME]? Please include all of the biological children you have with [PARTNER/SPOUSE'S NAME].

|___| # OF CHILDREN(0-20)

NONE0	(GO TO B3)
DON'T KNOWd	(GO TO B3)
REFUSEDr	(GO TO B3)

B2 How many of these children live with you now?

|____ # OF CHILDREN(0-20)

NONE	0
DON'T KNOW	
REFUSED	r

B3 How many children have you had with other partners or spouses? Please include all of the biological children you have with other partners, even if they are not currently living with you.

|____ # OF CHILDREN WITH OTHER PARTNER(S) (0-20)

NONE	0 (GO TO C1)
DON'T KNOW	d
REFUSED	r

B4 How many of these children live with you now?

|____ # OF CHILDREN(0-20)

NONE	0
DON'T KNOW	d
REFUSED	r

SECTION C: PSYCHOLOGICAL RESOURCES

Physical Health

C1 Next I'd like you to think about your health. In general, would you say your overall health is

Excellent,	01
Very good,	02
Good,	03
Fair, or	04
Poor?	05
DON'T KNOW	d
REFUSED	r

C2 Do you have any chronic health or medical conditions?

YES	01
NO	
DON'T KNOW	d (GO TO C4)
REFUSED	r (GO TO C4)

C3 What are these conditions?

PROBE: Any other conditions?

INTERVIEWER: Circle all that apply

	~
ARTHRITIS/BONE PAIN	
ASTHMA/EMPHYSEMA	02
BACK PROBLEM; "BAD BACK"	03
CANCER	04
DIABETES; "SUGAR"	05
FATIGUE/TIRED	06
LEARNING DISABILITY	07
HEADACHES	30
HEART CONDITION	09
HEPATITIS/CIRRHOSIS (LIVER PROBLEM	MS)10
HIGH BLOOD PRESSURE	11
NERVES/ANXIETY/STRESS	12
OBESITY	13
SEIZURES	14
ULCERS; "STOMACH PROBLEMS"	15
OTHER (SPECIFY)	16
DON'T KNOW	.d
REFUSED	r

Mental Health

C4 Now I am going to ask you some questions about feelings you may have had over the past 30 days. For each item I will ask how often you felt this way. Please tell me if you felt this way all of the time, most of the time, some of the time, a little of the time, or none of the time.

During the PAST 30 DAYS how often did you feel...

		All of the Time	Most of the Time	Some of the Time	A Little of the Time	None of the Time	DON'T KNOW	REFUSED
a.	So sad that nothing could cheer you up?	01	02	03	04	05	d	r
b.	Nervous?	01	02	03	04	05	d	r
C.	Restless of fidgety?	01	02	03	04	05	d	r
d.	Hopeless?	01	02	03	04	05	d	r
e.	That everything was an effort?	01	02	03	04	05	d	r
f.	Worthless?	01	02	03	04	05	d	r

C5 Taking things all together, on a scale of 1 to 7, where 1 is very unhappy and 7 is very happy, how would you say things are these days?

Very Un	ihappy				Very I	Нарру	DON'T KNOW	REFUSED
01	02	03	04	05	06	07	d	r

C6 How often do you worry that your total (family) income will not be enough to meet your (family's) expenses and bills? Would you say almost all the time, often, once in a while, hardly ever, or never?

Almost all the time	Often	Once in a While	Hardly Ever	DON'T Never KNOW REFU		REFUSED
01	02	03	04	05	d	r

Kin Support

C7 Now I would like to ask you about help and support you may receive from people other than your (partner/spouse).

During the next year, if you needed help, could you count on someone in your family to ...

		YES	NO	DON'T KNOW	REFUSED
a.	Loan you \$100?	01	00	d	r
b.	Provide advice, encouragement, moral,	01	00	d	r
	or emotional support?				
c.	Help with babysitting or child care?	01	00	d	r
d.	Provide transportation?	01	00	d	r
e.	Provide a place to live?	01	00	d	r

SECTION D: CURRENT RELATIONSHIP

Conflict Management

Now I would like to ask you some questions about your relationship with [PARTNER NAME]. As a reminder, the information you provide will be kept confidential and will in no way affect any benefits you may be receiving. Your participation is voluntary and you may skip any question you do not wish to answer.

D1 I am going to read you some statements about things couples may experiences when they are together. Tell me if this happens often, sometimes, rarely, or never.

	-						
		Often	Sometimes	Rarely	Never	DON'T KNOW	REFUSED
a.	When I have problems, my (partner/spouse) really understands what I'm going through.	01	02	03	04	d	r
b.	My (partner/spouse) blames me for things that go wrong.	01	02	03	04	d	r
C.	I feel appreciated by my (partner/spouse).	01	02	03	04	d	r
d.	I feel respected even when we disagree.	01	02	03	04	d	r
e.	Even when arguing we can keep a sense of humor.	01	02	03	04	d	r
f.	When we discuss something, my (partner/spouse) acts as if I am totally wrong.	01	02	03	04	d	r
g.	We are good at solving our differences.	01	02	03	04	d	r
h.	When we argue, one of us is going to say something we will regret.	01	02	03	04	d	r
i.	When we argue, I feel personally attacked by my (partner/spouse).	01	02	03	04	d	r
j.	During arguments, we are good at taking breaks when we need them.	01	02	03	04	d	r
k.	When we argue, I get very upset.	01	02	03	04	d	r
I.	We are pretty good listeners, even when we have different positions on things.	01	02	03	04	d	r
m.	My (partner/spouse) is good at calming me when I get upset.	01	02	03	04	d	r
n.	Little arguments turn into ugly fights with accusations, criticisms, name calling or bringing up past hurts.	01	02	03	04	d	r
0.	My (partner/spouse) puts down my opinions, feelings or desires.	01	02	03	04	d	r
p.	My (partner/spouse) seems to view my words or actions more negatively than I mean them to be.	01	02	03	04	d	r
q.	When we argue, one of us withdraws and refuses to talk about it any more.	01	02	03	04	d	r

INTERVIEWER: IF RESPONDENT IS FEMALE, CONTINUE WITH r AND s. IF MALE, GO TO D2.

		Often	Sometimes	Rarely	Never	DON'T KNOW	REFUSED
r.	I am afraid of my (partner/spouse).	01	02	03	04	d	r
s.	I am uncomfortable talking in front of my (partner/spouse) because of what he may do to me.	01	02	03	04	d	r

Communication, Friendship, and Time Spent Together, Supportiveness and Intimacy

D2 Please tell me whether you strongly agree, agree, disagree, or strongly disagree with the following statements.

		Strongly Agree	Agree	Disagree	Strongly Disagree	DON'T KNOW	REFUSED
a.	My (partner/spouse) and I often talk about things that happen to each of us during the day.	01	02	03	04	d	r
b.	My (partner/spouse) and I enjoy doing even ordinary, day-to-day things together.	01	02	03	04	d	r
C.	My (partner/spouse) knows and understands me.	01	02	03	04	d	r
d.	My (partner/spouse) listens to me when I need someone to talk to.	01	02	03	04	d	r
e.	My (partner/spouse) respects me.	01	02	03	04	d	r
f.	My (partner/spouse) encourages or helps me to do things that are important to me.	01	02	03	04	d	r
g.	My (partner/spouse) shows love and affection for me.	01	02	03	04	d	r
h.	I am satisfied with my sexual relationship with my (partner/spouse).	01	02	03	04	d	r
i.	My friends and relatives support my relationship with my (partner/spouse).	01	02	03	04	d	r

INTERVIEWER: IF RESPONDENT ANSWERED "OFTEN" OR "SOMETIMES" TO EITHER D1r OR D1s, GO TO D3. OTHERWISE GO TO D4.

Appendix B

D3 I appreciate your time and willingness to talk to me. For this particular study, we are looking for couples with certain characteristics. Based on some of your answers, it seems that the home visit will not be a good fit for you and your partner, so I will not need to interview him after all. I would still like to mail you a check for \$10 for participating in this interview. Can I verify your current address?

INTERVIEWER: RECORD NAME AND ADDRESS FOR PAYMENT

IF NEEDED, OFFER TO EXPLAIN THIS WOMAN'S PARTNER USING SCRIPT ABOVE WHY HE WILL NOT BE INTERVIEWED.

Now before we end our conversation, I would like to provide you with a few resources. Based on your answers to some of the questions I asked, it seems that you may have a high level of conflict in your relationship. The Washington State Domestic Violence Hotline, which is staffed 24 hours a day and can provide support, talk with you about your current relationship, and can provide additional resources for you, their number is 1-800-562-6025. It is important to know that both physical and emotional violence are NOT part of a healthy and safe relationship. If you are concerned for your safety or your child's safety, please remember that you can always call 9-1-1". Thank-you again for your help today.

INTERVIEWER: END CALL, TERMINATE INTERVIEW.

Perceived Relationship Alternatives

Even though it may be very unlikely, think for a moment about how various areas of your life might be different if you were to separate from your (partner/spouse). For each of the following areas, please tell me if your life would be worse, the same, or better.

D4. Would your overall happiness be...

Worse	01 (GO TO D4a)
The Same, or	
Better	
DON'T KNOW	d (GO TO D5)
REFUSED	r (GO TO D5)

D4a. Would you say...

Much Worse, or	01 (GO TO D5)
A little Worse	
DON'T KNOW	d (GO TO D5)
REFUSED	r (GO TO D5)

D4b. Would you say...

Much Better, or0	1
A little Better0	2
DON'T KNOW	d
REFUSED	r

D5.	Being a parent?		
	0	Worse	01 (GO TO D5a)
		The Same, or	02 (GO TO D6)
		Better	03 (GO TO D5b)
		DON'T KNOW	. ,
		REFUSED	r (GO TO D6)
D5a.	Would you say		
		Much Worse, or	(/
		A little Worse	()
		DON'T KNOW	(
		REFUSED	r (GO TO D6)
D5b.	Would you say		
		Much Detter an	04
		Much Better, or	
		A little Better DON'T KNOW	
		REFUSED	
D6.	Your sex life?		
		Worse	, , ,
		The Same	,
		Better	
		DON'T KNOW	
		REFUSED	r (GO TO D7)
D6a.	Would you say		
		Much Worse, or	01 (GO TO D7)
		A little Worse	
		DON'T KNOW	· · · ·
		REFUSED	r (GO TO D7)
D6b.	Would you say		
		Much Better, or	
		A little Better	
		DON'T KNOW	
		REFUSED	r
D7.	Your economic security?		
		Worse	01 (GO TO D7 a)
		The Same, or	. ,
		Better	
		DON'T KNOW	
		REFUSED	r (GO TO D8)
D7a.	Would you say		
	, ,	Much Worse, or	01 (GO TO D8)
		A little Worse	
		DON'T KNOW	
		REFUSED	r (GO TO D8)

D7b. Would you say...

Much Better, or	01
A little Better	02
DON'T KNOW	. d
REFUSED	r

D8. Now think about what would happen if you and your (partner/spouse) broke up this month. For each of the following, please tell if it is not at all likely, somewhat likely, very likely, or certain.

If you and your (partner/spouse) broke up this month, how likely is it that during the next year...

		Not at all Likely	Somewhat Likely	Very Likely	Certain	DON'T KNOW	REFUSED
a.	You could get a better (partner/spouse)	01	02	03	04	d	r
b.	You could get a (partner/spouse) as good as your current one.	01	02	03	04	d	r
C.	You would be sad but would get over it	01	02	03	04	d	r
d.	There are many other (men/women) you could be happy with	01	02	03	04	d	r

Expectations for marriage or divorce

D9 What do you think the chances are that you will separate from your (partner/spouse) in the near future?

No chance	01
A little chance	02
A 50-50 chance	03
A pretty good chance, or	04
An almost certain chance	05
DON'T KNOW	d
REFUSED	r

INTERVIEWER: GO TO D11 IF RESPONDENT CURRENTLY MARRIED

D10 What do you think the chances are that you will marry your partner in the future? Would you say...

No chance	01
A little chance	02
A 50-50 chance	03
A pretty good chance, or	04
An almost certain chance	05
DON'T KNOW	d
REFUSED	r

Commitment and trust

- Now I would like to ask about your relationship with [PARTNER/SPOUSE'S NAME]. As a reminder, the information you provide will be kept confidential and will in no way affect any benefits you may be receiving. Your participation is voluntary and you may skip any question you do not wish to answer.
- D11 Please tell me whether you strongly agree, agree, disagree or strongly disagree with the following statements.

		Strongly Agree	Agree	Disagree	Strongly Disagree	DON'T KNOW	REFUSED
a.	I may not want to be with my (partner/spouse) a few years from now.	01	02	03	04	d	r
b.	My relationship with my (partner/spouse) is more important to me than almost anything else in my life.	01	02	03	04	d	r
c.	I want this relationship to stay strong no matter what rough times we may have.	01	02	03	04	d	r
d.	I can trust my (partner/spouse) completely.	01	02	03	04	d	r
e.	My (partner/spouse) can be counted on to help me.	01	02	03	04	d	r

Fidelity

D12 Sometimes couples are not always faithful to each other. How likely is it that your (partner/spouse) has cheated on you with someone else? Would you say...

Definitely yes	01
Probably yes	02
Probably no	03
Definitely no	04
DON'T KNOW	d
REFUSED	r

D13 How likely is it that your (partner/spouse) will cheat on you in the future? Would you say...

Definitely yes	01
Probably yes	02
Probably no	03
Definitely no	04
DON'T KNOW	d
REFUSED	r

D14 How likely is it that you will cheat on your (partner/spouse) in the future? Would you say...

01
02
03
04
d
r

D15 Have you cheated on your (partner/spouse) with someone else?

YES	01
NO	00
DON'T KNOW	d
REFUSED	r

Happiness

D16 Taking all things together, on a scale from 0 to 10, where 0 is not at all happy and 10 is completely happy, how happy would you say your relationship with [PARTNER/SPOUSE'S NAME] is? You can pick any number from 0 to 10.

|____| (0-10)

DON'T KNOWd
REFUSEDr

Relationship Expectations

Now I have some questions about how your current experiences with your (partner/spouse) compare to your beliefs about what you can expect from a relationship. For each statement, please say whether your experience is about what you expected, worse than what you expected, or better than what you expected.

PROBE: By expectations I mean what you think is realistic to expect from a relationship.

D17 The amount your (partner/spouse) trusts you.

About what you expected	01 (GO TO D18)
Worse than you expected, or	02 (GO TO D17a)
Better than you expected	03 (GO TO D17b)
DON'T KNOW	d (GO TO D18)
REFUSED	r (GO TO D18)

D17a Would you say...

A lot worse you expected, or	01 (GO TO D18)
Somewhat worse you expected	02 (GO TO D18)
DON'T KNOW	d (GO TO D18)
REFUSED	r (GO TO D18)

D17b	Would you say		
5110			
		A lot better I expected, or	
		Somewhat better I expected DON'T KNOW	
		REFUSED	
			1
D18	The time you spend together.		
		About what you expected	01 (GO TO D19)
		Worse than you expected, or	
		Better than you expected	03 (GO TO D18b)
		DON'T KNOW	d (GO TO D19)
		REFUSED	r (GO TO D19)
D18a	Would you say		
		A lot worse you expected, or	01 (GO TO D19)
		Somewhat worse you expected, or	
		DON'T KNOW	
		REFUSED	
D18b	Would you say		
		A lot better I expected, or	01
		Somewhat better I expected	02
		DON'T KNOW	d
		REFUSED	r
D19	The amount of affection your (part	tner/spouse) shows you.	
		About what you expected	01 (GO TO D20)
		Worse than you expected, or	
		Better than you expected	· · · · · ·
		DON'T KNOW	· · /
		REFUSED	, ,
D19a	Would you say		
		A lot worse you expected, or	01 (GO TO D20)
		Somewhat worse you expected, or	
		DON'T KNOW	
		REFUSED	
D19b	Would you say		
		A lot better I expected, or	01
		Somewhat better I expected	
		DON'T KNOW	
		REFUSED	r

D20 The amount your (partner/spouse) criticizes you.

		About what you expected Worse than you expected, or Better than you expected DON'T KNOW REFUSED	02 (GO TO D20a) 03 (GO TO D20b) d (GO TO D21)
D20a	Would you say		
		A lot worse you expected, or Somewhat worse you expected DON'T KNOW REFUSED	02 (GO TO D21) d (GO TO D21)
D20b	Would you say		
		A lot better I expected, or Somewhat better I expected DON'T KNOW REFUSED	02 d
D21	The physical attractiveness of your	r (partner/spouse).	
		About what you expected Worse than you expected, or Better than you expected DON'T KNOW REFUSED	02 (GO TO D21a) 03 (GO TO D21b) d (GO TO D22)
D21a	Would you say		
		A lot worse you expected, or Somewhat worse you expected DON'T KNOW REFUSED	02 (GO TO D22) d (GO TO D22)
D21b	Would you say		
		A lot better I expected, or Somewhat better I expected DON'T KNOW REFUSED	02 d
D22	The amount you and your (partner	/spouse) argue.	
		About what you expected Worse than you expected, or Better than you expected DON'T KNOW REFUSED	02 (GO TO D22a) 03 (GO TO D22b) d (GO TO D23)

D22a	Would you say		
		A lot worse you expected, or Somewhat worse you expected DON'T KNOW REFUSED	02 (GO TO D23) d (GO TO D23)
D22b	Would you say		
		A lot better I expected, or Somewhat better I expected DON'T KNOW REFUSED	02 d
D23	The commitment you get from you	r (partner/spouse).	
		About what you expected Worse than you expected, or Better than you expected DON'T KNOW REFUSED	02 (GO TO D23a) 03 (GO TO D23b) d (GO TO D24)
D23a	Would you say		
		A lot worse you expected, or Somewhat worse you expected DON'T KNOW REFUSED	d (GO TO D24)
D23b	Would you say		
		A lot better I expected, or Somewhat better I expected	

DON'T KNOW......d REFUSEDr

Perceptions of Power

D24 In most relationships either the man or the woman has the most say about some decisions although they talk it over first. For instance, in your relationship, who usually has the most say...

		You	Your Partner/ spouse	Both of you have the same say	Don't Know	Refused
a.	about which friends or relatives you see most often?	01	02	03	d	r
b.	about how much should be spent on major purchases like furniture and appliances?	01	02	03	d	r
C.	in deciding how much money should be spent on things for the (children/baby)?	01	02	03	d	r
d.	about how much money your family can afford to spend per week on food	01	02	03	d	r
e.	about how often you and your (partner/spouse) go out for an evening?	01	02	03	d	r
f.	in deciding to have more children?	01	02	03	d	r
g.	about who does household chores?	01	02	03	d	r

Relationship investments

D25 On a scale of 1 to 5 where 1 is not at all true and 5 is very true, how true would you say the following statement is: I've put a lot of energy and effort into my relationship.

Not at all true				Very True	DON'T KNOW	REFUSED
01	02	03	04	05	d	r

SECTION E: GENDER ROLE BELIEFS

Now I would like to ask you just a few questions about relationships in general.

E1 Please tell me whether you strongly agree, agree, disagree or strongly disagree with the following statements.

		Strongly Agree	Agree	Disagree	Strongly Disagree	DON'T KNOW	REFUSED
a.	The important decisions in the family should be made by the man of the house.	01	02	03	04	d	r
b	It is much better for everyone if the man earns the main living and the woman takes care of the home and family.	01	02	03	04	d	r
C.	Preschool children are likely to suffer if their mother is employed.	01	02	03	04	d	r
d.	It is all right for mothers to work full-time when their youngest child is under age 5.	01	02	03	04	d	r
e.	A man whose partner or spouse is working full-time should spend just as many hours doing housework as she does.	01	02	03	04	d	r

SECTION F: MATERIAL RESOURCES

Employment

We are almost finished with the interview, I have just a few more questions about you. Again, the information you provide will be kept confidential and will in no way affect any benefits you may be receiving. Your participation is voluntary and you may skip any question you do not wish to answer.

First, I would like to ask about your work experience. Please think about paid jobs you may have had, both now and in the past. These can include self employment, babysitting, housekeeping and other temporary jobs.

F1 Have you ever worked for pay?

YES	01
NO	
DON'T KNOW	d (GO TO F9)
REFUSED	r (GO TO F9)

F2 Are you <u>currently</u> working for pay?

YES	01 (GO TO F4)
NO	
DON'T KNOW	d
REFUSED	r

F3 Did you work at any job for pay in the past 12 months, including self-employment, babysitting, housekeeping, or any other temporary jobs?

YES	01
NO	00
DON'T KNOW	d
REFUSED	r

INTERVIEWER: THROUGHOUT SECTION, IF RESP CURRENTLY WORKING, READ FIRST WORD OR PHRASE IN PARENTHESES. IF NOT CURRENTLY WORKING, READ SECOND PHRASE IN PARENTHESES.

Now I'd like to ask you some questions about (your current job/the job you held most recently). If you (have/had) more than one job, please think about the job where you worked the most hours.

F4 First, including overtime, how many hours per week (do/did) you usually work on this job?

		# OF HOURS PER	WEEK (GC) TO F	: 6)
(1-84)					

DON'T KNOW	d (GO TO F5)
REFUSED	r (GO TO F5)

F5 (Is/Was) the number of hours per week you usually (work/worked) less than 20 hours, 20 to 34 hours, or 35 hours or more?

LESS THAN 20 HOURS PER WEEK	01
20 - 34 HOURS PER WEEK	02
35 OR MORE HOURS PER WEEK	03
DON'T KNOW	d
REFUSED	r

F6 And what (do/did) you do there, that is what is your occupation?

INTERVIEWER: ENTER VERBATIM RESPONSE

- PROBE 1: What are your main activities or duties? What else do you do? What else? Do you supervise anyone?
- PROBE 2: For example, a child-care provider at a private preschool; geometry teacher in a public high school; sales clerk in a women's shoe store.

<OPEN>_____

DON'T KNOW	d
REFUSED	r

Income

This next set of questions is about income you received.

F7 In the last 12 months, what were your total earnings from all your jobs before taxes and deductions? Please do not include earnings from anyone else.

INTERVIEWER: STOP READING WHEN RESPONDENT PROVIDES RANGE.

None	00
Less than \$5,000	01
Between \$5,000 and \$10,000	02
Between \$10,001 and \$15,000	03
Between \$15,001 and \$20,000	04
Between \$20,001 and \$25,000	05
Between \$25,001 and \$35,000	06
Between \$35,001 and \$45,000	07
Between \$45,001 and \$55,000	08
Between \$65,000 and \$75,000	09
Between \$75,001 to \$100,000, or	10
More than \$100,000?	11
DON'T KNOW	d
REFUSED	r

F9 Now please think about all the money **you yourself** received during the <u>past month</u>, not money any other members of your household who live with you received.

PROBE: Please include electronically transferred benefits. PROBE: Please only include benefits received in your name, not those received separately by other members of your family.

INTERVIEWER: READ DOWN LIST FIRST, THEN FOR EACH YES RESPONSE, ASK AMOUNT.

	During the past month, did you receive (READ EACH ITEM)			How much money, in total, did [SOURCE] last month? PROBE: Your best estimate is		e from
		YES	NO	AMOUNT	DON'T KNOW	REFUSED
a.	Cash assistance, also known as TANF, Public Assistance, or WorkFirst?	01	00	\$, _ _ . (1-1,500.00)	d	r
b.	Food Stamp benefits?	01	00	\$, _ _ . (1-1,500.00)	d	r
C.	SSI (Supplemental Security Income) or disability insurance?	01	00	\$, _ _ . (1-1,500.00)	d	r
d.	Unemployment benefits?	01	00	\$, _ _ . (1-1,500.00)	d	r
e.	Child support?	01	00	\$, _ . _ . (1-1,500.00)	d	r
f.	Any other money such as W.I.C., disability benefits, alimony payments, housing or energy assistance, or money from friends or relatives?	01	00	\$, _ . (1-2,500.00)	d	r
	(SPECIFY)				d	r

Assets

F10 Do you own a car, truck, or van?

YES	01
NO	
DON'T KNOW	
REFUSED	

F11 Is the car, truck, or van in...

INTERVIEWER: CHECK ALL THAT APPLY

Both you and your partner/spouse's nan	nes01
Your partner/spouse's name only	02
Your name only, or	03
Someone else's name?	04
DON'T KNOW	d
REFUSED	r

F12 Do you and your partner/spouse own your own home or are you renting?

OWN HOME	01
RENTING	02 (GO TO F14)
LIVING WITH FRIENDS/FAMILY	00 (GO TO F14)
DON'T KNOW	d (GO TO F14)
REFUSED	r (GO TO F14)

F13 Is your home in...

Both you and your partner/spouse's name	nes01
Your partner/spouse's name only	02
Your name only, or	03
Someone else's name?	04
DON'T KNOW	d
REFUSED	r

F14 Do you have any bank accounts?

YES	01
NO	
DON'T KNOW	d (GO TO F16)
REFUSED	r (GO TO F16)

F15 Are any of these accounts in...

INTERVIEWER: CHECK ALL THAT APPLY

Both you and your partner/spouse's names()1
Your partner/spouse's name only0	2
Your name only, or0	3
Someone else's name?0	4
DON'T KNOW	d
REFUSED	. r

F16 People handle money differently. Which of the following best describes how you and your partner/spouse handle money?

We put all our money together,	01
We put some of our money together	
but keep the rest separate, or	02
We keep all our money separate	03
DON'T KNOW	d
REFUSED	r

Education

I have just a few more questions about you and your background.

F17 What is the highest grade or year of regular school that you have completed?

INTERVIEWER: READ LIST IF NECESSARY. CIRCLE ONE ANSWER.

No formal schooling1	
8th grade or less2	
Some high school (Grades 9,10,11, & 12)3	
High school diploma (Completed 12th grade)4	
G.E.D5	
Some college or 2 year degree6	
Technical or trade school7	
Bachelor's degree8	
Graduate or professional school9	

SECTION G: RACE AND ETHNICITY

G1 Do you consider yourself to be of Hispanic or Latino origin?

YES	01
NO	00
DON'T KNOW	d
REFUSED	r

G2 What is your race? Do you consider yourself White, Black or African American, Asian, American Indian or Alaska Native, or Native Hawaiian or Other Pacific Islander?

INTERVIEWER: CODE ALL THAT APPLY.

INTERVIEWER: IF RESPONSE IS "HISPANIC": DO YOU CONSIDER YOURSELF WHITE HISPANIC, BLACK HISPANIC, ETC.

White,01
Black or African American,02
Asian,03
American Indian or Alaska Native or,04
Native Hawaiian or Other Pacific Islander .05
DON'T KNOWd
REFUSEDr

Thank you, those are all the questions I have.

STOP TIME:

SECTION H: COLLECT CONTACT INFORMATION

H1 Now I need to make sure we have your correct address and telephone number so that someone from the Relationship Research Institute can contact you about scheduling a home visit.

If you and your (partner/spouse) participate in both the telephone interview and the home visit, you will each receive \$50 in cash at the time of the home visit. If you do not participate in the home visit, we will mail you a check for \$10 for taking part in the telephone interview.

INTERVIEWER: ASK FOR CURRENT ADDRESS OR VERIFY FROM CONTACT SHEET **IF NEEDED**: How do you spell your first and last name? What is your current address?

NAME:	
STREET:	
CITY, STATE, ZIP	

H2 What is the best phone number to reach you at?

PHONE:

Do you have an email address?

EMAIL:

H3 To assist us in setting up a day and time that would be convenient for you to take part in the home visit, Please give me two different times when you would be available for the 2 1/2 to 3 hour visit in the next week or two.

INTERVIEWER: OBTAIN TWO POSSIBLE TIME SLOTS WITHIN THE NEXT TWO WEEKS (ENTER TIME IN PACIFIC STANDARD TIME). ENTER SPECIFIC DATE OR DAY OF WEEK.

IF NEEDED: WE CAN BRING SOMEONE TO YOUR HOME TO WATCH YOUR CHILDREN DURING THE HOME VISIT IF NEEDED.

TIME 1 TIME 2 DAY: <u>DAY:</u> TIME: (PST) TIME: (PST)

OTHER NOTES:

SECTION I: TRANSITION TO PARTNER/SPOUSE INTERVIEW

11 Now I would like to interview your (partner/spouse). Can (he/she) come to the phone now to start the interview?

YES	01 (START PARTNER)
NO	
DON'T KNOW	d
REFUSED	r

I2 When is a good time for me to call (him/her)?

INTERVIEWER: RECORD CALLBACK TIME ON CONTACT SHEET AND THANK SAMPLE MEMBER. TERMINATE CALL.

13 What is the best telephone number for me to reach (him/her) at? RECORD ON PARTNER'S CONTACT SHEET



COUPLES COMMUNICATION STUDY

RESEARCH SUBJECT INFORMATION AND CONSENT FORM

TITLE: Couples' Communication Study

PROTOCOL NO:

SPONSOR: U.S. Administration for Children & Families: Office of Planning, Research, and Evaluation Washington, D.C. United States

CO-INVESTIGATORS: John M. Gottman, Ph.D. Relationship Research Institute (206) 832-0300

> M. Robin Dion, M.A. Mathematica Policy Research, Inc. (202) 484-5262

SITE: Relationship Research Institute 1730 Minor Ave., Suite 960 Seattle, Washington, 98101 United States

CONTACT FOR STUDY-RELATED QUESTIONS: Dan Yoshimoto, Ph.D. Palationshin I

Relationship Research Institute (206) 973-3455

PROJECT

INTERVIEWERS: Dan Yoshimoto, Ph.D. Relationship Research Institute (206) 973-3455

> Renay Cleary, M.S. Relationship Research Institute (206) 973-3455

Dennis McCarthy, M.A. Relationship Research Institute (206) 832-0300

COUPLES COMMUNICATION STUDY

RESEARCHERS' STATEMENT

We are asking you to take part in a research study. This consent form will give you the facts you need to help you decide whether to take part in the study. Please read the entire consent form. You may ask questions about the purpose of the research, what we would ask you to do, the possible risks and benefits, your rights as a research subject, and anything else about the research or this form that is not clear. Then, you can decide whether you want to be in the study. This process is called "informed consent." If you agree to be in this study, you will receive a signed and dated copy of this consent form for your records.

PURPOSE AND SOURCE OF FUNDING

The purpose of this study is to learn more about how couples from different backgrounds solve problems, work through disagreements, and make decisions. Your taking part in the study will lead to information that could later help the U.S. Department of Health and Human Services (DHHS) improve its programs and services. The Administration for Children and Families at the U.S. DHHS, is funding this study. If you take part in this study, you will be asked to participate in some activities together which are explained below. We will also measure your heart rate and how much you sweat using painless electrodes.

PROCEDURES

There are two parts to this study. In part one, we asked you and your partner to take part in one-onone, private phone interviews. You both gave verbal consent to take part in the study. Now, in part two, we are asking you to take part in a home visit and some activities in your home.

Your review of this consent form is the first step of the home visit. The next step is an interview. You and your partner will talk about your relationship and then answer some questions in private. Some of the questions are sensitive, such as, "How many times in the past year have you had five or more alcoholic drinks in one day?"

You also may be asked to take part in other activities, some of which will be videotaped. These may include (1) building a paper tower together, (2) choosing how to spend your winnings if you won the lottery, and (3) talking about something you disagree on. The interviewer will help you and your partner name some areas of disagreement in your relationship. Together you will choose a topic to discuss. The interviewer will then leave you and your partner alone to talk for 15 minutes about this topic. Each of you will then view your videotape and use a dial to indicate how you were feeling during the discussion.

You may stop this visit at any time. You may refuse to take part in any activity you do not wish to do.

If you agree to take part in the first and third activities named above, you will be videotaped. If you do not agree to be videotaped doing an activity, you will not participate in that activity. We will protect your privacy. We will not label the video with any names or other personal identifiers. All videos and surveys will only be labeled with subject identification numbers. At the end of the visit today, you will be asked if you agree to release your videos for various purposes which will be explained in the video release form.

If you are chosen for the third activity, we will also keep track of your heart rate and how much you sweat during the activity. Two painless electrodes will be applied to your skin (two on your ribs and two on your fingers) and you will be asked to wear a wristband and clip a small device to your earlobe. No pain is involved in wearing any of these measurement devices, and you may ask to remove them at any time. The devices will stay on for about 15 minutes and should not cause any discomfort while you wear them or while we put them on or take them off.

The home visit will take $2 \frac{1}{2}$ to 3 hours to complete. Someone from the research team will call you at home within a week to ask you about your experience with the study.

BENEFITS OF TAKING PART IN THE STUDY

Many people like talking about their relationship and enjoy taking part in studies like this one. Participants in past studies using the same procedures have reported that the activities helped them develop insight into their own relationship behavior and that of their partner. You may also take satisfaction in the fact that your participation is contributing to the scientific understanding of how couples make decisions, and that this information could potentially lead to the improvement of supportive services for families like your own. However, we cannot be sure that there will be any direct benefit to you.

RISKS OF TAKING PART IN THE STUDY

You may feel discomfort while talking about things that you and your partner don't agree on. These feelings are likely to be similar to how you would feel during a normal disagreement with your partner. You might experience some discomfort when filling out questionnaires about yourself and your relationship. Although unusual, we may need to shave a small area of your chest (if you are male) to place the electrodes. It is unlikely but possible that your skin could become slightly irritated where the electrodes are placed.

Although we will do all we can to protect your privacy, there is always a small risk of the loss of privacy.

PAYMENT

You and your partner will each be paid \$10 for taking part in the phone interview. You will each be paid \$40 to take part in the home visit. So, if you and your partner participate in both the phone interview and home visit, you will get \$100 as a couple. If only one of you took part in the phone interview, you will be paid for one phone interview (\$10) and \$40 each for the home visit. You will be paid in full for taking part in the home visit even if you decide not to do all of the home visit activities.

No other payment will be given to you for taking part in this study. You will not be paid or given free health care in the event of injury (physical or otherwise) or death as a result of taking part in this study.

PRIVACY

The U.S. government has given Mathematica Policy Research (MPR) and the Relationship Research Institute a Certificate of Confidentiality. This certificate is meant to protect your privacy as a research subject. It prevents researchers from releasing information about you against your will. The researchers in this study cannot be forced to release any information about you in any legal proceedings. However, the certificate does not prevent you from releasing this information if you wish to.

We will do our best to keep your personal information private. However, we cannot promise you complete privacy. By law, we must report to the police if we suspect child abuse or neglect. In this case, we would need to release you and your child's personal information. Also, if the researcher sees violence during the home visit, the police may be called.

Also, MPR, the Relationship Research Institute, and other organizations such as HHS may look at or copy your research records to study the data or ensure its quality.

VOLUNTARY PARTICIPATION/WITHDRAWAL

Your taking part in this study is voluntary. You and your partner may choose not to take part and you may leave the study at any time. You will not lose access to any government services now or in the future if you decide not to take part or to leave the study.

If at any time you want to stop taking part in this study or do not want to participate in one of the activities, tell one of the investigators listed above or the researchers here with you today.

The research director or the sponsor may stop the study at any time without your consent if they think it is in your best interest. You do not waive any legal rights by taking part in this study.

VIDEO DATA

The research staff will need to review your videos. Only our research team at the Relationship Research Institute and at MPR will be able to access them. The videos will be kept in a locked cabinet in a locked room. Both offices have 24 hour security on site and only individuals with security key cards are provided access after hours. All videos and other records will be kept until December 31, 2015. After that date, we will destroy them. You will not be named in any published results of the study.

You will view the videotapes today as part of the study procedures. At the end of our visit, you will fill out a release form telling us how we may use your videos. Video data will only be released for use outside our lab if both you and your partner allow us to. If you choose, you can arrange to watch the videos later and delete any portions. If you would like to view your video after the home visit, contact Dan Yoshimoto at (206) 973-3455.

QUESTIONS

If you have any questions about taking part in this study or have concerns or complaints about the research, please contact Dan Yoshimoto, Ph.D., at 206-973-3455; John Gottman, Ph.D., at 206-832-0300; or Robin Dion at 202-484-5262. If you want more information about being a study volunteer, or feel you have been harmed in any way as a result of taking part in this study, you can call:

Margo Campbell Public/Private Ventures (PPV) 2000 Market Street, Suite 600 Philadelphia, PA 19103 (800) 755-4778 PPV's Institutional Review Board (IRB) reviewed this study to ensure it will not be harmful to you. PPV cannot answer some study-specific questions, such as questions about appointment times.

Do not sign this form unless you have had a chance to ask questions and get answers to your questions.

COUPLES COMMUNICATION STUDY

PARTICIPANT'S AUTHORIZATION

I have read the information in this consent form (or it has been read to me). The study described above has been explained to me. I voluntarily consent to participate in this study. I have had an opportunity to ask questions. If I have questions later on about the research, I can ask one of the investigators listed above. I have been informed about other options available to me, including no further participation. By signing this consent form, I have not given up any of my legal rights.

I authorize the use and disclosure of my information to the parties listed in the Other Information section of this consent for the purposes described above.

PARTICIPANT'S SIGNATURE PARTICIPANT'S PRINTED NAME

DATE

Person Conducting Informed Consent Discussion Signature Person Conducting Informed Consent Discussion Printed Name

Date

COUPLES COMMUNICATION STUDY

INVESTIGATOR'S CERTIFICATE

I have provided an explanation of the above study and have encouraged the participants to request additional information. A copy of this consent form has been given to the participant.

I certify that this participant has been properly consented and I understand that I am responsible for the conduct of this study.

INVESTIGATOR'S SIGNATURE INVESTIGATOR'S NAME

Relationship Research Institute AFFILIATION

DATE

------ Use the following only if applicable ------

If this consent form is read to the subject because the subject is unable to read the form, an impartial witness not affiliated with the research or investigator must be present for the consent and sign the following statement:

I confirm that the information in the consent form and any other written information was accurately explained to, and apparently understood by, the subject. The subject freely consented to be in the research study.

Signature of Impartial Witness Date

Note: This signature block cannot be used for translations into another language. A translated consent form is necessary for enrolling subjects who do not speak English.

cc: Participants Investigator's Files

EXHIBIT B.2: HOME VISIT PROCEDURES AND MATERIALS

Document 1A: Oral History Interview

In this interview, an RRI staff member asks the couple to tell the story of how they met, their first impressions of one another, and how they moved through major life transitions, such as the decision to move in with one another.

Question 1. Why don't we start from the very beginning. Let's discuss how the two of you met and got together. Do you remember the time you met for the first time? Tell me about it. Was there anything about your partner (spouse) that made her (him) stand out? What were your first impressions of each other?

Question 2. Tell me about how the two of you decided to live together. Of all the people in the world, what led you to decide that this was the person you wanted to live with? Was it an easy decision? Was it a difficult decision? Were you ever in love? Tell me about this time.

Question 3. Looking back over the years, what moments stand out as the really hard times in your relationship? Why do you think you stayed together? How did you get through these difficult times? What is your philosophy about how to get through difficult times?

Document 1.B: Behavioral Choices Response Form

Please rate your preference for each set of options on the scale below:

Least Preferred	Neutral	Most Preferred	
-10 -9 -8 -	-7 -6 -5 -4 -3	3 -2 -1 0 +1	+2 +3 +4 +5 +6 +7 +8 +9 +10

How satisfied are you if...

Least Preferred Neutral Most 1	Prefe	rred																			
Cleaning the House		1104																			
1) Neither you nor your partner cleans the house	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
2) Your partner cleans the house and you don't	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
3) You clean the house and your partner doesn't	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
4) Both you and your partner clean the house	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
Preparing Meals	1	1	1	I	I			L	1	1	I	I			1	1		I	L		
5) Neither you nor your partner prepares meals	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
6) Your partner prepares meals and you don't	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
7) You prepare meals and your partner doesn't	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
8) Both you and your partner prepare meals	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
Paying Bills																					
9) Neither you nor your partner pays the bills	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
10) Your partner pays the bills and you don't	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
11) You pay the bills and your partner doesn't	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
12) Both you and your partner pay the bills	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10

How satisfied are you if... Least Preferred Neutral

Least Preferred Neutral Mo	ost Pi	efer	red																		
Grocery Shopping																					
13) Neither you nor your partner does	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
the grocery shopping																					
14) Your partner does the grocery	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
shopping and you don't																					
15) You do the grocery shopping and	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
your partner doesn't																					
16) Both you and your partner do	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
grocery shopping																					
Working	T		1	1	-	-	1		-		-	1			-	T	T	1			
17) Neither you nor your partner	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
works																					
18) Your partner works and you don't	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
19) You work and your partner doesn't	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
20) Both you and your partner both	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
work																					
Take Kids to School/Day Care	T		1	1	-	-	1		-		-	1			-	T	T	1			
21) Neither you nor your partner takes	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
the kids to school/day care																					
22) Your partner takes the kids to	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
school/day care and you don't																					
23) You take the kids to school/day care	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
and your partner doesn't																					
24) Both you and your partner take the	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
kids to school/day care																					

Document 1.C: Individual Survey with Sensitive Questions

While the couple is still separated, the individuals will be asked to complete a short survey with more sensitive questions. The female partner²¹ will be asked some questions on domestic violence and the male partner will be asked about fatherhood—both members of the couple will receive questions on substance abuse. Positive results on the domestic violence questionnaire will mean that the couple will not be asked to engage in the disagreement discussion or any part of interaction task 3.

A. Domestic Violence Assessment

Now I'm going to ask you some personal questions. No matter how well a couple gets along, there are times when they disagree on major decisions, get annoyed about something the other person does, or have spats or fights because they're in a bad mood or for some other reason. We're interested in understanding each person's unique experience in their relationship, specifically, how couples deal with conflict. Some couples avoid talking to each other, while other couples may yell and sometimes throw things or hit each other. We are interested in hearing what your experience has been like in your relationship. The information that you share with me today will be confidential and will NOT be shared with your partner or others outside the research team. The information will be kept in a locked cabinet. Are you comfortable answering these types of questions?

Section I.

The following are some things that you or your partner may have done when you had a disagreement.

1. During the past 6 months, has your partner hit you?	\Box Yes	□ No
2. During the past 6 months, has your partner twisted your arm or hair?	\Box Yes	□ No
3. During the past 6 months, has your partner pushed or shoved you?	\Box Yes	□ No
4. During the past 6 months, has your partner grabbed you?	\Box Yes	□ No
5. During the past 6 months, has your partner slapped you?	□ Yes	□ No

FOR INTERVIEWER USE:

1. Did the respondent answer "YES" to any question in Section I (1-5)?

IF NOT The sespondent may be eligible. Proceed to Section II.

IF SO *The* respondent is ineligible to participate in the disagreement discussion. Read the following: I appreciate your time and willingness to answer these questions. Based on some of your answers, it seems that you may be experiencing a high degree of conflict in your relationship, and I am concerned for your safety and well-being.

²¹ There were three same sex couples; two female-female couples and one male-male couple. Both members of the male-male couple were administered the questions about domestic violence.

GO TO DV SAFETY PROTOCOL SECTION I.B, TO DETERMINE LEVEL OF SAFETY, PROVIDE RESOURCES, AND ALTER PROCEDURES FOR VISIT.

Section II.

Now I am going to ask you whether your partner has done certain things when you had a fight during the past six months. Please just answer yes or no to each of the following.

6. During the past 6 months, has your partner used a knife or a gun on you?	□ Yes	□No
7choked you?	□ Yes	□ No
8beat you up?	\Box Yes	□No
9burned or scaled you on purpose?	□ Yes	□ No
10slammed you against a wall?	\Box Yes	□No
11kicked you?	□ Yes	□ No
12. During the past 6 months, have you passed out from being hit on the head by your	\Box Yes	□No
partner?		
13has your partner punched or hit you with something that could hurt?	\Box Yes	\Box No
14have you gone to a doctor because of a fight with your partner?	\Box Yes	□ No
15did you have a broken bone from a fight with your partner?	\Box Yes	□ No
16did you need to see a doctor because of a fight, but didn't?	□ Yes	□ No
17did you partner use force (like hitting or using a weapon) to make you have sex?	□ Yes	□No
18did your partner use threats to make you have sex?	□ Yes	□No

FOR INTERVIEWER USE:

2. Did the respondent answer "YES" to any question in Section II (6-18)?

IF NOT *The* respondent may be eligible. Proceed to Section III.

IF SO *The* respondent is *ineligible* to participate in the disagreement discussion. Read the following: I appreciate your time and willingness to answer these questions. Based on some of your answers, it seems that you may be experiencing a high degree of conflict or violence in your relationship, and I am concerned for your safety and well-being.

GO TO DV SAFETY PROTOCOL SECTION I.B, TO DETERMINE LEVEL OF SAFETY, PROVIDE RESOURCES, AND ALTER PROCEDURES FOR VISIT.

Section III.

19. In the past 6 months, did you partner try to control your every move by making you	\Box Yes	□ No
ask permission?		
20did your partner withhold money, make you ask for money, or take yours?	\Box Yes	\Box No
21did you partner threaten to kill you?	\Box Yes	□ No
22did your partner threaten to hurt your family, friends, or pets?	□ Yes	🗆 No
23did you partner refuse to take responsibility for violent behavior, putting the	□ Yes	🗆 No
blame on you?		
24did your partner try to isolate you by keeping you away from your family and	\Box Yes	□ No
friends?		
25did your partner stalk or harass you or someone else at work or elsewhere?	\Box Yes	\Box No
26did your partner insult, swear at you, or call you a name?	\Box Yes	□ No
27did your partner accuse you of being with another man?	□ Yes	□ No

FOR INTERVIEWER USE:

3. Did the respondent answer "YES" to 2 or more questions in Section III (19-27)?

IF NOT *The* respondent may be eligible. Proceed to Section IV.

IF SO *The* respondent is *ineligible* to participate in the disagreement discussion. Read the following: I appreciate your time and willingness to answer these questions. Based on some of your answers, it seems that you may be experiencing a high degree of conflict or violence in your relationship, and I am concerned for your safety and well-being.

GO TO DV SAFETY PROTOCOL SECTION I.B, TO DETERMINE LEVEL OF SAFETY, PROVIDE RESOURCES, AND ALTER PROCEDURES FOR VISIT.

Section IV.

28. Are you afraid of your partner?	□ Yes	□ No
29. Are you uncomfortable talking in front of your partner because of what he may do	□ Yes	□ No
to you?		

FOR INTERVIEWER USE:

4. Did the respondent answer "YES" to any of the questions in Section IV (28-29)?

IF NOT *The respondent is eligible. Proceed with all study tasks.*

IF SO *The* respondent is *ineligible* to participate in the disagreement discussion. Read the following: I appreciate your time and willingness to answer these questions. Based on some of your answers, it seems that you may be experiencing a high degree of conflict or violence in your relationship, and I am concerned for your safety and well-being.

GO TO DV SAFETY PROTOCOL SECTION I.B, TO DETERMINE LEVEL OF SAFETY, PROVIDE RESOURCES, AND ALTER PROCEDURES FOR VISIT.

B. Substance Abuse (Administered To Both Men And Women)

The next questions are about drinking alcoholic beverages. By a "drink" we mean either a bottle of beer, a wine cooler, a glass of wine, a shot of liquor, or a mixed drink.

1. In the past year, how many times have you had (4 if female/5 if male) drinks of alcohol in one day?

DON'T KNOWd	
REFUSEDr	

2. In the past year, did you have any problems keeping a job or getting along with family or friends because of your alcohol or drug use?

YES	01
NO	02
DON'T KNOW	d
REFUSED	r

3. And what about your partner? In the past year, did (he/she) have any problems keeping a job or getting along with family and friends because of (his/her) alcohol or drug use?

YES	01
NO	02
DON'T KNOW	d
REFUSED	r

C. Inventory of Father Involvement: (Administered To Men Only While Female Completing Domestic Violence Assessment)

Think of your experiences as a father over the past 6 months. Please rate how good a job you think you did as a father on each of the items listed below using a scale from zero to 6 with zero meaning very poor and 6 meaning excellent. If an item is not applicable to your situation, circle "NA" for not applicable.

Ver	0 ry Poor	1	2	3	4		5		Exc	6 cellent	1		IA t Apply Me
1	Discipl	ining your chil	dren			0	1	2	3	4	5	6	NA
2	Encour	aging your chil	dren to do thei	r chores		0	1	2	3	4	5	6	NA
3	Setting	rules and limit	s for your child	lren's behavior		0	1	2	3	4	5	6	NA
4	Encour	0	1	2	3	4	5	6	NA				
5	Encour	aging your chil	dren to do thei	r homework		0	1	2	3	4	5	6	NA
6	Teachi	ng your childre	n to follow rule	es at school		0	1	2	3	4	5	6	NA
7	Giving support	your children's	s mother encou	ragement and e	emotional	0	1	2	3	4	5	6	NA
8	Letting special	your children	know that their	mother is an in	nportant and	0	1	2	3	4	5	6	NA
9	Cooper childre	rating with your	r children's mo	ther in the rear	ing of your	0	1	2	3	4	5	6	NA
10	Providi health o	ng your childre care)	en's basic need	s (food, clothin	g, shelter, and	0	1	2	3	4	5	6	NA
11		ing responsibil	ity for the finar	ncial support of	the children	0	1	2	3	4	5	6	NA
12	Being a	a pal or a friend	l to your childre	en		0	1	2	3	4	5	6	NA
13		ng time just tal out something	king with your	children when	they want to	0	1	2	3	4	5	6	NA
14	Spendi	ng time with yo	our children do	ing things they	like to do	0	1	2	3	4	5	6	NA
15	Praisin	g your children	for being good	l or doing the r	ight thing	0	1	2	3	4	5	6	NA
16	Praisin	g your children	for something	they have done	e well	0	1	2	3	4	5	6	NA

Ver	0 ry Poor	1	2	3	4		5			6 ellent]	Doesn'	VA t Apply Me
17	Telling	your children	that you love th	iem		0	1	2	3	4	5	6	NA
18		aging your chil s, art, etc.)	dren to develop	p their talents (music,	0	1	2	3	4	5	6	NA
19	Encour high sc	aging your chil hool	dren to continu	e their schooli	ng beyond	0	1	2	3	4	5	6	NA
20	Plannir	ng for your chil	dren's future (e	ducation, train	ing)	0	1	2	3	4	5	6	NA
21	Encour	aging your chil	dren to read			0	1	2	3	4	5	6	NA
22	Readin	g to your youn	ger children			0	1	2	3	4	5	6	NA
23	Helping	g your older ch	ildren with thei	r homework		0	1	2	3	4	5	6	NA
24	Attendi	ng events your	children partic	ipate in		0	1	2	3	4	5	6	NA
25		nvolved in the ildren's basic r etc.)				0	1	2	3	4	5	6	NA
26	Knowin friends	ng where your o	children go and	what they do	with their	0	1	2	3	4	5	6	NA

Document 2.A: Paper Tower—Satisfaction with Process and Outcome

To construct the tower, the couple is provided with a box that contains materials such as newspaper, cardboard, construction paper, tape, markers and crayons, string, straws, and other materials for decorating. The couple has 20 minutes to complete this task, which is recorded, and afterward each partner is asked to rate their satisfaction with the process and product of their efforts.

How satisfied are you with the way you and your partner worked together to build the tower?

Please circle the number which best represents your response.

Very Uns	atisfied	Ver	y Satisfied						
1	2	3	4	5	6	7	8	9	10

How satisfied are you with the way your tower turned out?

Please circle the number which best represents your response.

Very Uns	atisfied	Ver	y Satisfied						
1	2	3	4	5	6	7	8	9	10

Document 3.A: Lottery Task Expenditure

Imagine that your family has won \$5,000 in a lottery and you need to decide how to spend this money. You have 10 categories to choose from:

- ✓ Electronic equipment (e.g., stereo equipment/speakers, plasma TV, computer, cell phone, GPS for car, etc.)
- ✓ Pay off bills or debts
- ✓ Entertainment (e.g., concerts, clubs, movies, eating out, etc.)
- ✓ Deposit on a home or apartment
- ✓ New home appliances or furniture (e.g., power tools, dishwasher, washer/dryer, toaster oven, sofa, bed, desk, etc.)
- ✓ Things for the kids (e.g., toys, clothes, shoes, etc.)
- ✓ Things for yourself and/or your spouse (e.g., new clothes, shoes, jewelry, exercise club membership, etc.)
- ✓ A vacation/travel
- ✓ A car/truck/SUV
- ✓ Put money into a savings account

Using these chips, which are each worth \$100, decide how much money you would like to spend on each of these categories. Please place the chips into the proper bin. (*Each partner does this task individually, and then they come together to do the task again as a couple.*)

Money Spent on each Category by <u>Male</u>:

- \$_____ Electronic equipment
- \$_____ Pay off bills or debts
 \$_____ Entertainment
- \$_____ Entertainment
- \$_____ Deposit on a home / apartment\$_____ New home appliances or furniture
- \$_____ New home appliand \$_____ Things for the kids
- \$_____ Things for yourself / your spouse
- \$_____ A vacation/travel
- \$_____ A car/truck/SUV
- \$_____ Put money into a savings account

Money Spent on each Category by <u>Female</u>:

- \$______ Electronic equipment
 \$______ Pay off bills or debts
 \$______ Entertainment
 \$______ Deposit on a home / apartment
 \$______ New home appliances or furniture
 \$______ Things for the kids
 \$______ Things for yourself / your spouse
 \$______ A vacation/travel
 \$______ A car/truck/SUV
 - \$_____ Put money into a savings account

Money Spent on each Category by <u>Couple</u>:

- Electronic equipment
- \$_____ Pay off bills or debts
- \$_____ Entertainment

\$_____ Deposit on a home / apartment

- \$_____ New home appliances or furniture
- \$_____ Things for the kids
 - \$_____ Things for yourself / your spouse
- \$_____ A vacation/travel
- \$_____ A car/truck/SUV
- \$_____ Put money into a savings account

Document 3.B: Lottery Task—Satisfaction with Process and Outcome

At the end of the allocation of money discussion, the couple completes another form together, indicating satisfaction with the outcome of their decision about how to allocate the winnings.

How satisfied are you with the way you and your partner discussed how to spend the money?

Please circle the number which best represents your response.

Very V	√ery								
Unsatist	fied	Satisfied							
1	2	3	4	5	6	7	8	9	10

How satisfied are you with the joint decision that was made about how to spend the money?

Please circle the number which best represents your response.

Very ∖	/ery								
Unsatisf	ied	Satisfied							
1	2	3	4	5	6	7	8	9	10

Document 4.A: Conflict Discussion----Problem Inventory

Prior to the disagreement discussion, RRI staff ask each partner to complete the "problem inventory" to identify areas of disagreement in the couple's relationship.

Instructions. This form contains a list of topics that many couples disagree about. We would like to get some idea of how much you and your partner disagree about each area. In the first column, please indicate much you and your partner disagree by placing a number from 0 to 100 next to each item. A zero indicates that you don't disagree at all, and a 100 indicates that you disagree very much. In the second column, please write down the number of years, months, weeks, or days that this has been an area of disagreement

For example:

We disagree about... How much? How long? Money and Finances 90 2 ¹/₂ years

The answers in this example indicates that money and finances is something you disagree about very much and that it has been a problem for about $2\frac{1}{2}$ years.

we disagree about How much? How long?
Money and finances
Communication
Who does what (chores, childcare, etc.)
In-laws and relatives
Sex
Infidelity
Spending time with children
Religion
Whether we should get married
Recreation and having fun
Trust
Alcohol and/or drugs
Disciplining children
Having a child together (in the future)
Jealousy
Whether or not to work
Finishing education
Getting our own place to live
Basic values
How much we should work
Our goals
Emotional expression
Issues of power
Independence and dependence
Looking for a job
Politics

We disagree about How much? How long?

Document 4.B: Conflict Discussion--Psychophysiological Measurement

Prior to the disagreement discussion, research assistants will connect psycho-physiological recording devices to both the male and female participants. The 10-minute discussion is videotaped and indicators of heart rate, skin conductance, and ear pulse transit time are taken throughout. These measures provide a comprehensive assessment of each partner's autonomic reactivity during the disagreement/decision making task. No pain is involved in wearing these devices, and participants are told that they may ask to be disconnected at any time.

In order for staff to attach the equipment, each participant is asked to stand and allow the researchers to place two electrodes on the third rib; one on the right and one on the left. This involves briefly cleaning the area with prep-pads (if particularly hairy, a razor may be used to shave a small area). On the participant's non-dominant hand, two velcro electrodes are attached to the middle and index fingers, and the participant wears a wristband. A PPG (photoplethysmograph) is clipped onto the earlobe of the non-dominant side.

Once the electrodes are connected, participants are told that staff will take a 2 minute baseline reading. They hear a tone, which signals the start of the 2 minutes. During those 2 minutes they are asked not to talk to one another or look at each other and are asked not to touch the electrodes. Another tone sounds the end of the 2 minutes. The couple is then asked to begin their discussion while the psycho-physiological data are recorded.

Document 4.C: Conflict Discussion—Satisfaction with Process and Outcome

After each partner completes the Areas of Disagreement form, an interviewer works with the partners to identify an issue that both are willing to discuss and feel comfortable with. The interviewer assesses each partner's comfort level with the topic and takes great care to limit topics to only lower intensity disagreements. In addition, the topic that is ultimately selected will be one that the couple has previously discussed on their own.

Couples are then asked to spend 10 minutes discussing and trying to make progress on the issue selected. During the discussion, psychophysioligical measurements are collected. Following the conflict discussion, partners rate their satisfaction with the interaction they just experienced and the decision outcome, if a decision was reached.

1. On a scale of 1 to 10, where 1 is very unsatisfied and 10 is very satisfied, how satisfied are you with the way this discussion went?

Please circle the number which best represents your response.

Very	Very								
Unsatis	sfied	Satisfied							
1	2	3	4	5	6	7	8	9	10

2. If you and your partner came to a decision during this discussion, how satisfied are you with the decision that was made?

Please circle the number which best represents your response.

Very	Ver	у								
Unsat	isfiec	1	Satisfied							
1		2	3	4	5	6	7	8	9	10

No decision was reached: _____

Document 5: Video Recall Task

The video recall procedure occurs after completion of the disagreement discussion. Each partner simultaneously views a play-back recording of their interaction and separately uses a rating dial to provide a continuous self-report of how they felt from moment to moment during the interaction. The dial traverses a 180° path, with the dial pointer moving over a nine-point scale ranging from extremely negative (1) to extremely positive (9), with neutral at 5. Spouses are instructed to adjust the dial continuously so that it always represents how they were feeling *when they were in the interaction*. For the conflict task, the couple will rate the video twice, once for how they felt, and again for how they think their partner felt.

Document 6: Debrief with Couple Post-Conflict Discussion

After the couple has completed the standard 10-minute discussion of a disagreement, the interviewer should debrief the experience with the couple. While we know these videotaped interactions are often less intense and volatile than a couple's typical interaction, couples can become escalated and experience some distress as a result of having completed the 10-minute interaction. Therefore, the following debriefing process should be used in order to ensure that each partner is de-escalated and leaves the session feeling no worse than when they began the session. It is important to keep in mind that these topics and discussions are not new for these couples and it is often the case that couples are not able to find the time to have an opportunity to spend 10-minutes of focused time on their relationship, especially if the couple has children.

After the couple has completed the disagreement discussion, the interviewer should cover the following main points with the couple. Each main point is described in further detail below.

- 1) Acknowledge the couple's experience.
- 2) Highlight strengths of the couple's relationship and their commitment to each other.
- 3) Give both partners a chance to voice their feelings about the discussion.
- 4) Give both partners a chance to ask questions about the discussion.
- 5) Ask them about their overall experience participating in the study.
- 6) Thank them for participating.

Acknowledge the couple's experience.

- If it seems like the couple had a stressful discussion characterized by negative affect, or even if the discussion was only mildly heated, show the couple that you recognize that this experience can be challenging for couples. Your acknowledgement of their experience will lead to immediate relief, which should help couples to discharge emotional arousal.
- Tell the couple that we presented them with a challenging situation and remind them of why we did this (i.e., the purpose of the study). Explain that couples make decisions together and discuss issues that pertain to their relationships on a regular basis and that we are trying to learn about these interactions. Make them feel like collaborators in the research.

Highlight strengths of the couple's relationship and their commitment to each other.

• As you are watching the couple's discussion, make note of positive interactions that occur so that you can share these with the couple during the debriefing. Highlight characteristics of their interaction that reflect strengths in their relationship. Look for things like displays of positive affect, listening, turn taking, appropriate expression of feelings and beliefs, sharing with one another, displays of care and affection, positive communication patterns, level of friendship/closeness, level of commitment to one another, etc. Even if the interaction was characterized by hostility and negativity, be sure to find something positive to focus on and share with them at this time (e.g., "It seems like you can both really be yourselves when you're together and are really comfortable with each other.").

Give both partners a chance to voice their feelings about the discussion.

- Remind the couple again that many couples get upset during the discussion, which can be very challenging. Tell them that we did, after all, ask them discuss a problem that they've been having.
- Ask the male and female separately how they are feeling about the discussion. Give each of them a chance to share their feelings regarding the discussion. Encourage them to share their overall reactions to the discussion with you. Validate their reactions and feelings and respond to them appropriately.
- Help the couple to diffuse any negative feelings that may be lingering from the discussion. Offer reinforcement for their willingness to share their thoughts and feelings with us. If either of them still appears upset or agitated, ask them if they are still feeling upset and encourage them to voice their feelings.
- For couples who experienced high levels of negative affect and seem to have trouble dealing with or participating in the discussion of a disagreement, make a point to explore the couple's feelings at this time. For couples who may be reluctant to share their feelings, ask them directly if they are feeling angry/sad/upset. Validate that it can be unpleasant to be put in a situation like this. Explore these negative feelings until the couple has had a chance to work through them. Make supportive and positive comments about the interaction.
- If the woman appears to be in danger at any point during the debriefing, proceed directly to the Safety Protocol.
- If a couple expresses the need for assistance regarding their relationship or other mental health-related issues, offer them referrals and assistance as needed, using the list below.
 - Associates in Behavioral Health 206-325-5255
 - Asian Counseling and Referral Services <u>www.acrs.org</u> 206-695-7600
 - Highline Mental Health <u>www.highlinementalhealth.org</u> 253-248-8226
 - Community Psychiatric Clinic <u>www.cpcwa.org</u> 206-461-3614

Give both partners a chance to ask questions about the discussion.

• Ask both partners if they have any questions they'd like to ask you about the discussion. Respond to any queries that they have. Tell them that they are free to contact you at any time if they have any questions in the future (and make sure that they have your contact information).

Ask them about their overall experience participating in the study.

- Ask the couple what it was like participating in the entire study. Ask them to share their perspective and tell you how it felt to participate in all of the activities. Ask them if they would recommend the study to a friend. Encourage them to tell you what they liked and did not like about the study in general.
- Getting the couple to focus on their overall experience with the study will enable them to shift the focus away from the disagreement discussion. Get them starting to think about the next thing they will do.

Thank them for participating.

• Thank the couple for participating in the discussion and study overall. Make them feel like collaborators. Remind them of the importance of this work and the important role

that they each played in it. Try to impart a sense of excitement regarding their participation. Remind them that they can contact you at any time with comments or questions.

Exploratory Study of Low-Income Couples' Decision Making Processes

PROTOCOL FOR SCREENING AND RESPONDING TO DOMESTIC VIOLENCE

"Domestic Violence" describes a pattern of abuse and coercive behaviors, including physical, sexual, and psychological abuse as well as economic coercion used against an intimate partner. Domestic violence often involves the use of a combination of tactics aimed at establishing control of one partner over the other.

I. BEFORE STUDY PARTICIPATION: SCREENING METHODS

Most domestic violence (DV) occurs with male perpetrators and female victims. Therefore, in order to ensure safety, telephone screening and in-home screening will be conducted in private with female partners only.

A. Telephone Screening

Using information on the Consent-to-Contact form, we will contact and interview the female prior to interviewing the male in each couple. In the event that the male partner initiates contact with the study or is the first person to answer the telephone when we call their home, the male partner will be provided with a brief description of the study as outlined in the telephone script. The male partner will also be informed that before we can proceed, we will need to share the same general description of the study with the female partner and interview her first. The male partner will not participate in the telephone interview until after the female partner has completed the screening process and is eligible for the study.

Interviews with the female partner will only be conducted when the female partner is in a private setting. If the female partner is not in a private setting, the telephone interview will be rescheduled for a different time when she is able to participate in private.

If the couple is not eligible due to domestic violence, use the exit script provided in the telephone interview:

I appreciate your time and willingness to talk with me. For this particular study, we are looking for couples with certain characteristics. Based on some of your answers, it seems that this study will not be a good fit for you and your partner, so I will not need to interview him after all. I would still like to mail you a check for \$10 for participating in this interview. Can I verify your current address?

[If needed, offer to explain to the woman's partner why he will not be interviewed, using the above script.]

Now before we end our conversation, I would like to provide you with a few resources. Based on your answers to some of the questions I asked, it seems that you may have a high level of conflict in your relationship. The Washington State Domestic Violence Hotline, which is staffed 24 hours a day and can provide support, talk with you about your current relationship, and can provide additional resources for you, their number is 1-800-562-6025. It is important to know that both physical and emotional violence are NOT part of a healthy and safe relationship. If you are concerned for your safety or your child's safety, please remember that you can always call 9-1-1". Thank you again for your help today.

B. Home Visit Screening

In the early part of the home visit, the couple will be separated and asked to complete some questionnaires in private. During this time, a clinician will administer the domestic violence screener to the female only. Simultaneously, but in a separate room, the male will complete a questionnaire related to father involvement, their partner's personality, and their relationship. Both partners will also answer questions about substance abuse.

If the full home visit screening is positive for domestic violence, the researchers will be charged with two objectives: Ensuring Safety and Providing Resources.

1. Assess Safety

If positive for domestic violence, first assess safety:

I appreciate your time and willingness to answer these questions. However, it seems that you are experiencing a high degree of conflict or violence in your relationship, and I am concerned for your safety and well-being.

Are you in danger right now? Are you afraid that your partner will hurt you today? Are you afraid to go home? Does the abuse seem to be getting worse?

If yes to any of the questions above: Do you have somewhere safe to go right now or do you need help finding a safe place?

If no to any of the questions above: Do you want to talk to someone about all of this and help you figure out ways to keep you and your kids safe?

2. Provide Resources if Feeling Unsafe

If the woman feels unsafe, provide and assist her with the following resources and encourage her to seek safety now:

New Beginnings 206-522-9472 <u>www.newbegin.org</u> Seattle and Shoreline. Services include a 24-hour crisis line and emergency shelter for women and children, transitional housing, information and referrals, legal clinics, support groups, individual advocacy, and community education.

Eastside Domestic Violence Program 425-746-1940 <u>www.edvp.org</u> North and East King County, including a 24-hour crisis line, two confidential shelters, additional safe housing, support groups for women and children, and advocates on behalf of victims.

Washington State Domestic Violence Hotline: 1-800-562-6025

If in immediate danger, encourage her to call 9-1-1 or call 9-1-1 for her.

3. Provide Resources if the Woman Feels Safe but Screen is Positive

Even though you don't feel you are in immediate danger at this time, I would still like to provide you with a few resources. The Washington State Domestic Violence Hotline, which is staffed 24 hours a day can provide support. They can talk with you about your current relationship and can provide additional resources for you, including how to tell if your relationship is becoming dangerous and the location of shelters if needed. Their number is 1-800-562-6025.

It is important to know that both physical and emotional violence are NOT part of a healthy and safe relationship. If you are concerned for your safety or your child's safety, please remember that you can always call 9-1-1.

4. Alter Study Procedures if DV Screen is Positive

If the in-home domestic violence screening is positive, we will again reassure the woman that we will in no way let her partner know that we have discussed domestic violence. We will also let her know that her partner was not asked these same questions in his interview with the other researcher, to avoid raising any potential suspicions.

Any couple with a positive DV screen will not be invited to participate in the discussion of a disagreement, nor complete the Areas of Disagreement form. The other study tasks will proceed, however, because if the visit were completely terminated after the DV screening, the male could become suspicious, potentially endangering the woman. The researcher who administers the domestic violence screener to the woman will simply announce which tasks the couple will invited to participated in, excluding the disagreement discussion and associated task.

If the researchers witness violence at any time during the visit, the police will immediately be called. The researchers will dial 9-1-1.

II. DURING PARTICIPATION: IDENTIFYING AND RESPONDING TO ANY DOMESTIC VIOLENCE

It is possible that some couples with domestic violence will slip through the screening process. Therefore, the home visits will be conducted only by researchers with experience and training in identifying and addressing violent situations. The researchers will be vigilant to the possibility of domestic violence and take appropriate action.

If domestic violence is suspected, our foremost concern will be the safety of the victim and the child or children. The same general procedure as outlined above will be followed, such that safety for the victim and any children will be assessed and responded to by providing specific resources, and assisting and encouraging the person to seek safety. We will discreetly speak with the victim in private, and will in no way alert the perpetrator to the true reason for altering procedures (such as dropping the disagreement exercise) or ending the visit. The lead interviewer, a licensed family therapist, will take the lead in responding to these situations. If necessary, we will provide assistance with seeking resources in their area to address their needs and specifically, and we will provide support for individuals seeking safety from their partner if this arises as an issue in their relationship during their participation in the study.

III. AFTER STUDY PARTICIPATION: DEBRIEF AND FOLLOWUP

We anticipate that our domestic violence screening method and procedures will prevent most couples with domestic violence from enrolling and participating in this study. Nevertheless, as an extra precaution, we will follow up with all couples who participated within one week after their home visit—regardless of their domestic violence status—to ensure that the study procedures have not led to violence and to provide any needed referrals for assistance.

Script for Follow-up with All Study Participants

The researcher will use the script below to obtain a general sense of how each partner is feeling about their participation and determine if there have been any adverse experiences as a result of participation. The interviewer will also provide any additional assistance with referral to resources, if it seems appropriate or if the participant indicates a desire for this assistance. If any adverse events/experiences related to participation are reported, the interviewer will log this information and spend time talking helping the participant process through this experience. A report will be created and submitted to the IRB.

Hi [participant's name], this is [researcher's name] from the Relationship Research Institute. Is this a good time to talk?

If yes: Proceed If no: Is there a good time that I can call back? [schedule time for call back]

I'm calling to follow up with you about your participation in the study last week. In general, we'd like to see how things are going for you two since we met at your home last week, and to see if you have any feedback for us.

- 1. Now that you have participated in the different activities of the study, do you have any feedback for us about how we might improve them?
- 2. Were there any specific activities you enjoyed more than others? If yes, why?
- 3. Were there any specific activities that you did not enjoy? If yes, why?
- 4. How have things been between you and your partner over the last week [since you participated in the study]?
- 5. Are there any resources or referrals that I can help you with?

APPENDIX C

RESULTS OF OBSERVATIONAL ANALYSIS

		Male			Female			
	Mean	SD	Range	Mean	SD	Range		
	in seconds			in seconds	i			
Positive Affect*	13.46	11.28	1 - 43	20.23	16.35	0 – 77		
Negative Affect	9.45	39.87	0 - 264	5.48	12.22	0 - 65		
Four Horsemen	1.05	2.75	0 - 14	1.30	3.65	0 - 22		
Contempt	0.30	1.21	0 - 7	0.28	1.15	0 - 7		
Criticism	0.00	0.00	0 - 0	0.17	0.90	0 - 6		
Defensiveness	0.59	1.65	0 - 9	0.89	3.21	0 - 21		
Stonewalling	0.09	0.60	0 - 4	0.00	0.00	0 - 0		
Domineering	8.39	38.65	0 - 257	4.00	11.01	0 - 65		
N		43			44			

Appendix C, Table 1. Descriptive Statistics for SPAFF-Coded Behavior	During Paper Tower Task
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Note: The first ten minutes—600 seconds—of the paper tower task was coded for affect. Thus, the theoretical range for all variables was 0–600.

*Significant difference in SPAFF code between males versus females, p <.01.

		Male			Female		
	Mean	SD	Range	Mean	SD	Range	
	in seconds			in seconds			
Positive Affect	25.06	34.13	1 - 138	24.21	27.29	0 - 131	
Negative Affect	110.28	100.72	0 - 366	111.58	91.87	0 - 390	
Four Horsemen*	60.03	73.41	0 - 324	43.97	48.81	0 - 200	
Contempt	1.47	4.10	0 - 23	2.11	4.45	0 - 18	
Criticism	4.75	13.16	0 - 71	15.79	30.32	0 - 157	
Defensiveness*	50.53	69.02	0 - 302	23.95	43.16	0 - 199	
Stonewalling	3.28	15.70	0 - 91	2.13	12.81	0 - 79	
Domineering	48.86	75.68	0 -365	65.34	79.24	0-372	
Ν	3	6			37		

Appendix C, Table 2. Descriptive Statistics for SPAFF-Coded Behavior During Conflict Discussion

Note: The first ten minutes—600 seconds—of the conflict discussion in the CDM study was coded for affect. Thus, the theoretical range for all variables was 0-600.

*Significant difference in SPAFF code between males versus females, p<.05.

_		Male		Female			
Variable	Mean	Standard Deviation	Range	Mean	Standard Deviation	Range	
Fraction of Time Aroused	0.39	0.31	0.0095	0.48	0.31	0.0098	
Fraction of Time Calm	0.02	0.07	0.00-0.33	0.00	0.00	0.00-0.00	
Heart Rate Reactivity ¹	2.75	4.22	-6.04-9.99	3.91	4.55	-4.46-11.95	
Skin Conductance Reactivity	4.11	4.40	-9.72-14.11	3.92	4.03	-6.98-12.44	
Ear Pulse Transit Time Reactivity	0.02	0.05	-0.02-0.25	0.01	0.03	-0.12-0.07	
Ν	3	36		3	37		

Appendix C, Table 3. Descriptive Statistics for Physiological Arousal during Conflict Discussion

Note: Three measures were collected: heart rate, ear pulse transit time, and skin conductance (see Chapter II for more information). Individuals were classified as "aroused" (coded as 1), "normal" (coded as zero, and equal to the individual's baseline reading); or "calm" (coded as -1) based on the amount of time spent in each state during the 10 minute conflict discussion. All 600 seconds of physiological data collection for all three measures was classified as aroused, normal, or calm based on which quartile each score was in. In the cases where two or more of the three measures were in the upper quartile, participants were classified as aroused. When all three measures were in the lower quartile, participants were classified as calm. When all three measures remained within the two middle quartiles, they were classified as normal/neutral (comparable to baseline scores).

¹ Reactivity variables were created by subtracting average responses during the Baseline from average responses during the Conflict Discussion.

		Males			Females			
Behavior	Unmarried	Married	Difference		Unmarried	Married	Difference	
Positive Affect	14.89	12.57	2.32		19.85	21.71	-1.86	
Negative Affect	4.59	14.95	-10.36		6.09	5.00	1.09	
Four Horsemen	1.47	0.71	0.76		1.80	0.95	0.85	
Contempt	0.23	0.38	-0.15		0.39	0.19	0.20	
Criticism	0.00	0.00	0.00		0.35	0.00	0.35	
Defensiveness	0.86	0.33	0.53		1.09	0.76	0.33	
Stonewalling	0.18	0.00	0.18		0.00	0.00	0.00	
Domineering	3.14	14.24	-11.1		4.00	4.05	-0.05	
N=	22	21			23	21		

Appendix C, Table 4. Mean Differences in SPAFF-Coded Behavior during Paper Tower Task, by Marital Status

Source: SPAFF codes derived from observations of paper tower task in CDM study.

Significant difference in SPAFF code unmarried versus married males and females

		Males		Females		
Behavior	Unmarried	Married	Difference	Unmarried	Married	Difference
Positive Affect	22.47	27.37	-4.90	26.94	21.53	5.41
Negative Affect	93.82	125.00	-31.18	109.94	108.47	1.47
Four Horsemen	59.41	60.58	-1.17	41.11	38.40	2.71
Contempt*	2.47	0.58	1.89	3.61	0.74	2.87*
Criticism	6.71	3.00	3.71	16.83	15.63	1.20
Defensiveness	48.65	52.21	-3.56	16.17	22.11	-5.94
Stonewalling	1.59	4.79	-3.20	4.50	0.00	4.50
Domineering	31.88	63.68	-31.80	66.72	67.47	-0.75
N=	17	19		18	19	

Appendix C, Table 5. Mean Differences in SPAFF-Coded Behavior during Conflict Discussion, by Marital Status

Source: SPAFF codes derived from observations of conflict discussion in CDM study.

*Significant difference in SPAFF code unmarried versus married males and females, p=.05.

		Paper To	wer Task			Conflict [Discussion	
Observed Affect	Female Satisfaction with Process	Female Satisfaction with Outcome	Male Satisfaction with Process	Male Satisfaction with Outcome	Female Satisfaction with Process	Female Satisfaction with Outcome	Male Satisfaction with Process	Male Satisfaction with Outcome
Male Negative	24	10	25	06	24	22	31+	23
Male Positive	.10	.13	.26	.17	.22	.25	.34*	.30+
Male Four Horseman	38*	.09	23	.07	26	.04	07	11
Male Domineering	22	11	25	.06	04	25	36*	20
Female Negative	43**	11	33*	.05	35*	08	23	17
Female Positive	.08	.07	.26	.10	.24	.20	.39*	.38*
Female Four Horseman	20	.15	19	01	27+	37*	36*	34*
Female Domineering	41*	18	31*	.04	21	.13	08	03

Appendix C, Table 6. Correlations between Couple Interaction and Satisfaction with Process and Outcome

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

	Ma	ale	Female		
Physiological Reactivity:	Satisfaction with Process	Satisfaction with Outcome	Satisfaction with Process	Satisfaction with Outcome	
Female Heart Rate Reactivity	.29+	.28	.11	.13	
Male Heart Rate Reactivity	20	25	08	29	
Female Skin Conductance	20	25	19	28	
Male Skin Conductance	29+	40*	17	30	
Female Ear Pulse Transit Time Reactivity	12	16	12	12	
Male Ear Pulse Transit Time Reactivity	30+	39*	38*	54**	

Appendix C, Table 7. Correlations between Physiological Reactivity During the Conflict Discussion and Satisfaction with Process and Outcome

Note: + p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001

Variable	Female Negative Affect	Female Positive Affect	Female Four Horseman	Female Contempt	Female Criticism	Female Defensiveness	Female Stonewalling	Female Domineering
Conflict Discussion								
Male Negative Affect	.47**	21	.59***	.34*	.20	.52**	02	.24
Male Positive Affect	.07	.39*	20	18	.23	a	12	.17
Male Four Horsemen	.50**	09	.52**	.50**	.40*	.28+	.02	.30+
Male Contempt	.07	09	.40*	.36*	03	.06	.90***	11
Male Criticism	17	.11	.54**	.03	12	.70***	06	12
Male Defensiveness	.42*	04	.40*	.50**	.38*	.19	08	.28
Male Stonewalling	.39*	07	.14	.02	.29+	12	.26	.30+
Male Domineering	.13	19	.26	06	12	.43**	11	.04
Paper Tower Task								
Male Negative Affect	.80**	05	.09	.05	02	.08	а	.86**
Male Positive Affect	20	.53**	09	13	.02	05	а	18
Male Four Horsemen	.71**	19	.68**	.70**	.37*	.48*	а	.55**
Male Contempt	.76**	07	.09	.39**	05	03	а	.82**
Male Criticism	a	a	a	а	а	a	а	А
Male Defensiveness	.46**	21	.93**	.52**	.08	.81**	а	.18
Male Stonewalling	.28+	13	.28	.88**	03	.00	а	.22
Male Domineering	.77**	04	.04	.00	02	.04	а	.85**

Appendix C, Table 8. Correlations between Male and Female Interaction Patterns during Conflict Discussion and Paper Tower Task

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

a=correlation could not be computed due to limited variability in one or more of the variables.

Influence Model	Partner	Conflict Discussion (%)
Null	Male	97.2
	Female	83.3
Linear	Male	0.0
	Female	8.3
Bilinear	Male	2.8
	Female	5.6
Ojive	Male	0.0
	Female	2.8

Appendix C, Table 9. Math Model Parameters: Percentage of Individuals Accepting Influence in a Null, Linear, Bilinear, or Ojive Fashion

Notes: Math model summaries for the conflict discussion excluded same-sex couples. Two of the three same-sex couples were excluded from the conflict discussion because of suspected domestic violence. The single same-sex couple who participated in the conflict discussion showed zero influence when analyzed within the models.

Gottman and Murray (2002) proposed several distinct influence functions, which represent different ways in which partners may affect each other's emotional behavior; these are classified as the Null, Linear, Bilinear, and Ojive models. The Null, or "no influence" model posits that each person's behavior is determined by his or her own previous emotional state rather than behavior of the partner. The Linear model implies that the influence function is a straight line that has the same slope within both the positive and negative domains. In other words, one partner's behavior is influenced by the other in a linear fashion, and the levels of influence between partners occur in the same manner. For example, as one partner is slightly negative, the other will be slightly negative as well, and when one partner is slightly positive, the other will be slightly positive. In the Bilinear model, partners influence each other within each domain of positivity and negativity, but the levels of influence (i.e., slopes) vary across the domains so that influence in one may be more or less than the other (for example, one partner's high negativity may strongly influence the partner, but the partner's high positive affect has only a slight influence on the other. The Oijve model suggests that levels of influence within each domain vary and may also be nonlinear. For example, one partner's positive affect may not influence the other at all, while the other partner's negative affect does influence the other but not until it reaches a specific threshold.

Appendix C, Table 10. Correlations between Math Model Parameters and Satisfaction with Conflict Discussion Process and Outcome

		Self Satisfaction with Process	Self Satisfaction with Outcome	Partner Satisfaction with Process	Partner Satisfaction with Outcome
Male	Start State	.30+	.21	.21	.17
	Steady State	.27	.19	.14	.13
Female	Start State	.01	.19	.10	.17
	Steady State	.01	.16	.07	.13

+ p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001

		Male		Female		
	Mean	SD	Range	Mean	SD	Range
Positive Affect	632.37	132.81	263-872	615.89	137.44	217-855
Negative Affect	196.00	134.90	0-615	204.23	139.56	0-657
Four Horsemen	111.26	97.76	0-444	98.54	83.61	0-420
Contempt	4.49	11.72	0-81	5.52	13.81	0-110
Criticism	18.54	38.44	0-273	27.78	41.11	0-239
Defensiveness	82.69	79.82	0-418	63.42	74.602	0-412
Stonewalling	5.53	28.07	0-240	1.83	7.00	0-43
Ratio of Positive to Negative Affect	15.49	78.79	0-872	14.50	43.85	0-285

Appendix C, Table 11. Descriptive Statistics for SPAFF-Coded Interaction from Middle-Income Sample: QPPHI

Source: CDM and QPPHI data.

Note: The first 15 minutes—900 seconds—of the conflict discussion in QPPHI were coded for affect. Thus, the theoretical range was 0–900 seconds.

Appendix C, Table 12. Comparison of Observed Affect Across Two Study Samples

	Ma	ales	Fen	nales	Cou	ples
Percentage of Time Respondents Displayed:	Low– Income Sample	Middle- Income Sample	Low- Income Sample	Middle- Income Sample	Low- Income Sample	Middle- Income Sample
Negative Affect	18.38%	21.78%	18.60%	22.69%	n/a	n/a
Positive Affect	4.18%	4.71%	4.04%	4.53%	n/a	n/a
Ratio of Positive to Negative Affect	n/a	n/a	n/a	n/a	.52	.82

Note: Differences between low- and middle-income couples were not statistically significant.

Low-Income Sample: CDM

Middle-Income Sample: QPPHI

	Males			Females			
	Mean	SD	Range	Mean	SD	Range	
Decision Making Measures							
Movement Toward Consensus (LT)	0.26	0.17	0-1	0.42	0.19	0.18 - 1	
Inclusiveness during PTT	1.90	0.62	0-2.67	2.12	0.68	0.67-3	
Controlling Behavior during PTT	1.33	0.60	0-2.67	1.34	0.52	0-2.67	
Video Recall Rating of Self Affect	4.52	1.07	2.63-7.78	4.58	1.09	2.77-7.36	
Video Recall Rating of Partner's Affect	4.04	1.15	1.36-8.27	4.10	1.40	0.49-7.69	
Satisfaction Ratings							
Satisfaction with PTT Process	8.48	1.75	4-10	8.93	1.54	4-10	
Satisfaction with PTT Outcome	7.36	2.26	2-10	7.98	1.07	2-10	
Satisfaction with LT Process	8.98	1.80	2-10	8.17	2.15	2-10	
Satisfaction with LT Outcome	8.98	1.56	5-10	8.52	1.84	3-10	
Satisfaction with CD Process	8.08	2.45	1-10	7.89	2.41	2-10	
Satisfaction with CD Outcome	8.12	2.30	1-10	8.00	2.52	1-10	

Appendix C, Table 13. Descriptive Statistics for Decision-Making Behavior and Satisfaction Measures

Note: LT=Lottery Task; PTT=Paper Tower Task; CD=Conflict Discussion

	Who Does Task?	Cleaning the House	Preparing Meals	Paying Bills	Grocery Shopping	Working	School/Day Care
Male	Neither	5.10	4.10	3.29	4.21	4.66	5.26
	Male	6.74	11.24	9.69	8.71	11.21	9.26
	Female	9.50	11.67	10.38	11.33	7.43	11.19
	Both	18.35	16.74	16.72	16.98	14.31	16.12
Female	Neither	4.07	4.39	4.48	3.20	4.55	4.57
	Male	8.18	10.25	11.16	12.79	6.98	10.43
	Female	8.43	9.32	8.14	7.72	9.75	9.45
	Both	18.86	17.51	15.89	16.86	16.00	15.64

Appendix C, Table 14. Average Satisfaction for Completing Household Chores: Behavioral Choices Data

Note: Higher scores = higher satisfaction

Appendix C, Table 15. Male/female payoff matrices for video recall rating dial data

1	2	3	4
1.0			
0.31+	1.0		
0.80***	0.42*	1.0	
0.23	0.83***	38*	1.0
	0.31+ 0.80***	0.31+ 1.0 0.80*** 0.42*	0.31+ 1.0 0.80*** 0.42* 1.0

		Lotter	y Task			Paper To	ower Task	
Observed Affect	Female Satisfaction with Process	Female Satisfaction with Outcome	Male Satisfaction with Process	Male Satisfaction with Outcome	Female Satisfaction with Process	Female Satisfaction with Outcome	Male Satisfaction with Process	Male Satisfaction with Outcome
Males' Movement Toward Consensus	.24	.18	.01	02				
Females' Movement Toward Consensus	.08	00	.16	.19				
Total Inclusion, Males					.19	.12	.11	02
Total Control, Males					21	07	41**	08
Total Inclusion, Females					.11	.07	.18	.07
Total Control, Females					21	14	14	.14
Male Inclusiveness 1					.05	.01	.00	09
Male Inclusiveness 2					.16	.09	.12	.14
Male Inclusiveness 3					.21	.20	.16	12
Male Control 1					00	07	23	06
Male Control 2					26+	06	39**	05
Male Control 3					21	02	25+	06
Female Inclusiveness 1					15	10	.08	.11
Female Inclusiveness 2					.24+	.19	.27+	.11
Female Inclusiveness 3					.20	.11	.12	04
Female Control 1					13	36*	.15	07
Female Control 2					19	01	28+	.19
Female Control 3					08	.12	14	.15

+ *p* < 0.10; * *p* < 0.05; ** *p* < 0.01; *** *p* < 0.001

Notes:

Observer rating of inclusiveness:

- 1. Partner asks questions or seeks partner's opinion or clarification.
- 2. Individual attempts to work jointly with partner.
- 3. Individual accepts and responds to partner's engagement attempts.

- Observer rating of controlling behavior:1. Individual assumes leadership of the task, directs, or delegates a plan of action.2. Overt battling partner for control of task.3. Indirect or subtle challenges for control.

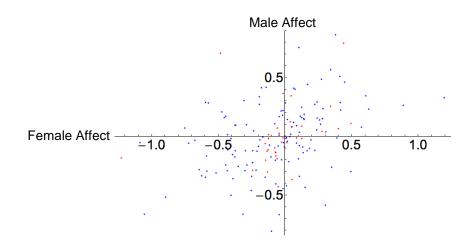


Figure C.1. Stationary Points for Low-Income and Middle-Income Couples

Notes: Low-Income (CDM) Couples Plotted In Red; Middle-Income (QPPHI) Couples Plotted In Blue. Stationary points refer to the emotional states at which the couple is likely to remain throughout the interaction. For example, a couple in which the female has a stationary state of 1.5 and the male has a state of -2, one would expect that the female is usually happy while the male is usually unhappy during the interaction.

APPENDIX D

RESULTS OF CONTEXTUAL FACTORS ANALYSIS

		Education			Emplo	yment			Earnings		Other Income
Couple Interaction Behavior	Female has more education	Both have same education	Male has more education	Only female works	Only male works	Both work	Neither works	Female has higher earnings	Both have same earnings	Male has higher earnings	Difference in income
Female Behavior											
Positive Affect	-0.01	-0.14	0.19	-0.08	0.04	0.00	0.03	0.11	0.00	-0.08	0.02
Negative Affect	-0.07	-0.06	0.17	0.18	-0.12	0.02	-0.06	-0.12	0.00	0.09	-0.06
Contempt	-0.03	-0.02	0.06	-0.12	0.24	-0.14	0.01	-0.12	-0.20	0.29+	0.07
Criticism	0.10	0.00	-0.13	0.04	-0.15	-0.06	0.19	0.04	0.00	0.03	0.01
Defensiveness	0.04	0.05	-0.1	0.19	-0.09	0.07	-0.16	0.00	-0.05	0.04	0.04
Dominance	-0.19	-0.05	0.31 +	0.04	-0.04	0.06	-0.06	-0.16	0.07	0.07	1
Controlling	0.05	-0.03	-0.02	0.02	-0.03	0.01	0.00	-006	0.14	-0.10	0.23
Inclusive	0.33*	0.11	-0.52**	0.14	-0.25+	0.18	-0.03	0.21	-0.02	-0.13	0.29+
Movement To	0.19	-0.16	-0.04	-0.05	0.23	-0.10	-0.09	-0.09	0.08	-0.01	0.07
Consensus											
Relative Movement To	.11	0.07	-0.05	0.31*	0.04	-0.30*	0.01	0.06	0.03	-0.07	-0.31*
Consensus Concurrence of Affect	0.12	-0.19	0.09	0.17	0.06	0.11	-0.34*	-0.19	0.08	0.07	-0.22
Cooperation vs. Competition	0.05	-0.21	0.18	0.07	0.08	0.04	-0.17	-0.06	0.08	-0.03	-0.11
Male Behavior											
Positive Affect	-0.08	-0.15	0.28+	-0.17	-0.01	0.25	-0.11	0.11	0.01	-0.10	0.18
Negative Affect	0.07	0.15	-0.27	0.15	-0.21	-0.09	0.17	0.00	-0.13	0.12	0.26
Contempt	0.21	-0.20	-0.02	0.26	0.02	-0.12	-0.13	0.00	-0.15	-0.03	0.11
Criticism	-0.03	0.14	-0.14	-0.02	-0.14	0.26	-0.12	-0.17	-0.04	0.18	0.06
Defensiveness	-0.04	0.12	-0.11	0.02	-0.19	-0.25	0.12	0.07	0.00	-0.05	0.20
Dominance	0.05	0.11	-0.20	0.02	-0.04	0.12	-0.15	-0.07	-0.11	0.16	0.18
Controlling	0.05	-0.08	-0.01	0.08	0.05	0.12	-0.28+	-0.16	0.00	0.11	-0.04
Inclusive	0.06	0.14	-0.23	0.07	-0.07	0.15	-0.13	0.20	-0.18	0.02	0.34*
Movement To	0.16	-0.15	-0.01	-0.28+	0.16	0.19	-0.12	-0.16	0.06	0.06	0.19
Consensus	0.10	0110	0101	0.201	0110	0.15	0.11	0.10	0100	0.00	0.15
Concurrence of Affect	0.06	0.16	-0.27	-0.04	0.08	-0.11	0.08	0.05	-0.16	0.11	-0.02

Appendix D, Table 1. Correlations between Contribution of Material Resources and Observed Couple Interaction

Note: Sample sizes for the couple interaction measures are: positive affect, negative affect, contempt, criticism, defensiveness, and dominance (N=37); controlling (N=45); inclusive (N=43); affect in sync with partner (N=35); movement toward consensus (N=45); and preference for cooperation (N=44). All affective behavior variables were from the conflict discussion task except for Movement to Consensus (lottery task), Concurrence of Affect (video recall task), and Cooperation vs. Competition (behavioral choices task).

Two females and one male, who were part of same sex couples, were classified as a member of the opposite sex for these analyses.

	Hea	lthª	Mental	Health⁵	Individual Happiness		
Couple Interaction Behavior	Females Health Status	Male Health Status	Female Psychological Distress	Male Psychological Distress	Female Happiness	Males Happiness	
Female Behavior							
Positive Affect	0.03	-0.11	0.34*	0.09	-0.04	0.07	
Negative Affect	-0.33*	-0.13	-0.28+	-0.28+	-0.03	0.13	
Contempt	-0.15	-0.12	-0.25	-0.17	0.11	0.23	
Criticism	0.15	-0.03	-0.26	-0.16	-0.01	-0.06	
Defensiveness	-0.35*	0.12	0.01	0.09	0.00	0.02	
Dominance	-0.28+	-0.16	-0.18	-0.27	-0.02	0.12	
Controlling	-0.15	-0.27+	-0.09	-0.06	-0.24	-0.08	
Inclusive	-0.34*	-0.13	-0.05	-0.04	-0.28+	0.15	
Movement To Consensus	-0.04	-0.01	-0.24	0.13	0.13	0.07	
Concurrence of Affect	-0.04	0.19	-0.20	0.00	0.00	-0.05	
Cooperation vs. Competition	0.02	-0.01	-0.07	-0.19	0.12	0.04	
Male Behavior							
Positive Affect	-0.06	-0.18	0.03	0.20	-0.25	-0.11	
Negative Affect	-0.37*	-0.09	-0.01	-0.17	-0.08	0.07	
Contempt	-0.17	-0.20	-0.11	-0.13	-0.15	0.25	
Criticism	-0.27	-0.01	-0.04	-0.13	-0.04	0.05	
Defensiveness	-0.13	-0.05	-0.16	-0.18	0.10	0.06	
Dominance	-0.32*	-0.04	0.18	0.00	-0.17	0.01	
Controlling	-0.49**	-0.16	-0.20	-0.12	-0.15	-0.01	
Inclusive	-0.08	-0.09	-0.07	0.00	-0.33*	-0.12	
Movement To Consensus	-0.01	-0.22	-0.08	-0.10	0.05	-0.01	
Concurrence of Affect	0.08	0.12	-0.02	0.15	0.15	-0.12	

Appendix D, Table 2. Correlations between Physical/Psychological Resources and Observed Couple Interaction

Note: Sample sizes for the couple interaction measures are: positive affect, negative affect, contempt, criticism, defensiveness, and dominance (N=37); controlling (N=45); inclusive (N=43); affect in sync with partner (N=35); movement toward consensus (N=45); and preference for cooperation (N=44). All affective behavior variables were from the conflict discussion task except for Movement to Consensus (lottery task), Concurrence of Affect (video recall task), and Cooperation vs. Competition (behavioral choices task).

^aHigher scores=poorer health

^bHigher scores=more psychological distress

Two females and one male, who were part of same sex couples, were classified as a member of the opposite sex for these analyses.

	Perceives Good Alterna		Perceives Better Off if Separated			
Couple Interaction Behavior	Females	Males	Females	Males		
Female Behavior						
Positive Affect Negative Affect Contempt Criticism Defensiveness Dominance Controlling Inclusive Movement To Consensus Concurrence of Affect Cooperation vs. Competition	$\begin{array}{c} -0.03\\ 0.12\\ -0.05\\ 0.02\\ -0.21\\ 0.21\\ -0.03\\ -0.09\\ -0.27+\\ -0.25\\ -0.10\\ \end{array}$	$\begin{array}{c} 0.02 \\ -0.09 \\ -0.12 \\ 0.09 \\ 0.26 \\ -0.23 \\ 0.01 \\ -0.24 \\ -0.25 + \\ 0.05 \\ -0.25 + \end{array}$	0.11 -0.02 -0.03 0.05 0.03 -0.03 0.06 0.05 -0.21 -0.43** -0.10	0.11 -0.20 0.00 0.07 0.21 - 0.38 * -0.16 0.03 0.06 0.09 0.13		
Male Behavior Positive Affect Negative Affect Contempt Criticism Defensiveness Dominance Controlling Inclusive Movement To Consensus Concurrence of Affect	0.06 -0.24 0.11 -0.13 0.13 - 0.42 ** -0.07 0.00 -0.22 -0.17	-0.40** 0.17 0.07 0.08 -0.10 0.33* 0.02 -0.30* -0.04 -0.04	$\begin{array}{c} 0.16\\ 0.15\\ -0.06\\ -0.05\\ 0.31+\\ -0.05\\ -0.13\\ 0.03\\ -0.03\\ -0.09\end{array}$	-0.16 0.05 0.33 * 0.15 0.16 -0.12 -0.14 0.04 0.13 -0.15		

Appendix D, Table 3.Correlations between Relationship Perceptions of Relationship Alternatives and Observed Couple Interaction

Note: Sample sizes for the couple interaction measures are: positive affect, negative affect, contempt, criticism, defensiveness, and dominance (N=37); controlling (N=45); inclusive (N=43); affect in sync with partner (N=35); movement toward consensus (N=45); and preference for cooperation (N=44).

Two females and one male, who were part of same sex couples, were randomly classified as a member of the opposite sex for these analyses.

	Trust			Commitmen	t	Support and Affection			Relationship Happiness			
Couple Interaction Behavior	Female Trust	Male Trust	Couple Trust	Female Commit– ment	Male Commit- ment	Couple Commit– ment	Female Support /Affec- tion	Male Support/ Affection	Couple Support/ Affection	Female Happiness	Male Happiness	Couple Happiness
Female Behavior												
Positive Affect	0.00	0.06	0.02	-0.05	0.20	0.09	0.21	0.16	0.22	0.14	0.14	0.17
Negative Affect	-0.13	-0.04	-0.13	-0.04	0.07	0.02	-0.19	0.05	-0.09	-0.29+	-0.03	-0.19
Contempt	-0.18	0.17	-0.11	-0.28+	-0.10	-0.25	-0.19	0.19	0.00	-0.31+	-0.02	-0.19
Criticism	-0.22	0.14	-0.15	10	-0.24	-0.22	-0.22	-0.21	-0.26	-0.32*	-0.26	-0.34*
Defensiveness	0.09	-0.10	0.05	0.18	-0.21	-0.01	-0.05	-0.14	-0.11	0.05	-0.12	-0.04
Dominance	-0.11	-0.08	-0.13	-0.03	0.28+	0.15	-0.09	0.18	0.05	-0.22	0.12	-0.07
Controlling	-0.29+	0.12	-0.18	-0.04	0.11	0.05	-0.40**	0.08	-0.19	-0.43**	-0.05	-0.29*
Inclusive	0.08	0.13	0.14	0.14	0.06	0.14	-0.16	0.00	-0.09	0.11	0.31*	0.25
Movement To Consensus	0.05	0.01	0.05	-0.08	-0.05	-0.10	0.09	-0.14	-0.03	0.14	0.13	0.17
Concurrence of Affect	0.10	-0.21	0.02	0.15	0.05	0.13	0.16	-0.19	-0.01	0.07	-0.19	-0.06
Cooperation vs.	-0.01	0.14	0.08	0.06	0.12	0.13	0.23	0.07	0.18	0.02	0.08	0.06
Competition												
Male Behavior												
Positive Affect	-0.38*	-0.18	-0.41**	0.01	0.29+	0.19	0.03	-0.14	-0.06	-0.28+	-0.18	-0.27
Negative Affect	-0.01	0.07	0.02	0.11	-0.06	0.04	-0.31+	0.08	-0.14	-0.19	0.05	-0.08
Contempt	0.12	0.08	0.13	-0.21	-0.22	-0.28+	-0.06	0.18	0.07	0.08	0.04	0.07
Criticism	0.08	-0.17	0.02	0.04	-0.22	-0.11	0.03	-0.04	-0.01	0.00	-0.16	-0.09
Defensiveness	-0.1	0.08	-0.06	-0.04	-0.07	-0.07	-0.11	0.12	0.00	-0.18	0.16	-0.02
Dominance	0.04	0.07	0.06	0.20	0.02	0.15	-0.30+	0.02	-0.17	-0.09	-0.05	-0.08
Controlling	-0.04	-0.01	-0.04	0.08	-0.01	0.05	-0.27+	-0.08	-0.22	-0.10	0.01	-0.05
Inclusive	-0.16	-0.06	-0.17	0.08	0.11	0.14	-0.13	-0.08	-0.13	-0.23	0.07	-0.09
Movement To Consensus	-0.01	-0.11	-0.07	-0.28+	-0.20	-0.34*	0.11	-0.02	0.06	-0.06	-0.09	-0.09
Concurrence of Affect	-0.03	0.18	0.03	0.14	0.31+	0.28+	-0.21	-0.11	-0.19	0.05	0.09	0.08

Appendix D, Table 4. Correlations between Self-Reported Relationship Quality and Observed Couple Interaction

Note: Sample sizes for the couple interaction measures are: positive affect, negative affect, contempt, criticism, defensiveness, and dominance (N=37); controlling (N=45); inclusive (N=43); affect in sync with partner (N=35); movement toward consensus (N=45); and preference for cooperation (N=44).

Two females and one male, who were part of same sex couples, were classified as a member of the opposite sex for these analyses.

	Positiv	ve Conflict Manag	ement	Destructive Conflict Management				
Couple Interaction Behavior	Female Positive Conflict Management	Male Positive Conflict Management	Couple Positive Conflict Management	Female Destructive Conflict Management	Male Destructive Conflict Management	Couple Destructive Conflict Management		
Female Behavior								
Positive Affect	0.20	0.13	0.20	-0.14	0.04	-0.05		
Negative Affect	-0.40**	-0.09	-0.29+	0.19	-0.10	0.04		
Contempt	-0.03	0.21	0.12	-0.06	-0.35*	-0.27		
Criticism	0.02	-0.48**	-0.30+	0.17	-0.13	0.01		
Defensiveness	-0.27	-0.09	-0.22	-0.06	0.13	0.06		
Dominance	-0.35*	0.10	-0.14	0.16	-0.13	0.00		
Controlling	-0.27+	0.20	-0.03	0.31*	-0.19	0.06		
Inclusive	0.00	0.12	0.08	0.04	0.07	0.07		
Movement To Consensus	0.41**	0.17	0.36*	-0.36*	0.01	-0.21		
Concurrence of Affect	0.11	-0.07	0.02	-0.33*	0.25	-0.03		
Cooperation vs Competition	0.17	0.12	0.18	-0.23	-0.01	-0.15		
Male Behavior								
Positive Affect	-0.12	-0.13	-0.15	0.05	0.11	0.10		
Negative Affect	-0.32*	0.00	-0.18	0.30+	-0.11	0.10		
Contempt	-0.07	0.23	0.11	0.13	-0.01	0.07		
Criticism	0.05	0.00	0.03	-0.28+	0.11	-0.08		
Defensiveness	-0.06	-0.02	-0.05	0.19	-0.19	-0.02		
Dominance	-0.38*	0.04	-0.19	0.26	-0.02	0.14		
Controlling	-0.24	0.05	-0.11	0.19	0.17	0.23		
Inclusive	0.07	0.02	0.05	0.09	-0.09	-0.01		
Movement To Consensus	0.23	0.17	0.25+	-0.20	-0.02	-0.14		
Concurrence of Affect	0.15	0.08	0.14	-0.02	0.22	0.14		

Appendix D, Table 5.Correlations between Self-Reported Conflict Management and Observed Couple Interaction

Note: Sample sizes for the couple interaction measures are: positive affect, negative affect, contempt, criticism, defensiveness, and dominance (N=37); controlling (N=45); inclusive (N=43); affect in sync with partner (N=35); movement toward consensus (N=45); and preference for cooperation (N=44).

Two females and one male, who were part of same sex couples, were classified as a member of the opposite sex for these analyses.

	Relationship Expectations Are Met		Expects t	o Separate	Expects Partner Infidelity		
Couple Interaction Behavior	Females	Males	Females	Males	Females	Males	
Female Behavior							
Positive Affect	0.20	-0.06	0.55**	-0.15	0.32*	0.02	
Negative Affect	-0.12	-0.12	0.02	-0.01	-0.29+	0.04	
Contempt	-0.05	0.20	0.27	0.41**	-0.13	-0.16	
Criticism	-0.02	-0.19	0.02	-0.02	0.08	-0.19	
Defensiveness	-0.18	-0.05	-0.07	0.13	-0.13	0.02	
Dominance	-0.08	-0.04	0.04	-0.12	-0.27	0.15	
Controlling	-0.15	0.23	-0.06	-0.08	0.01	-0.16	
Inclusive	-0.30*	0.00	0.00	0.03	-0.31*	-0.29*	
Movement To Consensus	-0.03	0.09	-0.14	-0.12	-0.07	-0.08	
Concurrence of Affect	-0.05	-0.16	0.00	0.06	-0.10	-0.14	
Cooperation vs Competition	-0.06	-0.07	0.07	0.01	0.21	-0.13	
Male Behavior							
Positive Affect	-0.10	-0.23	0.32*	-0.12	0.06	-0.05	
Negative Affect	-0.12	-0.04	-0.04	0.01	-0.16	-0.12	
Contempt	0.16	0.00	-0.01	0.40**	-0.16	-0.06	
Criticism	0.08	-0.02	-0.11	-0.07	0.11	-0.01	
Defensiveness	-0.13	-0.03	0.24	0.03	-0.23	-0.06	
Dominance	-0.08	0.00	-0.24	-0.04	0.04	-0.07	
Controlling	-0.24	-0.05	-0.06	0.09	-0.20	-0.02	
Inclusive	-0.26+	-0.16	0.26+	-0.03	-0.11	-0.27+	
Movement To Consensus	-0.11	-0.13	0.04	-0.06	0.19	0.08	
Concurrence of Affect	-0.14	0.05	-0.11	0.00	-0.14	-0.30+	

Appendix D, Table 6. Correlations between Relationship Expectations and Observed Couple Interaction

Note: Sample sizes for the couple interaction measures are: positive affect, negative affect, contempt, criticism, defensiveness, and dominance (N=37); controlling (N=45); inclusive (N=43); affect in sync with partner (N=35); movement toward consensus (N=45); and preference for cooperation (N=44).

Two females and one male, who were part of same sex couples, were randomly classified as a member of the opposite sex for these analyses.

	Gender Rol	e Attitudes	Family Structure			
Couple Interaction Behavior	Female's Belief in Traditional Gender Roles	Male's Belief in Traditional Gender Roles	Married	Multiple Partner Fertility		
Female Behavior						
Positive Affect	-0.13	0.05	0.10	-0.01		
Negative Affect	0.09	-0.15	-0.01	-0.11		
Contempt	0.34*	-0.07	-0.32*	-0.06		
Criticism	0.07	-0.20	-0.02	0.01		
Defensiveness	0.01	-0.21	0.09	-0.14		
Dominance	0.06	-0.03	0.00	-0.08		
Controlling	0.09	-0.30*	-0.21	0.06		
Inclusive	-0.16	-0.24	0.16	0.05		
Movement Toward	0.10	0.07	-0.08	0.07		
Consensus						
Affect in Sync with Partner	-0.19	-0.05	-0.18	-0.18		
Male Behavior						
Positive Affect	-0.24	-0.25	0.07	0.14		
Negative Affect	0.30+	-0.11	0.13	-0.14		
Contempt	-0.18	-0.07	-0.23	0.02		
Criticism	0.10	-0.06	-0.13	-0.01		
Defensiveness	0.31+	-0.25	-0.03	0.09		
Dominance	0.08	0.04	-0.17	-0.25		
Controlling	-0.12	-0.09	-0.14	-0.16		
Inclusive	-0.13	-0.35*	0.07	0.12		
Movement Toward	-0.03	-0.08	-0.28+	0.00		
Consensus Affect in Sync with Partner	0.19	0.20	0.27	-0.20		

Table D.7.Correlations between Gender Role Attitudes and Family Structure and Observed Couple Interaction

Note: Sample sizes for the couple interaction measures are: positive affect, negative affect, contempt, criticism, defensiveness, and dominance (N=37); controlling (N=45); inclusive (N=43); affect in sync with partner (N=35); movement toward consensus (N=45); and preference for cooperation (N=44).

Two females and one male, who were part of same sex couples, were classified as a member of the opposite sex for these analyses.



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