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Predicting Marital Dissolution Using Data from Both Spouses

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ABSTRACT

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The present research studies marital dissolution using data from both spouses from the National Survey of Families and Households (NSFH) and uses the method of multiple imputation to handle missing data. Role theory and another four approaches (social exchange theory, stake theory, gender perspective and heterogeneity perspective) are used to make a methodological argument why using data from both spouses is necessary to study marital stability. Five data sets are imputed and there are 3,777 observations in each imputed data set. Main research findings are as followed. First, the model fits of the data from both spouses on marital dissolution are significantly better than the model fits of the data from one spouse only; therefore, gathering perceptual data from both spouses is necessary to understand marital dissolution. Second, overall, the effects of most spousal discrepancies do not support the heterogeneity perspective. Third, the model fits of the *wife only* model are significantly better than the model fits of the *husband only* model across different periods of marital duration, and the predictability of wives' variables is more *stable* than husbands' variables. Therefore, if only individual-level data are available to use, researchers are encouraged to use wives' data rather than husbands' data. Fourth, the predictability of factors varies with marital duration and gender in the models with data from both spouses.

Keywords: marital dissolution, divorce, separation, multiple imputation, data from both spouses, dyadic couple data, role theory, stake theory

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Chapter One: Introduction

It is well-recognized that interpersonal differences are related to solidarity generally and marital solidarity in particular. Durkheim compared many societies in the world and concluded that there are two different types of force that integrate separate segments of a society: mechanical solidarity (the less difference the more solidarity) and organic solidarity (some differences, if complemented by other differences, may build solidarity). Whether one applies mechanical solidarity or organic solidarity to marriage, it is understood that too many differences or irreconcilable differences, threaten marital solidarity. The idea is well-established in family literature: "irreconcilable differences" is a common factor and is an accepted legal justification to explain marital dissolution (Foster, 1973; Freed & Foster, 1977).

Another version of this truism is Bernard's (1972) statement that two "realities" exist in every marriage, although the "reality" of either spouse's perceptions is open to question. Raschke (1987) also stated that, in the research of what people perceived about their divorce, researchers got different versions of marriage from each spouse. Perceptions of marriages can be understood as elements that fall into the category of social constructions that are constructed both by spouses and by research procedures in research studies. Whether based in questionnaires, interview studies or ethnographic observation, the texts are constructed and represent observation from a particular "niche" or point of view. Therefore, it is not surprising that researchers found significant gender differences in expectations, perceptions and experience in marriage (Bernard, 1972; Huber & Spitze, 1980; Sanchez & Gager, 2000; Thompson & Walker, 1989).

It follows that information from both spouses will present a richer picture and represent more points of view on the same relationship than will information from only one spouse. Role theory and other theoretical approaches also discuss marital interactions and imply that

information from one spouse only is unable to tell the story of the interaction process or the marriage generally. However, most research on marriage is based on information from only one of the spouses. There are good reasons for this: it is more expensive to obtain data from both spouses, and there is some evidence that wives are better informants than husbands (Gager & Sanchez, 2003; Heaton & Blake, 1999; Kirkpatrick & Davis, 1994; Sacher & Fine, 1996). The goal of the present research is to assess whether studies of marital dissolution would be improved by using data from both spouses and whether the degree of improvement can justify the added expense necessary to obtain data from both spouses as opposed to data from one spouse only.

Having more experienced observers is one of the possible advantages of having multiple observers of a relationship. From some points of view, the longer one observes a relationship, the more opportunity one has to see it clearly, or to correct mistaken views. On the other hand, it is possible that one could miss something due to observing the same relationship for too long. Relating back to Bernard's observation of every marriage being two marriages, if taking marital duration into account, it could be said that even one observer's account of a relationship varies with duration of marriage. That is, there might be one "marriage" as perceived after a few weeks, another as perceived after a few months, and a third after a few years, all based in the same observer viewing the same marriage. Therefore, some attention should be paid not only to the perceptions of both spouses, but to the duration of the marriage within which the observation is occurring.

Researchers have compared married and divorced couples to identify factors that explain marital dissolution. Characteristics found to be associated with marital dissolution include marital happiness, perceived consequences of separation, socioeconomic status, and age at marriage (Bradbury, Fincham, & Beach, 2000; Glenn, 1991; Heaton & Albrecht, 1991; Lewis &

Spanier, 1979; Martin & Bumpass, 1989; Rogers, 2004). These characteristics predict marital dissolution in data obtained from one spouse. The questions to be examined in the present study are: 1) Whether the model fit of using data from both spouses to predict marital dissolution using the established perceptual variables is improved over using data from either spouse separately; 2) Whether including a pure "difference measure," namely the absolute difference between spouses across the entire set of independent variables, improves the model fit; and 3) Whether the influence of variables on marital dissolution varies with marital duration when information from both spouses is included.

Chapter Two: Theoretical Framework

Bahr (1994) questioned observer-related liabilities by asking two questions: How much can observers “see” an event or relationship, and how clear is their vision? He argued that all observers only can capture "glimpses" of an event or relationship. In other words, they only can see a limited portion of the event or relationship that happens to be "seeable" to them, for “each view, no matter how carefully magnified and framed, is only a glimpse, or a series of glimpses, subject to countless problems and qualifications” (Bahr, 1994, p. 57). Besides the problem of seeing only a portion of the event or relationship, there is also a question of how clear the observer’s vision is. All observers of events or relationships vary in their perceptions and experiences, and these individual differences make observers occupy a particular niche, and that niche offers only a limited point of view. Thus all observations of relationships are partial and biased.

Although there may be no satisfactory way to understand an event or relationship fully from partial and biased observations/glimpses, researchers may obtain more reliable composite representations by multiplying the observations/glimpses. In other words, adding observations, either from the same persons over a period of time, or from different persons, should strengthen researchers’ confidence in understanding what they are observing and reduce errors caused by the biases of observers. This principle is grounded in the literature on reliability, validity, and triangulation (Decrop, 1999; Flick, 1992; Mathison, 1988; Morse, 1991).

In the case of marriage, there are significant differences in spouses’ expectations, perceptions, and experience in marriage (Bernard, 1972; Huber & Spitze, 1980; Sanchez & Gager, 2000; Thompson & Walker, 1989). Taking different evaluations of marital happiness as an example, if a happy husband does not recognize his unhappy wife’s

dissatisfaction and provide the rewards she wants, then the wife may become more dissatisfied and some marital problems may arise from their difference. Obviously, neither the husband's nor wife's evaluation of marital happiness represents the reality of marriage; the observation from each spouse is partial and biased because he/she observes from a unique psychological, cultural, and personal niche. The differences in spouses' perceptions may reveal something about the marriage, and the literature suggests that the greater the differences, the less stable the relationship (Albrecht, Bahr & Goodman, 1983; Kuncel, Ones & Sackett, 2010). Spousal differences often result in marital conflicts, and conflicts over definitions, perceptions, and behavior, may cause marital dissolution. Certainly, not all of the spousal differences turn into marital conflicts; sometimes couples can resolve their problems successfully, but it is fair to say that all marital conflicts are over differences between spouses. This is not to say all marital dissolutions stem from conflicts: some may just come from "not interested in him/her anymore" (although there may be some differences there in why romantic feeling fades away). But to a substantial degree, conflict is part of the path to marital dissolution.

The characteristics of a marriage differ from one observer to another. In a sense, there are as many "marriages" as there are observers: husbands and wives view their marriage differently, and so do children and other observers. A possible way to increase confidence in descriptions of relationships is to increase the number of observers. In marriage research, gathering data from at least both spouses can improve the understanding of the marriage. Although it follows that more observations of the marriage are better than fewer, most studies of marriage have used information from one spouse only, because multiplying observations increases the costs of research.

Role Theory

The main point of the above discussion is that researchers can gain better understanding of marriage by having more than one point of view. This is especially the case for divorce, after the adoption of the no-fault divorce law, where either spouse can decide to terminate marriage. Some theoretical approaches can help us understand the interactions and conflicts in marriage if data from both spouses are taken into account. Role theory assumes that human behavior is socially patterned and is organized and directed by social roles. Roles are learned patterns of human conduct: they are organized in response to prescriptions and expectations of significant others in a person's life. In other words, roles are defined not only by the expectations and beliefs of the significant others, but the role incumbent as well. For example, individuals are expected to act like a husband or a wife if they are married, and how they are to play the marital role is defined by the role incumbent and the significant others. Roles give the role incumbent anchorage points in the social systems and scripts for the "parts" in which he/she functions and provide him/her with a sense of identity (Hindin, 2007).

Role theory states that roles are always reciprocal. The husband's role has no meaning except in relation to an actual or imagined role of wife. In other words, in the case of marriage, the actions of husbands and wives are not separate, isolated, or discrete events. Spouses carry on relevant activities in their efforts to perform complex functions and to achieve common goals, such as home ownership, child rearing, and even marital dissolution (Mangus, 1957). During the process, each spouse incorporates into his or her own subjective life, the attitudes and intentions of his/her partner and significant others. In addition, they also know what to expect in the way of role performance by their spouse whose acts are reciprocal to their own. These role expectations are internalized in the attitudes of the individuals. Based on role theory, role expectations are

implanted in people through indoctrination, conscious imitation of role models, and other types of informal learning

In marriage, even though feminist scholars reject Parsonian notions of men's and women's marital roles being determined by sex (Osmond & Thorne, 1993), the literature shows that a woman's role as wife and mother may be the main or predominant role in her life: wives spend more hours each day in child care and housework than husbands do (Gilligan, 1982; Mangus, 1957; Renzetti, 1992). Even if women are employed outside the home, they are still largely responsible for child care and housework (Leslie, Anderson, & Branson, 1991; Perry-Jenkins & Folk, 1994). All other roles tend to be subsidiary and subordinate for them. On the other hand, husbands spend longer hours in paid employment; as a result, the occupational role may be the predominant role in his life and even his family roles may be subordinated to his work role (Bielby & Bielby, 1989; Blair & Lichter, 1991; Leslie et al., 1991; Mangus, 1957).

The integrative quality of a marriage is viewed as a function of role definition, role expectation, and role performance of spouses. If the marriage is integrative, presumably each spouse will find himself or herself a more completed and fulfilled person and feels that he or she is a part in the relationship. In contrast, if the marital roles are incompatible and conflicting, the relationship would be at risk. Due to a history of different gender socialization, spouses are likely to have different experiences that shape their marital role definitions, role expectations and ideas of what constitutes appropriate role performance.

As a marriage proceeds, spouses' role definitions and expectations continually are shaped by their personal varying experiences and the reactions of significant others to their role performances. Spouses may find it difficult to meet marital role expectations, encounter difficulties in compromising different marital role definitions with their spouse, or experience

conflict between family and other roles (e.g., the role of employee). If so, problems in enacting marital roles may have direct negative influences on marriage.

Several studies show that female partners' data better predict relationship stability than male partners' data, and wives' attitudes and perceptions were better predictors of marital stability than were husbands' variables (Gager & Sanchez, 2003; Heaton & Blake, 1999; Kirkpatrick & Davis, 1994; Sacher & Fine, 1996). However, Amato and Rogers (1997) found that although wives reported more marital problems than husbands, both spouses' perceived problems predicted divorce equally well. Based on the research findings of Amato and Rogers (1997), analyzing data from one spouse may be sufficient, and perhaps there is no need to collect data from both spouses. However, one limitation of their study is that their sample of wives and husbands were not married to each other. Since the sample of wives and husbands were not married to each other, their research finding was unable to answer this research question: Would adding data from the other spouse help predict marital stability? The assumptions and propositions of role theory would suggest that analyzing data from both spouses may improve prediction of marital stability.

The assumptions of role theory point to the interactions between husbands and wives, and it is clear that it would be difficult to understand the interactions in marriage if only information from one spouse was obtained. For example, if only wives' attitudes about marriage are collected, how can researchers apply role theory to understand marriage without husbands' responses? According to role theory, roles and behavior are reciprocal. For example, two wives may have the same scores on attitude questions, but it is possible that their identical scores do not reflect the same marital story—it would depend on how their spouses responded to the comparable questions.

Certainly, it is possible that these two wives' similar responses to the research questions are the result of similar interactions with their husband. However, it is impossible to know whether information from one spouse adequately reflects the spousal interactions unless the model fit with data from both spouses is tested. If the model fit with data from both spouses is significantly better than the model fit of including data from one spouse only, it means that information from one spouse only is insufficient to describe marital interactions.

Husbands' responses to research questions may be different from wives' responses to the same questions. In this case, there is no doubt about the need to have data from both spouses. In sum, in either situation discussed above, from role theory's point of view, analyzing data from one spouse is not sufficient to understand marriage. However, most of the research findings are based on the analyses of data from one spouse only. Based on role theory, researchers should analyze data from both spouses instead of using data from one spouse in their research.

Not only role theory talks about interactions between spouses, other theories also consider marital interactions from different angles. In order to strengthen the justification of the methodological argument raised by the present research, four other theoretical approaches are introduced briefly, namely social exchange theory, stake theory, gender perspective, and heterogeneity perspective.

Social Exchange Theory

Social exchange theory suggests that if either spouse feels the exchange in not beneficial, he/she can end the relationship under the no-fault divorce law. Social exchange theory contains three basic components: the profit (the ratio of rewards to costs), barriers, and alternatives. This theory assumes that people use the information they possess to rationally weigh rewards and costs associated with different behavioral choices before acting. They choose behavior that they

perceive will maximize their profit. In other words, the benefits or "profits" determine behavioral choices. Since it is not possible to know the actual rewards and costs involved before interaction occurs, people use their expectations for rewards and costs to guide their behavior (Sabatelli & Shehan, 1993).

Scanzoni (1979) stated that reciprocity operates to stabilize marital relationships by establishing a network of interdependent duties and expectations, which means that each spouse has certain duties to perform for his/her spouse; on the other hand, he/she also expects his/her spouse to fulfill certain duties. Each spouse also needs to provide the rewards that the other wants if he/she hopes to obtain valued rewards. These reciprocal exchanges are regulated by the principle of fairness. Social exchange theory assumes that the principle of fairness is important for the maintenance of relationships because fair exchanges are more profitable to relationships than are unfair exchanges. An unfair exchange relationship is a situation in which one's profit is less than one's investment compared to one's expectations.

Social exchange theory's reciprocal exchanges and the principle of fairness indicate the dynamic characteristic of marriage, which implies that the similarity of couples' evaluation of marriage affects their marital stability. Interdependence and reciprocity are the assumptions of social exchange theory about the nature of relationships. These two assumptions imply that one spouse's perspectives and choices influence the other's perspectives and behavioral choices. Therefore, from an exchange point of view, it is beneficial to use information from both spouses to study individuals' behavioral choices in the marriage.

Stake Theory

Stake theory was first introduced by John J. and Irma Honigmann in their study of modernization in an Arctic town (1970). Stake theory assumes that when people have a stake in

society, they would tend to adhere to the norms of society and to avoid deviant behavior which can result in loss of one's stake. In contrast, if people lack a stake in society, they would not have strong motivations to conform to the norms of the society (Honigmann & Honigmann, 1970). To have a stake in society is to invest something in a particular social context with expectation of deriving a benefit from this investment. Stake theory implies that people's behavior follows a rational behavior model: people tend to minimize costs and maximize benefits to adopt the most advantageous behavior to gain what they expect, given their personal resources, situations or status (Harsanyi, 1961; Rotter, 1954; Stroup & Gift, 1971; Zipf, 1949).

Social exchange theory helps understand marital interactions between spouses from the angle of fairness, and stake theory helps understand how spouses commit themselves to a relationship. Being in a happy marriage is more important to wives than husbands and wives work harder than husbands to maintain their relationships (Acitelli, 1992; Kirkpatrick & Davis, 1994; McRae & Brody, 1989). The emphasis and efforts wives make on marriage suggest that wives have a stronger stake in marriage than husbands; and at the same time, wives have higher expectations for marriage as well. The great investment wives make in marriage suggests that wives' perceptions of marital quality would be more accurate and have greater effects on marital stability than husbands' perceptions. Some research findings support this perspective: female partners' data better predict relationship stability than male partners' data (Kirkpatrick & Davis, 1994; Sacher & Fine, 1996). Gager and Sanchez (2003) found that when more concrete, proximate measures of marital stability were considered, wives' more negative evaluations of marital quality were better predictors of divorce than husbands' negative reports. Heaton and Blake (1999) also found that wives' attributes, attitudes, and perceptions were better predictors of marital stability than were husbands' variables. However, Amato and Rogers (1997) found

that although wives reported more marital problems than husbands, both spouses' perceived problems predicted divorce equally well. One limitation of the study of Amato and Rogers (1997) is that their sample of wives and husbands were not married to each other. The present study uses data from husbands and wives married to each other. The comparison of predictions of marital dissolution by each spouse separately will be relevant to the stake theory suggestion that wives perceptions are better predictors because they have the greater stake.

Gender Perspective

Gender theory suggests that husbands and wives might have different reasons for divorce. Researchers found that husbands and wives identified different variables that caused their divorce. Wives were more likely than husbands to cite emotional or relationship issues, spousal drinking, and abusive behavior as causes of divorce (Amato & Previti, 2003). Husbands were more likely to cite their own negative behaviors and complained that their spouse neglected their needs or that their interests were incompatible (Amato & Previti, 2003; Gigy & Kelly, 1992). In addition, previous research has demonstrated that spouses' perceptions, expectations and evaluations of their marriage vary by gender. For example, wives were more likely than husbands to be unhappy with their marriages, to have thoughts of divorce, and to connect housework fairness with thoughts of divorce (Bernard, 1972; Huber & Spitze, 1980). Since marriage is a process of interactions between spouses, gender perspective would be better understood if analyzing data from both spouses rather than trying to measure gender differences in comparisons involving husbands and wives are not married to each other.

Heterogeneity Perspective: A Phenomenological Approach of Marriage and Heterogeneity

Why does heterogeneity affect marriage negatively? Berger and Kellner (1980) provide a sophisticated explanation using a phenomenological frame of reference. From their point of

view, marriage is a social arrangement "that creates for the individual the sort of order in which he can experience his life as making sense" (Berger & Kellner, 1980, p. 392). Marriage protects people from anomie by creating a mini-cosmos in a private sphere. After getting married, life is different from being single. Spouses need to reconstruct reality in the mini-cosmos in marriage, and both the world and the self are redefined and reconstructed. If spouses are heterogeneous, which means they have "more" to reconstruct, the creation of a common and cohesive reality may be difficult. Therefore, heterogeneity in general is expected to hamper the creation of a stable marriage.

The above discussions suggest that including information from both spouses in research can help better understand marriage and relevant theories. Although the literature supports the view that husbands and wives perceive their marriage differently (Bernard, 1972; Huber & Spitze, 1980; Sanchez & Gager, 2000; Thompson & Walker, 1989), to date, no studies are found to provide statistical evidence to support that gathering information from both spouses is necessary. The purpose of the present research is methodological rather than substantive. To examine whether using data from both spouses represents a better picture of marriage, the present study compares model fits of the following models: using data from spouses separately, spouses in combination, and with difference scores summarizing the inter-couple dissimilarities. It seemed that a stronger case could be made for the effects of using data from both spouses if the independent variables were variables already known to influence marital stability. Therefore, the literature review identifies such important variables, rather than focusing on all possible variables which together might best predict marital dissolution.

Chapter Three: Literature Review

The literature has identified many marital predictors, such as age at marriage, education, income, marital happiness, marital violence, and religion (Amato & Hohmann-Marriott, 2007; Fowers, 2000; Gager, 1998; Gager & Sanchez, 2003; Heaton, 2002; Heaton & Albrecht, 1991; Hill, 1988; Kahl, 2005; Kon, 1988; Lawrence & Bradbury, 2001; Rogge & Bradury, 1999; Wilson & Waddoups, 2002). If researchers need data on both spouses for their research, some information on both can be collected from a single respondent. For example, one spouse can provide researchers with his/her spouse's information on age at marriage, education, and religious belief; it is not necessary for researchers to collect such "objective" data from both spouses. However, there are other variables that the respondent cannot provide for his/her spouse, such as marital happiness, fairness questions, and other perceptual/emotional variables, where couple data might be most important.

In addition, some variables are "semi-objective"—they could be "objective," "subjective" or in-between. For example, if a question asks, "When you have a serious disagreement with your husband/wife, how often do you end up hitting or throwing things at each other," how respondents define "hitting" would affect how they answer this question. A husband may say, "I just pushed her, not hit her," but his wife may think that her husband hit her. This type of question could be either "objective" (if spouses have the same definition of hitting) or "subjective" (if spouses do not have the same definition of hitting). In order to understand how "objective" or "subjective" this type of question is, further research can study how spouses from the same marriage answer the "semi-objective" question differently.

The topic here is couple data that cannot be obtained from one spouse, and testing the "semi-objective" data is not a goal of this study. Therefore, the present research does not include

the "semi-objective" data like marital violence and objective data like education and income. In short, this study limits attention to a class of variables not fully accessible to outside observers namely perceptual/emotional variables. Finally, the present research examines whether the effects of having data from both spouses vary with marital duration. Therefore, some literature on marital duration is reviewed as well.

Perceptions of Marital Happiness

Many studies have shown that marital unhappiness predicted subsequent marital dissolution (Bradbury, Fincham, & Beach, 2000; Glenn, 1991; Lewis & Spanier, 1979). For example, married individuals who reported low marital happiness were nearly five times more likely to divorce than those who reported greater marital happiness (Booth, Johnson, White, & Edwards, 1985, 1986). Most of the research on marital happiness and divorce has used data from one spouse to study the effects of marital happiness. However, three recent studies (Amato & Hohmann-Marriott, 2007; Gager & Sanchez, 2003; Heaton & Blake, 1999) using data from both spouses are relevant here.

Heaton and Blake (1999) found that when all variables were included in one model, both wives' and husbands' coefficients for happiness became much smaller and had insignificant effects. Gager and Sanchez (2003) reported that the odds of marital disruption for couples in which neither spouse reported that the marriage was "very happy" were 320% higher than for couples who agreed that their marriage was very happy. In addition, among couples who disagreed on the evaluation of marital happiness, couples in which the husband was unhappier than his wife had higher odds of marital dissolution, suggesting that unhappy husbands were more likely to act on their unhappy feelings by seeking a divorce than were unhappy wives (Gager & Sanchez, 2003).

Amato and Hohmann-Marriott (2007) used data from both spouses in assessing why couples with a moderate level of happiness seek divorce. For couples with an average level of happiness, the existence of barriers to divorce and the availability of alternatives affected whether the marriage continues or ends. Low-distress couples who divorced had weak barriers (such as low levels of attendance at religious services and liberal attitudes toward divorce) or alternatives to the present relationship (such as involvement with other partners prior to divorce). Even though these three studies used data from both spouses, they do not show whether including data from both spouses predicts marital status better than models using data from one spouse only.

Perceptions of Fairness

Some studies on equity have found a strong positive link between perceptions of housework fairness and marital satisfaction, conflict, and thoughts of divorce (Blair, 1993; Gager, 1998; Gager & Sanchez, 2003; Greenstein, 1996; Lennon & Rosenfield, 1994; Perry-Jenkins & Folk, 1994; Sprecher, 1992; Suitor, 1991; Yogev & Brett, 1985). For example, researchers found that wives' sense of unfairness was a significant predictor of both wives' and husbands' marital happiness and thoughts of divorce, whereas husbands' perceptions of unfairness were not good predictors (Blair, 1993; Lennon & Rosenfield, 1994). Gager and Sanchez (2003) found that the odds of divorce were higher among couples in which both partners perceived unfairness to wives than those in which both perceived fairness to wives. They also found that, compared to couples in which both perceived fairness, the odds of divorce were lower for couples in which the husbands perceived unfairness to wives but wives did not (Gager & Sanchez, 2003).

Sanchez and Gager (2000) found that couples in which the wife perceived unfairness to herself, but the husband perceived fairness, had significantly higher odds of divorce than couples in which both perceived fairness. Although the finding was tentative, the important finding for the present purpose is that couple differences in these perceptual variables seemed to affect marital stability.

Cultural Factors

Family scholars have observed that some social changes have contributed to the increase in the divorce rate. The social changes include changing attitudes on marriage, lifetime commitment, unfaithfulness, and divorce and increased individualism. Marriage has long been viewed as a normative social institution and is conceptualized as a monogamous, lifelong partnership. However, within the last several decades, an increasing percentage of the population has rejected this institution and do not support this conceptualization, which is evidenced by infidelity and divorce rates that approximate 25-50 percent (Campbell & Wright, 2010). The literature shows that infidelity is one of the most commonly reported causes of divorce (Amato & Previti, 2003; Amato & Rogers, 1997). Michael, Gagnon, Laumann, and Kolata (1994) found that women are more likely to think that premarital and extramarital sex are wrong because of religious beliefs. In contrast, men tend to think that "sex need not have anything to do with love" (Michael et al., 1994, p. 233).

Thornton and Young-DeMarco (2001) found that the public became more accepting of divorce between the 1960s and the 1990s. Thornton's (1998) finding also supports the social acceptance of divorce. Thornton (1998) found that, compared to the past, young married mothers were much more likely to state that divorce was the best solution to marital problems.

In addition, Amato's (1996) research showed that more positive attitudes toward divorce predicted marital dissolution, even after controlling for the factor of marital quality.

Individualism means that one views the interest of the self as taking precedence over the interests of the larger group to which the person belongs. It emphasizes personal happiness and personal autonomy (Fowers, 2000; Thornton, 1998). Research has shown that people's attitudes about marriage became more individualistic after the 1960s (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985; Cherlin, 2004), and that the level of individualism was positively related to the rate of divorce (Hofstede, 1980). Contemporary marriage has three characteristics related to individualism: the pursuit of personal happiness, perceptions of consensual obligations, and contract-based commitment. First, the pursuit of individual happiness is seen as the natural aim of marriage. Research among college students shows that they expect marriage to provide them with a deep source of love and emotional fulfillment (Barich & Bielby, 1996; Buss, Shackelford, Kirkpatrick, & Larsen, 2001). Such expectations led to frequent disappointment, and are associated with divorce because couples expect impossible emotional benefits from marriage (Bohle, 1994; Fowers, 2000; Jones, 1997). Couples with unreasonably high expectations tend to have lower tolerance for unsatisfactory situations and unfulfilled expectations, which may lead to marital instability (Fowers, 2000; Knox, Schacht & Zusman, 1999).

Contemporary marriage emphasizes consensual obligations, that is, the obligations associated with marriage are determined by the parties themselves rather than imposed by cultural expectations. Also, in addition to the emphasis on individual interests and consensual obligations, contemporary society views marriage as a contract between two people rather than a lifetime commitment (Thornton, 1998), which means that individual perceptions of emotional satisfaction are associated with whether the relationship is seen as "contract keeping" or lifetime

commitment. Heaton and Albrecht (1991) found the belief that marriage is a lifetime commitment contributed to marital stability. Kahl (2005) also pointed out that how respondents thought about marriage was important to marital success: spouses who highly committed to the marital dyad were more likely to feel appreciated and to stay married.

Perceptions of Consequences of Separation

According to social exchange theory, if married people perceive positive alternative futures if the marriage were to end, they are more likely to divorce. Heaton and Albrecht (1991) found that participants who thought their lives would be worse if they separated were less likely to divorce. Sanchez and Gager (2000) found that husbands' perceived alternatives to the marriage were associated with higher odds of divorce, whereas wives' were not. Amato and Hohmann-Marriott (2007) also found that, compared with high-distress marriages that ended in divorce, low-distress divorced couples held less positive views about their life possibilities following divorce. On the other hand, compared to couples who remained married, both low- and high-distress divorced couples were more likely to believe that their quality of life would improve following divorce. In other words, perceived positive consequences of separation affect marital stability.

Perceptions of Self-Esteem

Self-esteem is the positive or negative regard that an individual holds of himself or herself (Gecas & Burke 1995; Rosenberg, 1979). Self-worth and self-efficacy were the two most frequently noted dimensions of self-esteem (Longmore & Demaris, 1997). People with a strong sense of self-worth and self-efficacy did not feel as powerless in stressful situations because they believed that they were capable of coping with such situations by reacting efficiently (Gecas & Schwalbe 1983; Heaton & Albrecht, 1991). For example, Heaton and Albrecht (1991) explained

that married people might perceive similar barriers and alternatives to end their marriage, but some of them might be more willing to act because of a belief that they had more control over the possible negative outcomes. They found that both husbands and wives were more willing to leave an unhappy marriage if they felt that they had some sense of control over their lives. The influence of this factor was statistically significant but only moderate in magnitude (Heaton & Albrecht, 1991). In short, married people with better self-esteem were less likely to stay in unsatisfied relationships and believed that there were other alternatives except their current marriage. In addition, Kahl (2005) found that these two items, which are "feeling sure life will work out as wanted" and "being satisfied with self" positively influenced spousal appreciation and marital happiness.

Marital Duration

The risk of divorce appears to decrease as length of marriage increased (Becker, Landes, & Michael, 1977; Fergusson, Horwood, & Shannon, 1984; Huber & Spitze, 1980). Long marital duration might act as a barrier to divorce because the longer couples remained married, the greater the accumulation of shared experience and other common resources (Becker et al, 1977; Huber & Spitze, 1980). Also, it is not easy to transfer the assets that couples accumulated to another relationship (Booth et al., 1986; Heaton & Albrecht, 1991). Thus, longer marital duration is associated with marital stability.

Some researchers have found that individuals who divorced after long-term marriages tended to blame infidelity, growing apart, and problems with family cohesiveness (Amato & Previti, 2003; Kitson & Holmes, 1992), whereas those in short-term marriages cite personality clashes and basic incompatibility. These research findings indicate that reasons for divorcing vary by the length of marriage, and further imply that the effects of predictors of divorce may

vary by marital duration. Researchers have found the effects of several predictors varied by marital length, such as age at marriage, wife's education and affection. South and Spitze (1986) found that the effects of age at marriage on the probability of divorce appeared to weaken slightly at later marital duration. However, Heaton, Albrecht and Martin (1985) found that the effects of difference of *age at marriage* between spouses did not diminish over marital duration, which means that this couple difference would continue to influence marital stability throughout the duration of the marriage. In addition, wife's education clearly had different effects on divorce at different periods of marital duration. South and Spitze (1986) found that early in marriage, wife's education helped lower the possibility of divorce; but later in marriage, it was associated with a higher probability of divorce. Gottman and Levenson (2000) found that negative affection (e.g., criticism, contempt, defensiveness, and stonewalling) during marital conflicts predicted early divorce (within the first 7 years of marriage), but not later divorce (between the 7th and 14th year of marriage). This contrasted with the prediction of later divorces, in which the absence of positive affection, not the presence of negative affection, was most predictive of later divorce. For the present study, the main point is that different variables make a difference at different periods of marital duration.

Gottman and Levenson (2000) studied how marital variables predicted early divorce (within the first 7 years of marriage) and later divorce (between the 7th and 14th year of marriage). They defined these two marital periods based on past research. Gottman and Levenson (2000) stated:

> Based on the literature on marital satisfaction over the life course, it is reasonable to suggest that there are two periods critical to the survival of a marriage: the first 7 years of marriage, during which half of all the divorces occur (Cherlin, 1981), and at midlife,

> when people often have young teenage children. The latter period has been suggested by some investigators as perhaps the lowest point in marital satisfaction during the life course (e.g., Adelman, Chadwick, & Baerger, 1996; Orbuch, House, Mero, & Webster, 1996; Steinberg & Silverberg, 1987; White & Booth, 1991). (p. 737).

Therefore, the present research also examines, in models using data from both spouses, how marital variables affect marital stability in these three periods: (1) couples married 7 years or less, (2) couples married over 7 years and equal or less than 14 years, and (3) couples married beyond 14 years.

Chapter Four: Research Methods

The present research uses data from the NSFH (Sweet & Bumpass, 1996; Sweet, Bumpass, & Call, 1988). When researchers use data from primary respondents from the NSFH, they do have data from both husbands' and wives' points of view. However, the male and female primary respondents were not married to each other at wave one, and the data they provided only reflect one side of the story of every marriage. Based on the theoretical approaches discussed in chapter two, including data from both husbands and wives who are married to each other helps improve the prediction of marital stability. This study includes marital observations from both spouses who were married to each other at wave one.

This study compares a model including data from both spouses with a model containing data from only one spouse from each couple in an effort to see how much the additional data improve the prediction of marital stability. In addition, the present research examines whether spousal dissimilarity, as a separate variable, predicts marital stability. Here spousal dissimilarity is measured as the absolute difference between spouses. According to Kenny, Kashy, Simpson, and Cook (2006), the similarity of couples' responses is typically operationalized as the absolute difference between the reports of husbands and wives. The absolute difference can be viewed as an interaction of husbands' and wives' effects.

Research Questions and Hypotheses

There are three research questions in the present study:

Question One: Does a model using data from both spouses predict marital stability significantly better than a model using data from only one spouse?

Question Two: Do measures of spousal dissimilarity help predict marital stability?

Question Three: Does the predictability of marital stability using data from both spouses vary with duration of marriage?

To date, there is no relevant research found for the first research question. The theoretical approaches and research findings discussed in previous chapters imply that both spouses' evaluations of marriage should be considered in research, but most previous studies were based largely on married individuals rather than on couple dyads. A few studies, such as Amato and Hohmann-Marriott (2007), Bumpass and Sweet (1972), Gager and Sanchez (2003), Heaton et al. (1985), Heaton and Blake (1999), and Sanchez and Gager (2000), have used couple-level data in their analyses. However, these studies did not compare the model fit of using data from both spouses with the model fit of using data from one spouse.

It is known that spouses' perceptions, expectations and evaluations of their marriage vary by gender (Bernard, 1972; Gager & Sanchez, 2003; Huber & Spitze, 1980; Sanchez & Gager, 2000; Thompson & Walker, 1989), and also that multiplying observers improves predictability. Consequently, it is reasonable to hypothesize that the model fit of using data from both spouses is better than the model fit of using data from only one of the marital partners.

Are good model fits equivalent to good model predictions? Model validation is possibly the most important step in the model building sequence. It is also one of the most overlooked. Measures of goodness of fit typically summarize the discrepancy between observed values and the values expected under the model in question, and it describes how well the observed values fit a set of observations. Use of a model that does not fit the data well cannot provide good answers to research questions.

The literature has shown that spouses' perceptions, expectations and evaluations of their marriage vary by gender (Bernard, 1972; Gager & Sanchez, 2003; Huber & Spitze,

1980; Sanchez & Gager, 2000; Thompson & Walker, 1989) and spousal differences lead to marital dissolution (Albrecht et al., 1983; Kuncel et al., 2010). Spousal differences often result in marital conflicts, and further cause marital dissolution. Certainly, not all of the spousal differences turn into marital conflicts; sometimes couples are willing to confront, discuss, and try to resolve their problems, but it is fair to say that many marital conflicts are over differences between spouses. This is also not to say all marital dissolutions stem from such conflicts: some may just come from "just do not love him/her anymore" (although there may be some differences there in why love fades away). But to the degree that conflict is part of the path to marital dissolution. Therefore, some researchers have studied how spousal discrepancies affect marital stability.

A few studies, such as Amato and Hohmann-Marriott (2007), Bumpass and Sweet (1972), Gager and Sanchez (2003), Heaton et al. (1985), Heaton and Blake (1999), and Sanchez and Gager (2000), have used data from both spouses to examine how some predictors' couple-differences affect marriage; and these couple differences have not been considered in absolute-value difference scores apart from content/topic. Thus, while the research findings on this topic are limited, based on the literature of spousal differences that discussed above, it is reasonable to hypothesize that absolute levels of disagreement influence marital stability.

The literature has shown that marital duration predicts marital stability (Becker et al., 1977; Fergusson et al., 1984; Huber & Spitze, 1980). For present purposes, duration may have contradictory effects, namely either to weaken perception or to strengthen it. Spouses' perception on marriage might be weakened over time due to "instrument" decay or taking things for granted. On the other hand, spouses' perception might be strengthened over time because they have more experiences on observing and/or better appreciation of nuances. Therefore, in

the model using data from both spouses, how the effects of factors vary with marital duration needs to be tested.

Sample

The present research uses data from wave one and two of the NSFH (Sweet & Bumpass, 1996; Sweet, Bumpass, & Call, 1988). Wave one was conducted in 1987-1988, and wave two was conducted in 1992-1994. The sample of the NSFH represents the noninstitutional United States population age 19 and over and includes an oversampling of minorities. Wave one is a nationally representative sample of adults and their spouses or cohabiting partners. When potential respondents were originally contacted by phone, the spouse who answered the phone was coded as the primary respondent, and his or her spouse/partner was then coded as the secondary respondent. Wave two attempted to interview all primary respondents and their partners, whether or not the couple remained together and whether or not the partner participated at wave one.

The sample of this study includes married primary respondents who participated at wave one and wave two, and secondary respondents who completed the spouse self-administered questionnaire. Among these married couples, those who are in the following categories are not included in the sample:

1. Respondents whose marriage ended through the death of their spouse prior to wave two.
2. For the purpose of imputation, the sample does not include observations that having missing values on the following variables: marital status at wave one and wave two, gender, age, marriage date, race, education, personal income, cohabitation history,

marriage history, and having young children at home (see the section of handling missing data for more details).

3. Twenty-nine couples whose *age at current marriage* was younger than 14 years old or older than 80 years old are not included.
4. Also excluded were: seven couples of the same gender (studying same sex relationships is not the goal of this research), and two "spouses" who in fact were not primary respondent's spouse, judging from the questions on the household roster.

Originally, there are 13,008 observations from the NSFH at wave one and two, and 6,877 observations were married at wave one. After the process of sample selection, there are 3,777 observations, which are 3,777 couples, in the sample. At wave two, 3,291 respondents were still married to the same spouse to whom he/she was married at wave one and 486 couples were divorced or separated, which is 12.87% of the sample size. In addition, in order to let the results appropriately reflect the proportion of the population, a weighting variable is used while analyzing the data. This weighting variable is designed to represent the population of married persons by age, sex, and race/ethnicity.

Measurement

Marital status. The dependent variable is respondent's marital status at wave two: whether primary respondents were still married to the same spouse as he/she was married to at wave one. Respondents' marital status is measured by a *status* variable from *Primary Respondent Status File* at wave two.

Perceptions of marital happiness. *Marital happiness* is measured by a seven-point scale question, ranging from 1 (*very unhappy*) to 7 (*very happy*). Gager and Sanchez (2003) also used couple data from the NSFH and constructed six dichotomous categories to measure couple

differences: (1) both 7, (2) combinations of 6 and 7, excluding both 7, (3) wife 6 or 7, husband 5 or lower, (4) husband 6 or 7, wife 5 or lower, (5) both 5 or less, and (6) a residual category. The strength of their measurement is that it presented the direction of the differences like "*when wife is happier than husband*…." However, their measurement did not examine the effect of each possible category and measured some cases roughly: they coded husbands and wives who perceived happiness 5 or less as one category. In a 7-point scale, it may be questionable to code subjects who perceived happiness 5 and subjects who perceived happiness 1 as one category.

In the present research, besides both husband- and wife- m*arital happiness* variables, the absolute difference between husbands' and wives' reports is included in the model. To facilitate interpretability of model intercept parameters, the husband and wife variables are also centered at the midpoint of their shared scale (Edwards, 1994).

Perceptions of fairness. Sanchez and Gager (2000) also used data from the NSFH and measured couple differences by constructing an 8-category classification based on the combinations of the husband's and the wife's perceptions of fairness. Taking the *perceived fairness in household chores* variable as an example, this variable represents a 5-point scale, ranging from 1 (*very unfair to me*) to 5 (*very unfair to her/him*), with the category *fair to both* as the midpoint. Therefore, there are 5*5= 25 possible combinations of the husband and wife response categories from which Sanchez and Gager (2000) created the following categories: a) both spouses perceive fairness; b) both perceive unfairness to the husband; c) both perceive unfairness to the wife; d) the wife perceives fairness, but the husband perceives unfairness to the wife; e) the wife perceives fairness, but the husband perceives unfairness to himself; f) the

husband perceives fairness, but the wife perceives unfairness to herself; g) the husband perceives fairness, but the wife perceives unfairness to the husband; and h) a residual category (see Table 1).

(TABLE 1 ABOUT HERE)

The present research applies the principles of social exchange theory to measure these three fairness variables, which are *fairness in household chores, fairness in working for pay,* and *fairness in spending money*. They are coded individually as dichotomous variables in the model. Unlike the other variables, couples' disagreement on fairness variables might strengthen or weaken the marital relationship depending on the nature of the disagreement. For example, suppose a husband thinks housework is very unfair to his wife, but his wife thinks that it is just somewhat unfair to her. In this case, because the husband's perception of the unfairness to the wife is greater than the wife's perception of the unfairness to herself, he might show his appreciation to his wife for the contributions she makes to marriage. The appreciation from the husband is an "unexpected" or "additional" reward for the wife. Based on social exchange theory, the reward could strengthen their marital relationship. On the other hand, if the husband thinks that housework is just somewhat unfair to his wife, but the wife thinks that it is very unfair to her; the husband might not give his wife the reward or appreciation that she expects because his perception of the unfairness to her is less than her perception of the unfairness to herself. This is an example of an unfair exchange relationship. According to social exchange theory, an unfair exchange relationship is a situation in which one's profit is less than one's investment compared to one's expectations, and it has negative influences on marriage. It follows that couples whose disagreement might weaken their marital relationship are coded as "0", which is *spouse A*'s perception of unfairness to *spouse B* is less than *spouse B*'s perception of the

unfairness to himself/herself, and they are expected to be more likely to end their marriage at wave two. Two types of couples are coded as "1": couples who agreed with each other and couples whose disagreement might strengthen their marital relationship (*spouse A*'s perception of unfairness to *spouse B* is greater than *spouse B*'s perception of the unfairness to himself/herself) (see Table 2). This measurement of fairness variables is only used in the model including data from both spouses.

(TABLE 2 ABOUT HERE)

Apparently, the way Sanchez and Gager (2000) measured fairness variables did not follow the principles of social exchange theory. Here is an example: Sanchez and Gager (2000) put these two groups of couples in the same category (the residual category):

Group A: "*the wife thought it was very unfair to her, but the husband thought it was very unfair to him*."

Group B: "*the wife thought it was very unfair to her husband, but the husband thought it was very unfair to his wife*."

Based on social exchange theory, the marriage of couples in the group A is more likely to be at risk because it is an unfair exchange relationship. In contrast, for couples in the group B, the husband and the wife thought it was very unfair to his/her spouse, and they might show their appreciation to their spouse for the contributions he/she makes to marriage, and the appreciation further strengthens their marital relationship. Although the measurement of fairness variables in the study of Sanchez and Gager (2000) can show the direction of spousal difference, the present research is interested in applying the principles of social exchange theory to the measurement of fairness variables.

In the model of using data from one spouse only (the individual-level model), the principles of social exchange theory are also applied to measure the three fairness variables and they are coded individually as dichotomous variables as well. Spouses who thought that *it was very unfair* or *somewhat unfair* to himself/herself are coded as "0" (the spouse's perception of fairness might weaken the marital relationship); spouses who thought that *it was fair to both, very unfair* or *somewhat unfair* to his/her spouse are coded as "1" (the spouse's perception of fairness might strengthen the marital relationship).

Cultural factors. Five questions are used to examine cultural influences on respondents' marital stability: 1.) *pro-marriage attitude*, 2.) *attitude regarding lifetime commitment*, 3.) *attitude regarding unfaithfulness*, 4.) *attitude regarding divorce if the youngest child is under age five*, and 5.) *having freedom to do what one wants individually*. The *attitude regarding divorce with young child* is a seven-point scale question, and the rest of four questions are five-point scale questions. The responses, "refused," "don't know," and "no answer," are recoded as missing data. These five scales are coded such that those with higher values would be expected to be less likely to end their marriage. In addition, Amato and Hohmann-Marriott (2007) combined two of these questions, "*marriage is a lifetime relationship*…" and "*a couple should avoid getting a divorce if their youngest child is under five*'' to construct a measure of disapproval of divorce. If these two questions were used to construct two new variables (one for wives, and another for husbands), the alpha reliability coefficient would be .369 for wives and .311 for husbands. The alpha reliability coefficient for using all five attitude variables to construct a scale is .41 for wives and .352 for husbands. Imputed data are used to calculate these alpha reliability coefficients. Considering these low alpha reliability coefficients, all five questions are treated as separate indicators in the model. These five questions are measuring

respondents' attitudes regarding marriage, and the differences between husbands' and wives' attitudes may affect their marital relationship. Therefore, the similarity of couples' attitudes is measured by the absolute difference between the reports of husbands and wives to test research question two. Each husband's and wife's variable is centered at the midpoint of their shared scale before calculating the absolute difference to facilitate interpretability of model intercept parameters (Edwards, 1994).

Perceptions of consequences of separation. The indicator of *perceived consequences of separation* is measured by five questions that asked married respondents about their expected quality of life if they were to divorce. These five questions asked about 1.) *standard of living,* 2.) *social life,* 3.) *career opportunities,* 4.) *overall happiness,* and 5.) *sex life*. The response scales of these five items are coded as 1= *much better* and 5 = *much worse,* so higher values represent perceived worse consequences of separation, which implies that respondents might be less likely to end their marriage. The index score is the mean of the responses on these five questions. The responses, "refused," "don't know," and "no answer," are recoded as missing data before calculating the mean. The alpha reliability coefficient for this scale is .806 for husbands, and .790 for wives. Imputed data are used to calculate these alpha reliability coefficients.

Both the husband and the wife were in the same relationship; if the husband and the wife perceived the possible consequences of separation differently, they might handle their marital problems differently, which might affect their marital stability. Therefore, this study includes the similarity of their perceived consequences of separation in the model to test research question two, and it is measured by the absolute difference between their reports. Each husband's and wife's response is centered at the midpoint of their shared scale to facilitate interpretability of model intercept parameters (Edwards, 1994).

Perceptions of self-esteem. Based on Longmore and Demaris (1997), self-esteem is constructed by four questions from the NSFH. Two of the items reflect feelings of self-worth: (1) "*feel that I'm a person of worth, at least on an equal plane with others*" and (2) "*On the whole, I am satisfied with myself*." The other two items reflect a sense of self-efficacy: (3) "*I have always felt pretty sure my life would work out the way I wanted it to*," and (4) "*I am able to do things as well as other people*." Items 1, 2, and 4 are taken from Rosenberg's self-esteem scale (Rosenberg, 1979 & 1989). The response scale of each item is a five-level response format ranging from 1 (strongly disagree) to 5 (strongly agree). The index score is the mean of the responses on these four items. Before calculating the mean, the responses, "refused," "don't know," and "no answer," are recoded as missing data, and each husband's and wife's response is centered at the midpoint of their shared scale to facilitate interpretability of model intercept parameters (Edwards, 1994). Imputed data are used to calculate the alpha reliability coefficients. The alpha reliability coefficient for this scale is .672 for wives and .642 for husbands. In addition, if the present research only uses item 1,2, and 4 (Rosenberg's self-esteem scale) to construct the scale of self-esteem, the alpha reliability coefficient for the scale is .663 for wives and .609 for husbands, which are lower than the alphas of the scales constructed by four items. The similarity of husbands' and wives' self-esteem is measured by the absolute difference between the reports of husbands and wives.

Marital duration. The *duration of marriage* is the length of marriage in century months that was measured from the wedding date to the date of the first interview. When checking the marriage dates reported by both spouses, 563 couples (15% of the sample size) reported different marriage dates. This problem is handled in the following two ways:

(1) The marriage date is after the interview date: If the marriage dates reported by both spouses are after the interview date, then they are removed from the data set. If the date reported by one spouse is after the interview date, and the other is before the interview date, then the date before the interview date is used.

(2) The marriage dates reported by both spouses are before the interview date, but the dates are different. The present research studies their current marriage, so the more recent date is used because the less recent date might be the date for their past marriage.

Statistical Methods

The dependent variable, which is the marital status at wave two, is a dichotomous variable: whether or not respondents were still married to the same spouse as he/she was married to at wave one. Therefore, logistic regression is used to analyze data.

There are four models and four duration groups in this study:

Four models:

Model A: The reports by husbands only are analyzed in the model.

Model B: The reports by wives only are analyzed in the model.

Model C: The reports by husbands and wives are analyzed in this model.

Model D: The reports by both husbands and wives, and the absolute difference between spouses are analyzed in this model.

Four duration groups:

Duration Group One: The whole sample, without dividing participants by marital duration, is analyzed.

Duration Group Two: The reports by couples married 7 years or less are analyzed.

Duration Group Three: The reports by couples married over 7 years and equal or less than 14 years are analyzed.

Duration Group Four: The reports by couples married beyond 14 years are analyzed. Therefore, to answer the three research questions in the present study, 4*4=16 sub-models are analyzed (see Table 3).

(TABLE 3 ABOUT HERE)

The first research question is to compare whether the model fit of using data from both spouses is better than the model fit of using data from one spouse, which is nested within the model of using data from both spouses. A log likelihood ratio test is used for the comparison. If missing data is present, when the number of variables in the model changes, the listwise deletion option may change the number of observations, upon which the likelihood ratio chi-square is based. Therefore, it is important to have same observations in each model to test model fits. In order to have identical observations in each model, the method of *multiple imputation* is used to deal with the missing data.

One problem with listwise deletion is that it excludes observations with missing data from analysis and may create a bias in data findings as participants who do not answer all questions may have different characteristics than participants who do. Using multiply imputed data sets also addresses this problem—this is another advantage of using multiply imputed data sets. The method of *multiple imputation* is introduced in more detail in the following paragraphs.

Multiple Imputation

General speaking, there are two types of imputation: single imputation and multiple imputation. Single imputation is a method that substitutes a value for each missing value, and its inference tends to overstate precision because it neglects the between-imputation component of variability. Rubin (1987) indicated that single imputation does not reflect the uncertainty about

the predictions of the unknown missing data; as a result, the estimated variances of the parameter estimates are biased toward zero.

Instead of filling in a single value for each missing value, multiple imputation replaces each missing value with a set of plausible values, and the variation among the results of imputed data sets reflects the uncertainty of missing value (Rubin, 1976, 1987). After imputing multiple data sets, the imputed data sets are then analyzed by using standard statistical methods and combining the results from these analyses into a single set of estimates. In summary, compared to other imputation methods, there are three advantages of multiple imputation. First, it assumes that data are missing at random given the measured variables rather than missing completely at random. Missing completely at random means that missing values are randomly distributed across all observations and is seldom a realistic assumption in most real-data situations. Second, the uncertainty of an imputed missing value is reflected through imputing more than one value for each missing observation and is handled in the combining-results procedure. Third, combining estimates of parameters and covariance matrices results in efficient estimates and inference.

Considering the shortcomings of single imputation and the advantages of multiple imputation, the present research uses multiple imputation to handle missing data. The data analysis involves three phases while using multiple imputation to handle missing data. First, the missing data are filled in *m* times to generate *m* complete data sets by the MI procedure. Second, the *m* complete data sets are analyzed using standard statistical analyses. Third, once the *m* complete data sets are analyzed using standard statistical analyses, the MIANALYZE procedure is then used to generate valid statistical inferences about these parameters by combining results from the *m* analyses. In this study, the PROC MI and PROC MIANALYZE procedure in

Release 9.2 of the SAS program are used for producing and analyzing multiply imputed data sets. In addition, in order to compare the model fit of the model including data from both spouses with the model fit of the individual-level data, a TEST statement in the PROC MIANALYZE procedure is used. These three phases of the present study are presented in the following paragraphs.

Phase one: generating imputed data sets. There are several methods available in SAS to impute data, and the method of choice depends on the patterns of missing values. Missing data patterns are commonly described as either monotone or arbitrary. A data set with variables Y_1, Y_2, ..., Y_p is defined to have a monotone missing pattern when the event that a variable Y_j is missing for a particular individual implies that all subsequent variables Y_k, $k > j$, are missing for that individual (see Table 4). In other words, when a variable Y_j is observed for a particular individual, all previous variables Y_k, $k < j$, are also observed for that individual. On the other hand, if a pattern of the missing data is not observed, then the data set has an arbitrary missing data pattern (Missing data patterns, 2010).

(TABLE 4 ABOUT HERE)

The PROC MI procedure in SAS displays the patterns of missing values: there are 359 missing patterns in the imputation model for husbands and 408 missing patterns in the imputation model for wives. After checking these missing patterns, the *Markov chain Monte Carlo (MCMC) Full-Data Imputation* method proposed by Schafer (1997) is used because of the arbitrary missing pattern in the data set for the present research. MCMC uses the statistics from available observations in the data set as the initial estimates for the expectation-maximization (EM) algorithm to compute good starting values with which to begin the MCMC process. The EM algorithm (Little & Rubin, 1987) is a technique that finds maximum likelihood estimation in

parametric models for incomplete data. In addition, the method of multiple chains is used in the multiple imputation procedure. The method of multiple chains means that a separate chain is used for each imputation (Schafer, 1997). In terms of the number of multiple imputations, a general rule of thumb is that three to five imputations are sufficient to obtain good quality overall estimates (Vargas-Chanes, Decker, Schroeder & Offord, 2003). The default number of multiple imputation in SAS is five; therefore, five imputed data sets are produced by the PROC MI procedure. The output of PROC MI provides the information of relative efficiency for each imputed variable. The relative efficiency is the result of comparing the efficiency of *m* imputations with the efficiency of infinitely many imputations. The results show that the relative efficiency of five imputations ranges from .9339 to .9999, which means that running five imputations is a legitimate choice.

It would not be a good imputed data set if imputed values were out of the observed range. Therefore, in order to ensure that the imputed values are within the observed range, the maximum and minimum values are specified for imputed variables and the ROUND option is used to set the imputed values to be integers. The maximum and minimum values are specified based on the scales of imputed variables. For example, if the variable is a five-point scale question (ranging from 1 to 5), then the maximum value is specified as 5 and the minimum value is specified as 1.

Variables involved in the imputation model. The model used for imputation that preserves the relationships among variables is desirable (Meng, 1995; Rubin, 1996). Therefore, the imputation model used in the present research is created based on the following standards: (1). Husbands and wives perceive and evaluate their marriage differently; therefore, the missing observations are imputed separately by gender. For example, the male imputation model, which

only includes husbands' reports, is used to impute husbands' missing values. After running imputations separately by gender, the male and female imputed data sets are merged into one data set.

(2). Allison (2002) stated that it is important to include the dependent variable in the data augmentation process for getting unbiased estimates of the regression coefficients. Some researchers have recommended against imputing missing data on the dependent variable (Cohen & Cohen, 1985). To follow this advice, observations with missing data on the dependent variable are deleted before beginning the imputation. In addition, to follow the advice from Dr. D. L. Eggett and Dr. D. T. Scott (personal communication, January 15, 2010), observations with missing data on the following variables are deleted before beginning the imputation: *gender*, *age*, *marriage date*, *race*, *education*, *personal income*, *cohabitation history*, *marriage history*, and *having young children at home*. These demographic variables are essential for providing information to impute missing values on other independent variables; therefore, this study would prefer not imputing missing values on these demographic variables.

(3). An imputation model should be rich enough to preserve the relationships among variables that are the focus of later analyses. In general, any association that may prove important in subsequent analyses or including variables that are correlated with a dependent variable should be present in the imputation model (Allison, 2002; Meng, 1995; Rubin, 1996). However, it is not necessary to include all variables in the imputation model in subsequent analyses unless their relationship to the dependent variable is of substantive interest. Results are not biased by the inclusion of extra variables in the imputation phase. Therefore, considering a variety of post-imputation analyses, a rich imputation model that preserves a large number of associations is desirable (Meng, 1995; Rubin, 1996; The multiple imputation FAQ page, 2010).

In this study, the imputation model includes the following 33 variables: marital happiness, time spent together, seven argument variables, marital violence, the perceived chance of divorce, three fairness variables, two communication variables, sex life, health, five attitude variables, religious involvement, five perceived consequences of separation variables and four self-esteem variables (see Appendix). These 33 variables are chosen because they were identified by the literature to have influences on marital stability (Amato & Hohmann-Marriott, 2007; Fowers, 2000; Gager, 1998; Gager & Sanchez, 2003; Heaton, 2002; Heaton & Albrecht, 1991; Hill, 1988; Kahl, 2005; Kon, 1988; Lawrence & Bradbury, 2001; Rogge & Bradury, 1999; Wilson & Waddoups, 2002), and I will use them in my next research. In order to preserve the relationships among variables, to follow the advice from Dr. D. L. Eggett and Dr. D. T. Scott (personal communication, January 15, 2010), the imputation model only keeps participants with valid data for at least 17 of the 33 variables. The responses, "refused," "don't know," and "no answer," are recoded as missing data before running the imputation.

Phase two: using standard statistical analyses to analyze data. The dependent variable, marital status at wave two, is a dichotomous variable: whether or not primary respondents were still married to the same spouse as he/she was married to at wave one. Therefore, logistic regression is used to analyze data. At this phase, SAS runs logistic regression to analyze data.

Phase three: combining the results of analyses and generating valid statistical inferences. The PROC MIANALYZE procedure is used to generate valid statistical inferences about the parameters by combining results from the five analyses. The final step is to compare if the model with data from both spouses has a better fit to the data. Since the individual-level model is nested within the model with data from both spouses, the model fit indicator of *-2 log*

likelihood is used to test the goodness of fit. According to Allison (2002), researchers cannot just average the likelihood ratio chi-squares across the analyses of the five imputed data sets—it is much more complicated than just taking the mean. Allison (2002) has discussed this issue in his book, "*Missing Data*," and it is beyond the scope of this paper. According to Allison (2002), a TEST statement in the PROC MIANALYZE procedure is used to construct likelihood ratio chi-squares to test the goodness of fit. In constructing this test, MIANALYZE makes the assumption that the fraction of missing information is the same for all parameters. Allison (2002) considers this assumption to be relatively innocuous.

Using the TEST statement in the PROC MIANALYZE procedure. There are four models in this study:

Model A (an individual-level model): Husbands' variables only.

Model B (an individual-level model): Wives' variables only.

Model C (a model with data from both spouses): Husbands' variables + wives' variables.

Model D (a model with data from both spouses and the absolute value): Husbands' variables + wives' variables + the absolute value of the difference between husband and wife, which is treated as an interaction term.

For example, to test model three against model two, running model three and including the TEST statement in model three:

SAS command:

TEST husband var1 = husband var2 =...= husband var32 = 0 /mult; (fixing the parameters of husbands' variables to zero.)

Chapter Five: Results

Descriptive Statistic

This study uses MI procedure to impute five complete data sets: there are 3,777 observations, which are 3,777 couples, in the imputation model. Five imputed data sets are produced, so the total observations used for analysis are 18,885.

At wave two, 3,291 primary respondents were still married to the same spouse to whom he/she was married at wave one and 486 couples were divorced or separated, which is 12.87% of the sample. The demographic information about participants is listed in Table 5. The average age for husbands is 40.8 years old and 38.3 years old for wives. The average *age at marriage* for current marriage is 27 years old for husbands and 24 years old for wives. 3,172 husbands (out of 3,777 observations) are white, and 3,195 wives are white; 344 husbands are black, and 328 wives are black. Among 3,777 couples, 179 couples do not have the same race (4.74% of the sample size). The average education is 13.18 years for husbands and 13 years for wives. The average personal income for husbands is about $32,500 and $12,500 for wives.

Among 3,777 couples, 1516 couples had biological children, adopted children or step children under age 18 living in the household. The average marriage length is 14.4 years (see Table 5): 40.1% (1,516 couples out of 3,777 couples) of the couples were married 7 years or less, 20.2% were married between 7-14 years, and 39.7% were married beyond 14 years (see Table 5).

(TABLE 5 ABOUT HERE)

In addition, the information regarding the continuous independent variables' mean, standard deviation, and proportion of missing observations is listed in Table 6. The proportion

of missing observations ranges from a low of 1.56% for wives' *pro-marriage* to a high of 7.1% for wives' *consequence of separation* (see Table 6).

(TABLE 6 ABOUT HERE)

Model Fit

Individual-level model vs. model with data from both spouses. Two individual-level models, which are *husband only* and *wife only*, are compared with the models with data from both spouses separately. Considering the possible confounding effect of the interaction terms (spousal dissimilarity), the models with data from both spouses and the interaction terms are not compared with the individual-level models. The results show that the model fits of the models with data from both spouses are significantly better than the model fits of the individual-level models (see Table 7).

(TABLE 7 ABOUT HERE)

While taking marital duration into account, for couples married between 7-14 years, the model with data from both spouses is not significantly better than the *wife only* model. For other periods of marital duration, the model fits of the models with data from both spouses are significantly better than the other individual-level models (see Table 7).

Husband only model vs. wife only model. *The husband only* and *wife only* models are not nested; therefore, *Akaike's Information Criterion* (AIC) and *Bayesian information criterion* (BIC) are used to compare *wife only* model with *husband only* model. To date, the PROC MIANALYZE procedure does not combine AIC and BIC from the five analyses; therefore, AIC and BIC are compared in each imputation. The results show that the AIC and BIC of the *wife only* model are smaller than the *husband only* model in each imputation, and even the highest values of AIC and BIC of the *wife only* model are smaller than the lowest values of AIC and BIC

of the *husband only* model in each period of marital duration, which means that the *wife only* model has a better model fit than the *husband only* model across marriages of different duration (see Table 8).

(TABLE 8 ABOUT HERE)

Predictability of Interaction Terms (Spousal Dissimilarity)

The correlation matrix shows the correlation coefficients among the continuous variables for husbands and wives (see Table 9). Note that most of the correlations between husbands and wives are significant, but the magnitudes are small (the biggest correlation is .35 between husbands' *marital happiness* and wives' *marital happiness*). The weak correlations indicate that husbands' data are not strongly predictive of wives' data, which implies that there are gender differences between husbands and wives. Paired T-tests were used to examine the significances of mean differences between spouses. The results show that most couple differences are statistically significant (see Table 10), which supports the literature regarding traditional gender differences.

(TABLE 9 & TABLE 10 ARE ABOUT HERE)

The present research is interested in whether the spousal discrepancies contribute significantly to the prediction of marital dissolution. To test if measures of spousal dissimilarity improve the prediction of marital stability, among the models including data from both spouses, the model fits between the models with- vs. without- the interaction terms (the absolute value of the spousal differences) are compared. The fits of the models with and without the absolute value interaction terms do not differ, indicating that including the interaction terms does not significantly improve the prediction of marital dissolution (see Table 7). The paired T-test results are based on simple differences and the differences can be greater or smaller than zero

whereas the logistic regression models use the absolute differences, which are greater than zero only. Therefore, the paired T-test results cannot be applied to or be compared with the results of the models including the absolute differences.

Although the overall joint test of the effects of spousal dissimilarity is non-significant, two specific spousal discrepancies have significant effects. Couples married between 7 to 14 years were less likely to stay in the marriage with greater spousal discrepancy on *attitude regarding divorce if the youngest child is under age five* (odds ratio/O.R.: .83 at .01 level, see Table 13), and couples married beyond 14 years were less likely to stay in the marriage given increased spousal discrepancy on *self-esteem* (O.R.: .55 at .05 level, see Table 14).

Perceptions of Marital Happiness

Wives' *marital happiness* has significantly positive influences on marital stability in all models and across different periods of marital duration (see Table 11, 12, 13, 14). For example, for couples married 7 years or less, the odds of staying in marriage at wave two is 1.21 times greater for each one unit increase in wives' *marital happiness* at 0.01 level (see Table 12). Husbands' *marital happiness* has significantly positive effects in most models, but not for husbands married between 7 to 14 years. For couples married between 7 to14 years, husbands' *marital happiness* has a significantly positive effect in the *husband only* model, but the effect is not significantly different from zero after adding wives' data in the model. In short, the results here show that wives' *marital happiness* has significantly positive effects on marital stability across different periods of marital duration, but the effects of husbands' *marital happiness* vary with marital duration.

(TABLE 11, 12, 13, & 14 ARE ABOUT HERE)

Perceptions of Fairness

Among three fairness variables, only *fairness in spending money* has significant effects in some individual-level models: compared to spouses who perceived *unfairness in spending money* to himself/herself, those who perceived *fair to both* or *unfairness to his/her spouse* were more likely to stay in marriage (see Table 11 & 12). However, the significant effects might be tentative because they are not significantly different from zero after taking the other spouse's data into account (see Table 11 & 12). The significant effects in the single-level models only present one side of the story: *perception of fairness in spending money* might seem serious if we only hear one side of the story, but the concern would disappear if we listen to how the other spouse responds to it.

Cultural Factors

Four cultural factors have interesting findings. First, wives' *pro-marriage* attitude has positive influence on marital stability in the *wife only* model: the odds of staying in marriage is 1.13 times greater than being separated/divorced given a one unit increase in wives' *pro-marriage* attitude (see Table 11). However, the effect is not quite significant (p-value=.0513) after taking husbands' data into account.

Second, for couples married 7 years or less, husbands' *lifetime commitment* has significantly negative influences on marriage in the models with data from both spouses at .05 level (O.R: .82 in the model including data from both spouses without the absolute differences; O.R: .81 in the model including data from both spouses with the absolute differences, see Table 12), but its effects are insignificant in models of other periods of marital duration. The negative effects indicate that, for couples married 7 years or less, a one-unit increase in husbands' thought that *marriage is a lifetime relationship* reduces the likelihood of an intact marriage at wave two.

Third, in the model without considering marital duration, couples were more likely to stay married with greater wives' *disapproving sexual unfaithfulness* (O.R.: around 1.12, see Table 11). Wives' significant effects show in the *wife only* model as well as in the models with data from both spouses. However, husbands' significantly positive effect of this variable only presents in the *husband only* model and is insignificant in the models with data from both spouses. The results here indicate that the wives' variable is a better predictor than the husbands'.

Fourth, husbands' *having freedom to do what one wants individually* has significant influences on marriage for couples married beyond 7 years, but the direction of the influences varies with marital duration. This variable has negative effects on marriage for couples married between 7-14 years (see Table 13), but positive influences on marriage for couples married beyond 14 years (see Table 14). In Table 14, husbands' *individualistic* variable is only significant in the *husband only* model. In the model with data from both spouses, but without the absolute values, its p-value is .055, indicating that this factor has potential effects on marriage after wives' data are considered. The negative effects mean that, for couples married between 7-14 years, a one-unit increase in husbands' thought that *partners must have freedom to do what they want individually in a successful marriage*, the odds of staying in marriage is about 1.30 times greater than being divorced or separated at wave two (O.R: 1/.77=1.3, see Table 13). In contrast, for husbands married beyond 14 years, the odds of staying in marriage is 1.33 times greater than being divorced or separated if a one-unit decrease in such thought (see Table 14).

Perceptions of Consequences of Separation

The influences of *perceived negative consequences of separation* on marriage vary with marital duration. Except for couples married 7 years or less, this factor's effects are significant in the individual-level models, but they are not significantly different from zero after taking the other spouse's evaluation into account (see Table 11, 13, & 14). For couples married 7 years or less, husbands' *perceived negative consequences of separation* is only significant in the *husband only* model. However, wives' *perceived negative consequences of separation* still has significant effects in the models with data from both spouses: the odds of staying in marriage is 1.45 times greater than being separated/divorced if wives perceive a one-unit increase in *negative consequences of separation* (see Table 12). The results here indicate that the wives' variable can better predict marital stability than the husbands' variable because its effects still maintain in the model with data from both spouses.

Perceptions of Self-Esteem

In the model without considering marital duration and for couples married between 7-14 years, the effects of husbands' *self-esteem* are only significant in the *husband only* model and they are not significantly different from zero after taking wives' evaluation into account. Therefore, the significant effects in the *husband only* model might be just tentative.

Predictability of Variables Vary by Gender

The above discussion regarding the predictability of variables shows that the effects of variables vary by gender. Since the model fits of data from both spouses are significantly better than the model fits of the individual-level models; therefore, only the results in the models with data from both spouses are discussed here: summarizing the result presentations from the previous paragraphs: wives' *attitude about sexual unfaithfulness* (see Table 11) and *perceived*

consequence of separation (see Table 12) have significant influences on marital stability. On the other hand, husbands' *attitude about lifetime commitment* (see Table 12) and *individualistic attitude* (see Table 13) have significant effects. Wives' *marital happiness* has significant effects across marriages of different duration, but husbands' *marital happiness* predicts marital status better for couples married beyond 14 years. It is interesting that, for husbands married between 7-14 years, *individualistic attitude* is a better predictor than *marital happiness* (see Table 13).

Effects Change after Adding the Other Spouse's Data to the Model

The effects of some variables change after adding the other spouse's data to the model. Summarizing these changes from the previous paragraphs: in the model without considering marital duration, both spouses' *fairness in spending money* and *perceived consequence of separation*, wives' *pro-marriage attitude*, husbands' *attitude about sexual unfaithfulness* and *self-esteem*—the effects are significant in the individual-level model, but they are not different from zero after adding the other spouse's data to the model (see Table 11). For couples married 7 years or less, the effects of husbands' *fairness in spending money* and *perceived consequence of separation* change from significant to insignificant. In contrast, the effects of husbands' *attitude about lifetime commitment* change from insignificant to significant (see Table 12). For couples married between 7-14 years, the effects of husbands' *marital happiness* and *self-esteem* and wives' *perceived consequence of separation* change from significant to insignificant (see Table 13). For couples married beyond 14 years, the effects of husbands' *individualistic attitude* and *perceived consequence of separation* change from significant to insignificant (see Table 14).

Chapter Six: Discussion

Theoretical approaches and research findings suggest that including information from both spouses would help better understand marriage, and the results support it. Overall, except for the *wife only* model for couples married between 7-14 years, the fits of the models with data from both spouses are significantly better than the model fits of the individual-level model. A significantly better model fit means a better model validation, and good answers to research questions would follow. For couples married between 7-14 years, the *wife only* model is better than the *husband only* model, and the model with data from both spouses is not significantly better than the *wife only* model—the results here imply that, for couples who have been married between 7-14 years, if data from both spouses are not available, analyzing data from wives would be sufficient to provide researchers with good answers to research questions. A possible explanation is that, for couples married between 7-14 years, husbands were more likely to act upon their roles in paid employment and to build up their stake in career and were less likely to get involved in marriage and family (their significant needs for having freedom to do what they want individually support this assumption; see Table 13 and later discussion about the results of *individualism*). Based on stake theory and role theory, compared to husbands' fewer investments in family and poor performance on marital roles, wives' relatively more investments in family and good performance on marital roles make wives' data have strong effects on marital stability. Under wives' strong effects, husbands relatively do not have power on the decision of marital dissolution. Another possible explanation is that husbands' data are unable to show a good picture of marriage because of their fewer investments in family and poor marital role performance. As a result, adding their perceptual information into the model does not significantly improve the model fit.

While comparing the results in the individual-level models with the results in the models with data from both spouses, some variables, like the variable of *fairness in spending money* and husbands' *self-esteem*, show significant effects on marriage in the individual-level model, but the effects are not significantly different from zero after taking the other spouse's data into account. The results indicate that some "good" marital predictors identified by the literature might not be as "good" as expected when perceptual data from both spouses are included in the model. In other words, variables identified by the model with data from both spouses can better predict marital stability. Based on role theory, it is because the individual-level model only tells one side of the story: it may seem serious if only one side of the story is heard, but listening to what the other partner thinks would change the picture of marriage. The individual-level model is unable to provide sufficient information to understand the process or interactions of marriage. For variables that have significant influences on marriage in the individual-level model, but insignificant effects in the model with data from both spouses, the significant effects in the individual-level model may be just tentative. Here are the marital predictors identified by the models with data from both spouses: (1). *Marital happiness* has significantly positive effects in most models and most periods of marital duration; therefore, this variable is a good marital predictor. (2). *Attitude about sexual unfaithfulness* is suggested if marital duration is not considered in research. (3) *Attitude about marriage is a lifetime relationship* and *perceived consequence of separation* are recommended for studying couples married 7 years or less. (4). *Attitude about having freedom to do what one wants individually* is suggested for studying couples married between 7-14 years. In short, *marital happiness* is the only variable that has significant effects across marriages of different duration, and the effects of the other identified variables vary with marital duration.

However, spousal discrepancies do not statistically improve the model fits and only two spousal dissimilarities, *attitude about divorce if young kids at home* and *self-esteem*, have significant influences on marital stability. Overall, the effects of most spousal discrepancies do not support the heterogeneity perspective. The heterogeneity perspective assumes that heterogeneity negatively affects marital stability because couples have "more" to reconstruct, so the creation of a common and cohesive reality of marriage may be difficult, and further hampers the creation of a stable marriage. In the present research, spousal discrepancy means that spouses perceive marriage differently. The results of the present research show that couples could reconstruct most perceptual heterogeneities except for two discrepancies: *attitude about divorce if young kids at home* and *self-esteem*.

The significantly negative effect of discrepancy on *attitude about divorce if young kids at home* presents for couples married between 7-14 years. For couples who are at this stage of marriage, if they have young children at home, based on stake theory, wives would invest more in family (taking care of young children) than husbands; husbands would invest more at work to establish a stake in their career. Husbands would have a weaker stake in family and be less likely to commit themselves to marriage because of the relatively fewer investments they make in marriage. According to role theory, a woman's role as mother may be the predominating role if she has young children at home. The wife would expect her husband to play the role of father well and also be a good husband to support her role as a mother. However, at this stage of life, the husband may make more investments in career and fewer investments in family and he might encounter role conflicts between family and career, which implies that he probably does not play the roles of husband and father well and his performance does not meet the role expectations his wife has for him. The incompatibilities and conflicts among roles reflect on the discrepancy on

attitude about divorce if young kids at home. From the heterogeneity perspective's point of view, it would be difficult for couples to create a common and cohesive reality of marriage because of the role conflicts and couple discrepancy on stakes in marriage. Therefore, the relationship is more likely to be at risk.

The significantly negative effect of discrepancy on *self-esteem* presents for couples married beyond 14 years. For couples married beyond 14 years, if discrepancy on *self-esteem* negatively affects marriage, it is reasonable to assume that wives would be the ones who had lower self-esteem because of long-time investments in family, and husbands would be the ones who had higher self-esteem because of successful career achievements. In other words, the spousal difference on *self-esteem* presents an outline of the marital life: wives invested more in family and had a strong stake in marriage, but a weak stake in the world outside the marriage; the situation of husbands was the other way around. The different investments in marriage indicate the different degrees of commitment spouses make to marriage. Based on stake theory, the fewer investments one makes in marriage, the less he/she commits himself/herself to marriage.

Different theoretical approaches would understand this marital dissolution from different angles. Role theory and gender perspective would argue that it is possibly caused by gender socialization and how differently society or significant others value the roles men and women play. Even though feminist scholars make great efforts in promoting gender equality, gender inequality still exists in society. Generally speaking, the roles women play receive fewer rewards than the roles men play: society does not give much credit to wives who devote themselves to marriage and family. In contrast, husbands who have career achievements earn credits and respect from society and their significant others. The social values or values of significant others lead husbands and wives to develop different levels of self-esteem. Therefore,

it is not surprising that there is a spousal difference on *self-esteem* and the discrepancy implies that husbands and wives were living apart "emotionally," and the marriage was more likely to be at risk. Social exchange theory would explain that spouses with high self-esteem would perceive more alternatives after marital dissolution and were more likely to end the relationship. Under the no-fault divorce law, this spouse could decide to terminate the marriage. From heterogeneity perspective's point of view, it would be difficult for couples to create a common and cohesive reality of marriage under such condition. Therefore, the relationship was more likely to be at risk.

Some studies show that female partners' data better predict relationship stability than male partners' data, and wives' attitudes and perceptions were better predictors of marital stability than were husbands' variables (Gager & Sanchez, 2003; Heaton & Blake, 1999; Kirkpatrick & Davis, 1994; Sacher & Fine, 1996). The results of the present study support the previous research findings. While comparing the results in the individual-level models with the results in the models with data from both spouses, only some variables show significant effects across the individual-level models and the models with data from both spouses. Among these variables, wives' variables are more "stable" than husbands', which means that the predictability of wives' variables are less affected by including husbands' information in the model. In addition, AIC and BIC of the wife *only* model are lower than the *husband only* model, which means that the wife *only* model has a better model fit than the *husband only* model. Based on stake theory, it could be because the emphasis and efforts wives made in marriage foster them to have more accurate perceptions about marriage.

Overall, the results support the literature regarding the effect of factors varies by gender, which also supports gender perspective. Gender perspective suggests that husbands and wives

might have different reasons for divorce. Here are the examples of the effect of factors varies by gender: the significantly positive effects of wives' *disapproving sexual unfaithfulness* show their expectation for their spouse (keeping sexual faithfulness) and commitment to marriage; on the other hand, husbands' effect of this variable does not significantly predict marital stability. Two results show the weaker commitment husbands made to marriage: husbands married 7 years or less were less likely to stay in marriage if they thought that *marriage is a lifetime relationship and should never be ended except under extreme circumstances*; husbands married between 7-14 years expected to have freedom to do what they wanted individually. However, wives' effects of these two factors are not different from zero. The weaker commitment husbands made to marriage implies that they invested less in marriage than wives from the perspective of stake theory.

In addition, in the models with data from both spouses, wives married 7 years or less were more likely to stay in marriage if they perceived negative consequences of separation; however, the effect of husbands' *perceived consequence of separation* is not different from zero. Based on social exchange theory, if wives perceived negative consequences of separation, they were more likely to stay in marriage because the costs of separation were too high. Husbands' insignificant effect of this variable shows that how husbands perceived consequence of separation does not help predict marital stability. Why is that? This gender difference can be explained by role theory and stake theory. Based on role theory and the relevant research findings, a woman's role as wife and mother was the predominating roles in her life (Gilligan, 1982; Mangus, 1957; Renzetti, 1992). Even if she employed outside the home, she was still largely responsible for child care and housework (Leslie et al., 1991; Perry-Jenkins & Folk, 1994). All other roles were subsidiary and subordinate for her. On the other hand, the

occupational role was the predominating role for a husband and his family roles were subordinated because he was less involved. Roles give the role incumbent anchorage points in the social systems in which he/she functions and provide him/her with a sense of identity. Women would lose their predominating role as wife and a broken sense of identity if the marriage did not work out. Compared to wives' great loss, losing a subordinate role as a husband was relatively not serious for men. Therefore, compared to husbands, marital dissolution means more to wives in a negative way. This could be the reason why husbands' *perceived consequence of separation* does not help predict marital stability. From stake theory's point of view, this perception does not significantly affect husbands' marital stability because they committed themselves less to marriage and had a strong stake in the world outside the marriage.

There are two unexpected interesting findings about the predictability of variables in this study. First, for couples married 7 years or less, if husbands tended to think that *marriage is a lifetime relationship*, it is less likely for them to stay in marriage at wave two. These newlywed husbands might just give a socially desirable response and were not willing to act upon their lifetime relationship commitment. Stake theory might explain that it was because these husbands did not have a strong stake in their current marriage, which means that they did not invest much and committed themselves less to their current marriage. If so, these newlywed husbands would not have much to lose due to marital dissolution because they did not invest much; at the same time, they had more alternatives than husbands married beyond 7 years. As a result, if they did not think their current spouse was the one with whom they wanted to keep their lifetime commitment, they were more likely to end their current marriage to seek for a better quality of life. In addition, role theory might explain that these newlywed husbands made a lifetime

relationship commitment, but were unable to meet marital role expectations from their spouse and significant others; they might encounter difficulties in compromising different marital role definitions with their spouse or might experience more conflict between family and other roles (e.g., the role of employee). In either case, problems in enacting marital roles would have direct negative influences on marriage.

Generally speaking, people tend to think that it is necessary to sacrifice personal needs or desires to maintain marriage. However, this principle does not apply to husbands married between 7-14 years. For couples married between 7-14 years, if husbands tended to think that *partners must have freedom to do what they want individually in a successful marriage*, they were more likely to stay in marriage. In contrast, for couples married beyond 14 years, they were more likely to stay in marriage if husbands were opposed to such thought. A possible explanation as follows: being in a happy marriage was more important to wives than husbands and wives work harder than husbands to maintain their stake in marriage. Traditionally, individualistic thought and behavior are considered as "undesirable behavior" in marriage. Based on stake theory, wives may lessen their stake in marriage if they are being individualistic. Different from wives, husbands married between 7-14 years tend to devote themselves to their work or career: stabilizing a stake in career is important for middle-aged husbands. At this stage of life, it is possible that husbands may focus on achievements at work to stabilize their status; or they may experience some midlife crisis. In either case, it is understandable that they would desire to have freedom to do what they want individually. As a result, having individualistic thought and freedom to do what they want individually might help stable the relationship rather than damage it. When the stake in career is established and stable, husbands would be more willing to make sacrifices and to devote themselves to marriage—this

maybe the reason why husbands' disagreement on individualistic thought reflects their marital stability for couples married beyond 14 years. In addition, from role theory's points of view, husbands married between 7-14 years might encounter great role conflicts between family roles and roles at work. Therefore, the individualistic thought and freedom would allow them to relax a little from enacting family roles and further help decrease their role conflicts. After working through the great role conflicts between family and work, husbands married beyond 14 years would be able to make more investments in family, and having disagreement on individualistic thought would help them enact their family roles. The results here support that the influences of marital variables on marriage vary with marital duration.

Chapter Seven: Conclusion

The present research uses five theoretical approaches, which are role theory, social exchange theory, stake theory, gender perceptive and heterogeneity perspective, to understand marital dissolution and to explain the results. Certainly, all these approaches are helpful in providing a perspective to understand marital instability. However, the discussions above suggest that role theory and stake theory are especially useful to explain the effects of perceptual or emotional variables on marital dissolution.

Corresponding to the three research questions, the results show that, first, given the established perceptual variables, the prediction of marital stability of a model using data from both spouses is significantly better than a model using data from only one spouse except for the *wife only* model for marital duration between 7-14 years. Thus, the present research provides statistical evidence to support that gathering perceptual data from both spouses is necessary. Second, including spousal dissimilarity (the absolute value of the spousal differences) does not significantly improve the prediction of marital dissolution. Overall, the effects of most spousal discrepancies do not support the heterogeneity perspective. The results show that couples can reconstruct, or at least, that differences are more manageable for some perceptual heterogeneities than for others. Most difficult to reconcile, to judge from the present analysis, are these two discrepancies: *attitude about divorce if young kids at home* and *self-esteem*. Third, in the models with data from both spouses, the results support the literature that the effects of marital factors vary by marital duration, and that the effects of these variables also vary by gender, which supports the gender perspective.

Besides the main research findings, the present research also makes several contributions to the literature by introducing new research findings. First, the results show that the model fits

of the *wife only* model are better than the model fits of the *husband only* model across marriages of different duration, and the predictability of wives' variables is more *stable* than husbands' variables, which means that some significant effects of wives' variables are still significant after including husbands' information in the model. This result means that if only individual-level data are available to use or can be collected, researchers are encouraged to use wives' data rather than husbands' data. Why data from wives are better at predicting marital dissolution might be, in line with stake theory, because the emphasis and efforts wives make in marriage—their greater stake enables them to have more accurate perceptions about the marriage. Second, some factors have significant effects on marital stability in the individual-level data, but the effects are not significantly different from zero in the models with data from both spouses. This finding suggests that the significant effects of some "good" predictors of marital stability identified by the literature may be just tentative, or at least problematic. Third, using listwise deletion to handle missing data may create a bias in data findings because participants who do not answer all research questions may have different characteristics than participants who do. The analyses of the present research retain the characteristics of participants who did not answer all questions by using multiple imputation to handle missing data. Therefore, having biased findings caused by listwise deletion is less of a concern in this study.

The present research only examined the effects of perceptual or emotional variables on marital stability; therefore, the results can only be generalized to the variables chosen and relevant variables, and other more "objective" measures of variables (semi-objective variables), such as number of marital conflicts or incidents of marital violence, might yield different results. Therefore, additional study is needed.

There are three suggestions for future research. First, the results of this study show that using perceptual or emotional data from both spouses can better illuminate factors related to marital stability. Since respondents cannot provide perceptual or emotional information for their spouses, if studying perceptual or emotional variables is the goal, researchers should consider having a smaller sample with data from both spouses rather than maximizing sample size with data from one spouse only. Second, for perceptual or emotional variables, the findings of this research suggest that analyzing data from both spouses is the best approach. However, for semi-objective variables, future research is needed to examine whether a couple-level model is better than an individual-level model. Researchers have to take into account what variables they are studying, because whether couple or individual data is necessary depends on the kind of variables being studied. Third, future research is needed to clarify whether there are some variables for which husbands are better respondents than wives. Then the decision about which spouse should be the primary respondent could be made on the basis of topics to be investigated.

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Table 1
The Measurement of Fairness Variables in the Study of Sanchez and Gager (2000)

Husband thought / Wife thought	very unfair to him	somewhat unfair to him	fair to both	somewhat unfair to his wife	very unfair to his wife
very unfair to her husband	b	b	g	h	h
somewhat unfair to her husband	b	b	g	h	h
fair to both	e	e	a	d	d
somewhat unfair to her	h	h	f	c	c
very unfair to her	h	h	f	c	c

Table 2

The Measurement of Fairness Variables in a Model with Data from Both Spouses in the Present Study

Husband thought / Wife thought	very unfair to him	somewhat unfair to him	fair to both	somewhat unfair to his wife	very unfair to his wife
very unfair to her husband	1	1	1	1	1
somewhat unfair to her husband	0	1	1	1	1
fair to both	0	0	1	1	1
somewhat unfair to her	0	0	0	1	1
very unfair to her	0	0	0	0	1

Note: Here, "1" means that couples' agreement/disagreement might strengthen their marital relationship. In contrast, "0" means that couples' disagreement might weaken their marital relationship.

Table 3
16 Sub-models in the Present Study

	Duration Group One	Duration Group Two	Duration Group Three	Duration Group Four
Model A	Analysis 1	Analysis 5	Analysis 9	Analysis 13
Model B	Analysis 2	Analysis 6	Analysis 10	Analysis 14
Model C	Analysis 3	Analysis 7	Analysis 11	Analysis 15
Model D	Analysis 4	Analysis 8	Analysis 12	Analysis 16

Table 4
An Example of a Monotone Missing Pattern

Group	Y_1	Y_2	Y_3	Y_4
1	X	X	X	X
2	X	X	X	.
3	X	X	.	.
4	X	.	.	.

Note: Here, an "X" means that the variable is observed in the corresponding group and a "." means that the variable is missing.

Table 5

Demographic Statistics

	Husband					Wife				
	N	Mini.	Maxi.	Mean	SD	N	Mini.	Maxi.	Mean	SD
Age (years)	3,777	17	89	40.8	13.65	3,777	16	84	38.3	13.18
Age at marriage (years)	3,777	15	76	27	7.91	3,777	14	74	24	7.04
Education (years)	3,777	0	>19	13.18	3.05	3,777	0	>19	13	2.66
Personal income (dollar)	3,777	0	>79,999	32,500	14,999	3,777	0	>79,999	12,500	9,999
Marriage length (years)	3,777	0.5	63.6	14.4	13.1	3,777	0.5	63.6	14.4	13.1
Race_white	3,172					3,195				
Race_black	344					328				
Having kids at home	1,506					1,506				
Married 7 years or less	1,516					1,516				
Married between 7-14 years	762					762				
Married beyond 14 years	1,499					1,499				

Note: Mini.: Minimum.
Maxi.: Maximum.

Table 6

Descriptive Statistics of the Continuous Independent Variables

	Husband					Wife				
Independent variables	Mini.	Maxi.	Mean	SD	pmiss(%)	Mini.	Maxi.	Mean	SD	pmiss(%)
Marital happiness	1	7	6.10	1.19	1.62	1	7	6.04	1.27	1.77
Pro-marriage	1	5	3.58	1.02	1.91	1	5	3.25	1.08	1.56
Lifetime commitment	1	5	4.11	0.98	2.22	1	5	3.98	1.14	1.67
Faithfulness	1	5	3.89	1.07	2.46	1	5	4.12	1.02	1.85
Attitude divorce	1	7	4.26	1.88	2.38	1	7	3.75	1.83	2.12
Individualist	1	5	2.32	1.01	1.85	1	5	2.27	1.01	1.64
Consequences	1	5	3.57	0.68	5.53	1	5	3.72	0.67	7.10
Self-esteem	1	5	3.99	0.55	3.84	1	5	3.99	0.57	3.57

Note: N=18,885.

pmiss (%): proportion of missing.

Mini.: Minimum.

Maxi.: Maximum.

Table 7

Model Fit Test

	F	df
1.) The wife only vs. The husband + wife		
Not by duration	3.16***	11
Married 7 years or less	2.25*	11
Married between 7-14 years	1.4	11
Married beyond 14 years	3.16***	11
2.) The husband only vs. The husband + wife		
Not by duration	9.47***	11
Married 7 years or less	4.03***	11
Married between 7-14 years	2.79**	11
Married beyond 14 years	4.01***	11
3.) The husband + wife vs. The husband + wife + the absolute value		
Not by duration	0.78	8
Married 7 years or less	0.51	8
Married between 7-14 years	1.18	8
Married beyond 14 years	1.56	8

*** $p < .001$. ** $p < .01$. * $p < .05$.

Table 8

Model Fit Test: Husband Only Model vs. Wife Only Model

	Husband AIC	Wife AIC	Husband BIC	Wife BIC
	Model without considering marital duration			
Imputation 1	2295.91	2227.95	2376.99	2309.03
Imputation 2	2296.62	2227.54	2377.70	2308.62
Imputation 3	2297.67	2227.65	2378.75	2308.73
Imputation 4	2296.26	2226.81	2377.34	2307.89
Imputation 5	2299.14	2221.98	2380.22	2303.05
	Couples who were married 7 years or less			
Imputation 1	1038.72	1017.27	1102.61	1081.16
Imputation 2	1038.78	1017.87	1102.67	1081.76
Imputation 3	1039.85	1016.03	1103.73	1079.91
Imputation 4	1037.66	1016.86	1101.54	1080.74
Imputation 5	1039.45	1016.23	1103.34	1080.12
	Couples who were married between 7-14 years			
Imputation 1	657.87	642.07	713.50	697.71
Imputation 2	658.74	642.18	714.37	697.81
Imputation 3	659.04	641.89	714.67	697.52
Imputation 4	659.25	643.33	714.88	698.96
Imputation 5	660.54	640.50	716.18	696.13
	Couples who were married beyond 14 years			
Imputation 1	647.23	641.66	710.98	705.41
Imputation 2	647.84	640.62	711.59	704.37
Imputation 3	647.74	641.99	711.49	705.74
Imputation 4	647.82	638.85	711.57	702.60
Imputation 5	648.38	637.87	712.13	701.62

Table 9

Person Correlation Matrix among the Continuous Variables for Husbands and Wives

		Wife							
		Marital happiness	Pro-marriage	Lifetime commitment	Faithfulness	Attitude divorce	Individualist	Consequences	Self-esteem
Husband	Marital happiness	0.35***	0.08***	0.13***	0.07***	0.06***	0.02**	0.21***	0.14***
	Pro-marriage	0.07***	0.21***	0.11***	0.02***	0.08***	0.02**	0.10***	0.05***
	Lifetime commitment	0.09***	0.11***	0.24***	0.07***	0.18***	0.08***	0.10***	0.06***
	Faithfulness	0.11***	0.01	0.08***	0.21***	0.04***	0.04***	0.11***	0.04***
	Attitude divorce	0.01	0.08***	0.18***	0.01	0.25***	0.11***	0.01	-0.01
	Individualist	0.02*	0.05***	0.08***	0.01	0.11***	0.22***	0.02*	-0.04***
	Consequences	0.23***	0.13***	0.13***	0.10***	0.07***	0.02**	0.27***	0.11***
	Self-esteem	0.15***	0.03***	0.05***	0.03***	0.03***	-0.04***	0.14***	0.17***

*** $p < .001$. ** $p < .01$. * $p < .05$.

Table 10

Paired T Test

	The whole model	7 years or less	between 7-14 years	beyond 14 years
Marital happiness	5.58***	0.33	4.54***	5.00***
Fairness_chores	73.11***	45.53***	38.60***	42.85***
Fairness_working	7.14***	2.42*	-0.62	9.69***
Fairness_money	4.12***	2.75**	-0.46	4.38***
Pro-marriage	33.88***	19.75***	15.09***	23.11***
Lifetime commitment	13.98***	7.58***	6.09***	10.40***
Faithfulness	-24.74***	-18.43***	-7.91***	-15.19***
Attitude divorce	30.82***	20.18***	16.20***	17.26***
Individualist	5.95***	1.85	3.05**	5.27***
Consequences	-25.3***	-20.35***	-10.04***	-12.74***
Self-esteem	-0.18	0.86	-2.73**	0.68

*** $p<.001$. ** $p<.01$. *$p<.05$.

Table 11

The Whole Model without Considering Marital Duration (Odds Ratio)

	Individual-level		Couple-level without ABS			Couple-level with ABS		
	Husband only	Wife only	Husband	Wife	Dissimilarity	Husband	Wife	Dissimilarity
Marital happiness	1.30***	1.43***	1.16**	1.36***		1.18***	1.40***	1.08
Fairness_chores	0.77	0.89			0.99			0.97
Fairness_working	1.06	1.13			1.18			1.15
Fairness_money	1.47*	1.48*			1.21			1.17
Pro-marriage	1.06	1.13*	1.03	1.12		1.03	1.12	1.01
Lifetime commitment	0.94	1.00	0.93	0.99		0.93	1.00	1.01
Faithfulness	1.14*	1.13*	1.08	1.11*		1.10	1.12*	1.05
Attitude divorce	0.99	1.04	0.99	1.04		1.00	1.02	0.94
Individualist	0.99	1.00	0.97	1.00		0.97	1.00	1.01
Consequences	1.35***	1.28**	1.19	1.20		1.15	1.20	0.89
Self-esteem	1.28*	1.03	1.18	1.01		1.18	1.00	0.99
Duration	1.01***	1.01***	1.01***	1.01***		1.01***	1.01***	

Note: ABS: the absolute difference.

*** $p < .001$. ** $p < .01$. * $p < .05$.

Table 12

Couples Who Were Married 7 Years or Less (Odds Ratio)

	Individual-level		Couple-level without ABS			Couple-level with ABS		
	Husband only	Wife only	Husband	Wife	Dissimilarity	Husband	Wife	Dissimilarity
Marital happiness	1.25**	1.29***	1.16	1.21**		1.18*	1.26**	1.11
Fairness_chores	0.75	0.86			1.24			1.22
Fairness_working	1.09	1.40			1.33			1.35
Fairness_money	1.91**	1.45			1.42			1.41
Pro-marriage	1.09	1.12	1.04	1.12		1.03	1.14	1.03
Lifetime commitment	0.85	1.01	0.82*	1.02		0.81*	1.03	1.02
Faithfulness	1.09	1.14	1.04	1.15		1.06	1.16	1.06
Attitude divorce	0.96	1.04	0.97	1.05		0.98	1.04	0.96
Individualist	0.99	1.00	0.95	1.01		0.96	1.02	0.93
Consequences	1.37*	1.54**	1.18	1.45**		1.15	1.43*	0.98
Self-esteem	1.28	0.92	1.24	0.89		1.26	0.92	1.21

Note: ABS: the absolute difference.

*** $p < .001$. ** $p < .01$. * $p < .05$.

Table 13

Couples Who Were Married Between 7-14 Years (Odds Ratio)

	Individual-level		Couple-level without ABS			Couple-level with ABS		
	Husband only	Wife only	Husband	Wife	Dissimilarity	Husband	Wife	Dissimilarity
Marital happiness	1.24**	1.42***	1.10	1.34***		1.15	1.38**	1.11
Fairness_chores	1.42	0.83			1.02			0.99
Fairness_working	0.86	0.74			0.78			0.74
Fairness_money	0.94	1.33			0.98			0.90
Pro-marriage	1.19	1.21	1.17	1.19		1.21	1.23	0.99
Lifetime commitment	0.97	0.91	1.01	0.90		1.00	0.89	0.88
Faithfulness	1.17	1.03	1.11	1.02		1.10	1.02	0.93
Attitude divorce	1.06	1.02	1.07	1.00		1.09	0.95	0.83**
Individualist	0.77*	0.97	0.78*	0.99		0.76*	1.01	1.03
Consequences	1.27	1.46*	1.11	1.35		1.01	1.32	0.87
Self-esteem	1.68**	1.30	1.36	1.22		1.35	1.24	1.06

Note: ABS: the absolute difference.

*** $p < .001$. ** $p < .01$. * $p < .05$.

Table 14

Couples Who Were Married Beyond 14 Years (Odds Ratio)

	Individual-level		Couple-level without ABS			Couple-level with ABS		
	Husband only	Wife only	Husband	Wife	Dissimilarity	Husband	Wife	Dissimilarity
Marital happiness	1.43***	1.58***	1.34***	1.55***		1.35***	1.59***	1.04
Fairness_chores	0.34	1.31			0.58			0.56
Fairness_working	1.89	0.92			1.33			1.32
Fairness_money	1.55	1.74			1.44			1.58
Pro-marriage	1.05	1.12	1.01	1.04		1.01	1.00	0.94
Lifetime commitment	1.14	1.10	1.10	1.07		1.12	1.14	1.25
Faithfulness	1.11	1.16	1.04	1.13		1.05	1.16	1.19
Attitude divorce	1.01	1.10	0.98	1.09		0.94	1.11	1.06
Individualist	1.33*	1.04	1.30	1.01		1.25	0.92	1.27
Consequences	1.48*	0.88	1.36	0.76		1.35	0.78	0.95
Self-esteem	0.91	1.00	0.94	0.98		0.86	0.86	0.55*

Note: ABS: the absolute difference.

*** $p < .001$. ** $p < .01$. * $p < .05$.

Appendix

Questions Involved in the Imputation Model

1. Taking things all together, how would you describe your current marriage?

2. During the past month, about how often did you and your husband/wife spend time alone with each other, talking or sharing an activity?

3. The following is a list of subjects on which couples often have disagreements. How often, if at all, in the last year have you had open disagreements about each of the following:

a. Household tasks

b. Money

c. Spending time together

d. Sex

e. Having a(nother) child

f. In-laws

g. The children

4. There are various ways that married couples deal with serious disagreements. When you have a serious disagreement with your husband/wife, how often do you:

a. just keep your opinions to yourself?

b. discuss your disagreements calmly?

c. end up hitting or throwing things at each other?

5. It is always difficult to predict what will happen in a marriage, but realistically, what do you think the chances are that you and your husband/wife will eventually separate or divorce?

6. Even though it may be very unlikely, think for a moment about how various areas of your life might be different if you separated. For each of the following areas, how do you think things would change?

a. your standard of living

b. your social life

c. your career opportunities

d. your overall happiness

e. your sex life

7. About how often did you and your husband/wife have sex during the past month? (number of times)

8. How often do you attend religious services?

9. Please indicate how much you agree or disagree with each of the following statements:

a. I have always felt pretty sure my life would work out the way I wanted it to.

b. I feel that I'm a person of worth, at least on an equal plane with others.

c. On the whole, I am satisfied with myself.

d. I am able to do things as well as other people.

9. Please circle the number that best represents how much you approve or disapprove of the behaviors described. A couple with an unhappy marriage getting a divorce if their youngest child is under 5?

10. Please indicate how much you agree or disagree with each of the following statements:

a. It's better for a person to get married than to go through life being single.

b. Marriage is a lifetime relationship and should never be ended except under extreme circumstances.

c. In a successful marriage, the partners must have freedom to do what they want individually.

d. Married couples ought to overlook isolated occasions of sexual unfaithfulness

11. How do you feel about the fairness in your relationship in each of the following areas?

a. Housing chores

b. Working for pay

c. Spending money

12. Compared with other people your age, how would you describe your health?