

IS THE FUTURE BETTER THAN THE PAST?
AN EMPIRICAL COMPARISON OF MARITAL QUALITY AMONG SHORT-TERM,
INTERMEDIATE-TERM, AND LONG-TERM COUPLES

By
Stephen D. Green

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Michael J. Sporkowski, Chairman
Gloria W. Bird
Rick Peterson
Howard O. Protinsky
Stephanie L. Sargent

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Abstract

The purpose of this study was to compare couples in different phases of marriage with the primary goal of contributing to our understanding of marital quality throughout the life span. Rusbult's investment theory (Rusbult, 1980, 1983; Rusbult & Buunk, 1993), which predicts specific outcomes concerning relationship satisfaction, commitment, and stability, served as the guiding theory behind this effort. Assumptions derived from the theory were tested with couples in three distinct phases of marriage using data from the first wave of the National Survey of Families and Households (Sweet, Bumpass, & Call, 1988). Short-term couples consisted of husbands and wives married between 4 and 6 years, intermediate couples consisted of those married between 20 and 25 years, and long-term couples consisted of those married 45 years or more.

Couples were compared with regard to four specific aspects of their relationships: conflict frequency, conflict resolution, satisfaction, and perceptions of the quality of alternatives to their current marriages. Data generated from spouses' averaged scores were analyzed using a series of one-way ANOVAs and paired t-tests. Results from this sample of respondents clearly revealed that long-term couples engaged in less conflict, utilized different conflict resolution strategies, were more satisfied with their marriages, and perceived alternatives to their relationships as less favorable than younger couples. In addition, when husbands' and wives' scores on the above measures were compared, long-term couples exhibited fewer differences than younger couples. Findings from this study are discussed in light of existing research and theory.

DEDICATION

Dedicated with all of my love
to my wife Mary
and my daughter Autumn

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Completing a Ph.D. is a major milestone in my academic career; however, it would not have been possible without the help of many dear friends, family members, and mentors. I would like to thank God (my Heavenly Father), and the Lord Jesus Christ for always being at my side. Despite the time consuming nature of graduate school, I can honestly say that I never lost sight of what is truly important in this life. God's word was a continual source of strength and encouragement to me while working on the Ph.D. I also want to thank God for blessing me with such a wonderful family. I am grateful to my parents, Richard and Reta Green, for their continual love, support, and guidance throughout my life. I am truly blessed to have such wonderful parents. They taught me from my youth to seek first the kingdom of God and His righteousness (Matthew 6:33), knowing that all things work together for good to those who love God, and who are called according to His purpose (Romans 8:28).

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CHAPTER 1: INTRODUCTION

Overview and Purpose of the Study

Family life in the United States has undergone dramatic changes in the latter half of the 20th century. Among the changes that have occurred, one of the most profound has been the rising incidence of marital instability. According to recent census data (U.S. Bureau of the Census, 1996a), the number of currently divorced persons has quadrupled since 1970. Divorced persons increased from 4 million in 1970 to 17 million in 1994. It has been estimated that nearly two-thirds of first marriages will end in divorce (Martin & Bumpass, 1989). Despite the fact that a large percentage of marriages do not endure, marriage remains one of the most valued relationships in Western culture. Census data indicate, that while the average age at first marriage for both men and women has increased by more than 3 years since 1975 (U.S. Census Bureau, 1996a), 9 out of 10 Americans will marry at some point in their lives (Goldscheider & Waite, 1991). In fact, most couples enter marriage hoping their relationships will endure and will be satisfying to both partners (Halford, Kelly, & Markman, 1997).

While some couples' hopes for a successful long-term relationship are never realized, there are couples who remain in committed, loving relationships for life. According to census data on aging (U.S. Bureau of the Census, 1996b), in 1994 there were over 33 million elderly (aged 65 or older) living in the United States. Among those aged 65 and older, over 55% are currently married and living with their spouses (U.S. Bureau of the Census, 1996c). From 1900 to 1994 the elderly population increased 11-fold, compared with only a 3-fold increase for those under age 65. Within this same period, the oldest old population (persons aged 85 and older) increased by 274%. These recent trends in aging have major implications for modern marriages. As the number of older Americans increase and the life span of the average person continues to grow, couples who remain married can potentially spend 50, 60 or more years together.

With the arrival of the 21st century, researchers are becoming increasingly interested in long-lasting marriages in hopes of learning about these couples and to discover factors that have contributed to the longevity of their relationships (Alford-Cooper, 1998; Carstensen, Gottman, & Levenson, 1995; Dickson, 1995; Kaslow & Robison, 1996; Lauer & Lauer, 1986; Levenson, Carstensen, & Gottman, 1993, 1994). Couples married for 40, 50 or more years provide researchers, clinicians, family life educators, and the general public with an excellent opportunity to learn how marriages endure and how they change over time. With divorce being so prominent in American culture, these couples may be able to provide researchers with valuable information that can help other couples build more satisfying and enduring relationships. In addition, these couples can increase our understanding of how societal events (e.g., wars, economic conditions) and expectations (e.g., gender roles) impact marriages. As pointed out by Levenson et al. (1993, p.303),

These couples have lived together during a historical period that has seen dramatic changes, including a number of changes in which gender was central. They married at a younger age and, compared with later cohorts, were more likely to stay together. Social trends such as the women's movement, the entry of women into the work force, and the normative shift in expectations from instrumental to companionate and intimate marriages all exerted powerful influences on their lives and marriages.

Most research on marital relationships within the past 50 years has been conducted using relatively young couples and has tended to focus on factors that predict the dissolution of the marital bond (Alford-Cooper, 1998; Carstensen, Graff, Levenson, & Gottman, 1996; Levenson et al., 1993, 1994). While this research has made significant

contributions to our understanding of marital relationships, researchers continue to have a limited knowledge of the factors that contribute to marital success and longevity. Despite the sustained interest in marital quality throughout the decades, few systematic efforts have involved long-term marriages in which spouses have remained together for 40, 50 or more years. In the early 1970s, Stinnett, Collins, and Montgomery (1972) stated: “Unfortunately, research concerned with the perceptions of older husbands and wives towards their marriage relationships and their present period of life is very limited” (p. 665). Eleven years later, in a critical review of the literature, Sporakowski and Axelson (1989) identified and reported the results of 16 empirical studies on long-term marriages published since 1970, many of which revealed a diverse mix of findings and conclusions about couples in enduring relationships. In a more recent review of research on long-lasting marriages, Dickson (1995) concluded,

Unfortunately, although the average longevity is increasing, there is not a concomitant increase in knowledge about the long-lasting marriage. Much of the research on aging focuses on retirement, health issues, and perceptions of life satisfaction among older adults. Relatively little attention has been devoted to exploring how later-life couples perceive the quality of their overall life together and what it means to be lifelong partners (p. 24).

The purpose of the present investigation was to compare couples in different phases of marriage, including couples married 45 years or more, with the primary goal of contributing to our understanding of marital quality throughout the life span. Rusbult’s investment theory (Rusbult, 1980, 1983; Rusbult & Buunk, 1993), which predicts specific outcomes concerning relationship satisfaction, commitment, and stability, served as the guiding theory behind this effort. While the theory has been widely used to study satisfaction and commitment in short-term relationships, very few studies have included long-term couples in their analyses. Therefore, assumptions derived from the theory were tested with couples in 3 distinct phases of marriage using a nationally representative sample of married respondents. Short-term couples consisted of husbands and wives married between 4 and 6 years, intermediate couples consisted of those married between 20 and 25 years, and long-term couples consisted of those married 45 years or more.

Investment theory predicts that couples who are satisfied with their relationships, who have invested a great deal in them (i.e., time, energy, and resources), and whose alternatives are perceived as less favorable, will tend to be more committed to their relationships. Whereas, couples who are dissatisfied, who have invested very little, and whose alternatives are perceived as being more favorable, will tend to be less committed. As commitment to a relationship increases, Rusbult and Buunk (1993) contend that couples are more likely to engage in pro-relationship behaviors that contribute to the quality of their relationships (e.g., accommodative behavior during conflict, perceived relationship superiority). While the model offers specific predictions concerning relationship satisfaction, commitment, and stability, the authors clearly state that the causal relationships among variables are probably not unidirectional. Instead, they suggest that the model is better conceived of as a large feedback loop. If this is accurate, then increased commitment will likely lead to behaviors that promote greater satisfaction in a relationship. Based on the above reasoning, it was proposed that couples in long-term marriages (i.e., those who tend to be in more committed and stable relationships) will tend to engage in less conflict, will tend to be more proficient at dealing with conflict, will tend to perceive alternatives to their relationship as being less favorable, and will tend to be more satisfied with their relationships than younger couples.

Sample

The sample for the present study was drawn from the first wave of the National Survey of Families and Households (NSFH; Sweet, Bumpass, & Call, 1988), a national survey designed to investigate the causes and consequences of changes in American families and household structures. The NSFH 1988 is based on a national probability sample of over 13,000 households, including an oversample of minority households. Unlike previous surveys of American families, the NSFH focuses almost exclusively on family issues, such as marriage, divorce, remarriage, and sibling, parent-child, and stepfamily relationships. Due to the large sample size and the broad range of family process variables addressed in the survey, the NSFH provides researchers with a valuable tool to make reliable statistical estimates and subgroup comparisons. This is especially pertinent to the present study, which compared couples differing in length of marriage. Another strength of the NSFH is that, in addition to interviewing primary respondents (e.g., adult family members), data were also collected from secondary and tertiary respondents, such as spouses and children.

Definition of Key Terms and Concepts

Key terms and concepts underlying the present study were adopted from Rusbult's (1980, 1983) investment model, which extends concepts developed within the social exchange tradition (Rusbult, Johnson, & Morrow, 1986). Definitions of these concepts are consistent with those proposed by Rusbult and other social exchange theorists (e.g., Kelley & Thibaut, 1978; Lewis & Spanier, 1979; Thibaut & Kelley, 1959). The concepts addressed in this study include rewards/costs, marital satisfaction, investments, quality of alternatives, and commitment.

Rewards and Costs

Rewards and costs are concepts that are central to all social exchange theories. Thibaut and Kelley (1959) broadly define rewards as the "pleasures, satisfactions, and gratifications" derived from a relationship (p.12). In the context of marriage, there are numerous things that could be classified as rewards. Examples include mutual interests, a satisfying sexual relationship, positive feelings associated with one's role as a spouse (e.g., feeling appreciated), perceptions of fairness within the relationship, ability to communicate effectively, and a spouse's positive traits (e.g., sense of humor, physical attractiveness, intelligence). The present study employed Thibaut and Kelley's (1959) definition of rewards, which is also used by Rusbult in her research with couples involved in intimate relationships. Costs, in contrast, are defined as the negative attributes of a relationship that result in loss or punishment (Rusbult, 1980, 1983; Thibaut & Kelley, 1959). Examples of costs associated with marriage include frequent conflict, inability to resolve differences in a positive manner, poor communication, role strain, perceptions of inequity within the relationship, and a spouse's negative traits (Rusbult, 1983).

Marital Satisfaction

Rusbult broadly defines satisfaction as the "degree of positive affect associated with a relationship" (Rusbult, 1980, p.174). In the context of marriage, satisfaction reflects a spouse's subjective evaluation of his/her relationship, including both positive and negative feelings. Therefore, in keeping with this broad definition, marital satisfaction was defined in the present study as a spouse's evaluation of the degree of happiness with his/her marital relationship.

Quality of Alternatives

Quality of alternatives refers to the rewards and costs of the best available alternative to the current relationship (Rusbult, 1980; Thibaut & Kelley, 1959). Alternatives to a marital relationship may consist of another intimate relationship (i.e., one that is perceived as providing greater rewards), spending time with friends and family, or solitude. As with the concept of marital satisfaction, a spouse's assessment of the quality of alternatives to his/her relationship is very subjective. Regardless of whether or not an alternative is superior to the current relationship, if a spouse perceives it to be so, there is a greater likelihood that the stability of the relationship will be reduced (Sabatelli & Shehan, 1993).

Investments

Investments are simply defined as the number and magnitude of resources linked to a particular relationship. According to Rusbult (1995), investments can be of a direct nature (e.g., length of relationship, energy, self-disclosure), or an indirect nature (e.g., children, mutual friends, shared material possessions). By definition, couples in long-term marriages have invested a great deal of resources into their relationships (e.g., time, energy). Although not formally measured in the present study, differing levels of investment were assumed based on the length of a couple's marriage.

Commitment

Rusbult (1983) defines commitment as "the tendency to maintain a relationship and to feel psychologically attached to it" (p. 102). Commitment, when thought of in the context of marriage, represents a long-term orientation to the relationship that takes into account a spouse's feelings of attachment to the partner, and a desire to maintain the relationship despite the inevitable problems that are common to all marriages (Rusbult & Buunk, 1993). According to Rusbult's definition, commitment involves both personal (e.g., feelings of attachment to a spouse), and structural components (e.g., commitment to the institution of marriage). As with the concept of investments, commitment was assumed based on the length of a couple's marriage.

CHAPTER 2: REVIEW OF LITERATURE

Marital Conflict

Conflict Sources, Frequency, and Resolution

For many years, researchers have been interested in the role of conflict in predicting marital instability and dissolution (Gottman, 1993, 1994; Gottman & Krokoff, 1989; Gottman & Levenson, 1992; Levenson & Gottman, 1983, 1985). Utilizing self-report data, physiological measures, and direct observations of couples engaged in conversational interactions, Gottman and his colleagues have discovered that conflict, per se, is not necessarily detrimental to a marriage. What does appear to have adverse effects on marital satisfaction and stability is frequent conflict that is characterized by a high degree of negativity. In a study of 30 married couples, Levenson and Gottman (1983) found that dissatisfied couples' interactions were characterized by a greater degree of negative affect and negative affect reciprocity when compared to satisfied couples.

Consistent with the findings above, Gottman and Krokoff (1989) discovered that distressed couples demonstrated greater negativity, negative affect reciprocity, and exchanged fewer positive rewards than satisfied couples. These researchers also discovered that husbands report being more dissatisfied in their marriages when their wives reciprocate negative behavior (i.e., pursuit-nagging), and wives report being more dissatisfied when husbands do not reciprocate negative affect (i.e., withdrawal). Defensiveness, stubbornness, and withdrawal on the part of spouses during conflict were all found to be predictive of relationship deterioration.

Based on the above investigations and a subsequent 4-year longitudinal study of 73 married couples, Gottman (1993) identified a typology of five groups of couples based on their conflict styles. Three of the groups, referred to as validators, volatiles, and avoiders, were found to have stable marriages; whereas, the other two groups (i.e., hostile and hostile-detached) were found to be very unstable. What distinguished the stable and unstable groups was not the absence of conflict, but the degree to which positive interactions outweighed negative interactions. Distressed couples in Gottman's (1993) study maintained a ratio of .8 to 1 of positive behaviors to negative behaviors, indicating that there existed more negativity than positivity in these relationships. In contrast, couples in non-distressed marriages were found to maintain a 5:1 ratio of positive to negative interactions. Gottman (1993) concludes by proposing a balance theory of marriage, which posits that couples in stable marriages can deal with conflict in different ways, including avoidance, yet remain in stable relationships as long as a positive marital ecology is maintained.

While the above research has made significant contributions to our understanding of conflict in marriage, it is important to note that most of these studies were conducted with relatively young couples. Very few studies have looked at conflict and conflict resolution strategies employed by older couples (Carstensen et al., 1996; Levenson et al., 1993; Matthews, Wickrama, & Conger, 1996). Findings from the few studies that have been conducted suggest that in older marriages there is a reduced potential for conflict, and a reduction in the amount of negativity that is expressed during conflictual situations (Alford-Cooper, 1998; Carstensen et al., 1995; Gilford & Bengston, 1979; Levenson et al., 1993).

Gilford & Bengston (1979) studied marital satisfaction among 1,056 respondents from three-generation families using a two-dimensional measure of satisfaction (i.e., positive interactions vs. negative sentiments). Results from this investigation revealed that couples

from the oldest generation (i.e., couples married an average of 41 years) expressed less negative sentiment than the two younger generations. The authors suggest that perhaps older couples are taking advantage of the time they have left to live by arguing less and enjoying life more fully (Gilford & Bengston, 1979).

More recent investigations comparing older and younger couples have found similar results. Swenson et al. (1989) found that retired couples reported a significantly lower number of marital problems than preretired couples. Significant differences emerged in every area that was assessed (i.e., decision making, childrearing, relatives, health, money management, and expression of affection), indicating that older couples express less negative sentiment than younger couples. This finding was especially true for retired couples who were highly committed to each other. Couples who were committed to their spouse, as a person, reported fewer problems pertaining to decision making, setting goals in their marriage, relatives, personal care, and the expression of affection. The authors suggest that commitment to one's spouse may provide the necessary security in the relationship that allows couples to approach conflict with more risk taking (Swenson et al., 1989).

Zietlow and VanLear (1991) also offered this explanation after analyzing data from their study of 51 couples representing three marital groups (i.e., short-term couples, intermediate couples, and long-term couples). Compared to younger couples, long-term married couples were more likely to engage in competitive symmetry, which tends to increase the risk of conflict. However, older couples were also more likely than younger couples to rely upon deference (e.g., simple agreement, requesting information) as a strategy during their interactions with each other (Zietlow & VanLear, 1991).

Empirical evidence from studies comparing older and younger couples also indicates that the sources of conflict may vary according to age and life cycle stage. In a study comparing couples in long-term marriages (i.e., couples in their 60s and 70s) with those in middle-aged marriages (i.e., couples in their 40s and 50s), Levensen et al. (1993) discovered several differences between these two groups in terms of sources of conflict. Couples in middle-aged marriages ranked children, money, communication, recreation, sex, and in-laws as the top five sources of conflict in their relationships; whereas, older couples ranked communication, recreation, money, children, and sex as the top five. Within this same study, the researchers also compared couples' reported levels of disagreement in the following 10 areas: money, communication, in-laws, sex, religion, recreation, friends, alcohol and drugs, children, and jealousy. Results from this analysis revealed that older couples reported lower levels of disagreement in all 10 areas, with significant differences occurring in the areas of money, religion, recreation, and children. These results do not imply that older couples' lives are void of conflict; however, it does appear that the nature of conflict is somewhat different when compared to younger couples.

In a follow-up study with the same sample, Carstensen et al. (1995) found that in older couples, the resolution of conflict was less emotionally negative and more affectionate than in middle-aged couples. Older couples displayed lower levels of anger, disgust, belligerence, and whining during discussions of a problem area of continuing disagreement in their marriages. Carstensen et al. (1995) note that these findings support the idea that older couples utilize strategies to control the amount of negativity that is expressed in their relationships.

What is less clear, however, is whether long-term couples actually resolve their differences or simply agree to accept them. Alford-Cooper (1998) found support for both strategies in her study of couples married 50 years or more. When couples did engage in conflict, the most frequently mentioned sources were finances, relatives, poor health,

raising children, and the spouse's annoying habits. The strategies most frequently used by these couples to handle conflict included compromise, honest communication, doing what their spouse wanted, and avoidance. According to Alford-Cooper (1998), couples who utilized compromise and honest communication reported greater levels of marital happiness; whereas, couples who avoided issues tended to report lower satisfaction scores, lower levels of marital intimacy, and less agreement on important issues.

In summary, conflict appears to be an inevitable part of marriage. However, as Gottman argues, the mere presence of conflict does not imply that a couple will have a dissatisfying marriage. The studies reviewed above indicate that couples who are able to resolve their problems in a positive manner tend to be more satisfied with their relationships. In the few studies that have compared older and younger couples, the evidence points to the fact that older couples' relationships are characterized by fewer marital problems. While researchers are beginning to look more at conflict within the context of marriage, there are still a number of unanswered questions concerning the strategies employed by couples to resolve their differences. Do couples use different conflict resolution strategies depending upon their marital life cycle stage? Do couples become more proficient over time in dealing with marital conflict? Or do couples simply have less to argue about as they grow older? The present research attempted to answer some of these questions by comparing couples in distinct stages of marriage.

Marital Satisfaction

Changes in Marital Satisfaction Across the Life Cycle

Satisfaction, like many other aspects of marriage, is susceptible to change on a number of levels. First, the factors (i.e., rewards and costs in social exchange terms) that once predicted satisfaction in the early stages of marriage may not have the same predictive ability in the later stages of marriage. As Halford, Kelly, and Markman (1997) state, "The characteristics of couples who sustain long-term satisfied relationships are not the same characteristics which determine initial attraction or commitment to relationships, a phenomenon we term the short-term/long-term disjunction dilemma" (p. 7). Consistent with this viewpoint, research indicates that satisfaction during the early stages of a relationship is often associated with factors such as physical attractiveness, a satisfying sexual relationship, and engaging in highly pleasurable activities together (Karney & Bradbury, 1995; Halford et al., 1997); whereas, satisfaction in long-term marriages tends to be associated with love, trust, respect, children and grandchildren, and an ability to resolve conflict in a positive manner (Alford-Cooper, 1998; Levenson et al., 1993; Sporkowski & Hughston, 1978).

Second, many couples also experience changes in their level of marital satisfaction over time. In fact, this aspect of marital satisfaction has been one of the most widely debated topics in the history of the family field. Empirical data on marital satisfaction across the family life cycle has yielded mixed results over the past 40 years (Ade-Ridder & Brubaker, 1983; Cole, 1984; Vaillant & Vaillant, 1994). Findings can be grouped into three primary categories: 1) marital satisfaction decreases over the life course of the marriage, 2) marital satisfaction follows a curvilinear path, with couples reporting higher levels of satisfaction during the early and later stages of the family life cycle, and 3) no systematic pattern of marital satisfaction develops over the family life cycle (Herman, 1994; Medley, 1977).

In studies conducted prior to the 1960s, researchers found support for the idea that marital satisfaction steadily declines as couples grow older (Blood & Wolfe, 1960; Pineo, 1961, 1969). Blood and Wolfe (1960) conducted face-to-face interviews with 909 married

women living in the Detroit-area. Data derived from these interviews indicated that wives' marital satisfaction steadily decreased with length of marriage, with couples married 30 years or more reporting the lowest levels of marital satisfaction. The same authors found that marital satisfaction also decreased with each successive stage in the family life cycle, with the exception of a brief increase after the children were launched. Concerning these findings, the authors concluded that as couples age, they spend less time interacting with one another and more time focused on interests and responsibilities outside the marital relationship (e.g., children, work). While this viewpoint may have some validity, it is important to note that the vast majority of wives interviewed in this study were under the age of 60, and therefore, had not entered into the retirement stage of the family life cycle. In fact, only 8 retired women were included in the analysis of marital satisfaction (Blood & Wolfe, 1960).

In a re-analysis of Burgess and Wallin's (1953) longitudinal study of over 1,000 couples interviewed over a 25-year period, Pineo (1961,1969) reported similar findings to those mentioned above. Couples, who were interviewed during their first year of marriage and at subsequent intervals (i.e., 5, 15, and 25 years of marriage), reported a gradual decline in marital satisfaction and adjustment. Pineo attributed this decline in marital quality to feelings of "disenchantment," which he believed were inevitable due to the changes that individuals make in the middle and later years of their lives that are inconsistent with the expectations and needs of their spouses. According to Pineo (1961,1969), couples experience a greater degree of satisfaction with their relationships during the early years of marriage because there is a good fit between partners; however, as spouses enter into later stages of the life cycle, this fit begins to diminish.

It is important to note that Pineo's study can be criticized on the same grounds as the Blood and Wolfe study mentioned above. Couples involved in this research were only interviewed into the 25th year of their marriages, which implies that many of these couples still had children living in their homes. As with most couples in Blood and Wolfe's (1960) cross-sectional study, these couples had not entered into the later stages of the family life cycle, such as the postparental and retirement stages, where more recent studies have found high levels of marital satisfaction (Alford-Cooper, 1998; Gilford, 1984; Herman, 1994; Lauer et al., 1990; Mathis & Tanner, 1991; Weishaus & Field, 1988).

In an effort to overcome some of the limitations of previous studies which failed to include couples in later stages of the family life cycle, Swenson, Eskew, and Kohlhepp (1989) administered surveys to 448 spouses, all of which had entered into the postchildrearing stages. Of those who filled out questionnaires, 212 were retired and 236 were currently employed. Results from this study revealed that married persons in the retired, postchildrearing group expressed less love to each other than younger couples who had been married for shorter periods of time. This decline was found in every area of love expression, but was even more pronounced in the areas of self-disclosure, tolerance, and unexpressed feelings (Swenson et al., 1989). While expressions of love appeared to decline in this sample of older couples, the same study also found that older married couples reported significantly less marital problems than younger couples. In fact, significant differences were found in every problem area that was assessed (i.e., decision making, childrearing, relatives, health, money management, and expression of affection).

Although expressions of love occurred less frequently between spouses in the later stages of the life cycle, this does not necessarily imply that they are less satisfied with their relationships. This study did not ask respondents to indicate their degree of satisfaction with their relationships; therefore, it is entirely possible that older couples are less expressive in general, and yet extremely satisfied with their marriages. As the data

indicated, older couples reported fewer marital problems concerning the expression of affection than younger couples (Swenson et al., 1989).

While the above research lends minimal support to the argument that marital satisfaction declines in later stages of the life cycle, the majority of studies on marital quality throughout the family life cycle have discovered a curvilinear pattern (Ade-Ridder & Brubaker, 1983; Anderson, Russell, & Schuum, 1983; Glenn, 1990; Sporakowski & Axelson, 1989). Cross-sectional studies conducted during the 1960s and 70s (Burr, 1970; Rollins & Cannon, 1974; Spanier, Lewis, & Cole, 1975; Stinnett, Carter, & Montgomery, 1972) revealed a consistent pattern in which couples reported high levels of marital satisfaction during the early years of marriage, followed by a steady decline during the childbearing years, and a return to high levels during the postchildrearing years.

Burr (1970) investigated marital satisfaction in 116 couples varying in age and family life cycle stage. Instead of using a composite score of marital satisfaction, which combines satisfaction with multiple dimensions of the marital relationship, Burr measured marital satisfaction in six different areas (i.e., finances, social activities, household tasks, companionship, sexual interaction, and parent-child relationships). Overall, results support the curvilinear pattern of marital satisfaction across life cycle stages. Satisfaction was typically high during the first two stages (i.e., pre-child and young children), but dramatically declined during the third stage (i.e., school age). Contrary to the author's hypothesis that marital satisfaction would decrease in all six areas during the later stages of the life cycle, Burr found that satisfaction in most areas remained stable or increased in the final stages of the family life cycle. This finding was especially true for men, who reported increases in satisfaction in the areas of finances, task performance, and companionship (Burr, 1970).

In much larger samples, Rollins and Cannon (1974), Spanier, Lewis, and Cole (1975), and Anderson et al. (1983) found additional support for the notion of a curvilinear pattern of marital satisfaction over time. Rollins and Cannon's (1974) study looked at marital satisfaction among 800 married respondents using three separate measures of marital satisfaction. According to these authors, a shallow U-shaped trend of general marital satisfaction emerged from the data. However, as in Burr's (1970) study, Rollins and Cannon also conducted secondary analyses on the five separate dimensions of marital satisfaction used in Blood and Wolfe's (1960) survey (i.e., children, standard of living, understanding, love, and companionship). Results from these analyses revealed different patterns in marital satisfaction over time which were dependent upon the area that was assessed. For example, satisfaction with understanding, children, and love and affection declined at various stages throughout the life cycle; whereas, satisfaction with standard of living and companionship increased during the later stages. Based on these results, it is entirely possible that the factors which contribute to marital satisfaction in young couples are very different from the factors that contribute to marital satisfaction in older couples. For example, it may be that expressions of love and affection play an important role in the beginning stages of marriage; whereas, companionship takes on an increasingly important role as couples reach the later stages of the family life cycle.

Although earlier studies showed rather convincing support for the curvilinear pattern of marital satisfaction, researchers began acknowledging the limitations of using cross-sectional data to investigate changes in marital quality over time (Glenn, 1990; Sporakowski & Axelson, 1989). In order to overcome this limitation, Vaillant and Vaillant (1994) conducted a 40-year longitudinal study of 169 college men and their wives. Marital satisfaction in this study was assessed both prospectively and retrospectively. In order to assess marital satisfaction retrospectively, the researchers had participants complete a marital life chart, in which they rated their marriages from the age of 20 until the age of 60,

in seven 5-year increments. An examination of this data revealed a weak curvilinear pattern with the lowest point of marital satisfaction occurring at approximately 20 years. However, when marital satisfaction was assessed prospectively on eight separate occasions over a 40 year period using a simple marital adjustment scale, these researchers discovered that the U-shaped curve disappeared. In fact, marital satisfaction remained relatively stable throughout the middle and later years. Findings such as these by Vaillant and Vaillant (1994) have led some researchers to conclude that there is no systematic pattern of marital satisfaction that occurs over the family life cycle.

In summary, research on the developmental course of marriage has revealed a diverse mix of findings as it pertains to marital satisfaction. Some early studies support the pattern of continual decline, while other studies have found rather strong support for the curvilinear pattern of marital satisfaction over time. However, one of the major criticisms of the studies discussed thus far is that very few included couples in the later stages of the life cycle. Of the studies that did include older couples, only a few included sample sizes large enough to be representative of the larger population from which they were drawn. Due to factors such as the proliferation of the elderly in America, and increases in the average life span, research focused on marital quality throughout the life span must include couples in the later stages of life in order to present an accurate picture of the developmental course of marriage.

Gender Differences in Marital Satisfaction

Studies of marital satisfaction among couples (young and old) have revealed discrepancies between spouses, with husbands typically reporting greater satisfaction scores than wives (Alford-Cooper, 1998; Schumm, et al., 1998). Schumm et al. conducted a recent study of marital satisfaction among 1,320 dual military couples married an average of 4.8 years, and found that wives did report lower marital satisfaction scores than husbands (effect size = .14). These results are consistent with discrepancies found between older husbands and wives. Stinnett, Collins, and Montgomery (1970) studied marital need satisfaction among 227 older husbands and wives using a scale which assessed the extent of satisfaction that spouses derived from having needs fulfilled in a variety of areas related to marriage (e.g., security, affection, emotional closeness). Results from this investigation indicated that husbands in older marriages are much more inclined to report having their needs met than wives.

Sporakowski and Hughston (1978) found similar gender differences in their study of couples married 50 years or more. Based on scores from the Locke-Wallace Marital Adjustment Test (Locke & Wallace, 1959), it was discovered that husbands rated their marriages approximately 10 points higher on average than wives. In addition, the researchers had participants fill out the questionnaire as if they were responding for their spouses. Results from this analysis also indicated major gender differences between husbands and wives. Males consistently rated their spouses higher than females rated themselves, and females consistently rated their spouses higher than females rated themselves, indicating that both males and females perceived marriage to be more beneficial to men (Sporakowski & Hughston, 1978).

More recent studies of marital satisfaction in later life marriages (e.g., Alford-Cooper, 1998; Herman, 1994; Weishaus & Field, 1988) appear to corroborate the above findings. Of the 1,152 spouses surveyed in her study, Alford-Cooper (1998) found that husbands were significantly more likely to report being very happy; whereas, women were more likely to report being happy or somewhat happy with their marriages. While these differences are statistically significant, it is important to note that the largest differences are not between happy and unhappy rankings, but between very happy and happy rankings.

The vast majority of men and women in this study ranked their marriages as either being very happy (59.7% of men and 51.4% of women) or happy (39.4% of women and 35.1% of men). Only 9.2% of females and 5.2% of males reported their marriages as being somewhat happy to very unhappy (Alford-Cooper, 1998).

Quality of Alternatives

The concept of quality of alternatives, as defined earlier, refers to the rewards and costs of the best available alternative to the current relationship (Rusbult, 1980; Thibaut & Kelley, 1959). According to investment theory, spouses engage in a subjective process that involves comparing their current marital relationship with the quality of alternatives that are available outside of the relationship. When considering alternatives to a marital relationship, spouses are thought to take into account a number of possibilities (e.g., greater financial status, another intimate relationship, non-involvement). As with most exchange theories, investment theory predicts that perceptions of alternatives to the current relationship will have an effect on an individual's commitment level, and ultimately, the stability of the relationship. When an individual perceives alternatives to be more favorable than the current relationship, a decrease in commitment is predicted.

Most of the research involving the concept of quality of alternatives has centered around short-term intimate relationships (e.g., dating relationships and young married couples). In an initial test of the investment model among two samples of college students involved in romantic dating relationships, Rusbult (1980) found that a decrease in the quality of alternatives to the current relationship was associated with increased commitment. These results are consistent with other studies of couples involved in dating relationships. Rusbult (1983) conducted a longitudinal study of the investment model among 17 male and 17 female undergraduates involved in dating relationships. Results indicated that over time, commitment to the relationships increased when satisfaction and investments increased, and when alternatives to the relationship were perceived as less favorable. Removal of the alternative quality variable reduced the predictive ability of the model.

In the few studies that have included married respondents in the samples, quality of alternatives has still been found to be a significant predictor of relationship commitment and stability. In an effort to test the generalizability of the model, Rusbult et al. (1986) had participants fill out questionnaires which assessed all relevant variables, including quality of alternatives. Out of the 130 persons who completed the questionnaires, 74% were married. As with previous studies, quality of alternatives correlated significantly with relationship commitment. When the data were divided by relationship length and marital status, it was found that the relationship between quality of alternatives and commitment was stronger for dating couples and couples involved for less than 10 years than for married couples and couples involved in relationships over 10 years (Rusbult et al., 1986).

Based on the above studies, it is clear that perceptions of the quality of alternatives to the present relationship are related to commitment; however, little is known about how couples in long-term marriages compare to couples married for shorter durations on this variable. According to investment theory, couples develop more committed and stable relationships, at least in part, due to perceiving alternatives as less favorable to their existing relationships. In general, couples involved in long-term marriages have more stable marriages; therefore, they should also view alternatives as less appealing.

Theoretical Basis

The investment model is a theory of relationship development and deterioration that attempts to “predict degree of commitment to and satisfaction with a variety of forms of ongoing association (e.g., romantic, friendship, business) with wide ranges of duration and involvement” (Rusbult, 1980, p.173). Investment theory is rooted in the social exchange tradition, and therefore, shares a number of common assumptions with other social exchange models, particularly interdependence theory (Thibaut & Kelley, 1959). According to Sprecher (1998), most social exchange theories share three basic assumptions: 1) social behavior must be considered as a series of exchanges; 2) individuals attempt to maximize rewards and minimize costs in their relationships; and 3) social exchanges operate according to the norm of reciprocity (i.e., when individuals receive rewards, they feel obligated to reciprocate).

Interdependence theory (Kelley & Thibaut, 1978; Thibaut & Kelley, 1959), like other social exchange theories (e.g., Blau, 1964; Homans, 1961), places heavy emphasis on the role of rewards and costs in determining behavior. As stated earlier, rewards consist of the pleasures and gratifications enjoyed by a person. In the context of an intimate relationship, rewards serve as positive reinforcements for particular behaviors (e.g., remaining in a relationship). Costs, in contrast, are the “factors that operate to inhibit or deter the performance of a sequence of behavior” (Thibaut & Kelley, 1959, p.12). Interdependence theory assumes that individuals in relationships engage in those behaviors that will provide the greatest rewards. To a large extent, relationships are evaluated according to the balance between rewards and costs. If rewarding aspects of a relationship outweigh the costs, then a couple is likely to remain committed to the relationship. Conversely, if the costs outweigh the rewards, it is likely that commitment to the relationship will suffer.

What distinguishes interdependence theory from other social exchange theories, however, is the emphasis placed on relationship interdependence (Rusbult & Bunk, 1993; Sabatelli & Shehan, 1993). The theory goes beyond the simple notion that individuals only pursue those things that promote their self-interests. Broader considerations must also be taken into account, such as the needs of the partner and long-range goals for the relationship. Therefore, the unit of observation broadens from the individual to the relationship itself. In order to gain a better understanding of the quality of a relationship, the interaction between the partners must be considered.

Social exchange relationships, according to Thibaut and Kelley (1959), are characterized by differing levels of attraction and dependence. A relationship is deemed attractive to the degree that its outcomes exceed one’s expectations, or comparison level. The concept of comparison level (CL) is defined by Thibaut and Kelley (1959) as the “standard against which the member evaluates the attractiveness of the relationship or how satisfactory it is” (p.21). An individual’s CL is determined by a number of factors, including previous relationships, observations of others’ relationships, and the outcomes received by one’s partner. When outcomes (i.e., rewards - costs) in a relationship compare favorably to an individual’s CL, satisfaction with the relationship will tend to be high; however, if outcomes fall below the CL, relationship satisfaction will tend to be low (Rusbult & Buunk, 1993).

Dependency, another important concept in interdependence theory, is determined by comparing the outcomes received in one’s relationship with the quality of alternatives that are available outside of the relationship. Thibaut and Kelley (1959) describe comparison level of alternatives (CL-alt) as “the standard the member uses in deciding whether to remain in or to leave the relationship... CL-alt can be defined informally as the lowest level

of outcomes a member will accept in light of available alternative opportunities” (p. 21). In the context of marriage, alternatives may consist of another intimate relationship (i.e., one that is perceived as providing greater rewards), spending time with friends and family, or non-involvement. Interdependence theory allows for numerous patterns of satisfaction and dependency. For example, if the outcomes of a relationship exceed both CL and CL-alt, satisfaction and dependency are predicted to be high. If outcomes fall below CL and CL-alt, satisfaction and dependency are predicted to be low. Interdependence theory can also be used to explain why individuals remain in unsatisfactory and abusive relationships. For example, if outcomes fall below CL but exceed CL-alt, satisfaction will be low whereas dependence will be high (Rusbult & Buunk, 1993).

The investment model relies heavily upon Thibaut and Kelley’s (1959) interdependence theory, and retains each of the concepts discussed above (e.g., rewards, costs, comparison level, comparison level of alternatives). Similar to interdependence theory, Rusbult (1980, 1983) contends that individuals are motivated to maximize rewards and minimize costs in their relationships. As discussed in Thibaut and Kelley’s framework, investment theory predicts that individuals will be satisfied with and attracted to their relationships to the extent that outcomes (i.e., rewards - costs) exceed expectations (i.e., comparison level). Satisfaction with a relationship should be at its highest when rewards increase, costs decrease, and comparison level is low (Rusbult, 1980).

What distinguishes Rusbult’s investment model from interdependence theory is the introduction of the concept of investments, and the emphasis that is placed on commitment as the primary determinant of relationship stability. Rusbult argues that dependence on a relationship is “subjectively represented and experienced as feelings of commitment” (Rusbult & Buunk, 1993, p. 180). As stated earlier, commitment is defined in the model as the tendency to maintain a relationship and to feel psychologically attached to it. Involved in this definition are both personal and structural aspects of commitment, which Rusbult (1983) contends should co-vary (i.e., individuals who report intent to maintain a relationship should also be psychologically attached to it).

Following interdependence theory, the investment model assumes that commitment to a relationship will be greater when satisfaction is high and the quality of relationship alternatives are low. However, in the model, satisfaction level and the quality of alternatives are not the only two factors that influence commitment. As the title of the theory implies, investment size is another important predictor of relationship commitment (Rusbult, 1980, 1983; Rusbult & Buunk, 1993). Investments are defined by Rusbult (1980) as the resources linked to a particular relationship, and they are considered to be of two primary types (i.e., intrinsic and extrinsic). Intrinsic investments include such things as time, energy, self-disclosures, and money; whereas, extrinsic investments may consist of shared memories, mutual friends, shared possessions, and children. According to Rusbult and Buunk (1993), investments of either type tend to intensify commitment by increasing the costs of ending a relationship.

The investment model extends interdependence theory one step further by hypothesizing that commitment mediates the effects of satisfaction, investments, and quality of alternatives on relationship stability (Rusbult, 1980, 1983; Rusbult & Buunk, 1993). Whereas most exchange theories would argue for direct effects of satisfaction and quality of alternatives on relationship stability, the investment model assumes that the effects are indirect. Thus, decisions to remain in or exit a relationship are most directly influenced by an individual’s feelings of commitment. Rusbult and Buunk (1993) propose that commitment “shapes stable tendencies to engage in pro-relationship behaviors, even when such behaviors are costly or stand in opposition to direct self-interest” (p. 190). Examples of pro-relationship behaviors thought to emanate from increased commitment

include accommodative behavior during conflict, derogation of attractive and threatening alternative partners, and perceived relationship superiority (Rusbult & Buunk, 1993). If increased commitment does in fact lead to these pro-relationship patterns, then couples in long-term relationships should tend to be more proficient at dealing with conflict, should view alternatives to their relationship as less favorable, and should be more satisfied with their relationships compared to younger couples.

Empirical Research Involving the Investment Model

Satisfaction, Investments, and Quality of Alternatives as Predictors of Commitment

Empirical tests of the investment model have provided rather strong support for the assumption that satisfaction, investments, and quality of alternatives are significant predictors of relationship commitment (Bui, Peplau, & Hill, 1996; Rusbult, 1980, 1983; Rusbult et al., 1986; Yuan-Huei & Rusbult, 1995). In one of the earliest studies involving the investment model, Rusbult (1980) investigated the ability of the model to predict commitment among couples involved in dating relationships. As predicted, she discovered that rewards and costs were predictive of relationship satisfaction, and that satisfaction, investments, and quality of alternatives combined to predict relationship commitment.

In an early longitudinal test of the model among 24 individuals involved in dating relationships, Rusbult (1983) found that increases in rewards over time led to corresponding increases in satisfaction. However, unlike the previous study, costs associated with the relationship did not significantly affect relationship satisfaction. Commitment, as predicted, increased when satisfaction and investments increased, and when alternatives to the relationship decreased. Within this same study, Rusbult (1983) also examined the ability of the model to predict relationship stability, which was measured by stay/leave behavior. For those who remained in their relationships, rewards increased, costs rose slightly, satisfaction and investments grew, and quality of alternatives were perceived as less favorable. The individuals who ended their relationships experienced trends in the opposite direction (Rusbult, 1983).

More recent studies involving individuals in dating relationships have found additional support for Rusbult's investment model (Davis & Strube, 1993; Yuan-Huei & Rusbult, 1995). Satisfaction, investments, and quality of alternatives once again proved to be strong predictors of relationship commitment. While the model's assumptions have been continually confirmed with dating individuals, fewer studies have focused on married persons. In one of the rare investigations involving married individuals, Rusbult et al. (1986) tested the investment model with 130 individuals, 74% of which were married. Consistent with model predictions, reward level significantly correlated with relationship satisfaction; however, cost level was not strongly related to satisfaction. Also as predicted, satisfaction and investments were positively related to commitment; whereas, quality of alternatives correlated negatively. When the authors divided the results by duration of relationship, the total model was significant for individuals involved in relationships 10 years or more and less than 10 years (Rusbult et al., 1986).

Rationale and Research Questions

For over a half a century, researchers have attempted to gain a better understanding of why some marriages endure, while others do not. More recently, attention has been increasingly directed toward couples that have remained in enduring relationships; however, a careful look at the literature on marital relationships reveals that there is little empirical research involving couples married for 40, 50, or more years (Dickson, 1995; Sporakowski & Axelson, 1989). Given this fact, the central purpose of the present study

was to contribute to our understanding of marital quality across the life span by comparing couples in the early, middle, and later stages of marriage.

Similar to the categories established by Zietlow and VanLear (1991), couples were assigned to three groups based on length of marriage (i.e., short-term, intermediate-term, and long-term). In Zietlow and VanLear's research, each of the three marital length categories encompassed a very broad range of years, which were continuous from one group to the next (i.e., short-term = 1 to 12 years; intermediate = 13 to 39 years; long-term = 40 or more years). One possible problem with this categorization is that couples married 12 years are probably not very distinct from couples married 13 years, yet they are classified as being in different groups. The same could be said for couples married 39 years versus 40 years. A second problem that could result from the categorization scheme is that couples within each group could be very heterogeneous. For example, couples married 13 years may be very different from couples married 39 years. Couples married 13 years are probably more similar to the couples married 12 years, and yet they are placed in separate groups.

In order to overcome these two problems, a smaller cross-section of couples were selected from each of the three groups. Short-term couples consisted of those married between 4 and 6 years, intermediate-term couples consisted of those married 20 to 25 years, and long-term couples consisted of those married 45 years or more. Categorizing the three groups in this way increases the probability that there will be some degree of homogeneity within each group, but that each group will be very distinct from the others in terms of their current marital situations.

The investment model discussed in this chapter served as the theoretical basis for the present study. While the theory has been primarily used to study satisfaction and commitment processes in dating relationships, it can also serve as a valuable framework for understanding how couples develop satisfying and stable long-term marriages. The research questions that guided the present investigation are rooted in the concepts of investment theory and are identified below.

Similar to other social exchange models, investment theory is based on the premise that individuals seek to maximize rewards and minimize costs in their interactions with others. When rewarding aspects of a relationship outweigh the costs, satisfaction tends to be high; whereas, when costs outweigh rewards, satisfaction tends to be low. Two costs that have been found to be detrimental to marital satisfaction and stability include frequent conflict and an inability to resolve differences in a positive manner (Gottman, 1993, 1994). According to investment theory, highly committed and stable relationships develop when satisfaction and investment levels are high, and when quality of alternatives to a relationship are perceived as less favorable than the current relationship. In addition, Rusbult and Buunk (1993) propose that individuals who have a long-term orientation toward their relationships, such as long-term married couples, tend to engage in processes that facilitate the resolution of conflict. Therefore, the first two research questions deal with the frequency and resolution of conflict.

Research Question #1

Are there significant differences in the frequency of conflict between short-term, intermediate-term, and long-term couples?

Research Question #2

Are there significant differences in the conflict resolution strategies used by short-term, intermediate-term, and long-term couples?

Research on marital satisfaction across the family life cycle has produced mixed results over the past several decades. While a few early studies revealed a pattern of continual decline, the vast majority of studies on this issue seem to indicate that marital satisfaction follows a curvilinear path, with satisfaction being at its highest during the early and later stages of marriage (Anderson et al., 1983). However, due to the fact that most studies did not include an adequate number of long-term married couples in their analyses, researchers cannot be certain about this relationship. From an investment model perspective, satisfaction results from the balance between rewards and costs. As Rusbult and Buunk (1993) acknowledge, this balance does not always remain favorable to partners. For example, heavy costs, (e.g., role strain) often incurred during the childbearing years, may contribute to temporary declines in marital satisfaction for both husbands and wives.

Research Question #3

Are there significant differences in marital satisfaction between short-term, intermediate-term, and long-term couples?

According to investment theory, when alternatives to a relationship are perceived as being more attractive than one's current relationship, commitment and stability are compromised. The few studies that have addressed the concept of alternative relationship quality with married individuals support the notion that commitment increases when alternatives are considered less appealing (Rusbult et al., 1986). What is less clear, however, is whether couples in long-term marriages, compared to younger couples, perceive relationship alternatives as less favorable. Rusbult & Buunk (1993) contend that one of the consequences of relationship commitment is that individuals engage in a process by which they derogate attractive and threatening alternative partners. If couples in more committed and stable relationships, such as long-term married couples, engage in this process, then they should tend to view alternatives as less appealing compared to younger couples. Therefore, the fourth research question addresses the issue of perceptions of quality of alternatives across marital groups.

Research Question #4

Are there significant differences between short-term, intermediate-term, and long-term couples in terms of perceptions of the quality of alternatives to their marital relationships?

Studies conducted with both younger and older couples have revealed significant gender differences between husbands and wives, particularly in the area of marital satisfaction. Almost without exception, when gender differences are assessed, husbands report greater marital satisfaction scores than their wives (Schumm et al., 1998). However, it is important to understand that the differences are often minimal. As revealed in Alford-Cooper's (1998) study, the major differences in marital satisfaction between spouses married 50 years or more were between very happy and happy rankings, not happy and unhappy.

Researchers have also uncovered gender differences in the ways that spouses handle conflict. Carstensen et al. (1995) discovered that wives were clearly more emotionally

expressive than husbands in terms of both positive and negative emotions during discussions of a marital problem. Wives displayed greater negative affect (e.g., anger, contempt, sadness, whining) and positive affect (e.g., joy) than husbands; whereas, the only two areas in which husbands outscored wives were in manifestations of defensiveness and de-escalation. Carstensen et al. (1995) point out that these results are consistent with the growing body of research that has shown that “women tend to be more confronting and more affectively negative than men, who tend to be more defensive and more likely to try to escape from conflict” (p. 147).

However, there is also some evidence, from studies comparing older and younger couples, that gender differences in certain areas are less pronounced in older marriages. In their study of 156 married couples, Levenson et al. (1993) found that older couples exhibited fewer gender differences than middle-aged couples in terms of sources of pleasure and amounts of disagreement over money, religion, recreation and children. Therefore, the fifth research question centers around the issue of spousal differences.

Research Question #5

Are there significant differences between spouses on the measures of conflict frequency, conflict resolution, marital satisfaction, and quality of alternatives?

Due to the availability of data from both spouses, comparisons in this study focus on similarities and differences between partners. Schumm et al. (1998) contend that this is a more meaningful approach than simply comparing unrelated males and females in a given sample. As discussed above, studies of marital satisfaction frequently find that males report higher satisfaction scores than females; however, this may be due to the fact that researchers rarely compare scores from males and females who are spouses. It is possible that differences would diminish if comparisons were made between partners in an existing relationship.

CHAPTER 3: METHODOLOGY

Overview of the Research Design

The present investigation is based on secondary data derived from the National Survey of Families and Households (NSFH; Sweet, Bumpass, & Call, 1988). For the purpose of this study, the original NSFH sample was narrowed down to a select group of first-time married respondents. Couples meeting specific criteria were assigned to three distinct groups based on length of marriage (i.e., short-, intermediate-, and long-term). Five research questions focusing on differences in marital quality between these couples were addressed using a series of one-way ANOVAs and paired *t*-tests. Following is a detailed description of the methodology employed in this study.

Description of the National Survey of Families and Households 1988

The NSFH 1988 is a national survey developed under the direction of researchers from the University of Wisconsin's Center for Demography and Ecology (Sweet et al., 1988). Funding for this large-scale survey was provided by a grant from the National Institute of Child Health and Human Development. According to the project's coordinators, the primary goal of the survey was to investigate the causes and consequences of changes in American family and household structures. Unlike previous national surveys, the NSFH focuses almost exclusively on family issues; therefore, it provides researchers with a rich source of data that can be used to study a wide range of topics pertaining to families.

The NSFH 1988 is based on a cross-sectional probability sample of over 13,000 households, including an oversample of six household types: 1) African-American households; 2) Hispanic households; 3) households with children and one parent/guardian absent; 4) households with children who have a step parent; 5) households with children and both parents absent; and 6) households with couples married since January 1, 1982. Interviews for the first wave of data were conducted with primary, secondary, and tertiary respondents between March 1987 and May 1988. The survey contains 4,321 variables and 13,017 cases (Sweet et al., 1988). Response rates for the NSFH 1988 were 73.5% for the main sample and 76.8% for the oversample (Sweet et al., 1988).

The sampling procedure used in the NSFH 1988 can be broken down into five stages. In the first stage, researchers selected 100 U.S. counties/county groups based on 1985 population estimates. The initial counties/county groups that were selected are referred to as Primary Sampling Units (PSUs). In the second stage, subdistricts were selected from these PSUs, depending on the population size of the PSU. Subdistricts are referred to as Secondary Sampling Units (SSUs), and for the NSFH 1988, the total number selected was 1,700. In the third stage, one listing area (i.e., an area containing 45 or more households) was selected from each SSU. In the fourth stage, individuals known as "listers" were sent to each of the 1,700 subdistricts in order to create a list of all the addresses within that particular area. After this was accomplished, approximately 20 addresses from each of these areas were selected for inclusion in the sample. Half of those selected were randomly assigned to the main sample, while the other half were assigned to the oversample. In the fifth stage, interviewers screened each of the households, obtained a listing of all household members and randomly selected a primary respondent from the adult members of the household (Sweet et al., 1988).

Once the final sample was selected, in-person interviews were conducted with up to 3 respondents. Primary respondents were interviewed face-to-face, while self-administered

questionnaires were completed by secondary (e.g., spouse or cohabiting partner), and tertiary respondents (e.g., adult child, sibling) if available. Data obtained from these interviews has been made available to the public in several formats (e.g., mainframe tape format, CD-ROM for microcomputers, and file transfer protocol via the internet). The data set used in the present study was obtained from Sociometrics Corporation on a single CD-ROM, which contains the raw data, SPSS program statements, SAS program statements, and a user's guide (Sweet, Bumpass, & Call, 1992).

Participants

In order to obtain a sample consistent with the goals of the present study, it was necessary to establish certain criteria that would serve as a basis for inclusion. The following criteria were used to narrow down the sample: 1) participants had to be currently married; 2) participants' marriages had to fall within one of the three marital length intervals; 3) participants had to be in their first marriages; 4) primary and secondary respondents had to complete the self-report questionnaire regarding their current marriage; and 5) couples had to be involved in a heterosexual marriage. Couples meeting the above criteria qualified for inclusion in one of the three groups. Couples married 4-6 years were assigned to the short-term group. Couples married 20-25 years were assigned to the intermediate group. Finally, couples married 45 years or more were assigned to the long-term group.

Based on the above criteria, 1,069 couples qualified for inclusion in the present study (408 short-term; 306 intermediate-term; and 355 long-term). While each of these couples were classified as having completed the self-report questionnaires concerning their current marriages, not all spouses responded to every item of interest. If one or both spouses failed to complete all the relevant items (e.g., conflict frequency), they were excluded from that particular analysis. However, if the same spouses responded to other relevant items (e.g., marital satisfaction), they were included in the subsequent analysis. Therefore, for each particular dependent variable, the sample sizes vary. Table 1 contains a description of the demographic characteristics of the 1,069 couples, divided by marital length.

Procedure

The procedures used in the present study can be divided into four stages. The first stage involved obtaining a copy of the raw data derived from the NSFH 1988. The data are available to the general public in several formats; however, I purchased the data in CD-ROM format from Sociometrics Corporation. Contained on a single compact disc were the raw data files, SPSS program statements, SAS program statements, and a user's guide (Macintosh format). In order to access the data, two things were needed: 1) a personal computer with a CD-ROM drive, and 2) a statistical software program. For the purposes of the present study, SPSS was used. Contents of the CD were copied onto my hard drive. Next, a syntax window within SPSS was opened along with the file containing SPSS program statements required to create a working data file (i.e., a file containing raw data from respondents). Before running the program, several commands were edited so that it could be read in Macintosh format. Once this was accomplished, a working data file was created by running the program. The file was saved on my hard drive under the label, "NSFH DATA."

The second stage consisted of narrowing down the number of cases (over 13,000) to those eligible for inclusion in the final sample. A case consists of data from primary, secondary (if applicable), and tertiary respondents (if applicable). In order to obtain the sample for this study, SPSS edit commands were used to filter out cases that did not meet the established criteria. First, respondents who were not currently married were

Table 1. DEMOGRAPHIC CHARACTERISTICS OF SAMPLE

<u>Variable</u>	<u>Marital Group</u>		
	Short-Term (<u>n</u> = 408)	Intermediate-Term (<u>n</u> = 306)	Long-Term (<u>n</u> = 355)
Age			
Husbands			
<u>M</u>	29.1	45.6	73.8
<u>SD</u>	4.2	4.4	5.7
Wives			
<u>M</u>	27.4	43.3	71.1
<u>SD</u>	4.5	3.9	6.2
Income (median)	\$30,350	\$47,300	\$17,000
Children			
<u>M</u>	1.4	2.6	2.8
<u>SD</u>	1.0	1.5	2.1
Marital Length			
<u>M</u>	5.4	22.7	50.7
<u>SD</u>	0.8	1.8	5.0
Education (highest level)			
Husbands			
< H.S. Diploma	9.8%	21.3%	54.7%
H.S. Diploma	44.4%	34.4%	31.5%
Associate Degree	20.1%	12.5%	4.0%
Bachelor's Degree	17.2%	17.0%	5.4%
Master's Degree	5.9%	11.1%	1.7%
Doctorate Degree	2.7%	3.6%	2.6%
Wives			
< H.S. Diploma	8.9%	15.3%	44.9%
H.S. Diploma	50.7%	48.2%	40.3%
Associate Degree	18.5%	15.0%	7.4%
Bachelor's Degree	16.0%	14.0%	6.9%
Master's Degree	5.2%	7.0%	0.6%
Doctorate Degree	0.7%	0.7%	NA
Race (of couples)			
Black	8.8%	9.2%	6.8%
White	75.2%	81.0%	89.3%
Hispanic	3.9%	6.2%	2.8%
Other	1.7%	0.7%	NA
Interracial	10.3%	2.9%	1.1%

eliminated. Item M2CP01 asked primary respondents to indicate their marital status. M2CP01 = 1 indicates that the respondent was married at the time of the interview. Those responding otherwise were eliminated. Second, all respondents who had been married more than once were excluded from the sample. Item M95 asked primary respondents to identify how many times they had been married. Similarly, item S50 asked secondary respondents (i.e., spouses) to identify the number of times they had been married. If either of the spouses indicated that they had been married more than once, the couple was eliminated from the sample pool. Third, respondents who did not complete the spouse/partner questionnaire were also eliminated. Item MQUEST identified whether or not the primary respondent completed a self-report questionnaire and whether or not a secondary questionnaire was filled out by the spouse. MQUEST = 1 (Has SE-Secondary questionnaire only) and MQUEST = 3 (Tertiary and Secondary questionnaires) were the only cases retained. All others were eliminated.

Before reducing the sample any further, a variable describing the length of a couple's marriage in number of years was constructed. A single item indicating marital length was not available because respondents were interviewed at different times over a period of one year; however, marital length was calculated using several available items. During interviews, respondents were asked to give the month and year of several specific events (e.g., marriage, birthdate). The NSFH staff coded these dates in century months (i.e., the number of months since the turn of the century) using the following formula:

$$CM = 12 * (\text{last two digits of year}) + \text{month}$$

Months were coded according to the order in which they appear in the calendar year (e.g., January = 1, February = 2 ... December = 12). In order to construct a variable that described length of marriage (in years), the date of the interview was computed (i.e., month and year) in century months for each respondent. Item MMONTH provides the month in which the interview with a primary respondent took place. Item MYEAR provides the year of the interview (i.e., either 1987 or 1988). These two items were plugged into the formula for converting dates into century months. Next, item M96M was used to obtain the date (month and year coded in century months) of a couple's marriage. After this was accomplished, the following formula was used to come up with the marital length variable (MARLGTH):

$$\text{MARLGTH} = \text{interview date} - \text{marriage date} / 12$$

Once marital length was established, respondents who did not fall into one of the three marital length intervals were eliminated. The remaining respondents were assigned into three groups based on length of marriage (i.e., short-term couples = 1, intermediate couples = 2, long-term couples = 3).

In order to ensure that couples were involved in heterosexual marriages, a variable labeled, "HETERO" was created. This variable was constructed by averaging items M2DP01 (sex of primary respondent) and R2SEX (sex of secondary respondent). In each of these variables, males were coded as 1 and females were coded as 2. An average score of 1.5 on the HETERO variable indicated that the couple was involved in a heterosexual marriage. Couples who failed to score a 1.5 were eliminated from the final sample.

In the third stage, filter variables were created in conjunction with each dependent variable (i.e., conflict frequency, conflict resolution, marital satisfaction, and quality of alternatives), allowing me to filter out couples who failed to respond to items that would be used in the data analysis. For each variable of interest, if either spouse failed to give an answer, the couple was eliminated from the analysis. However, if both spouses responded to items pertaining to a subsequent variable, they were included in that particular analysis.

Finally, due to the availability of data from both spouses, in the fourth stage, husbands' and wives' scores were averaged for each dependent measure. Composite variables reflecting these couple scores were constructed. For example, items E701 and S67 were averaged to create an indicator of a husband and wife's level of marital satisfaction. The creation of these variables enabled me to compare actual couple scores during data analysis.

Instrumentation / Measurement

The NSFH 1988 asked participants to respond to a wide variety of demographic and family process variables; however, many of these were not relevant to the present study. With the exception of few items (e.g., demographics), the majority of variables that were assessed in the present study center around the quality of a couple's marital relationship. Most of the items pertaining to marital quality were included on self-report questionnaires which were identical for primary and secondary respondents. The variables of interest, and how they were measured in the present study are described below (see Appendix A for the exact items used in this study, and their response categories).

Marital Conflict

Marital conflict was defined as the frequency of open disagreements between spouses, and was measured with a 5-item scale. The following question was posed to respondents: "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?": 1) household tasks (items E706A & S72A); 2) money (items E706B & S72B); 3) spending time together (items E706C & S72C); 4) sex (items E706D & S72D); and 5) in-laws (items E706F & S72F). Respondents were asked to report the frequency of open disagreements in the above domains on a likert scale ranging from 1 (never) to 6 (almost every day).

When combined to form a single measure of marital conflict, this 5-item scale was shown to have adequate internal reliability. Out of the 1,069 couples qualifying for inclusion in this study, 809 couples completed the 5-item scale. Alpha reliability for husbands was .79, and .77 for wives. This scale, or a very similar version, has been widely used by other researchers (e.g., Acock & Demo, 1994; Blair, 1993; Brown & Booth, 1996; MacDonald & DeMaris, 1995; Voydanoff & Donnelly, 1999). Reliability coefficients computed by the above researchers are similar to those in the present study. For example, among a sample of 693 married couples, Blair (1993) computed alphas of .78 for husbands, and .76 for wives.

Conflict Resolution

Conflict resolution was defined as the strategies used by respondents to resolve marital disagreements. Respondents were asked the following question about the strategies they use to resolve conflict: "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...?" Spouses were then presented with the following response options: 1) just keep your opinions to yourself (items E707A & S73A); 2) discuss your disagreements calmly (items E707B & S73B); 3) argue heatedly or shout at each other (E707C & S73C); 4) end up hitting or throwing things at each other (E707D & S73D). Response categories ranged from 1 (never) to 5 (always). Instead of combining the items into a scale, each of the conflict strategies were treated separately when comparing marital groups.

Marital Satisfaction

Marital satisfaction was defined as a spouse's evaluation of the degree of happiness with his/her marital relationship, and was measured with a global item that asked respondents to rate their overall happiness on a 7-point scale. Item E701 in the primary respondent's self-enumerated questionnaire and item S67 in the spouse/partner questionnaire asked, "Taking things all together, how would you describe your marriage?" Response categories ranged from 1 (very unhappy) to 7 (very happy). This item is very similar to the marital happiness item used in Locke and Wallace's (1959) Marital Adjustment Test and Spanier's (1976) Dyadic Adjustment Scale.

Quality of Alternatives

Quality of alternatives refers to a spouse's perceptions of the quality of alternatives to his/her current relationship, and was measured with a 5-item scale. Respondents were asked the following question: "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?": 1) your standard of living (items E713A & S79A); 2) your social life (items E713B & S79B); 3) your career opportunities (items E713C & S79C); 4) your overall happiness (items E713D & S79D); and 5) your sex life (E713E & S79E). Response options ranged from 1 (much worse) to 5 (much better). When combined to form a single measure of quality of alternatives, this 5-item scale was shown to have good internal reliability. In the present study, 793 couples completed the 5-item scale. Alpha reliability was .84 for husbands, and .82 for wives. Other researchers have used the same scale with the addition of a sixth item (i.e., children) and have also found it to be reliable. Among a sample of 1,004 first-time married mothers, the alpha reliability coefficient was .83 (Acock and Demo, 1994).

Demographic Variables

The following demographic variables were included in this study for descriptive purposes: age, gender, income, number of children, marital length, education, and race. Age is a continuous variable that was measured with items M2BP01 (primary respondent) and S1M (secondary respondent). Primary respondents were asked to report their age (in years), while secondary respondents were asked to give their date of birth. The NSFH staff converted the birth dates of secondary respondents into century months; however, using items S1M, MMONTH, and MYEAR (i.e., the interview date), a variable that measured their ages in years was constructed.

Gender was measured with items M2DP01 (primary respondent) and R2SEX (secondary respondent), which simply asked respondents to indicate whether they were male = 1 or female = 2. Income was measured with item IHTOT2, which is a variable constructed by the NSFH staff representing the household's total income, including income of respondent and spouse from interest, dividends, and other investments. Number of children was measured with item E12NUM, a variable constructed by the NSFH staff based on primary respondents' listings of the first names of all of their children, including all of their spouse's children. This variable also reflects children who were no longer living at home during the time of the interviews. Marital length was constructed using interview and marriage dates. The resulting variable, "MARLGTH," measured the length of a couple's marriage in years.

Education, for both husbands and wives, was measured by asking respondents to indicate the highest level of education obtained during the time of the interviews. In order to construct a single variable measuring a respondent's highest educational level, it was

necessary to use multiple items. COMPLETED, a variable constructed by the NSFH staff, provided a single measure of the educational level of primary respondents; however, an identical measure was not completed by secondary respondents. Therefore, the following items were used to construct a variable that would reflect the highest level of education obtained by secondary respondents: S175, S176A1, S176B1, S176C1, S176D1, and S176E1. Each of these items asked secondary respondents to indicate whether or not they had completed a particular level of education (e.g., High School Diploma, Bachelor's Degree, Master's Degree). Using the above items, primary and secondary responses were coded into six categories: Less than High School Diploma, High School Diploma, Associate Degree, Bachelor's Degree, Master's Degree, and Doctorate Degree. The percentages of those receiving various levels of education, divided by marital group, can be found in Table 1.

Race was measured with items M484 (primary respondent) and S170 (secondary respondent), which asked, "Which of the groups on this card best describes you?" (1 Black; 2 White -not of Hispanic origin; 3 Mexican American, Chicano, or Mexicano; 4 Puerto Rican; 5 Cuban; 6 Other Hispanic; 7 American Indian; 8 Asian; or 9 other). I constructed a single variable from these two items by matching husbands' and wives' scores. For example, if a husband and wife both indicated that they were Black, the couple was classified as Black. When a husband and wife were of a different race, the couple was classified as "Interracial." The racial percentages, divided by marital group, are also reported in Table 1.

Data Analysis

Data generated from respondents were analyzed using a variety of statistical procedures. The central focus of the study was to compare couples varying in length of marriage along the dimensions of marital quality mentioned above. In order to take advantage of data from both spouses, husbands' and wives' scores were averaged for each dependent measure. The resulting variables were analyzed using one-way analyses of variance (ANOVA) with marital length as the between-subjects factor. Due to the problems associated with using unbalanced ANOVA designs, it was determined that balancing the designs would lead to more valid comparisons between marital groups. Therefore, for each dependent measure, frequencies were run on the number of couples within each marital group who were eligible for inclusion in a particular analysis. Based on these results, it was possible to determine which of the three groups had the lowest number of eligible couples. Next, an equal number of couples were randomly selected from each of the remaining marital groups. This process was repeated for each analysis. When significant differences were revealed between marital groups at the 0.05 level, post hoc pairwise comparisons were carried out using the Scheffe method to determine which groups differed significantly from each other on a given variable. According to Pedhazur and Schmelkin (1991), the Scheffe post hoc test is "the most versatile and the most conservative" of the post hoc comparison methods (p. 491).

In a second set of analyses, paired *t*-tests were used to test for gender differences between spouses on each of the dependent measures. Schumm et al.(1998) suggest using paired *t*-tests when data are available from both spouses because they allow for direct comparisons between husbands' and wives' scores. As with the previous analyses, the significance level was set at 0.05.

CHAPTER 4: RESULTS AND DISCUSSION

Overview of the Results

Data from short-term, intermediate-term, and long-term couples were analyzed using a one-way balanced ANOVA design with marital group serving as the independent variable. Unlike many large scale national surveys, the NSFH collected data from both spouses, making it possible to construct dependent variables that reflect average couple scores. The central focus of this investigation was to compare couples on four aspects of their relationships: conflict (frequency & resolution), marital satisfaction, and quality of alternatives. When significant differences were detected, Scheffe post hoc tests were used to determine which groups significantly differed from each other. In separate analyses, paired *t*-tests were used to test for significant differences between spouses on each of the dependent measures discussed above.

Overall, results indicate that long-term couples engage in less conflict, utilize different conflict resolution strategies, perceive alternatives to their relationships as less favorable, and are more satisfied with their marriages than younger couples. In addition, long-term spouses appear to be more congruent in their perceptions of their marriages than younger couples as indicated by the paired comparisons. Five research questions were posed in chapter 2. Findings pertaining to each of these questions will be presented and discussed in light of existing research and theory in the remainder of this chapter.

Conflict Frequency

Question 1 asked if there are significant differences between short-term, intermediate-term, and long-term couples in the amount of conflict that occurs in their relationships. The long-term group had the smallest number of eligible respondents at 189 couples; therefore, an equal number of couples were randomly selected from the other groups resulting in a balanced design. Examination of the results from the one-way ANOVA revealed significant differences between the marital groups, $F(2, 564) = 114.65, p < 0.0001$. Post hoc pairwise comparisons further revealed that all three groups significantly differed from each other in terms of conflict frequency. Mean conflict frequency scores generated from the 5-item scale are found in Table 2. As can be seen, long-term couples reported the least amount of conflict out of the three groups ($M = 6.32$), followed by intermediate-term ($M = 8.69$), and short-term couples ($M = 10.70$).

Table 2 also contains mean scores for each of the five sources of conflict measured in the scale. As indicated in the table, significant differences were found between the three groups on all five items, including household tasks, $F(2, 564) = 71.42, p < 0.0001$; money, $F(2, 564) = 88.26, p < 0.0001$; time together, $F(2, 564) = 30.43, p < 0.0001$; sex, $F(2, 564) = 54.45, p < 0.0001$; and in-laws, $F(2, 564) = 74.26, p < 0.0001$. In each of the five areas that were assessed, long-term couples reported the least amount of conflict, while short-term couples reported the most. Response categories for each item ranged from 1 (never) to 6 (almost every day). A score of 2 represented open disagreements between spouses less than once a month, while a score of 3 represented open disagreements several times a month. As can be seen in Table 2, average couple scores ranged from 1.05 to 2.38, with the majority falling between 1 (never) and 2 (less than once a month).

The above results, which clearly indicate that long-term couples engage in less conflict than younger couples, are consistent with the existing research on conflict in enduring relationships. Findings from the few studies that have been conducted suggest that in older

Table 2. MEAN CONFLICT FREQUENCY SCORES OF SHORT-TERM, INTERMEDIATE-TERM, AND LONG-TERM COUPLES

<u>Variable</u>	<u>Marital Group</u>					
	<u>Short-Term</u>		<u>Intermed-Term</u>		<u>Long-Term</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Conflict Frequency (5-item scale)	10.70 ^c	3.64	8.69 ^b	2.63	6.32 ^a	1.90
Argue about household tasks (1) never to (6) daily	2.38 ^c	0.93	1.85 ^b	0.81	1.38 ^a	0.65
Argue about money (1) never to (6) daily	2.33 ^c	1.04	1.95 ^b	0.79	1.26 ^a	0.45
Argue about time together (1) never to (6) daily	2.21 ^c	1.02	1.92 ^b	0.92	1.44 ^a	0.96
Argue about sex (1) never to (6) daily	1.98 ^c	0.96	1.63 ^b	0.71	1.19 ^a	0.44
Argue about in-laws (1) never to (6) daily	1.81 ^c	0.86	1.34 ^b	0.56	1.05 ^a	0.23

Note. N = 567 (189 couples per group). Husbands' and wives' scores are averaged. Means with different lowercase superscripts differ at $p < 0.05$ by the Scheffe \dagger tests.

marriages there is a reduced potential for conflict, and a reduction in the amount of negativity that is expressed between partners (Gilford & Bengston, 1979; Levenson et al., 1993; Swenson, 1989). Swenson (1989) compared retired and preretired couples on the number of marital problems present in their relationships, and discovered that retired couples reported a significantly lower number of problems in all areas that were assessed. This finding was also replicated in one aspect of a study conducted by Levenson et al. (1993), which compared long-term couples with middle-aged couples on the amount of disagreement in 10 areas of their marriages. Couples in long-term relationships scored lower on all 10 areas, with significant differences occurring in the areas of money, religion, recreation, and children.

The trends observed in the current investigation regarding conflict frequency are also consistent with concepts derived from investment theory, and can be readily interpreted within this framework. Investment theory is built on the assumption that couples attempt to maximize rewards, while minimizing costs in their relationships. It naturally follows that regardless of length of marriage, couples will try to minimize relationship conflict; however, this may be especially true for long-term couples who have invested a great deal of time, energy, and resources into their relationships. Compared to younger couples, the costs of conflict are potentially greater for long-term couples if conflict increases to the extent that it threatens the stability of the relationship.

Rusbult and Buunk (1993) further contend that as commitment to a relationship increases (based on investment size, satisfaction level, and quality of alternatives), couples tend to engage in pro-relationship behaviors, such as accommodative behavior during conflict. If commitment to a relationship increases with time, it is likely that couples who remain together in long-term relationships will be more proficient at dealing with conflict. Couples married for 40 or 50 years have had ample time to get to know each other and are well aware of the issues that bring about the most conflict. Therefore, issues that may have created a problem for a couple during the early stages of their relationship may be resolved rather easily in the later years. It is also entirely possible that after many years together, spouses simply learn to accept their differences, thus reducing the amount of conflict in their relationships (Alford-Cooper, 1998; Carstensen et al., 1996).

Rankings of the five conflict items revealed differences between the groups in 3 of the 5 areas, including household tasks, money, and time together. The top three areas of conflict for short-term couples were household tasks, money, and time together. For intermediate-term couples, money, time together, and household tasks ranked as the top three. In contrast, the top three areas of conflict for long-term couples were time together, household tasks, and money. Conflict over sex and in-laws ranked fourth and fifth for all three groups.

The fact that couples at different points in their relationships identified certain problems as being more salient than others makes intuitive sense and is supported by previous research. For example, couples married 4 to 6 years reported that household tasks created the most conflict in their relationships. Considering these couples have only been married for a short period of time, it is possible that they are still trying to negotiate a system of responsibilities around the home (Carter & McGoldrick, 1989). For couples married 20 to 25 years, money was reported as being the greatest source of conflict. This may be somewhat surprising considering this group reported the highest source of income (see Table 1); however, it is very likely that these couples have more children living at home as well as more children attending college, two factors that increase the financial strain on couples. Levenson et al. (1993) found that couples in their 40s and 50s (a similar age range to those in the intermediate-term group) also ranked children and money as the top sources of conflict in their marriages.

The finding that long-term couples reported time together as being the greatest source of conflict is partially supported by research with older couples. The average age for both husbands and wives in the long-term group is over 70 years; therefore, many of these couples have retired from their jobs. Most couples who have entered into the retirement stage tend to have much more time available to spend with one another, which can be perceived by spouses both positively and negatively. Many studies have found that retirement is a positive experience for couples, providing increased companionship (Alford-Cooper, 1998; Hill & Dorfman, 1982; Stinnett et al., 1972); however, researchers have also found that retirement can bring about greater financial difficulties, boredom on the part of husbands, and too much togetherness (Hill & Dorfman, 1982).

The finding that all three couple groups reported very minimal conflict over sex and in-laws somewhat contradicts previous research that has found these to be major sources of contention between couples (Cunningham, Braiker, & Kelley, 1992; Geiss & O'Leary, 1981). However, these two issues are rarely mentioned by couples as creating the most conflict in their relationships. According to Lauer and Lauer (1994), money, children, and communication typically precede other sources of conflict when ranked by couples. In their study comparing older and middle-aged couples, Levenson et al. (1993) found that both couple groups ranked sex and in-laws behind children, money, communication, and recreation. Similarly, couples in the present study reported that money, household tasks, and time together were more frequent sources of conflict than sex and in-laws.

Conflict Resolution

Question 2 asked if there are significant differences in the conflict resolution strategies used by short-term, intermediate-term, and long-term couples. Couples were compared on the frequency with which they use the following strategies in dealing with conflict: keep opinions to self, discuss disagreements calmly, argue heatedly or shout, and end up hitting or throwing things. Separate one-way ANOVAs were run for each item. Sample sizes for each comparison varied depending upon the number of eligible respondents in each marital group. In each comparison, the long-term group yielded the lowest number of eligible respondents; therefore, an equal number of respondents were randomly selected from the other two groups.

Table 3 contains the mean scores reported by short-term, intermediate-term, and long-term couples. As can be seen, significant differences emerged on several of the items. With regard to the first strategy, ANOVA results indicated a significant difference between groups, $F(2, 717) = 7.88, p < 0.001$. Post hoc tests revealed that long-term couples were significantly more likely than short-term couples to keep their opinions to themselves during conflictual situations. Significant differences were not found between intermediate-term couples and the other two groups. Response categories for the first item ranged from 1 (never) to 5 (always); however, all three group means fell between 2 (seldom) and 3 (sometimes).

When compared on the second item (i.e., the tendency to discuss disagreements calmly), the ANOVA results were not significant. All three group means were between 3 (sometimes) and 4 (very often). One-way ANOVA results on the third item were significant, $F(2, 726) = 20.47, p < 0.0001$. As presented in Table 3, all three groups differed significantly from one another. Long-term couples were less likely than the other two groups to argue heatedly or shout at each other when engaged in conflict ($M = 1.67$), followed by intermediate-term ($M = 2.02$), and short-term couples ($M = 2.25$). While the differences between groups were statistically significant, the group means indicate that none were very likely to argue heatedly or shout at each other during conflict.

Table 3. COMPARISONS OF CONFLICT RESOLUTION STRATEGIES USED BY SHORT-TERM, INTERMEDIATE-TERM, AND LONG-TERM COUPLES

<u>Conflict Strategy</u>	<u>Marital Group</u>					
	<u>Short-Term</u>		<u>Intermed-Term</u>		<u>Long-Term</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Keep opinions to self (1) never to (5) always*	2.42 ^a	0.77	2.58 ^{ab}	0.81	2.73 ^b	0.93
Discuss disagreements calmly (1) never to (5) always**	3.29 ^a	0.75	3.37 ^a	0.73	3.42 ^a	0.96
Argue heatedly or shout (1) never to (5) always***	2.25 ^c	0.76	2.02 ^b	0.73	1.67 ^a	0.76
End up hitting or throwing things (1) never to (5) always****	1.16 ^b	0.39	1.07 ^a	0.29	1.02 ^a	0.17

Note. Sample sizes vary for each conflict resolution strategy. * N of 720 (240 couples per group). ** N of 795 (265 couples per group). *** N of 729 (243 couples per group). **** N of 726 (242 couples per group). Husbands' and wives' scores are averaged. Means with different lowercase superscripts differ at $p < 0.05$ by the Scheffe \bar{t} tests.

Comparisons on the fourth item (i.e., hitting or throwing things at each other) also revealed significant differences, $F(2, 723) = 12.00, p < 0.0001$. Findings from post hoc tests show that long-term ($M = 1.02$) and intermediate-term couples ($M = 1.07$) were significantly less likely to hit or throw things at their spouses than short-term couples ($M = 1.16$). As with the previous item, all three group means were very close to 1, indicating that the couples included in this analysis reported almost never hitting or throwing things at each other when engaged in conflict. The tendency for couples in this sample to seemingly underreport negative behaviors during conflict may be partially attributed to social desirability bias. Other researchers (e.g., Gottman, 1994) have found that couples can be happily married and still engage in heated exchanges during conflict.

Overall, the results indicate that the two older groups, particularly long-term couples, are less likely to use emotionally volatile strategies when engaged in conflict. Long-term couples were more likely than intermediate-term and short-term couples to keep their opinions to themselves. These same couples were also less likely than intermediate-term and short-term couples to argue heatedly or shout at each other during disagreements. Despite the fact that none of the three couple groups were very likely to hit or throw things at each other during conflict, long-term and intermediate-term couples were less likely than short-term couples to resort to this behavior.

Although very few studies have examined the issue of conflict resolution among long-term couples, there is empirical evidence suggesting that older couples are less emotionally negative compared to younger couples when dealing with disagreements in their relationships. Carstensen et al. (1995) conducted a study comparing older couples with middle-aged couples and discovered that older couples displayed lower levels of anger, disgust, belligerence, and whining during discussions of a problem area in their marriages. Carstensen et al. interpreted their results by suggesting that as spouses age, they tend to engage in behaviors that promote emotional closeness between them and their partners. These positive behaviors stand in contrast to the distancing feelings generated from frequent conflict that is characterized by a high degree of negativity (Gottman, 1993).

As previously stated, one of the underlying premises of investment theory is that couples try to maximize positive experiences, while minimizing those that have negative consequences. In addition, it is also thought that couples who have a long-term orientation toward their relationships, such as those in the long-term group, will tend to engage in behaviors that facilitate the resolution of conflict (e.g., compromising, acknowledging the other's viewpoint, ignoring negative behavior). Although all three groups reported that they frequently discuss their disagreements in a calm manner, long-term couples were significantly more likely than younger couples to avoid heated exchanges, which tend to escalate conflict.

Marital Satisfaction

Question 3 asked if there are significant differences in marital satisfaction between short-term, intermediate-term, and long-term couples. In this comparison, the intermediate-term group yielded the lowest number of eligible respondents at 286; therefore, an equal number of respondents were randomly selected from the other two groups. Examination of the results from the one-way ANOVA revealed significant differences between the marital groups, $F(2, 855) = 16.11, p < 0.0001$. Post hoc pairwise comparisons further revealed that long-term couples significantly differed from short-term and intermediate-term couples on the global marital satisfaction item, which ranged from 1 (very unhappy) to 7 (very happy). Mean satisfaction scores are located in Table 4. As can be seen, long-term couples ($M = 6.42$) reported being more satisfied with their marriages

Table 4. MEAN MARITAL SATISFACTION SCORES OF SHORT-TERM, INTERMEDIATE-TERM, AND LONG-TERM COUPLES

<u>Variable</u>	<u>Marital Group</u>					
	<u>Short-Term</u>		<u>Intermed-Term</u>		<u>Long-Term</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Marital satisfaction (1) very unhappy to (7) very happy	6.06 ^a	0.91	6.00 ^a	1.02	6.42 ^b	0.92

Note. N = 858 (286 couples per group). Husbands' and wives' scores are averaged. Means with different lowercase superscripts differ at $p < .05$ by the Scheffe t tests.

than short-term ($M = 6.06$) and intermediate-term couples ($M = 6.00$). Short-term and intermediate-term couples did not significantly differ from one another on this measure.

It is important to note that, while statistically significant differences emerged between long-term couples and the other two groups, group means indicate that all three groups are happy to very happy with their marriages. Results from a frequency distribution of scores from the entire sample (husbands' and wives' scores averaged) revealed that 74.4% of couples fell within the 6 to 7 range on the scale. Seventy-one percent of short-term couples (20.4% = 6.0; 25.9% = 6.5; 24.8% = 7.0), 69.9% of intermediate-term couples (19.2% = 6.0; 23.4% = 6.5; 27.3% = 7.0), and 82.1% of long-term couples (8.7% = 6.0; 16.4% = 6.5; 57% = 7.0) indicated that they were happy to very happy with their marriages. One possible explanation for these high scores is that couples responded in what they perceived to be a socially desirable manner. The high percentage of couples reporting satisfying marriages in this line of research has prompted some researchers to suggest that self-report measures of marital satisfaction are contaminated with social desirability bias (Edmonds, 1967; L'Abate & Bagarozzi, 1993). In the NSFH, social desirability scales were not included; therefore, it is difficult to draw conclusions on this issue. While the percentage of satisfied couples appears to be rather high, there was variation between groups.

The finding that long-term couples are more satisfied with their marriages than intermediate-term and short-term couples is not surprising considering the fact that several recent studies of long-term couples have found that they tend to be very satisfied with their marriages (Alford-Cooper, 1998; Herman, 1994; Lauer et al., 1990; Mathis & Tanner, 1991). The results, however, are not consistent with early studies that found a continuous decline in marital satisfaction over time (Pineo, 1961, 1969). Nor are they consistent with the U-shaped pattern of satisfaction that has been found in several studies (Anderson et al., 1983; Glenn, 1990).

As discussed in chapter 2, there is some evidence indicating that couples with children (especially adolescent children) experience a decline in marital satisfaction that eventually returns to higher levels after the children leave home. However, in the present study, all three groups reported that they were happy to very happy with their marriages. From a family life cycle perspective, the intermediate-term group falls into the category of families with adolescents, yet their satisfaction levels were not significantly different from the short-term group.

Although all three groups indicated that they were satisfied with their marriages, long-term couples scored nearly a half a point higher on the global item used to measure marital satisfaction. This is a sizable difference considering the response categories only ranged from 1 (very unhappy) to 7 (very happy). The fact that long-term couples reported higher levels of marital satisfaction than younger couples can be explained using investment model concepts. By virtue of being together for a minimum of 45 years, it can be assumed that these couples have invested a tremendous amount of time, emotional energy, and resources into their relationships. The costs of ending such a relationship are much greater for these couples than for younger couples. Therefore, it is to their benefit to remain in the relationship, while maximizing the positive experiences associated with it. In addition, these couples have proven that they have a high level of commitment to their marriages. High levels of commitment and stability, in turn, reinforce pro-relationship behaviors that increase satisfaction with the relationship.

The fact that long-term couples reported higher marital satisfaction scores than intermediate-term and short-term couples makes sense when considering the possible role of commitment in increasing relationship satisfaction. However, there is an apparent

problem when one considers that intermediate-term and short-term couples did not significantly differ on this measure. If commitment and stability increase with time, then couples married 20 to 25 years should report higher satisfaction scores than couples married 4 to 6 years. Yet this apparent contradiction may be explained by considering the concept of investments.

Investments are defined in this study as the number and magnitude of resources linked to a particular relationship. Examples of investments include time, energy, self-disclosures, shared memories, length of a relationship, children, and shared possessions. Over the course of a relationship investment size typically increases, yet investments are not always focused on the relationship itself. In the initial years of a marriage, couples invest a great deal of time and emotional energy into building a strong marital dyad; however, during the middle years investments are often redirected from the spouse to other sources, such as children and jobs. Therefore, even if commitment to the marriage does not decrease, less time and energy is available to do the things that promote increased marital satisfaction.

Quality of Alternatives

Question 4 asked if there are significant differences between short-term, intermediate-term, and long-term couples in terms of perceptions of the quality of alternatives to their current marital relationships. Couples were asked to respond to the following scenario: “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?” Areas assessed included standard of living, social life, career opportunities, overall happiness, and sex life. Response categories ranged from 1 (much worse) to 5 (much better). The long-term group had the smallest number of eligible couples at 179; therefore, an equal number of couples were selected from the remaining two groups.

Results from the one-way ANOVA indicated significant differences between the marital groups, $F(2, 534) = 23.44, p < 0.0001$. Post hoc tests further revealed that all three groups significantly differed from each other on the 5-item quality of alternatives scale. Mean scores generated from this scale are found in Table 5. As indicated in the table, long-term couples ($M = 10.25$) perceived the quality of alternatives to their current marital relationship as less favorable than intermediate-term ($M = 11.28$), and short-term couples ($M = 12.34$).

Table 5 also contains mean scores for each of the five areas assessed in the quality of alternatives scale. As can be seen, significant differences were found between the three groups on 3 of the 5 items, including standard of living, $F(2, 534) = 26.68, p < 0.0001$; social life, $F(2, 534) = 46.41, p < 0.0001$; and career opportunities, $F(2, 534) = 56.99, p < 0.0001$. Long-term couples were more likely to view the quality of alternatives in these three areas as being less favorable than their current relationships, followed by intermediate-term, and short-term couples. As evidenced by the group means, most couples' scores fell between 2 (worse) and 3 (same). On the final two items (i.e., overall happiness and sex life), none of the couple groups significantly differed from each other. In fact, regardless of the length of the marriage, couples tended to perceive alternatives in these areas as worse to much worse than their current relationships.

The above findings can be interpreted using investment theory concepts. Rusbult and Buunk (1993) argue that increased commitment leads to the process of derogating relationship alternatives. Comparisons of the different couple groups indicated that long-term couples (i.e., those who tend to be in more committed relationships) perceived the

Table 5. MEAN SCORES ON PERCEPTIONS OF QUALITY OF ALTERNATIVES TO CURRENT MARITAL RELATIONSHIPS BY MARITAL GROUP

<u>Variable</u>	<u>Marital Group</u>					
	<u>Short-Term</u>		<u>Intermed-Term</u>		<u>Long-Term</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Quality of Alternatives (5-item scale)	12.34 ^c	2.76	11.28 ^b	2.68	10.25 ^a	3.22
Standard of living (1) much worse to (5) much better	2.46 ^c	0.69	2.17 ^b	0.60	1.95 ^a	0.69
Social life (1) much worse to (5) much better	2.85 ^c	0.74	2.45 ^b	0.73	2.10 ^a	0.74
Career opportunities (1) much worse to (5) much better	3.04 ^c	0.60	2.81 ^b	0.53	2.10 ^a	0.74
Overall happiness (1) much worse to (5) much better	1.92 ^a	0.76	1.89 ^a	0.74	1.82 ^a	0.76
Sex life (1) much worse to (5) much better	2.08 ^a	0.79	1.97 ^a	0.78	2.04 ^a	0.79

Note. N = 537 (179 couples per group). Husbands' and wives' scores are averaged. Means with different lowercase superscripts differ at $p < .05$ by the Scheffe t tests.

quality of alternatives to their current relationships as less favorable than younger couples. While the concept of derogating alternatives was not formally assessed in the NSFH survey, the data are consistent with this assumption.

Results also reinforce the idea that for long-term couples, the costs of exiting a relationship are greater than for younger couples. It can be assumed that couples married for over four decades have invested a tremendous amount of time, energy, and resources into a relationship. Therefore, in order for an alternative relationship to be perceived as superior, problems of a serious nature would have to exist within the current relationship, or the partner(s) would have to perceive alternatives as being able to provide a reward-cost ratio that far exceeds the reward-cost ratio of the existing relationship. Although all three couples groups perceived relationship alternatives as less favorable than what they already have, long-term couples indicated that alternatives were worse than both intermediate-term and short-term couples, and intermediate-term couples indicated that alternatives were worse than short-term couples.

Husband and Wife Comparisons

Question 5 asked if there are significant differences between spouses on the conflict (frequency & resolution), marital satisfaction, and quality of alternatives measures assessed in the study. In order to answer this question, husbands' and wives' scores in each of the marital groups were compared using paired *t*-tests (see Table 6 for means and significance levels). As can be seen, short-term spouses significantly differed on 2 of the 4 areas (conflict resolution and quality of alternatives). With regard to conflict resolution, husbands in short-term marriages were more likely than their wives to report keeping their opinions to themselves, $t(382) = 3.22$, $p < .01$, and discussing disagreements calmly, $t(379) = 2.65$, $p < .01$. The second area in which short-term spouses significantly differed was in perceptions of the quality of alternatives. On this measure, husbands perceived the quality of alternatives to their current relationship as more favorable than their wives, $t(361) = 7.10$, $p < .001$.

Comparisons between spouses in intermediate-term marriages revealed significant differences in 3 out of 4 areas (conflict frequency, conflict resolution, and quality of alternatives). On the conflict frequency measure, husbands reported a greater frequency of conflict in their relationships than their wives, $t(248) = 2.14$, $p < .05$. Similar to short-term couples, in the area of conflict resolution intermediate-term husbands were more likely to report keeping their opinions to themselves during conflictual situations, $t(273) = 2.75$, $p < .01$, whereas wives were more likely to report arguing heatedly or shouting, $t(275) = 2.44$, $p < .05$. In the area of quality of alternatives, intermediate-term husbands perceived the quality of alternatives to their current relationship as more favorable than their wives, $t(251) = 5.08$, $p < .001$, a pattern also observed between short-term couples.

Results from long-term spouses revealed a high level of agreement in 3 of the 4 areas. The only significant difference between husbands and wives in long-term marriages occurred in the area of quality of alternatives. In contrast to the pattern observed in short-term and intermediate-term marriages, wives in long-term marriages perceived the quality of alternatives to their current relationships as more favorable than their husbands, $t(178) = 2.30$, $p < .05$.

Findings from the conflict comparisons between spouses in short-term and intermediate-term relationships are consistent with the growing body of research that has found differences between men and women in the ways in which they handle conflict (Carstensen et al., 1995; Christensen & Heavey, 1990; Gottman & Levensen, 1992). The above researchers have found that "women tend to be more confronting and more

Table 6. PAIRED COMPARISONS BETWEEN HUSBANDS AND WIVES IN SHORT-TERM, INTERMEDIATE-TERM, AND LONG-TERM MARRIAGES

Variable	Marital Group					
	Short-Term		Intermediate Term		Long-Term	
	Husb	Wife	Husb	Wife	Husb	Wife
Conflict Frequency (5-item scale)	10.66 (371)	10.44	9.04* (249)	8.55*	6.22 (189)	6.42
Conflict Resolution						
Keep opinions to self	2.57** (383)	2.35**	2.66** (274)	2.43**	2.70 (240)	2.75
Discuss calmly	3.37** (380)	3.22**	3.34 (276)	3.39	3.43 (265)	3.41
Argue heatedly/shout	2.23 (385)	2.32	1.95* (276)	2.10*	1.64 (243)	1.70
Hit or throw things	1.13 (383)	1.16	1.06 (273)	1.08	1.02 (242)	1.02
Marital Satisfaction	6.03 (393)	6.09	5.95 (286)	6.04	6.41 (329)	6.37
Quality of Alternatives (5-item scale)	13.05*** (362)	11.57***	11.90*** (252)	10.75***	9.87* (179)	10.62*

Note. Figures in parentheses represent number of paired comparisons.
 * p < .05. ** p < .01. *** p < .001.

affectively negative than men, who tend to be more defensive and more likely to try to escape from conflict” (Carstensen et al., 1995, p. 147). In a study of emotional behavior in long-term marriages, Carstensen et al. discovered that wives were clearly more emotionally expressive than husbands in terms of both positive and negative emotions. During discussions of a marital problem, wives displayed greater negative affect (e.g., anger, contempt, sadness, whining) and positive affect (e.g., joy) than husbands; whereas, the only two areas in which husbands outscored wives were in manifestations of defensiveness and de-escalation. These findings are similar to those generated from the present study, which found that husbands in short-term and intermediate-term marriages were more likely than their wives to keep their opinions to themselves during serious disagreements. Wives were also more likely in intermediate-term relationships to argue heatedly or shout during conflictual situations.

Results from the long-term couple comparisons did not reveal similar gender differences in conflict frequency or conflict resolution; however, this is consistent with research that has found that gender differences in certain areas are less pronounced in older marriages. In their study of 156 married couples, Levenson et al. (1993) found that older couples exhibited fewer gender differences than middle-aged couples in terms of sources of pleasure and amounts of disagreement over money, religion, recreation and children. Based on the similarities in scores between spouses in long-term marriages, it appears that their perceptions of their relationships are very congruent.

The finding that spouses did not significantly differ on the global marital satisfaction item in any of the three groups contradicts previous research that has discovered differences between men and women in their levels of reported satisfaction (Alford-Cooper, 1998; Schuum et al., 1998; Stinnett et al., 1970; Sporakowski & Hughston, 1978). A common finding has been that men report being more satisfied with their marriages than women; however, it is important to note that the discrepancies are typically between degrees of satisfaction, rather than dissatisfaction. For example, out of the 1,152 spouses surveyed in her study, Alford-Cooper (1998) found that the vast majority of men and women ranked their marriages as either being very happy (59.7% of men and 51.4% of women) or happy (39.4% of women and 35.1% of men). Only 9.2% of females and 5.2% of males reported their marriages as being somewhat happy to very unhappy (Alford-Cooper, 1998). Mean scores generated from spouses on the global satisfaction item used in the present study indicate that both husbands and wives are happy to very happy with their marriages.

Finally, when compared on the quality of alternatives scale, spouses in all three marital groups significantly differed from one another. Very little, if any, research has compared couples married for various lengths of time on the concept of quality of alternatives; therefore, it is difficult to place these findings in perspective. It is interesting that husbands in the short-term and intermediate-term groups were significantly more likely to perceive alternatives to their relationships as being more favorable than their wives perceived; whereas, the trend is reversed for long-term spouses. One possible explanation for the reversal in perceptions is that couples in long-term marriages often have to deal with the issue of declining health (Alford-Cooper, 1998; Sporakowski & Axelson, 1989; Wickrama, Lorenz, Conger, & Elder, 1997). In many cases, wives become caregivers for their husbands who are unable to physically accomplish the mundane tasks of life. The difficult and time consuming nature of this responsibility can impact nearly every aspect of life (e.g., standard of living, social life, sex life, overall happiness), possibly making alternatives more appealing for wives than husbands.

CHAPTER 5: SUMMARY, LIMITATIONS, AND RECOMMENDATIONS

Summary

The central focus of this research was to compare couples at different points in the marital life cycle. While prior comparisons have been made between younger and older couples, researchers have rarely included couples in the later stages of marriage (i.e., couples married 40 years or more), thus excluding one of the fastest growing segments of the United States population (U.S. Bureau of the Census, 1996b). Due to the availability of data from a large number of couples spanning the marital life cycle, the National Survey of Families and Households was selected to provide the sample for the present investigation. Couples meeting specific criteria were assigned to three distinct groups: short-term (4-6 years), intermediate-term (20-25 years), and long-term (45 or more years). The resulting sample consisted of 1,069 first-time married couples.

Guided by previous empirical research and concepts derived from investment theory (Rusbult, 1983; Rusbult & Buunk, 1993), couples were compared with regard to four specific aspects of their relationships: conflict frequency, conflict resolution, satisfaction, and perceptions of the quality of alternatives to their current marriages. Data generated from spouses' averaged scores were analyzed using a series of one-way ANOVAs and paired *t*-tests. Results from this sample of respondents clearly revealed that long-term couples engaged in less conflict, utilized different conflict resolution strategies, were more satisfied with their marriages, and perceived alternatives to their relationships as less favorable than younger couples. In addition, when husbands' and wives' scores on the above measures were compared, long-term couples exhibited fewer differences than younger couples.

Overall, the findings present a very positive picture of marriage in later life. Contrary to the notion that couples become "disenchanted" with their relationships over time, the data indicate that marriage can be very satisfying and rewarding for both men and women even after four or five decades together. These couples report being very satisfied with their marriages, they tend to have minimal conflict with their spouses, and when conflict does occur, they appear to resolve their differences in a healthy manner. Undoubtedly, long-term couples undergo struggles throughout the course of their relationships; however, through dedication and commitment to their spouses and the institution of marriage, many of these couples are able to overcome what other couples consider impossible odds.

Limitations

While this study has provided valuable information regarding similarities and differences between couples at different points along the marital continuum, there are some limitations that need to be addressed. One of the primary limitations of the current investigation is the fact that data were only examined at one point in time. Cross-sectional studies such as this one can provide valid comparisons between couples married for various lengths of time; however, they are limited in their ability to make generalizations concerning the developmental course of marriage. As pointed out by Glenn (1998), with cross-sectional studies it is extremely difficult, if not impossible, to disentangle age and cohort effects. A second weakness of cross-sectional studies is the problem of attrition. More specifically, dissatisfied couples will tend to be underrepresented in studies of long-term marriage due to the simple fact that many couples will have already divorced or separated (Glenn, 1990, 1998). In order to truly understand how marital quality changes over time, the same couples need to be studied at several points in time, from the initial years of marriage into the later years (Karney & Bradbury, 1995).

A second limitation of this study was the reliance on global items to measure various aspects of marital quality. As with most large, nationally representative data sets, the NSFH included a large number of single-item indicators. This weakness, however, has to be weighed against the benefits of having access to such a large sample of married respondents. It is also important to note that global items, per se, are not necessarily inferior to multi-item scales in their ability to provide information about a couple's relationship. For example, the item used to measure marital happiness/satisfaction in current study has been found to correlate very highly with more lengthy measures of marital quality (e.g., Locke-Wallace Marital Adjustment Test; Dyadic Adjustment Scale). One of the major criticisms of using global items is the possibility of greater random measurement error; however, as Glenn (1990) notes, this is not a serious problem if the researcher is not overly concerned with maximizing explained variance.

As noted in chapter 4, another limitation of the present study is the possibility that couples responded in a socially desirable manner on some of the marital quality measures. Scores on the conflict and satisfaction measures were skewed in a manner that suggests these couples may have overstated their level of marital satisfaction, and underreported the amount of conflict that occurs in their relationships. Many studies of marital quality have noted similar tendencies (Fowers, Applegate, Olson, & Pomerantz, 1994; Fowers, Lyons, & Montel, 1996). Measures of social desirability were not included in the NSFH, making it impossible to draw firm conclusions on this matter.

Finally, due to the manner in which the sample for this study was selected, caution should be exercised when attempting to generalize the findings to other couples. The NSFH is a very representative sample of families across the United States; however, the final sample used in the present study was composed solely of first-time married respondents who qualified for inclusion in one of the three marital length categories. Divorced and remarried spouses were not included, despite their growing numbers in the greater population. In addition, as with the vast majority of social science research, the current investigation relied upon self-report measures of marital quality. Couples were not randomly assigned to separate conditions; therefore, direct causal statements cannot be made from these results.

Recommendations

Findings from this study point to the fact that there is a need for more longitudinal research involving couples. As previously stated, the only way that researchers can truly be confident about changes in marital quality over time is to study couples from the initial years of marriage into the later years. While marital researchers are increasingly moving toward longitudinal designs (Karney & Bradbury, 1995), very few studies have traced couples into their fourth and fifth decades together. The reasons given for not doing so are very justifiable. The costs and time constraints are nearly insurmountable without large scale funding and access to a wide variety of resources (e.g., research assistants). It would also be extremely difficult for a single researcher to accomplish a project of this magnitude during his or her lifetime. Additional researchers would likely be needed to carry on such a work.

While the above project would prove to be extremely difficult, it is possible. An example of a study of this magnitude was begun in 1922 by Lewis Terman. His initial purpose was to study high-IQ children; however, these individuals have now been studied for over 60 years in a variety of unrelated projects (Holahan, 1984). Terman had the foresight to include a number of items pertaining to marriage when the children entered into adulthood. Married individuals from this sample responded to items about their marriages in 1940, and in a follow-up mail survey in 1981. Using this data, Holahan (1984) was

able to conduct a study of how marital attitudes have changed over a period of 40 years with this sample of respondents. While this sample cannot be construed as being representative of most married couples in the U.S., it still provides a good example of how longitudinal data can be used to study couples.

The researchers who developed and organized the first wave of National Survey of Families and Households, which focuses more on family processes than most national surveys, did so with the goal of conducting a follow-up survey approximately 5 years later. The second wave of data was collected in 1992 and is also available to the public; however, 5 years is not enough time to gain a thorough understanding of how marriages change from the initial years to the later years. Additional follow-ups conducted with the same couples in intervals of 5 or 10 years could provide more useful information concerning the developmental course of marriage. Similar questions to those asked in the present study could be tested longitudinally. Possible questions include: Does conflict frequency truly decline as couples grow older, or does it remain constant over the years? Do couples learn over the years how to deal with conflict in more productive ways, or do they simply learn to accept their differences? Does marital satisfaction remain constant, or does it fluctuate over the course of 40 or 50 years together? Do couples' perceptions of alternatives to their relationships change over time? Finally, do gender differences in the above variables increase or decrease over time, or do they remain constant? Longitudinal research could provide more accurate answers to these questions than cross-sectional studies.

A second recommendation related to the above is the need to include more comprehensive and reliable measures of marital quality in large national surveys. There are a number of advantages of large scale random surveys, such as increased generalizability, and access to larger samples; however, when they address marital issues, the surveys almost invariably contain global measures rather than multi-item scales that tap multiple dimensions of the marital relationship. Better measures of conflict and conflict resolution behavior would go a long way to increasing our understanding of how couples at different points on the marital continuum address conflict issues. The same principle applies to measures of marital satisfaction. More research is needed on what sources lead to satisfaction in marriage. As discussed in chapter 2, the sources that lead to satisfying marriages during the early years of the relationship may be very different than the sources that lead to satisfaction in the later years (Halford et al., 1997).

Although research on long-term marriages appears to be on the rise, there are a number of areas that could benefit from further research. As the average life span of Americans continues to rise, we will probably begin to see an increase in the number of remarried long-term couples. Couples who divorce in the early stages of their first marriages, could theoretically remarry and remain married for 40 or 50 years. Studies of such couples could yield valuable information on how to reestablish positive marital relationships after divorce. Another potentially useful study could be to investigate the differences between long-term satisfied couples and long-term dissatisfied couples. What are the factors that distinguish dissatisfied couples from those that are satisfied, and why do some dissatisfied couples remain married while others divorce?

The current investigation was guided by principles derived from Rusbult's investment theory (Rusbult, 1983; Rusbult & Buunk, 1993). The theory as initially presented by Rusbult (e.g., Rusbult, 1980; 1983) was very linear, in that it did not allow for the possibility of reciprocal relationships between variables. Recently, however, Rusbult and Buunk (1993) have suggested that reciprocal relationships probably exist between the variables, and that the theory can best be conceived of as a large feedback loop. When viewed in this way, the theory has promise for explaining how marital quality evolves over time. For example, Rusbult and Buunk contend that increased commitment leads to pro-

relationship behaviors, such as accommodative behavior during conflict and derogation of relationships alternatives. If the model is circular as suggested by these researchers, then these pro-relationship behaviors most likely contribute to a favorable reward-cost ratio, which increases marital satisfaction and the willingness to invest more time, energy, and resources into the marriage.

This study was not intended to be a specific test of the investment model; however, findings from the study appear to be consistent with the model when it is presented as a large feedback loop. If it can be assumed that the long-term couples in this study are in very committed relationships, then they should engage in the pro-relationship behaviors described above. The findings indicate that they engage in less conflict, perceive alternatives as less favorable, and are more satisfied with their marriages than younger couples. While the results appear to be consistent with the model's assumptions, further research needs to be conducted to see if increased commitment does in fact lead to the pro-relationship behaviors described by Rusbult and Buunk.

In terms of the theory itself, much more research needs to be conducted to see if reciprocal relationships exist between variables in the model. The model has traditionally assumed that commitment increases when satisfaction and investment levels are high, and quality of alternatives are low. But there are also a number of other possible relationships among variables, which leads to the following questions: What is the relationship between commitment level and one's willingness to invest in a relationship? What is the relationship between investment level and one's perceptions of the quality of alternatives outside the relationship? What is the relationship between satisfaction level and quality of alternatives? Finally, how does initial commitment level influence relationship satisfaction, investment level, and quality of alternatives?

Implications For Practitioners

Findings from the current investigation could be particularly useful to family life educators, therapists, and other professionals who work closely with couples. With divorce being so prominent in American culture, many family professionals are emphasizing the need for marital education programs that can be offered to young married couples and couples considering marriage. In fact, several states are beginning to offer incentives to pre-marital couples who complete marriage education classes (e.g., reduced marriage license fee). Other states have even tried to make marriage education mandatory before couples can be legally married. While these efforts may not reduce the divorce rate in most states, they do point to the growing interest in preventative educational programs that focus on marriage.

Another important trend in the family field is the National Council on Family Relations' recent push to certify family life educators. Certified Family Life Educator (CFLE) status is granted to professionals who have a certain level of experience and education in 10 content areas pertaining to families. CFLE's will most likely play an important role in developing and delivering educational programs on marriage. An important part of these programs will be to educate couples about the multiple facets of marriage.

Family life educators can help couples gain a better understanding of the developmental course of marriage, including how patterns of conflict and satisfaction possibly change over the course of 40 or 50 years together. Marriage educators can help couples realize that satisfaction with a relationship is not a static concept, but that it can be affected by a number of variables, such as the amount of time, energy, and resources invested in a relationship, as well as commitment to one's partner. Young couples can be

made aware of the fact that sources of satisfaction and conflict are likely to change over the course of a relationship. Through findings such as these from the present study, family life educators and therapists can help couples gain a more realistic understanding of marriage by emphasizing that conflict is inevitable in relationships even after 50 years together, and that it is important for couples to learn to deal effectively with their differences.

Finally, findings from this study can also be used to teach couples that marriage can be very rewarding for both men and women in all stages of the marital life cycle. Couples face tremendous challenges throughout their marriages. As most couples can attest, building successful intimate relationships requires great patience, understanding, and a willingness to invest on the part of both partners. Couples in this study, especially those in the long-term group, have demonstrated that they are willing and capable of building lasting marriages. In an age where divorce and separation are so prevalent, it is refreshing to see that couples can live happily ever after. Is the future better than the past? If given the opportunity to reflect on their lives together, my guess is that most would say, "yes."

REFERENCES

- Acock, A.C., & Demo, D.H. (1994). Family diversity and well-being. Thousand Oaks, CA: Sage.
- Ade-Ridder, L., & Brubaker, T.H. (1983). The quality of long-term marriages. In T.H. Brubaker (Ed.), Family relationships in later life (pp. 21-30). Beverly Hills, CA: Sage.
- Alford-Cooper, F. (1998). For keeps: Marriages that last a lifetime. Armonk, New York: M.E. Sharpe.
- Anderson, S.A., Russell, C.S., & Schuum, W.A. (1983). Perceived marital quality and family life-cycle categories: A further analysis. Journal of Marriage and the Family, *45*, 127-139.
- Blair, S.L. (1993). Employment, family, and perceptions of marital quality among husbands and wives. Journal of Family Issues, *14*, 189-212.
- Blau, P.M. (1964). Exchange and power in social life. New York: Wiley.
- Blood, R.O., & Wolfe, D.M. (1960). Husbands and wives: The dynamics of married living. New York: Free Press of Glencoe.
- Brown, S.L., & Booth, A. (1996). Cohabitation versus marriage: A comparison of relationship quality. Journal of Marriage and the Family, *58*, 668-678.
- Bui, K.T., Peplau, L.A., & Hill, C.T. (1996). Testing the rusbult model of relationship commitment and stability in a 15-year study of heterosexual couples. Personality and Social Psychology Bulletin, *22*, 1244-1257.
- Burgess, E.W., & Wallin, P. (1953). Engagement and marriage. Philadelphia: Lippincott.
- Burr, W.R. (1970). Satisfaction with various aspects of marriage over the life cycle. Journal of Marriage and the Family, *32*, 29-37.
- Carstensen, L. L., Gottman, J. M., & Levenson, R. W. (1995). Emotional behavior in long-term marriage. Psychology and Aging, *10*, 140-149.
- Carstensen, L.L., Graff, J., Levenson, R.W., & Gottman, J.M. (1996). Affect in intimate relationships: The developmental course of marriage. In C. Magai & S.H. McFadden (Eds.), Handbook of emotion, adult development, and aging (pp. 227-247). San Diego, CA: Academic Press.
- Carstensen, L.L., Levenson, R.W., & Gottman, J.M. (1995). Emotional behavior in long-term marriage. Psychology and Aging, *10*, 140-149.
- Cole, C. I. (1984). Marital quality in later life. In W. H. Quinn & G. H. Hughston (Eds.), Independent aging: Family and social support perspectives (pp. 72-90). Gaithersburg, MD: Aspen.

- Cunningham, J.D., Braiker, H., & Kelley, H.H. (1982). Marital status and sex differences in problems reported by married and cohabitating couples. Psychology of Women Quarterly, 6, 415-427.
- Davis, L.E., & Strube, M.J. (1993). An assessment of romantic commitment among black and white dating couples. Journal of Applied Social Psychology, 23, 212-225.
- Dentler, R., & Pineo, P. (1960). Marital adjustment and personal growth of husbands: A panel analysis. Marriage and Family Living, 22, 45-48.
- Dickson, F. C. (1995). The best is yet to be: Research on long-lasting marriages. In J.T. Wood & S. Duck (Eds.), Understudied relationships. Thousand Oaks, CA: Sage.
- Edmonds, V.H. (1967). Marital conventionalization: Definition and measurement. Journal of Marriage and the Family, 29, 681-688.
- Fowers, B.J., Applegate, B., Olson, D.H., & Pomerantz, B. (1994). Marital conventionalization as a measure of marital satisfaction: A confirmatory factor analysis. Journal of Family Psychology, 8, 93-103.
- Fowers, B.J., Lyons, E.M., & Montel, K.H. (1996). Positive marital illusions: Self-enhancement or relationship enhancement? Journal of Family Psychology, 10, 192-208.
- Geiss, S.K., O'Leary, K.D. (1981). Therapist ratings of frequency and severity of marital problems: Implications for research. Journal of Marital and Family Therapy, 7, 515-520.
- Gilford, R. (1984). Contrasts in marital satisfaction throughout old age: An exchange theory analysis. Journal of Gerontology, 39, 325-333.
- Gilford, R., & Bengtson, V. (1979). Measuring marital satisfaction in three generations: Positive and negative dimensions. Journal of Marriage and the Family, 39, 387-398.
- Glenn, N.D. (1990). Quantitative research in marital quality in the 1980s: A critical review. Journal of Marriage and the Family, 52, 818-831.
- Glenn, N.D. (1998). The course of marital success and failure in five american 10-year marriage cohorts. Journal of Marriage and the Family, 60, 569-576.
- Goldscheider, F., & Waite, L. (1991). New families, no families. Berkeley, CA: University of California Press.
- Gottman, J.M. (1993). The roles of conflict engagement, escalation, and avoidance in marital interaction: A longitudinal view of five types of couples. Journal of Consulting and Clinical Psychology, 61, 6-15.
- Gottman, J.M. (1994). Why marriages succeed or fail. New York: Simon & Schuster.
- Gottman, J.M., & Krokoff, L.J. (1989). The relationship between marital interaction and marital satisfaction: A longitudinal view. Journal of Consulting and Clinical Psychology, 57, 47-52.

- Gottman, J.M., & Levenson, R.W. (1992). Marital processes predictive of later dissolution: Behavior, physiology, and health. Journal of Personality and Social Psychology, *63*, 221-233.
- Halford, W.K., Kelly, A., & Markman, H.J. (1997). The concept of a healthy marriage. In W. K. Halford and H.J. Markman (Eds.), Clinical handbook of marriage and couples interventions (pp. 3-12). John Wiley & Sons Ltd.
- Herman, S.M. (1994). Marital satisfaction in the elderly. Gerontology and Geriatrics Education, *14*, 69-79.
- Homans, G.C. (1961). Social behavior. New York: Harcourt, Brace & World.
- Yuan-Huei, L.W., & Rusbult, C.E. (1995). Commitment to dating relationships and cross-sex friendships in america and china. Journal of Social and Personal Relationships, *12*, 7-26.
- Karney, B.R., & Bradbury, T.N. (1995). The longitudinal course of marital quality and stability: A review of theory, method, and research. Psychological Bulletin, *118*, 3-34.
- Kaslow, F., & Robison, J. A. (1996). Long-term satisfying marriages: Perceptions of contributing factors. The American Journal of Family Therapy, *24*, 153-170.
- L'Abate, L., & Bagarozzi, D.A. (1993). Sourcebook of marriage and family evaluation. New York: Brunner/Mazel.
- Lauer, R.H., & Lauer, J.C. (1986). Factors in long-term marriages. Journal of Family Issues, *7*, 382-390.
- Lauer, R.H., & Lauer, J.C. (1994). Marriage and Family: The quest for intimacy (2nd Ed.). Madison, Wisconsin: Brown & Benchmark.
- Lauer, R.H., Lauer, J.C., & Kerr, S.T. (1990). The long-term marriage: perceptions of stability and satisfaction. International Journal of Aging and Human Development, *31*, 189-195.
- Levenson, R.W., Carstensen, L.L., & Gottman, J.M. (1993). Long-term marriage: Age, gender, and satisfaction. Psychology and Aging, *8*, 301-313.
- Levenson, R.W., Carstensen, L.L., & Gottman, J.M. (1994). The influence of age and gender on affect, physiology, and their interrelations: A study of long-term marriage. Journal of Personality and Social Psychology, *67*, 56-68.
- Levenson, R.W., & Gottman, J.M. (1983). Marital interaction: Physiological linkage and affective exchange. Journal of Personality and Social Psychology, *45*, 587-587.
- Levenson, R.W., & Gottman, J.M. (1985). Physiological and affective predictors of change in relationship satisfaction. Journal of Personality and Social Psychology, *49*, 85-94.
- Lewis, R., & Spanier, G. (1979). Theorizing about quality and stability of marriage. In W. Burr, R. Hill, F.I. Nye & I. Reiss (Eds.), Contemporary theories about the family: Vol.1. Research-based theories (pp. 268-294). New York: Free Press.

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

MacDonald, W.L., & DeMaris, A. (1995). Remarriage, stepchildren, and marital conflict: Challenges to the incomplete institutionalization hypothesis. Journal of Marriage and the Family, *57*, 387-398.

Martin, T. C., & Bumpass, L.L. (1989). Recent trends in marital disruption. Demography, *26*, 37-51.

Matthews, L.S., Wicrama, K.A.S., & Conger, R.D. (1996). Predicting marital instability from spouse and observer reports of marital interaction. Journal of Marriage and the Family, *58*, 641-655.

Medley, M. (1977). Marital adjustment in the post-retirement years. Family Coordinator, *26*, 5-11.

Pedhazur, E.J., & Schmelkin, L.P. (1991). Measurement, design, and analysis: An integrated approach. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Pineo, P.C. (1961). Disenchantment in the later years of marriage. Marriage and Family Living, *23*, 3-11.

Pineo, P.C. (1969). Developmental patterns in marriage. Family Coordinator, *18*, 135-140.

Rollins, B.C., & Cannon, K.L. (1974). Marital satisfaction over the family life cycle: A reevaluation. Journal of Marriage and the Family, *36*, 271-282.

Rusbult, C.E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. Journal of Experimental Social Psychology, *16*, 172-186.

Rusbult, C.E. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. Journal of Personality and Social Psychology, *45*, 101-117.

Rusbult, C.E., & Buunk, B.P. (1993). Commitment processes in close relationships: An interdependence analysis. Journal of Social and Personal Relationships, *10*, 175-204.

Rusbult, C.E., Johnson, D.J., & Morrow, G.D. (1986). Predicting satisfaction and commitment in adult romantic involvements: An assessment of the generalizability of the investment model. Social Psychology Quarterly, *49*, 81-89.

Schumm, W.R., Resnick, G., Bollman, S.R., & Jurich, A.P. (1998). Gender differences and marital satisfaction: A brief report from a sample of dual military couples from the 1992 department of defense worldwide survey of members and spouses. Psychological Reports, *82*, 161-162.

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

Spanier, G., Lewis, R., & Cole, C. (1975). Marital adjustment over the family life cycle: The issues of curvilinearity. Journal of Marriage and the Family, *37*, 263-275.

- Sprecher, S. (1998). Social exchange theories and sexuality. The Journal of Sex Research, 35, 32-43.
- Sporakowski, M.J., & Axelson, L.V. (1989). Long-term marriages: A critical review. In L. Ade-Ridder & C.B. Hennon (Eds.), Lifestyles of the elderly: Diversity in relationships, health, and caregiving (pp. 9-28). New York, N.Y.: Human Sciences Press.
- Sporakowski, M.J., & Hughston, G. (1978). Prescriptions for happy marriage: Adjustments and satisfactions of couples married 50 years or more. The Family Coordinator, 27, 321-327.
- Stinnett, N., Carter, L., & Montgomery, J. (1970). Marital need satisfaction of older husbands and wives. Journal of Marriage and the Family, 32, 428-434.
- Stinnett, N., Carter, L., & Montgomery, J. (1972). Older persons' perceptions of their marriages. Journal of Marriage and the Family, 34, 665-670.
- Sweet, J., Bumpass, L., & Call, V. (1988). The design and content of the national survey of families and households (NSFH Working Paper No. 1). Madison, WI: Center for Demography and Ecology.
- Sweet, J., Bumpass, L., & Call, V. (1992). National survey of families and households 1988 (Data Set 1-5, Stone, V.E., Crutchfield, J.H., Colella, U.A., & Card, J.J., Archivists) [machine-readable data file and documentation]. Madison, WI: Center for Demography and Ecology, University of Wisconsin (Producer). Los Altos, CA: Sociometrics Corporation, American Family Data Archive (Distributor).
- Swenson, C.H., Eskew, R.W., & Kohlhepp, K.A. (1989). Five factors in long-term marriages. In L. Ade-Ridder & C.B. Hennon (Eds.), Lifestyles of the elderly: Diversity in relationships, health, and caregiving (pp. 71-80). New York, N.Y.: Human Sciences Press.
- U.S. Bureau of the Census (1996a). Current population reports, special studies, P23-191, how we're changing. Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census (1996b). Current population reports, special studies, P23-190, 65+ in the United States. Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census (1996c). Current population reports, P20-491, Marital status and living arrangements, March 1995 (update). Washington, DC: U.S. Government Printing Office.
- Vaillant, C.O., & Vaillant, G.E. (1993). Is the u-curve of marital satisfaction an illusion? A 40-year study of marriage. Journal of Marriage and the Family, 55, 230-239.
- Voydanoff, P., & Donnelly, B.W. (1999). The intersection of time in activities and perceived unfairness in relation to psychological distress and marital quality. Journal of Marriage and the Family, 61, 739-751.
- Weishaus, S., & Field, D. (1988). A half century of marriage: Continuity or change? Journal of Marriage and the Family, 50, 763-774.

Wickrama, K.A.S., Lorenz, F.O., Conger, R.D., & Elder, G.H., Jr. (1997). Marital quality and physical illness: A latent growth curve analysis. Journal of Marriage and the Family, 59, 143-155.

Zietlow, P.H., & VanLear, C.A. (1991). Marriage duration and relational control: A study of developmental patterns. Journal of Marriage and the Family, 53, 773-785.

APPENDIX A

Marital Quality Measures

Marital Conflict (Items E706A, B, C, D, F & S72A, B, C, D, F)

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:

	Never	Less Than Once A Month	Several Times A Month	About Once A Week	Several Time a Week	Almost Every Day
Household tasks	1	2	3	4	5	6
Money	1	2	3	4	5	6
Spending time together	1	2	3	4	5	6
Sex	1	2	3	4	5	6
In-laws	1	2	3	4	5	6

Conflict Resolution (Items E707A-E707D & S73A-S73D)

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:

	Never	Seldom	Sometimes	Very Often	Always
a. just keep your opinions to yourself?	1	2	3	4	5
b. discuss your disagreements calmly?	1	2	3	4	5
c. argue heatedly or shout at each other?	1	2	3	4	5
d. end up hitting or throwing things at each other?	1	2	3	4	5

Marital Satisfaction (Items E701 & S67)

Taking things all together, how would you describe your marriage?
Circle the number that best describes your marriage.

VERY UNHAPPY 1 2 3 4 5 6 7 VERY HAPPY

Quality of Alternatives (Items E713A-E713E & S79A-S79E)

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

- 1 - Much worse
- 2 - Worse
- 3 - Same
- 4 - Better
- 5 - Much better

b. your social life

- 1 - Much worse
- 2 - Worse
- 3 - Same
- 4 - Better
- 5 - Much better

c. your career opportunities

- 1 - Much worse
- 2 - Worse
- 3 - Same
- 4 - Better
- 5 - Much better

d. your overall happiness

- 1 - Much worse
- 2 - Worse
- 3 - Same
- 4 - Better
- 5 - Much better

e. your sex life

- 1 - Much worse
- 2 - Worse
- 3 - Same
- 4 - Better
- 5 - Much better

Demographic Items

Age

What is your date of birth? (Items S1M, MMONTH, & MYEAR)

Month ____ Day ____ Year ____

Primary respondents were asked to verbally give their age in years during the interview (Item M2BO1).

Gender

The gender of primary respondents was determined by the interviewer during the in-person interview (Item M2DP01). Secondary respondents were asked to indicate their gender in a self-report questionnaire. The NSFH staff coded these responses as male = 1 and female = 2 (Item R2SEX).

Income

Income was measured with item IHTOT2, which is a variable constructed by the NSFH staff representing the household's total income, including income of respondent and spouse from interest, dividends, and other investments.

Number of Children

Number of children was measured with item E12NUM, a variable constructed by the NSFH staff based on primary respondents' listings of the first names of all of their children, including all of their spouse's children. This variable also reflects children who were no longer living at home during the time of the interviews.

Marital Length

Marital length was constructed using interview (Items MMONTH & MYEAR) and marriage (M96M) dates given by primary respondents. The resulting variable measured the length of a couple's marriage in years.

Education

Education was measured by asking primary respondents to indicate their highest level of education obtained during the time of the interviews. COMPLETED, a variable constructed by the NSFH staff, provided a single measure of the educational level of primary respondents; however, an identical measure was not completed by secondary respondents. Therefore, the following items were used to construct a variable that would reflect the highest level of education obtained by secondary respondents: S175, S176A1, S176B1, S176C1, S176D1, and S176E1. Each of these items asked secondary respondents to indicate whether or not they had completed a particular level of education (e.g., High School Diploma, Bachelor's Degree, Master's Degree). Using the above items, primary and secondary responses were coded into 6 categories: Less than High School Diploma, High School Diploma, Associate Degree, Bachelor's Degree, Master's Degree, and Doctorate Degree.

Race

Which of the groups on this card best describes you? (Items M484 & S170)

1 Black; 2 White -not of Hispanic origin; 3 Mexican American, Chicano, or Mexicano; 4 Puerto Rican; 5 Cuban; 6 Other Hispanic; 7 American Indian; 8 Asian; or 9 other.

A single variable was constructed from these two items by matching husband's and wife's scores. For example, if a husband and wife both indicated that they were Black, the couple was classified as Black. When a husband and wife were of a different race, the couple was classified as "Interracial."

VITA

STEPHEN D. GREEN

335 New Kent Road
Blacksburg, VA 24060
(540) 961-2987
e-mail: stgreen2@vt.edu

EDUCATION:

- Ph.D. 2000 Virginia Polytechnic Institute and State University; Blacksburg, Virginia
Department of Human Development
Major Area: Family Studies
- M.S. 1996 Harding University; Searcy, Arkansas
Department of Marriage and Family Therapy
Major Area: Marriage and Family Therapy
- B.A. 1992 University of California; Davis, California
Department of Psychology
Major Area: Psychology
Graduated With Honors

PROFESSIONAL EXPERIENCE:

- 1999 - 2000 Instructor - Department of Communication Studies
Virginia Polytechnic Institute and State University
Taught COMM 1024 Introduction to Communication Research
Taught COMM 2004 Public Speaking
- 1998 - 1999 Higher Education Teaching and Research Assistant (summer sessions)
Department of Human Development
Virginia Polytechnic Institute and State University
Co-authored Virginia Cooperative Extension publications
Extension program planning, development, implementation and evaluation
Co-authored Families First: Keys to Successful Family Functioning
- 1996 - 1999 Graduate Teaching / Research Assistant
Department of Communication Studies
Virginia Polytechnic Institute and State University
Assisted in teaching undergraduate communication courses
Conducted research (literature reviews, data collection, data analysis)
Supervised field study students
- 1997 - 1998 Summer Youth Employment Counselor (summer)
Private Industry Council; Dublin, Virginia
Interviewed, hired and assigned summer youth employees to various job sites based on prior experience and abilities
Supervised 25 summer youth employees
Provided career development and job training counseling
- 1995 - 1996 Family Therapist Intern
Harding University Counseling Center; Searcy, Arkansas
Provided therapeutic services to individuals, couples and families

Completed over 600 hours of individual, family and group therapy in accordance with AAMFT standards
Received over 120 hours of AAMFT approved supervision
Received the Outstanding Marriage and Family Therapy Student Award

1992 - 1994 Missionary - Church of Christ; Bergamo, Italy
Conducted individual and group evangelistic Bible studies
Preached for the Bergamo Church of Christ
Planned and implemented the English Using the Bible (EUB) program
Coordinated social and educational activities with EUB students

1989 - 1992 Counselor
Sierra Children's Home / Agape Villages Inc.; Vacaville, California
Counseled at risk youth ages 9-16
Coordinated group recreational activities

HONORS:

Phi Kappa Phi Honor Society
Outstanding Marriage & Family Therapy Student Award - Harding University, 1996
Graduated With Honors - University of California, Davis; March 1992
Psi Chi Honor Society
Golden Key Honor Society

PROFESSIONAL AFFILIATIONS:

National Council on Family Relations
American Association of Marriage & Family Therapy

PUBLICATIONS:

Peterson, R.L., & Green, S.D. (1999). 350-090. Families first: Introduction. Virginia Cooperative Extension. Virginia Polytechnic Institute and State University.

Peterson, R.L., & Green, S.D. (1999). 350-091. Families first: Problem solving. Virginia Cooperative Extension. Virginia Polytechnic Institute and State University.

Peterson, R.L., & Green, S.D. (1999). 350-092. Families first: Communication. Virginia Cooperative Extension. Virginia Polytechnic Institute and State University.

Peterson, R.L., & Green, S.D. (1999). 350-093. Families first: Roles. Virginia Cooperative Extension. Virginia Polytechnic Institute and State University.

Peterson, R.L., & Green, S.D. (1999). 350-094. Families first: Affective responsiveness. Virginia Cooperative Extension. Virginia Polytechnic Institute and State University.

Peterson, R.L., & Green, S.D. (1999). 350-095. Families first: Affective involvement. Virginia Cooperative Extension. Virginia Polytechnic Institute and State University.

Peterson, R.L., & Green, S.D. (1999). 350-096. Families first: Behavior control. Virginia Cooperative Extension. Virginia Polytechnic Institute and State University.

PRESENTATIONS:

Peterson, R.L., & Green, S.D. (1999, November). Families first: Keys to successful family functioning. Poster session presented at the National Council on Family Relations Extension Pre-Conference, Irvine, CA.

Peterson, R.L., & Green, S.D. (1999, February). Families first: Keys to successful family functioning. Paper presented at the meeting of the Southeastern Conference on Family Relations, Atlanta, GA.

GUEST LECTURES:

“Families and the Media” (1999, Fall). Lecture presented in Community Programs and Family Life, an undergraduate course in the Department of Human Development, Virginia Polytechnic Institute and State University.

“Boundaries Between Family Life Education and Family Therapy” (1999, Spring). Lecture presented in Community Programs and Family Life, an undergraduate course in the Department of Human Development, Virginia Polytechnic Institute and State University.