The Relationship Between Marital Characteristics, Marital Interaction Processes, and Marital Satisfaction

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Structural Equation Modeling techniques were used to clarify the relationship between marital characteristics, marital processes, and the dependent variable—marital satisfaction—in a sample of 201 participants who were in 1st marriages. The Dyadic Adjustment Scale (DAS; G. B. Spanier, 1976) and the Enriching and Nurturing Relationship Issues, Communication and Happiness Inventory (ENRICH; D. H. Olson, D. G. Fournier, & J. M. Druckman, 1987) provided scales to measure marital interaction processes and marital satisfaction. A new instrument, the Characteristics of Marriage Inventory (CHARISMA; J. R. Rosen-Grandon & J. E. Myers, 2001), was developed using factor analysis to determine which marital characteristics were statistically significant. Structural equation modeling identified a path model wherein 6 marital interaction processes had a statistically significant influence on marital satisfaction when mediated by 3 latent factors of marital characteristics (love, loyalty, and shared values) and 2 moderating variables (length of marriage and gender of participant).

Marriage has been described as the most important and fundamental human relationship because it provides the primary structure for establishing a family relationship and rearing the next generation (Larson & Holman, 1994). The desirability of marriage is reflected in surveys suggesting that 90% of Americans will choose to marry at some point in their lives (Brubaker & Kimberly, 1993). According to Aldous (1996), a good marriage provides individuals with a sense of meaning and identity in their lives. A variety of studies have demonstrated that people are generally happier and healthier when they are married (Gottman, 1994; Kelly & Conley, 1987; Orbuch & Custer, 1995; White, 1994). Yet, while marriage seems to be a highly desirable relationship, statistics indicate that marital satisfaction is not easily achieved. One has only to consider the chronically high rates of divorce in order to appreciate the magnitude of this problem.

Between one half and two thirds of all first marriages in the United States end in divorce (Brubaker & Kimberly, 1993; Martin & Bumpass, 1989). The decision to divorce, however, does not mean that these individuals do not want to be married. Most people like to be married and tend to be happier and healthier when they are married. Therefore, it is not surprising that within 5 years of divorce, 77% of women and 84% of men remarry (Brubaker & Kimberly, 1993). Furthermore, the average length of the waiting period between divorce and remarriage seems to be shrinking from 5 to 3 years (Mackey & O'Brien, 1995). Unfortunately, of those who remarry, 60% are likely to divorce again (Martin & Bumpass, 1989), suggesting that even in their remarriages, people are unable to achieve sufficient marital satisfaction. Clearly, knowledge of how to achieve a successful marriage has lagged behind the popularity of this institution.

While the study of marital satisfaction has a long and well-documented history, it is clear from the consistently high divorce rates that still too little is known about ways to achieve and maintain a sufficient level of marital satisfaction to assure marital success (Arcus, 1992; Schvaneveldt & Young, 1992). Historically, much of the research on marital satisfaction has examined simple linear relationships between variables. Studies have typically focused on either the relationship between marital characteristics and marital satisfaction or the relationship between marital interaction processes and marital satisfaction when, actually, both of these sources of variance are operative (Kurdek, 1995). Gender also has been identified as an important, but poorly understood, influence on marital satisfaction (Glenn, 1990; Heppner, Kivlighan, & Wampold, 1992). Although the existing research has accounted for some of the variance in explaining marital satisfaction, there is a need for studies of more complex models to explain how multiple factors influence and are related to marital satisfaction (Robinson & Blanton, 1993). Two of the major factors that should be incorporated in these studies are marital characteristics and marital interaction processes.

Numerous attempts have been made to identify the components of marital satisfaction through studies of characteristics of happy long-term marriages (Fenell, 1993; Glenn, 1990; Lauer, Lauer, & Kerr, 1990; Robinson & Blanton, 1993).

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These include studies of long-term relationships (Fenell, 1993; Lauer et al., 1990; Robinson & Blanton, 1993), or those lasting more than 20 years (Mackey & O'Brien, 1995), studies of newlyweds married less than 3 years, and studies of persons in midlength marriages lasting between 4 and 20 years (Collins & Coltrane, 1991; Larson & Holman, 1994).

Fenell (1993) used a modified "delphi method," a consensus-building technique, to narrow down a larger list of marital characteristics to the 10 most important ones in long-term successful marriages. This method employed a panel of individuals with expert knowledge of this subject, who engaged in a three-round process of elimination to arrive at the desired consensus. The 10 most important characteristics, in order from *most* to *least* important, were identified as

1. Lifetime commitment to marriage
2. Loyalty to spouse
3. Strong moral values
4. Respect for spouse as a friend
5. Commitment to sexual fidelity
6. Desire to be a good parent
7. Faith in God and spiritual commitment
8. Desire to please and support spouse
9. Good companion to spouse
10. Willingness to forgive and be forgiven

In contrast, Collins and Coltrane (1991) reported the results of a public opinion poll indicating that the most important components of marriage were faithfulness (93%), understanding (86%), a good sex life (75%), children (59%), common interests (52%), sharing household chores (43%), having enough money (41%), and sharing similar backgrounds (25%).

Lauer et al. (1990) also studied characteristics of couples that had been married more than 45 years. These couples attributed their marital satisfaction to the following components: (a) They were married to someone they liked, (b) they had a commitment to the person as well as to the marriage, (c) they had a sense of humor, and (d) they were able to reach consensus (i.e., agreement). Robinson and Blanton (1993) studied couples who had been married an average of 40 years. They identified the key characteristics of happy marriages as (a) intimacy, (b) commitment, (c) communication, (d) congruence, and (e) shared religious orientation. According to these authors, characteristics that are related to enhanced marital quality include love, reciprocity, communication, understanding, religious orientation, patience, commitment, intimacy, shared responsibility, personal identity, persistence, hopefulness, flexible boundaries, and congruence.

Kurdek (1991) studied couples at the time of their marriage and 1 year later in the effort to investigate characteristics of marriage from a contextual perspective, where the context was the transition from being single to being married. He reported on couples who stayed together during the 1st year versus those who did not, and he concluded that three personality variables predicted marital satisfaction: (a) motives to be in the relationship, (b) satisfaction with social support, and (c) psychological distress.

Craddock (1991) applied a Circumplex Model of marital and family systems in a study of 100 Australian couples married an average of 8 years, using the two dimensions of cohesion and adaptability, to provide a structural typology of relational systems. He found that couples that were more flexible, adaptable, and cohesive reported greater marital satisfaction than couples that were chaotic, rigid, or random. Craddock also noted a positive correlation between marital satisfaction and similar religious orientation, similar personality issues, ability to resolve conflict, agreement on financial management, leisure activities, children and marriage, and family and friends. Relatedly, Schumm (1985) reported that similarity in religious orientation, quality of communication, and time spent together were the most important determinants of marital satisfaction.

Although some studies suggest that certain aspects of parenting are associated with decreased marital satisfaction (Glenn, 1990), the presence of children seems to be positively related to marital satisfaction (Kurdek, 1995). Children provide an important source of social support throughout life (Collins & Coltrane, 1991), even though certain aspects of marital satisfaction decrease during the child-rearing years (Glenn, 1990; White & Booth, 1991). Marital conflict has been shown to be more severe during the child-rearing phase; however, interpersonal confrontation between spouses is more adaptive than avoiding the problem. When major difficulties remain unresolved, conflict has a disruptive and corrosive effect on marital satisfaction that continues into the post–parenting years (Mackey & O'Brien, 1995).

A review of the literature on marital satisfaction from an ecological perspective, conducted by Larson and Holman (1994), resulted in three categories of factors: (a) background or contextual factors (i.e., family-of-origin variables, sociocultural factors, and current contexts), (b) individual traits and behaviors, and (c) couple interaction processes. They concluded that the strongest predictor of marital instability is young age at the time of marriage. They reported that race was not a good predictor of marital satisfaction and that the role of gender is still not clearly understood. Moreover, they reported that both approval of the relationship by friends and positive perceptions of the couple's marriage are predictive of marital satisfaction, whereas the effects of parental pressure through overinvolvement or intimidation are predictive of marital dissatisfaction. Larson and Holman distinguished between characteristics of individuals and characteristics of relationships, and they concluded that confusion in the literature between marital characteristics and marital interaction processes contributes to an inability to fully understand the factors affecting marital satisfaction. Larson and Holman's conclusion has been supported by other researchers, notably Arcus (1992), Kurdek (1991), and Mackey and O'Brien (1995).

In Mackey and O'Brien's (1995) study of "lasting marriages," the authors described marriage as a developmental process that occurs in adulthood and that results in the establishment of various marital interaction processes. These marital interaction processes are either behaviors that are transacted

within the relationship or interpersonal dynamics that evolve within the relationship and influence marital satisfaction. The authors identified five marital interaction processes: (a) containment of conflict; (b) mutuality in decision making; (c) quality of communication; (d) sexual and psychological intimacy; and (e) relational values of trust, respect, empathetic understanding, and equity.

The work of Lewis and Spanier (Lewis & Spanier, 1979; Spanier, 1976) concentrated on three marital interaction processes: consensus, cohesion, and affectional expression. Consensus refers to agreement on matters of finances, recreation, religious matters, friendships, proper behavior, philosophy of life, ways of dealing with parents and in-laws, agreement on aims and goals, agreement on time spent together, decision making, division of household labor, leisure activities, and career decisions (Spanier & Lewis, 1980). Cohesion refers to the degree to which an individual feels connected to or separate from the marital relationship system. Craddock (1991) indicated that cohesion involves emotional bonding, or how close partners feel to each other, and can be measured on a scale that extends from *enmeshment* (high cohesion) to *disengagement* (low cohesion). Affectional expression pertains to demonstrations of affection and sexual relations. Ade-Ridder (1990) found that continued sexual activity and sexual interest were important to maintaining a high quality marriage in later life.

Spanier (1989) noted that marital interaction processes referred to interactions of the couple, not just to actions of the individual. He also emphasized the "process" component of marital interaction processes and the idea that each process can be measured along a continuum at a given point in time. Spanier (1976) demonstrated that it was possible to assign a value to each variable at a given point and then measure growth and change over time. Because the nature of marital interaction processes is dynamic, research methods must have the capacity to measure changes in these marital interaction processes. Consistent with this logic, Larson and Holman (1994) noted that much recent research has shifted from the study of static, sociocultural, or family-of-origin background factors (e.g., marital characteristics) to the investigation of interactional dynamics of couples (e.g., marital interaction processes). In addition, studies of both marital characteristics and marital interaction processes suggest the importance of gender as a mediating or moderating variable (Ekerdt & Vinick, 1991; Keith & Wacker, 1990), as well as marital longevity (Keith & Wacker, 1990; Mackey & O'Brien, 1995).

Based on the recommendations of Kurdek (1995) and others cited here, the present study was undertaken to determine factors important to understanding marital satisfaction and to explore the relationships among those factors. The primary research question addressed was as follows: What is the nature of the relationship between marital characteristics, marital interaction processes, and marital satisfaction? The manner in which gender and length of marriage influences the relationship between marital interaction processes and marital satisfaction also was of interest.

METHOD

Following an extensive review of the literature on marital satisfaction, we developed a conceptual model that hypothesized a relationship between marital characteristics and marital satisfaction that is mediated by marital interaction processes and moderated by gender and marital longevity (see Figure 1). That is, the relationship between marital characteristics and marital satisfaction is influenced by marital interaction processes, and marital interaction processes, themselves, influence marital satisfaction. It was further hypothesized that the moderating variables, gender and length of marriage, will affect the strength and direction of the relationship between various marital interaction processes and marital satisfaction.

Instruments

Four instruments were used to test the proposed structural model. These included the Dyadic Adjustment Scale (DAS; Spanier, 1976), the Enriching and Nurturing Relationship Issues, Communication and Happiness Inventory (ENRICH; Olson, Fournier, & Druckman, 1987), the Characteristics of Marriage Inventory (CHARISMA; Rosen-Grandon & Myers, 2001), and a demographic questionnaire that assessed a variety of descriptors including gender and length of marriage.

Spanier's (1976) DAS, the most frequently used measure in the study of marital satisfaction, is a 32-item paper-and-pencil instrument that measures four independent factors: consensus, affectional expression, cohesion, and marital satisfaction. Content validity of the DAS was established through examination by a panel of three judges. Construct validity has been established through its use in more than 1,000 studies, and concurrent validity has been established by its correlation of $r = .86$ with the Locke-Wallace Marital Adjustment Scale (Fowers, 1990). Criterion-related validity was established through multiple studies that demonstrate that scores on the DAS distinguish between married and divorced individuals, married and cohabiting couples, heterosexual and homosexual couples, and open and closed relationships, as well as sex role and gender differences and differences between childless and parenting couples (Spanier, 1989).

The ENRICH Inventory is a 125-item multidimensional marital satisfaction scale that contains 14 subscales. Four of

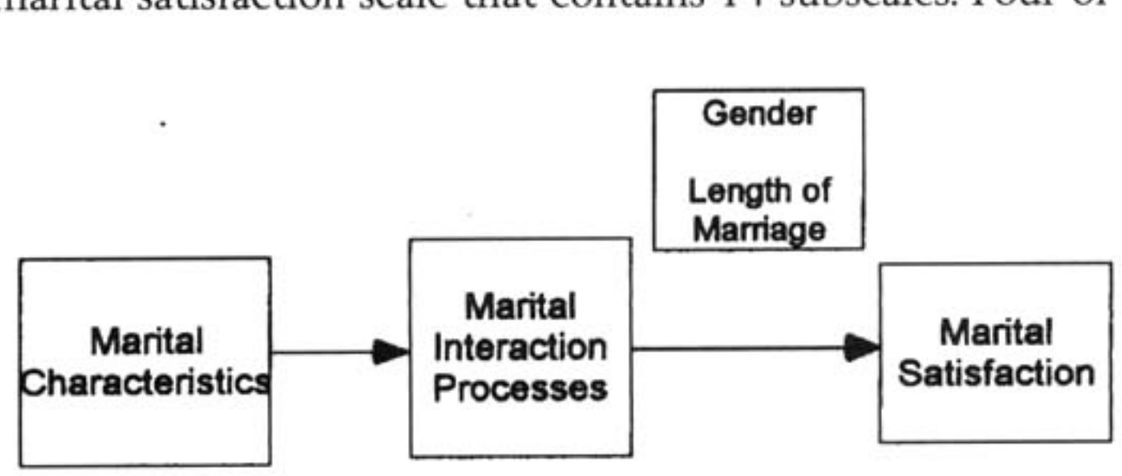

FIGURE 1

Originally Hypothesized Conceptual Model of Marital Satisfaction

the ENRICH subscales provide measures for Mackey and O'Brien's (1995) marital interaction processes: (a) Containment of Conflict, (b) Mutuality in Decision Making, (c) Sexual and Psychological Intimacy, and (d) Communication. Fowers (1990) reported a correlation of .73 between the ENRICH Inventory and the Locke-Wallace Marital Adjustment Test, a moderate correlation with family and life satisfaction measures (i.e., construct validity), and discriminative validity based on the ability of the ENRICH Inventory to distinguish between satisfied and dissatisfied couples.

CHARISMA (Rosen-Grandon & Myers, 2001) is an 18-item per scale instrument that is based on research conducted on marital characteristics by Fenell (1993) and Mackey and O'Brien (1995). Participants were asked to respond to a list of characteristics by rating these items in terms of "importance" of these characteristics and their "satisfaction" with these characteristics in their current relationship. The dependent variable, marital satisfaction, was measured using a composite scale with three items from the DAS Satisfaction scale and three from the corresponding ENRICH scale. The composite scale was developed using results of a factor analysis of the two scales, as described in the following section.

Participants and Procedure

Participants were selected using a purposeful sampling procedure in which volunteer respondents were recruited at a shopping mall in a large southeastern city on three consecutive weekends. Prospective participants were screened to ensure that all were in their first marriage, currently residing with their spouse, and were the only member of their marital dyad to participate. The final sample included 137 women and 64 men, of whom 77% were Caucasian and 23% ethnic minorities (primarily African American). They ranged in age from 20 to 75 years, with an average age of 39 years. The highest levels of education for husbands in this sample were as follows: 8% had less than a high school education, 15% had completed high school, 8% had completed trade or business school, 29% had some college, 21% were college graduates, 6% had some graduate school education, and 13% had completed advanced graduate degrees. The highest levels of education for wives in the sample were 21% had completed high school, 4% had completed trade or business school, 31% had some college, 31% were college graduates, 4% had some graduate school education, and 9% had completed advanced graduate degrees. When marriages were differentiated for longevity, 28% of participants had been married for 3 years or less, 39% had been married 4–20 years, and 33% had been married for more than 20 years.

Data Analyses

Descriptive statistics on the sample were generated using the PRELIS and LISREL-7 computer programs (Jöreskog & Sorbom, 1988). Structural equation modeling (SEM) was used to identify factors and measure the influences of exogenous variables on the endogenous variable, marital satisfaction. SEM was the basis for testing the proposed structural model and developing a new model providing the best fit for the data.

A measurement model composed of marital characteristics, marital interaction processes, and marital satisfaction was developed through the use of factor analysis techniques. Once the latent factors were identified, all but the highest loading items of the subscales were eliminated through item reduction. The SPSS (Version 8) program was used to conduct both exploratory and confirmatory factor analyses, which revealed the best fitting measurement model and structural model for the path analysis under consideration. Once the measurement model and the structural model were determined, hypotheses regarding statistically significant differences were tested by selecting subsamples of the data for comparison (i.e., gender, length of marriage).

The assessment of goodness-of-fit in structural equation modeling evaluates the closeness of the research sample to the actual model for the population. The root mean square error of approximation (RMSEA) is used to assist in assessing the viability of the structural models. Browne and Cudeck (1993) noted,

> Practical experience has made us feel that a value of the RMSEA of about .05 or less would indicate a close fit of the model in relation to the degrees of freedom . . . . We are also of the opinion that a value of about .08 or less . . . would indicate a reasonable error of approximation. . . . [We] would not want to employ a model with an RMSEA > .1. (p. 144; see also Loehlin, 1998, for discussion of cutoff values)

RESULTS

The initial alpha coefficients for the subscales of the DAS ranged from .69 (Affectional Expression) to .88 (Consensus). The alphas for the ENRICH scales ranged between .63 (Equalitarian Roles) and .85 (Communication and Sexual Relationship). For the two scales of CHARISMA, the alphas were .83 (Importance) and .94 (Satisfaction With Marital Characteristics). After the item reduction process, the alphas for the DAS scales ranged from .78 to .80, the ENRICH scales ranged from .73 to .87, and the alphas for the CHARISMA scales ranged from .73 to .90. The alpha for the combined factor for the dependent variable, Marital Satisfaction, was .79.

The Measurement Models

The conceptual model tested in this study hypothesized a relationship between marital characteristics and marital interaction processes and a path that would best lead to marital satisfaction (see Figure 1). To test this model, a measurement model was constructed from a series of exploratory factor analyses on the data, which suggested the number of latent factors that were present and the items that best contributed to the measurement of these latent factors.

Hattie (1981) described a four-stage factor analytic approach to studying behavioral domains: (a) conducting exploratory factor analyses to assess the number of factors, (b) developing viable factor names that are based on theoretical arguments

and ensuring that each factor consists of subscales that many researchers agree appropriately load on the factor, (c) assessing the goodness-of-fit using confirmatory factor analysis, and (d) cross-validating the hypothesis on new data sets.

Using Hattie's (1981) method, the number of factors underlying Importance ratings and Satisfaction ratings was first estimated based on the expected number of factors and their interpretability. The subscales from the ENRICH Inventory and DAS were factor analyzed individually using a maximum likelihood estimation method with oblique rotations (Jöreskog & Sorbom, 1988). Using this approach, the presence of a factor is supported (i.e., identified) by 2 to 4 items that load most heavily on that factor. The factor loading should exceed .30 for that factor to be considered stable.

An exploratory factor analysis of the list of 18 marital Importance and 18 Satisfaction characteristics in the CHARISMA scales clearly suggested the presence of three factors for each scale, but only using 10 of the items (see Table 1). The items were the same for both characteristics, and the patterning was most similar. The only discrepancy was that the "commitment to good parenting" item loaded less successfully on the Importance scale than it did on the Satisfaction scale. Although it was decided to include this item in Factor 3 to ensure sufficient identification, this discrepancy in factor loadings suggests a lower internal consistency and, thus, the need for further exploration of this factor.

Next, according to Hattie's (1981) method, preliminary names were assigned to the latent factors based on their item composition. Four items (i.e., marital characteristics) loaded most heavily on Factor 1 (respect; forgiveness; romance; and sensitivity, support), three items loaded most heavily on Factor 2 (lifetime commitment, loyalty, and strong moral values), and three items loaded most heavily on Factor 3 (belief in God, religious commitment, and commitment to good parenting); hence, the factor names, Love, Loyalty, and Shared Values, respectively, were selected.

Once the three factors and 10 items were identified, a confirmatory factor analysis was conducted to confirm that the items consistently loaded on these factors and to assess the goodness-of-fit for each model. Because the goal in developing the measurement model is to identify distinct factors, ideally, interfactor correlations are low. Both the pattern matrix and interfactor correlations for the Importance and Satisfaction subscales are shown in Table 1. The interfactor correlations for the three Importance factors were .42 or below. A chi-square test of the fit of the three-factor Importance model yielded a chi-square statistic = 273.5, with $df = 102$ ($p < .01$). The interfactor correlations for the three Satisfaction factors were .70 or below, and the three-factor Satisfaction model yielded a chi-square statistic = 316.2, with $df = 102$ ($p < .01$).

A third round of exploratory factor analyses was conducted to confirm the factors underlying the marital interaction processes. Because the three subscales from the DAS (i.e., Affectional Expression, Cohesion, and Consensus) and the four subscales from the ENRICH Inventory (i.e., Communication, Equalitarian Roles, Sexual Relationship, and Conflict Resolution) have been previously developed, the present research sought to confirm these seven factors by selecting those items that made the strongest contribution to each factor. Table 2 displays the results of these factor analyses as provided by the pattern matrix, which describes the degree of association between these seven marital interaction processes. As shown in Table 2, the highest correlation between any two factors in the correlation matrix is .44. As such, it was determined that the factors associated with marital interaction processes were sufficiently distinct, identified, and suitable for the measurement model. A chi-square fit statistic for this seven-factor model of marital interaction processes yielded a chi-square = 144.3, with $df = 129$ ($p = .17$).

The final step in the development of the measurement model was to determine the composition of a single factor

TABLE 1

Factor Loadings and Interfactor Correlations for CHARISMA Scales

	Importance Rating			Satisfaction Rating		
Variable	Love	Loyalty	Shared Values	Love	Loyalty	Shared Values
Marital characteristic						
Respect	0.60			0.77		
Forgiveness	0.60			0.79		
Romance	0.56			0.77		
Sensitivity, support	0.73			0.90		
Lifetime commitment		0.86			0.33	
Loyalty		0.89			0.89	
Strong moral values		0.59			0.77	
Belief in God			0.97			0.98
Religious commitment			0.86			0.83
Commitment to good parenting			0.21			0.33
Interfactor Correlation						
Love	—			—		
Loyalty	0.27	—		0.34	—	
Shared values	0.41	0.42	—	0.70	0.46	—

Note. CHARISMA = Characteristics of Marriage Inventory.

TABLE 2

Factor Loadings and Interfactor Correlations for Marital Interaction Processes

Variable	1	2	3	4	5	6	7
1. Affectional Expression_4	0.48						
1. Affectional Expression_6	0.31						
2. Cohesion_25		0.64					
2. Cohesion_26		0.69					
2. Cohesion_27		0.91					
2. Cohesion_28		0.44					
3. Consensus_14			0.96				
3. Consensus_11			0.51				
3. Consensus_2			0.59				
3. Consensus_15			0.50				
4. Communication_a				0.73			
4. Communication_h				0.65			
4. Communication_j				0.60			
5. Equalitarian Roles_d					0.69		
5. Equalitarian Roles_f					0.78		
5. Equalitarian Roles_l					0.71		
5. Equalitarian Roles_e					0.53		
6. Sexual Relationship_a						0.73	
6. Sexual Relationship_b						0.97	
6. Sexual Relationship_d						0.56	
6. Sexual Relationship_f						0.81	
7. Conflict Resolution_b							0.43
7. Conflict Resolution_e							0.72
7. Conflict Resolution_g							0.74

Note. Variables preceded by the numbers 1, 2, or 3 were adapted from the Dyadic Adjustment Scale (DAS). Variables preceded by the numbers 4, 5, 6, or 7 were adapted from the ENRICH Inventory. Letters or numbers that follow variable names refer to specific items borrowed from the DAS or ENRICH scales.

Interfactor Correlations Matrix for Marital Interaction Processes

	1	2	3	4	5	6	7
1. Cohesion	—						
2. Sexual Relationship	0.42	—					
3. Consensus	0.44	0.35	—				
4. Equalitarian Roles	0.08	0.05	0.03	—			
5. Conflict Resolution	0.32	0.20	0.36	0.01	—		
6. Communication	0.43	0.36	0.44	0.02	0.28	—	
7. Affectional Expression	0.18	0.27	0.22	0.07	0.21	0.05	—

Note. When compared with Figure 2, the following factor names should be considered synonymous: Sexual Relationship and Sexuality/Intimacy; Conflict Resolution and Conflict Management.

that would best represent the dependent variable—marital satisfaction. To ensure stability in the final model, only a small subset of items was desired for the dependent variable. A subset of six items, three from the DAS and three from the ENRICH Inventory, that best represented the total behavioral domain were selected (see Table 3). A single factor provided an excellent fit for these items ($\chi^2 = 12.5$, $df = 9$, $p = .19$).

The final model thus consisted of seven marital interaction processes: three factors that represent the importance of marital characteristics, three factors that represent the individual's level of satisfaction with those marital characteristics, and the dependent variable (marital satisfaction). As shown in Figure 1, marital interaction processes were initially thought to be mediators of the relationship between marital characteristics and marital satisfaction. However, when an early test of the structural model (as originally hypothesized) failed to identify significant paths, this result suggested the need to revise the conceptual model such that marital characteristics, rather than marital interaction processes, serve as the mediators in this model. Once revised, the structural model revealed significant indirect paths extending from all but one marital interaction process, to the dependent measure, marital satisfaction.

The Structural Model

Once the measurement model was completely identified, the structural model was tested using the SPSS LISREL-7 program (Jöreskog & Sorbom, 1988). It soon became evident that the Cohesion factor (from the DAS) was unrelated to any other factor in the model and was thus deleted from further analyses. The RMSEA value of .07 falls within the acceptable range ($\chi^2 = 1865$, $df = 940$, $N = 201$). As such, a reasonable amount of confidence is placed in the structural model shown in Figure 2. As shown in Figure 2, statistically significant paths ($p < .05$) were found between the six marital interaction process factors, the three Importance factors for marital characteristics, three Satisfaction factors on those same marital characteristics, and the overall Marital Satisfaction factor. Three significant paths

TABLE 3

Content of Items and Factor Loadings for the Dependent Variable: Marital Satisfaction

Variable	Item Content	Factor Loading
Marital		
Satisfaction_b	I am very happy with how we handle role responsibilities in our marriage.	0.68
Satisfaction_f	I am very happy with how we manage our leisure activities and time we spend together.	0.58
Satisfaction_j	I feel very good about how we each practice our religious beliefs and values.	0.47
Satisfaction18	In general, how often do you think that things between you and your partner are going well?	0.75
Satisfaction19	Do you confide in your mate?	0.78
Satisfaction20	Do you ever regret that you married (or lived together)?	0.57

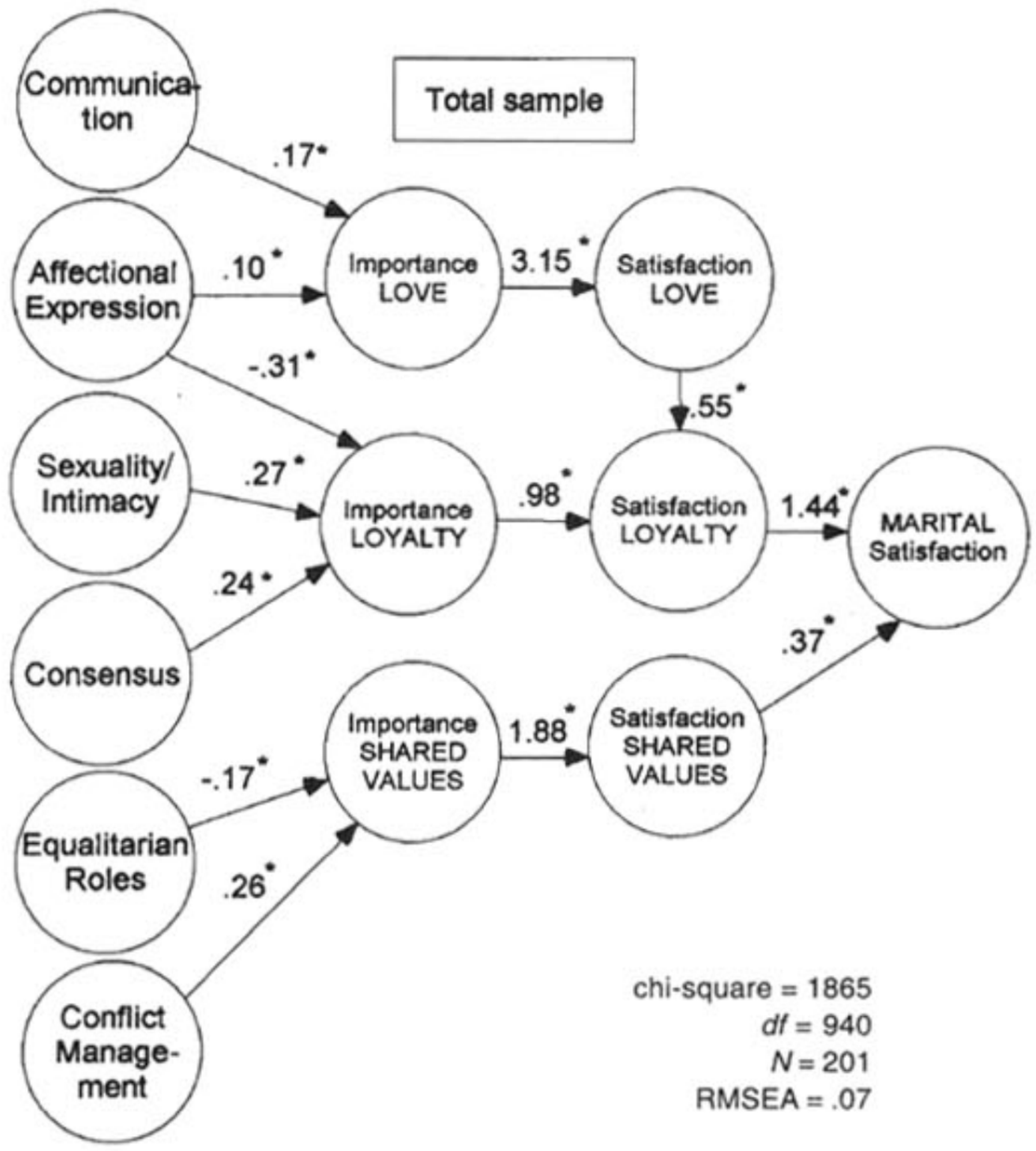

FIGURE 2

The Complete Structural Model Applied to the Total Sample (*N* = 201)

Note. Values in figure are beta coefficients derived from the LISREL-7 (Jöreskog & Sorbom, 1988) fully standardized solution. RMSEA = root mean square error of approximation.
*$p < .05$.

were found to extend from the six exogenous factors, representing marital interaction processes, through three Importance factors, and then through three Satisfaction factors, prior to reaching the factor for overall Marital Satisfaction. In other words, the relationship between marital interaction processes and marital satisfaction was found to be mediated by both the relative importance of marital characteristics and the relative satisfaction with that marital characteristic. Thus, results were found that confirmed Frisch's (1994) concept of weighted satisfaction and demonstrated the importance of including both measures of marital characteristics in the structural model.

Assessment of Gender and Marital Longevity Factors

We hypothesized that gender differences would have a statistically significant moderating effect on the strength of the relationship between marital interaction processes and marital satisfaction. This hypothesis was tested by applying the structural model to each subset of the sample based on gender and was found to be supported by the data based on differences in the strengths of various gamma and beta weights between the two models. All paths were significant in the model for female participants ($n = 137$, $\chi^2 = 2388$, $df = 940$, RMSEA = .11). In the subsample for male participants, paths leading from affectional expression, consensus, and sexuality to marital characteristics were not statistically significant ($n = 64$, $\chi^2 = 3234$, $df = 940$, RMSEA = .10).

We also hypothesized that there would be statistically significant differences in the ratings of importance of marital characteristics related to length of time in the present marriage. To test this hypothesis, separate models were tested for participants married less than 20 years and those married more than 20 years. All paths were significant for individuals married 20 years or less ($n = 134$, $\chi^2 = 2739$, $df = 940$, RMSEA = .12). However, for participants married more than 20 years, paths between affectional expression, sex, conflict management, and marital characteristics ceased to be significant ($n = 67$, $\chi^2 = 5434$, $df = 940$, RMSEA = .27). Similarly, the path between satisfaction with shared values and marital satisfaction became nonsignificant for those married more than 20 years. Thus, the hypothesis of statistically significant differences based on length of marriage was supported.

DISCUSSION

The use of structural equation modeling techniques allowed for testing of the conceptual model introduced in Figure 1. Originally, marital characteristics were hypothesized to have a direct influence on marital interaction processes, and marital interaction processes were conceptualized as mediating. When the structural model was tested and failed to find significant paths, however, it became necessary to reexamine the measurement model to find an alternate explanation for the relationships between the variables. Only by rearranging the conceptual model so that marital characteristics were positioned as mediators in the model, and rearranging the measurement model such that marital interaction processes were located as endogenous factors, was it possible to find a defensible model.

When the conceptual model was revised, the measurement model and factor analysis identified three distinct

latent factors of marital characteristics. These factors were assigned the factor names: Love, Loyalty, and Shared Values. The structural model shown in Figure 2 illustrates three paths to marital satisfaction based on a mediated relationship between marital interaction processes and marital satisfaction. Although Factors 1 and 2 appear to be adequately identified, the composition and identification of Factor 3, Shared Values, gives rise to further questions. Given the very low factor loading for the parenting characteristic, future research should investigate the possibility of a fourth distinct factor, which pertains specifically to importance and satisfaction with parenting. (This would require adding more such items to the scale.)

Loving relationships are those in which open communication and agreement on the expression of affection are important. The most important characteristics of loving marriages were identified as respect, forgiveness, romance, support, and sensitivity. In loving relationships, a path extends from communication and affectional expression to the importance factor and then extends from the importance factor to satisfaction. However, the results of the present study suggest that satisfaction with the characteristics of a loving relationship is not sufficient to achieve marital satisfaction. Rather, the path to marital satisfaction is mediated by satisfaction with loyalty in the relationship. Thus, according to this model, loyalty mediates the relationship between satisfaction with loving characteristics and marital satisfaction.

Relationships in which loyalty is important are those in which devotion to one's spouse is viewed as a priority, regardless of sexual activity and despite possible disagreements about the expression of affection. It is interesting that the most important characteristics of what we have called "loyal relationships" were the top three identified by Fenell (1993) as the most important characteristics of marriage: lifetime commitment to the marriage, loyalty to one's spouse, and strong moral values. According to the path model in Figure 2, spouses who value loyalty and who are satisfied with the loyalty in their relationship can achieve marital satisfaction.

Significant paths extend from three marital interaction processes (i.e., affectional expression, consensus, and sexuality/intimacy) through the importance factor for loyalty and through the satisfaction factor for loyalty, to overall marital satisfaction. This model suggests that sexual satisfaction is a very important ingredient in loyal relationships, despite disagreements that spouses may have about the expression of affection in the relationship. This finding supports previous research on the relationship between sexual satisfaction and marital satisfaction (Ade-Ridder, 1990); however, further research is needed to better understand the relationship between sexuality/intimacy and affectional expression.

Relationships in which there are shared values are those in which conflict is managed, gender roles are traditional, and high priorities are placed on religiosity and parenting. Other studies (e.g., Craddock, 1991; Greenstein, 1995) have similarly found that there is less conflict when spouses subscribe to traditional gender roles. The results of the present study suggest that if "traditionality" is highly valued by both spouses in a relationship, then satisfaction with the shared value of traditionality can lead to overall marital satisfaction. This finding is consistent with earlier findings by Greenstein (1995) and Zvonkovic, Schmiege, and Hall (1994). However, an even stronger implication is that satisfaction with gender roles depends on whether couples share common values about those roles.

A comparison of the different models for men and women revealed a difference in the paths to marital satisfaction for men in contrast to women. For men, loving relationships are more highly influenced by communication than by affectional expression; loyal relationships are more highly influenced by affectional expression than by sex or consensus. Similar to women, these results indicate that men who are satisfied with the values in their marriages tend to be more traditional, or less equalitarian, and they tend to be satisfied with conflict management in the relationship. In contrast, the model for women indicates that significant paths for women are the same as those reported for the total sample.

The present findings suggest that the influence of shared values on marital satisfaction may be different for men and women. According to these results, women in the sample who are satisfied with traditional gender roles, satisfied with the level of conflict management in their marriage, and satisfied that they and their spouses share a common set of values tend to be satisfied in their marriages. However, even when men are satisfied with the values shared in their marital relationships, this satisfaction does not necessarily lead to marital satisfaction. Regarding marital longevity, couples that have been married less than 20 years resembled the total sample in that all marital interaction processes contributed significant paths to the model of marital satisfaction. However, for those married more than 20 years, changes occurred in two out of three paths to marital satisfaction. Although the path from loving relationships to marital satisfaction remained the same, paths through loyalty and shared values changed over time. After 20 years of marriage, loyal relationships were singularly influenced by the level of consensus in the marriage, and relationships in which couples maintained shared values were singularly influenced by gender role traditionality. Although the path from loyalty to marital satisfaction remained significant, the path from shared values to marital satisfaction did not. Future research should investigate whether the influence of some marital interaction processes actually diminishes over time, as these findings suggest.

Gelles (1995) noted that research in the area of marital satisfaction has been moving in the direction of investigating more complex multidimensional models of marital satisfaction, in an attempt to more fully understand happy marriages. In much of the existing research, marital satisfaction has been thought to be influenced by three types of independent variables: (a) antecedent personality dynamics (i.e., marital characteristics), (b) interpersonal dynamics that evolve within the relationship (i.e., marital interaction processes), and (c) contextual factors that are not independent of each other

(e.g., gender, length of marriage; Kurdek, 1991; Mackey & O'Brien, 1995). The results of the present study support earlier findings that all three of these types of independent variables contribute significantly to marital satisfaction.

The present study yielded a list of the 10 most important marital characteristics among the original 18 being measured. Referring back to Fenell's (1993) results, the present study found agreement with 7 out of 10 marital characteristics. The current findings confirm the relative importance of lifetime commitment, loyalty to spouse, strong moral values, desire to be a good parent, faith in God, religious/spiritual commitment, and the willingness to forgive and be forgiven. The characteristics that were not as strongly supported were respect for one's spouse as a friend, commitment to sexual fidelity, a desire to please and support one's spouse, and being a good companion to one's spouse.

As suggested by Kurdek (1991) and others, studies of marital satisfaction should differentiate between marital interaction processes and marital characteristics. This differentiation was accomplished through the development of the measurement model wherein marital interaction processes and marital characteristics were assigned to different axes. A test of the structural model then supported the existence of significant relationships between specific marital interaction processes and marital characteristics.

As shown in the structural model, loving marriages (i.e., those that highly value the qualities of mutual respect, forgiveness, romance, and sensitivity) are most strongly associated with the marital interaction processes of communication and affectional expression. Loyal marriages (i.e., those that most highly value a lifetime commitment to the marriage, interpersonal loyalty, and strong moral values) are most strongly associated with the marital interaction processes of consensus and sexual satisfaction. Somewhat surprisingly, loyalty is positively related to sex/intimacy but inversely related to agreement on affectional expression, meaning that couples in loyal relationships are likely to disagree about the expression of affection.

Marriages in which there are shared values (i.e., those which most highly value belief in God, religious commitment, and commitment to good parenting) are associated with traditional gender roles and the ability to manage conflict. This finding is consistent with research by Craddock (1991), who reported a positive correlation between marital satisfaction, similar religious orientation, similar personality issues, the ability to resolve conflict, and consensus on parenting. Whisman and Jacobson (1989), however, also reported a relationship between traditional sex roles and depression in women, because traditional relationships are associated with less task-sharing and less satisfaction with decision making. According to research by Zvonkovic et al. (1994), marital satisfaction in relationships with traditional gender roles only remains high as long as both husband and wife agree about the level of traditionality within the relationship.

The results of this study should be considered in light of several possible limitations. First, data were collected in a single location (i.e., one shopping mall) and in only one southeastern state. Second, whereas the sampling design proved effective for gathering the necessary data on persons in first marriages, twice as many women as men volunteered for the study. The 2:1 ratio of women to men and the higher RMSEA values limit the ability to generalize the findings on gender differences. Third, because the study targeted individuals in their first marriages, the findings should not be construed as generalizable to marital satisfaction in remarriages. The goodness-of-fit indicators discussed earlier suggest that other factors that influence marital satisfaction are not accounted for by the structural model.

IMPLICATIONS

The art and science of marriage counseling depends largely on the ability of counselors to recognize and understand the underlying dynamics in a given marriage. In clinical circles, marital satisfaction has long been recognized as a subjective phenomenon. The task of the counselor is not to define marital satisfaction for a particular individual or couple, but rather to help the spouses clarify their own feelings about the marriage (i.e., the importance of and their satisfaction with marital characteristics), develop insight about their marital behaviors and the nature of their reciprocal interpersonal interactions (i.e., marital interaction processes), and learn to communicate their differing needs to each other. The structural model defined in this study may be useful in helping both counselors and their clients to conceptualize marriage and recognize the various influences that are likely to affect a spouse's level of marital satisfaction.

This research suggests that counselors may also benefit from evaluating the impact of various moderating variables on marital satisfaction. Although additional research is needed to fully understand the effects of gender and marital longevity on marital satisfaction, it is useful to hypothesize about and explore the importance of these moderating variables. This research suggests that certain marital interaction processes are less significant based on one's gender and/or length of marriage. The idea that husbands and wives have different preferences in marriage is not a new concept for counselors. However, as counselors attempt to conceptualize the overall nature of a marriage, it is useful to organize that conceptualization into specific characteristics and processes.

Couples often seek counseling when they are unhappy in their relationships but unsure (i.e., lack of clarity) of the source of their unhappiness. The present research suggests a clear way to conceptualize and measure some of the influences on relationships. The findings of this study suggest that the path to marital satisfaction, for a given individual, will be influenced by several variables, including marital interaction processes, the values placed on certain marital characteristics, the perceived level of satisfaction the individual experiences with those most highly valued marital characteristics, gender, and the number of years the individual has been married.

As shown in the structural equation models, the three paths to marital satisfaction are relatively distinct and have

minimal overlap. Clinicians may find that spouses who value different paths experience greater interpersonal conflict. Because this model makes sense from a clinical perspective, marriage counselors may wish to draw on this research to assess whether spouses or prospective spouses agree or disagree about their desired routes to marital satisfaction.

The structural model demonstrated that gender and marital longevity serve as moderators of marital satisfaction, which affect the strength of the relationship between marital interaction processes and marital satisfaction. However, the goodness-of-fit statistics suggest the presence and influence of other variables that have not been accounted for in this model. Therefore, further research is needed to incorporate additional contextual variables that reflect the changing trends and demographics of contemporary marriages and that may account for some of the unexplained variance in this model of marital satisfaction, such as variables associated with dual-earner households, stress management, different work schedules, lack of time together, the use of coping strategies, and management of work–family conflicts.

Future research should include consideration of the premarital context for relationships (e.g., age at first marriage, family history) and other personality variables that set the stage for a healthy marriage or that are predictive of divorce (Kurdek, 1991). The findings of this study suggest the need for further research on variables that influence marital satisfaction—such as gender differences; differing needs of younger and older marriages; and the dimensions of love, loyalty, and shared values—in order to further the goal of teaching couples how to achieve greater marital satisfaction.

Further research should also attempt to overcome the limitations to generalization of the present study by examining samples of the population in different geographic locations and by retesting hypotheses about differences based on gender and marital longevity. In addition, future studies should assess the extent to which the identified relationships between marital interaction processes and marital characteristics generalize to other research samples. As more of the variance in this model is accounted for, it is likely that the overall fitness of the model will improve and contribute additional explanations about the nature of factors affecting marital satisfaction.

CLOSING REMARKS

The present study investigated the relationship between marital interaction processes, marital characteristics, and marital satisfaction. Through the use of structural equation modeling techniques, the relationship between marital interaction processes and marital satisfaction was shown to be mediated by the relative importance of marital characteristics and the individual's satisfaction with those characteristics in his or her marital relationship. A total of three statistically significant pathways to marital satisfaction were identified in this research. The pathway through love was associated with communication and expression of affection. The pathway through loyalty was associated with sexuality/intimacy and the ability to build consensus. The pathway through shared values was associated with traditional versus nontraditional marital roles and the ability of the couple to manage conflict.

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