# ENRICH Marital Inventory: A Discriminant Validity and Cross-Validity Assessment

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**To assess the validity and clinical utility of the marital inventory ENRICH, discriminant validity study was conducted using a national sample of 5039 married couples. The sample was randomly split in order to form a cross-validation group. ENRICH is a multidimensional scale and two types of analysis were conducted to assess to value of these various scales. Results from discriminant analysis indicated that using either the individual scores or couples' scores, happily married couples could be discriminated from unhappily married couples with 85-95% accuracy. These results were cross-validated with a second sample. Using regression analysis, it was clearly demonstrated that background factors account for little of the variance in discriminating happy from unhappily married couples compared to their relationship dynamics, i.e., scale scores. All ENRICH scales except equalitarian roles proved significant, indicating the validity of a multidimensional inventory.**

This paper focuses on the validity and multidimensionality of the ENRICH marital inventory (Olson, Fournier, & Druckman, 1983) which was designed for marital therapists and researchers. Clinicians require a diagnostic tool that is reliable, valid, clinically useful, and that can provide a multidimensional perspective on couples coming for therapy. Researchers require a scientifically sound scale that will discriminate between various types of couples.

Marital satisfaction and related concepts are studied more often than any other concepts in the field (Spanier & Lewis, 1980). This research interest has received empirical justification in recent studies (Campbell, Converse & Rodgers, 1976; Glenn & Weaver, 1981; Olson, McCubbin, Barnes, Larsen, Muxen & Wilson, 1983; Weingarten, 1985) which have demonstrated that marital satisfaction is the most prominent contributor to global satisfaction for married people in the United States.

The majority of previous studies validating marital inventories have been limited in four important ways. First, sample sizes were usually too small to adequately assess the scales and at the same time cross-validate their findings. Second, these studies have often failed to control for background factors which could confound the findings. Third,

current marital satisfaction measures often do not have truly dyadic measurement; that is, inventory scores are generally limited to individuals' reports about the couple rather than some measure of the dyad itself (Fowers & Olson, 1988). Finally, previous research seldom assessed the multiple dimensions of marital satisfaction and the unique contribution of each dimension. These limitations will be specifically addressed in the present study.

There have been a number of recent papers that have investigated the reliability and validity of two multidimensional indices of marital satisfaction-*the Dyadic Adjustment Scale* (DAS) by Spanier (1976) and the *Marital Satisfaction Inventory* (MSI) by Snyder (1979).

The DAS has been assessed in a number of studies. The results of these studies have been generally positive. In the original validation study, Spanier (1976) found that the 32 items in the scale could differentiate married from divorced couples. The scale was also found to be reasonably reliable. At the same time, however, factor analysis produced a factor structure slightly different from what Spanier predicted.

Two subsequent studies have examined the DAS factor structure further. Spanier and Thompson (1982) completed a confirmatory factor analysis which found still another factor structure with separated couples. A fourth factor structure was found by Sharpley and Cross (1982). These authors also divided their sample into high and low score on the DAS in order to assess its discriminant validity. Discriminant analysis showed that the DAS items could discriminate successfully between the groups.

The Marital Satisfaction Inventory (MSI) is another multidimensional inventory designed for clinical and research purposes (Snyder, 1979, 1983). Snyder and his colleagues have conducted a number of studies to evaluate the MSI. The inventory has been found to be reliable and capable of discriminating between clinic and nonclinic couples (Snyder, 1979). Further studies have indicated that the MSI has acceptable concurrent validity (Snyder, Willis & Keiser, 1981) and predictive validity (Snyder & Berg, 1983). Finally, Snyder and Smith (1986) conducted a cluster analysis with 178 couples that resulted in five distinct couple types, thus supporting the multidimensionality of the MSI.

Research on the DAS and the MSI is more rigorous than earlier marital satisfaction scales (Fowers & Olson, 1988). Their sample sizes were sufficient for reliable conclusions and both husbands and wives were studied. The multidimensionality of both measures has been supported by factor and cluster analytic procedures. Although the body of research on these inventories offers partial replications, none of the studies conducted to this date have been successfully cross-validated. Also, research on these scales have not controlled for demographic variables. Finally, neither of these inventories offers dyadic measurement.

# ENRICH Marital Inventory

The purpose of this study is to assess the validity and clinical utility of the marital inventory ENRICH (Evaluating & Nurturing Relationship Issues, Communication, Happiness). It was designed as a multidimensional inventory, which assesses theoretically valuable and clinically useful dimensions of marital relationships (Olson, Fournier & Druckman, 1983).

These 14 ENRICH scales were developed through extensive theoretical and empirical analyses (Olson, Fournier & Druckman, 1983; Fournier, Olson & Druckman, 1983). Fournier et al., (1983) summarizes the results of ten studies of marital conflict and dissolution (e.g., Rausch, Goodrich & Campbell, 1963; Kitson & Sussman, 1982). The results of these studies indicated the importance of intrapersonal issues such as personality and personal habits, expectations and idealization, and values. Interpersonal issues included communication, conflict resolution, sex, commitment, and roles. External issues included content areas of relatives, friends, children and parenting and money.

The 14 scales of ENRICH Inventory (125 items) were developed to assess these problem areas. These categories are also generally similar to the scales developed in the PREPARE Inventory developed in 1979 (Olson, Fournier & Druckman, 1983). A description of each ENRICH scale follows. Each scale contains 10 items, except three scales which contain 5 items: idealistic distortion, marital cohesion and marital change.

*Idealistic Distortion*. This scale is a modified version of the Edmonds Marital Conventionalization scale (Edmonds, 1967). It measures the tendency of the partners to answer questions in a socially desirable manner and is used to revise individual scale scores to correct for that bias.

*Marital Satisfaction*. This scale provides a global measure of satisfaction by surveying ten areas of the couple's marriage. One global item was derived to tap ten of the clinical scales of ENRICH. It was not used in the analyses due to this measurement overlap.

*Personality Issues*. This scale examines an individual's perception of his or her partner with regard to behavioral issues and the level of satisfaction felt on those issues.

*Communication*. This scale is concerned with an individual's feelings and attitudes toward communication in his or her relationship. Items focus on the level of comfort felt by the partner in sharing and receiving emotional and cognitive information.

*Conflict Resolution*. This scale assesses the partner's perception of the existence and resolution of conflict in the relationship. Items focus on the openness of partners to recognize and resolve issues and the strategies used to end arguments.

*Financial Management*.  This scale focuses on attitudes and concerns about the way economic issues are managed within the relationship.  Items assess spending patterns and the care with which financial decisions are made.

*Leisure Activities*.  This scale assesses preferences for spending free time.  Items reflect social versus personal activities, shared versus individual preferences, and expectations about spending leisure time as a couple.

*Sexual Relationship*.  This scale examines the partner's feelings about the affectional and sexual relationship.  Items reflect attitudes about sexual issues, sexual behavior, birth control, and sexual fidelity.

*Children and Parenting*.  This scale assesses attitudes and feelings about having and raising children.  Items focus on decisions regarding discipline, goals for the children and the impact of children on the couple's relationship.

*Family and Friends*.  This scale assesses feelings and concerns about relationships with relatives, in-laws, and friends.  Items reflect expectations for and comfort with spending time with family and friends.

*Equalitarian Roles*.  This scale assesses an individual's feelings and attitudes about various marital and family roles.  Items focus on occupational, household, sex and parental roles.  Higher scores indicate a preference for more egalitarian roles.

*Religious Orientation*.  This scale examines the meaning of religious beliefs and practice within the marriage.  Higher scores indicate that religion is an important part of the marriage.

*Marital Cohesion*.  This scale describes how the couple feels toward each other and how they balance their separation and togetherness.

*Marital Change*.  This scale describes how the couple is able to balance stability versus change in their relationships.

The ENRICH Computer Report consists of a computerized 12-page summary that provides individual scores for the husband and wife and a couple score for each of the 14 categories.  Due to the effects of social desirability on marital satisfaction scores, ENRICH contains an Idealistic Distortion scale.  It is a 5-item scale that is used as a correction for the social desirability bias.  All of the individual scores in this study were corrected for idealism.  The Idealistic Distortion scale is a modified version of the Edmonds Marital Conventionalization scale (Edmonds, 1967).  It correlates highly with other scales that measure the social desirability bias (Olson, Fournier & Druckman, 1983).  It has an *alpha* reliability of .83 and a 4-week test-retest reliability of .92.

The ENRICH Computer Report also provides several types of information about the couple.  The Positive Couple Agreement (PCA) score is the percentage of agreement on the 10 items in each ENRICH category (0-100%) and it is a measure of couple consensus.  In addition, husband and wife responses to each item within a category are

classified into one of four types: (a) positive agreement (both agree it is a strength in their relationship); (b) special focus (negative agreement, both agree it is a problem for them); (c) indecision (one or both is undecided on an issue); and (d) disagreement (responses reflect opposing positions on an issue). Thus, the positive couple agreement (PCA) is the percentage of items on which the couple has positive agreement.

ENRICH also includes a demographic data form which provides information on age, education, occupation, income, the number of years the couple has been married, the number of months the partners knew each other before marriage, religious preference, birth order, marital status, race, employment level, parents' marital status, and population of childhood and current areas of residence. The correction formula for adjusting each person's scores takes into account their score on idealistic distortion, their score on each category (scale) and the overall correlation of idealistic distortion with that category.

The most basic assumption of the multidimensional approach to assessing relationships is that there are many facets to close relationships and that each of them contributes to overall satisfaction. In order to justify ENRICH as a multidimensional inventory, it must demonstrate consistent discriminant power across these factors with respect to marital satisfaction. Further, the various dimensions of satisfaction ought to make an independent contribution to the overall prediction of happiness.

Among the important attributes that a multidimensional marital inventory ought to have is the ability to clearly discriminate between satisfied and dissatisfied couples. While this is axiomatically true of the entire satisfaction measure, this discrimination capability ought to characterize the other scales in the inventory as well. This study will assess whether discriminations between satisfied and dissatisfied couples can be made with ENRICH as a whole and with its individual scales.

## METHOD

### *Subjects*

A national sample of all married couples (7261 couples) who had taken the ENRICH Inventory between January, 1983 and June, 1985 were included in the study. These married couples were administered the ENRICH Inventory by counselors or clergy because the couple was seeking martial counseling or marital enrichment. Their scores were obtained from the ENRICH Computer Report. The mean ages were 33 for the males and 32 for the females. The majority of the subjects had at least some college education and virtually all had finished high school. The couples had been married an average of 9.7 years and had an average of 2.9 children. The majority were white and of the Christian religion.

## ENRICH: Previous Validity & Reliability

A national study of 1200 couples provided evidence of the concurrent validity of ENRICH (Olson, McCubbin et al., 1983). A comparison of the ENRICH Marital Satisfaction scale with the classic Locke-Wallace Marital Adjustment scale resulted in correlations of .73 for individual scores and .81 using couple scores. These findings indicated the convergence of these two scales, providing evidence of the concurrent validity of ENRICH.

**Table 1**

**Reliability of ENRICH Scales**

| Scale | $Alpha^a$ | Test-Retest[b] |
|---|---|---|
| Marital Satisfaction | .86 | .86 |
| Idealistic Distortion | .83 | .92 |
| Personality Issues | .82 | .81 |
| Communication | .82 | .90 |
| Conflict Resolution | .84 | .90 |
| Financial Management | .82 | .88 |
| Leisure Activity | .71 | .77 |
| Sexual Relationship | .85 | .92 |
| Children and Parenting | .78 | .89 |
| Family and Friends | .79 | .82 |
| Equalitarian Roles | .68 | .90 |
| Religious Orientation | .84 | .89 |

[a]$N$ = 15,522 individuals: 7,261 couples.   [b]$N$ = 115 individuals; testing separated by 4 weeks.

**Table 2**

**Individual Scale Intercorrelation Matrix**

|  | PI | ER | CO | CR | FM | LA | SR | CP | FF | RO |
|---|---|---|---|---|---|---|---|---|---|---|
| PI | -- | .03[a] | .75 | .72 | .51 | .56 | .55 | .47 | .55 | .42 |
| ER |  | -- | -.03[a] | -.02[a] | -.01[a] | -.01[a] | -.09[a] | -.04[a] | -.06[a] | -.30 |
| CO |  |  | -- | .83 | .49 | .60 | .67 | .46 | .52 | .42 |
| CR |  |  |  | -- | .48 | .60 | .61 | .46 | .51 | .43 |
| FM |  |  |  |  | -- | .46 | .39 | .39 | .44 | .32 |
| LA |  |  |  |  |  | -- | .53 | .45 | .54 | .39 |
| SR |  |  |  |  |  |  | -- | .41 | .45 | .39 |
| CP |  |  |  |  |  |  |  | -- | .41 | .40 |
| FF |  |  |  |  |  |  |  |  | -- | .42 |

*Note.* PI = Personality Issues; ER = Equalitarian Roles; CO = Communication; CR = Conflict Resolution; FM = Financial Management; LA = Leisure Activities; SR = Sexual Relationship; CP = Children and Parenting; FF = Family and Friends; RO = Religious Orientation.
[a] = All correlations were significant at p<.001 except those starred.

The internal consistency (*alpha*) and test-retest reliabilities of ENRICH were assessed in a previous study, indicating that the inventory has acceptable reliability (Olson, Fournier & Druckman, 1983). See Table 1 for complete results.

In developing a multidimensional inventory, it was assumed that there would be conceptual and empirical overlap between the scales, especially since each scale was designed to provide a comprehensive assessment of that domain. The average correlation between the 10 scales used in this study was .37, with a range of -.30 to .83. The highest correlation was ($r = .83$) between two domains that one would expect to be related, i.e., Communication and Conflict Resolution. The one scale that had very low correlations with the other scale was Equalitarian Roles. As expected, this scale also had a significant negative correlation with the Religious Orientation scale ($r = -.30$). See Table 2 for a complete intercorrelation matrix.

## RESULTS

### *Selecting Satisfied and Dissatisfied Couples*

The background form includes 2 items that will be used as criteria for the analyses. The first is a marital satisfaction item. It ask, "How satisfied are you with your marriage?" The responses range from extremely satisfied to dissatisfied. The second is a question about divorce. It inquires, "Have you ever considered separation or divorce?" The responses are "yes" or "no."

The couples were divided into two groups based on their scores on the 1-item marital satisfaction measure. When both the husband and the wife reported that they were very satisfied or extremely satisfied, they were included in the satisfied group ($n = 2664$ couples). The unsatisfied group consisted of couples in which both partners indicated that they were somewhat dissatisfied or dissatisfied ($n = 2375$ couples). A total of 5039 couples (69%) were included in the two groups, with 2222 (31%) excluded because one spouse was satisfied and the other was dissatisfied. This sample was randomly split to provide validation and cross-validation samples for the discriminant analyses.

The appropriateness of the satisfaction split was assessed with the divorce and marital status items from the demographic information form. A *chi-square* analysis of the marital satisfaction groups and the item concerning whether the partners had considered divorce showed that a much higher proportion of dissatisfied couples had considered divorce ($\chi 2 = 2793$, *df* = 3, *p* < .001). If both husbands and wives had considered divorce, 86% of the couples fell into the dissatisfied group. If neither had considered divorce, 95% were in the satisfied group. In couples where only one spouse had thought seriously about divorce, 62% were dissatisfied. See Table 3 for a complete summary.

The second check on the marital satisfaction split was done with the marital status item. There were 192 couples who were separated at the time they took ENRICH. Of

these, 189 couples (98%) fell in the dissatisfied group.  Thus, it appears that the median split on the Marital Satisfaction measure provided a valid grouping of satisfied and dissatisfied couples.

## *Univariate Comparison of ENRICH Scales*

Figure 1. Happily married vs. unhappily married: Positive couple agreement (PCA) scores on ENRICH categories.
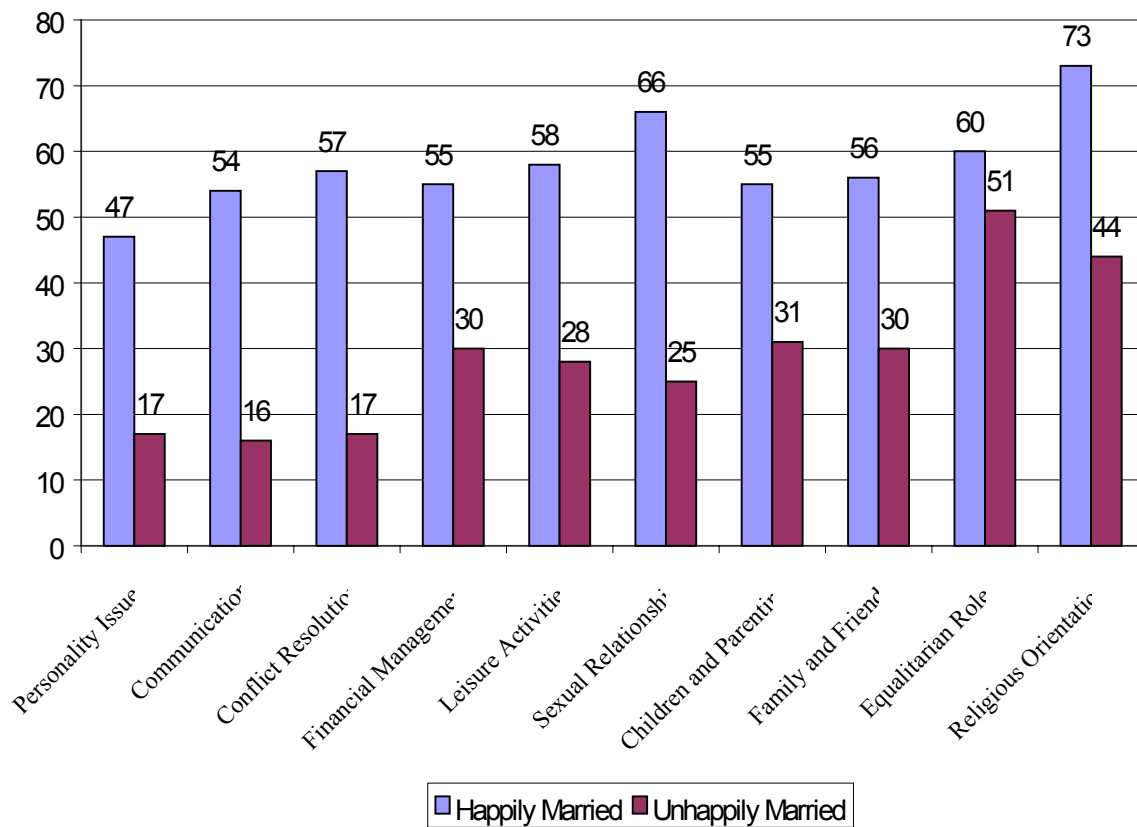


Univariate analyses of the individual and positive couple agreement scores were conducted using one-tailed *t*-tests for independent means.  The satisfied partners scored higher on every individual scale, except that dissatisfied wives had higher scores on Equalitarian Roles than the satisfied females.  The couple agreement scores were higher among the satisfied couples on every scale.  The positive couple agreement (PCA) scores have been arranged in a profile format in the Figure 1.  This format enables easy comparison of overall satisfied and dissatisfied couples.  These scores are summarized in Table 4.

**Table 3**

**_Chi_ Square Analysis of Individuals and Couples Who Considered Divorce**

| Spouses Who Considered Divorce | Satisfied | | Dissatisfied | | Total |
|---|---|---|---|---|---|
| | $n$ | $\%$ | $N$ | $\%$ | |
| Neither | 1,997 | 95.3 | 99 | 4.7 | 2,096 |
| Husband Only | 127 | 49.6 | 129 | 50.4 | 256 |
| Wife Only | 234 | 34.2 | 450 | 65.8 | 684 |
| Both | 271 | 13.9 | 1,675 | 86.1 | 1,946 |
| Total | 2,629 | 52.8 | 2,353 | 47.2 | 5,587 |

$x^2 = 2793.17$, $df = 3$, p<.001

## *Demographic Comparison of Satisfaction Groups*

The satisfied and dissatisfied couples were compared to assess their demographic similarity.  This was done using two-tailed *t*-tests for independent means for the continuous variables, and *chi-square* analyses for the categorical variables.  There are four continuous variables: (a) age, (b) years married, (c) months they had known their partners before marriage, and (d) the number of children.  The *t*-tests showed small, but significant differences on all four variables.  In the satisfied couples, both husbands and wives were older, had been married longer, had known each other longer before marrying, and had fewer children.  Table 5 contains complete results.

There are 11 categorical demographic variables for both males and females.  They are: (a) education, (b) occupation, (c) income level, (d) employment status, (e) religion, (f) marital status, (g) parents' marital status, (h) population of current residence, (i) population of residence during childhood, (j) race, and (k) birth order.  The satisfied and dissatisfied groups were compared on these variables using *chi-square.*

Among satisfied couples, both the husbands and wives tended to have more education ($\chi2 = 534.9$, $df = 6$, $p < .001$), and to be employed more often in higher status occupations ($\chi2 = 382.4$, $df = 6$, $p < .001$).  The amount of time the spouses spent working differed in the two groups.  If the husband had a full time and part-time job, the couple was more likely to be dissatisfied; if the husband only worked part time, the couple was more often satisfied.  There are no other significant differences in couple satisfaction when the wife is employed, or the husband works full time or is unemployed, ($\chi2 = 71.9$, $df = 3$, $p < .001$).

Table 4

**t-tests of ENRICH Category**

| Scale | Individual Scores | | | | | | Positive Couple Agreement (PCA) Scores | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | | | Female | | | | | |
| | Sat. | Dissat. | *T* | Sat. | Dissat. | *t* | Sat. | Dissat. | *t* |
| Personality Issues | 52.8 | 21.3 | 55.3* | 52.0 | 18.7 | 59.6* | 47.3 | 17.2 | 55.3* |
| Communication | 51.0 | 17.4 | 72.4* | 50.1 | 14.5 | 78.2* | 54.1 | 15.5 | 74.1* |
| Conflict Resolution | 53.3 | 17.2 | 74.8* | 53.2 | 15.7 | 79.2* | 56.5 | 17.2 | 69.2* |
| Financial Management | 47.6 | 27.6 | 29.7* | 46.1 | 25.8 | 30.2* | 54.5 | 30.1 | 35.0* |
| Leisure Activities | 66.8 | 31.9 | 47.7* | 67.8 | 30.4 | 52.7* | 57.8 | 28.4 | 54.5* |
| Sexual Relationship | 51.3 | 22.0 | 53.5* | 53.2 | 21.1 | 61.2* | 66.3 | 25.0 | 66.8* |
| Children and Parenting | 47.1 | 26.5 | 31.5* | 47.1 | 22.9 | 37.1* | 54.9 | 30.5 | 33.4* |
| Family and Friends | 48.6 | 25.8 | 35.1* | 45.2 | 24.6 | 32.4* | 55.9 | 29.6 | 43.5* |
| Equalitarian Roles | 72.9 | 71.9 | 1.7 | 69.9 | 81.6 | 21.2* | 59.7 | 50.9 | 14.9* |
| Religious Orientation | 45.8 | 27.3 | 31.9* | 43.4 | 22.9 | 38.0* | 72.8 | 44.2 | 41.3* |

Note. Sat. = Satisfied; Dissat. = Dissatisfied.

* *t* values significant at p<.001.


Among religious groups, Baptists, Catholics and Jews tended to be more often satisfied while Lutherans, Episcopalians and nondenominational Christians were more often dissatisfied. There were no differences among Methodists or other Prostestants ($\chi 2$ = 140.7, *df* = 8, *p* < .001).

In terms of marital status, couples in a first marriage and those who had one widowed spouse were slightly more often satisfied, while couples where either the husband or the wife had been previously divorced or the couple was currently separated were more often dissatisfied ($\chi2 = 226.7$, $df = 3$, $p < .001$).

The marital status of the parents was also related to a person's satisfaction. If either set of parents was divorced or separated, the couple was much more likely to be dissatisfied, as well. When their parents are still married, the couple is more often satisfied in their marriage. There was no difference in satisfaction if either or both parents were deceased ($\chi2 = 46.2$, $df = 7$, $p < .005$).

The population of current residence also appears to be related to satisfaction. Couples living in more populous areas were more often satisfied, while couples living in less populous areas were more often dissatisfied ($\chi2 = 114.5$, $df = 5$, $p < .001$). The population of the childhood residence also differentiated the couples, following a similar pattern. Couples who grew up in a rural setting were more likely to be dissatisfied and those who grew up in cities larger than 100,000 were more likely to be satisfied ($\chi2 = 34.4$, $df = 5$, $p < .001$). The only difference in race were that black couples tended to be more often dissatisfied ($\chi2 = 18.7$, $df = 5$, $p < .001$).

**Table 5**
**t-tests of Demographic Variables**

| Variable | Satisfied | Dissatisfied | t |
|---|---|---|---|
| Husband's Age | 34.4 | 33.4 | 4.3* |
| Wife's Age | 32.7 | 31.8 | 4.1* |
| Years married | 10.9 | 9.6 | 5.0* |
| Months Known Before Marriage | 28.8 | 23.3 | 8.7* |
| Number of Children | 2.9 | 3.0 | -2.0* |

There were no interpretable differences between the groups on income or the birth order of the spouses. A more complete analysis of the demographic data was conducted by Fowers (1988).

***Discriminant Analyses***

In order to assess ENRICH's discriminant validity, discriminant analysis was carried out using the individual or couple scores as predictors and the satisfied and dissatisfied groups as the criterion. The sample was randomly split into two groups to conduct a cross-validation of the discriminant analyses. In doing the cross-validation analysis, the original discriminant function equation was used for the cross-validation sample.

All of the discriminant analyses were carried out using the stepwise method with the objective of maximizing Rao's *V*. The minimum tolerance level for entry into the equations was $p < .001$. In all of the analyses, the *F* ratios were significant at $p < .001$.

There were 2,514 couples in the validation group and 2,525 couples in the cross-validation group. There were no significant differences between the validation and cross-validation groups on the individual or couple agreement scores. There were some slight differences between the groups in that the validation group had: (a) known each other for a shorter time before marrying; (b) fewer husbands who worked part time only; and (c) more Episcopalians and more Jews. These differences were deemed too slight to unduly bias the cross-validation.

Using individual scores only, 92.9% of the validation couples and 91.7% of the cross-validation sample was correctly classified ($\chi^2 = 3285.2$, $df = 18$, $p < .001$). With couple scores, 91.2% of the validation couples were correctly classified, and 90.1% for the corss-validation group ($\chi^2 = 2874$, $df = 8$, $p <. 001$). These results are summarized in Table 6.

In the individual scale discriminant analysis, all 10 of scales for the wife's scores and 8 of 10 scales for husband's were significant predictors of satisfaction. The husband's scores on Family and Friends and Religious Orientation were not significant. When couple scores were used, 8 of the 10 of the couple scales were utilized in the predictions. The Financial Management and Family and Friends scales were not significant. The discriminant function coefficients for each scale are listed in Table 7.

*Multiple Regression Analyses*

The regression analyses utilized the entire sample (7,261 couples). The one-item marital satisfaction measure served as the criterion measure. A couple score was obtained which is a combination of the couple mean and couple discrepancy scores. The formula suggested by Lavee and Olson (1987) for couple satisfaction is: couple satisfaction = $(2 [h + w] - |h - w|) \div 4$.

The predictive capacity of the scale was further examined through multiple regression analyses using the entire sample ($n = 7,261$ couples). Two separate analyses were done using individual scores and then using couple scale scores to predict couple satisfaction. The individual scores predicted satisfaction at a rather high level ($R = .82$; $R^2 = 67$) and the results were similar using couple scores ($R = .79$; $R^2 = .63$). Refer to Table 8 for Regression Coefficients for these analyses.

**Table 6**
**Discriminant Analysis: Percent Correctly Classified**

| Analysis Type | Satisfied | Dissatisfied | Overall |
|---|---|---|---|
| *Individual Scores:* | | | |
| Validation Group | 90.2 | 95.8 | 92.9* |
| Cross Validation | 88.4 | 95.5 | 91.7 |
| | | | |
| *Couple Agreement:* | | | |
| Validation Group | 86.4 | 96.4 | 91.2 |
| Cross-validation | 84.7 | 96.5 | 90.1 |

**Table 7**
**Scale Predictors in Discriminant Analysis**

| I. Individual Analysis | Discriminant Function |
|---|---|
| A. Husband Scores | |
| 1. Conflict Resolution | .236 |
| 2. Sexual Relationship | .162 |
| 3. Communication | .156 |
| 4. Leisure Activities | .111 |
| 5. Equalitarian Roles | .055 |
| 6. Financial Management | -.047 |
| 7. Children and Parenting | .039 |
| 8. Personality Issues | .037 |
| B. Wife Scores | |
| 1. Communication | .240 |
| 2. Sexual Relationship | .238 |
| 3. Conflict Resolution | .235 |
| 4. Religious Orientation | .170 |
| 5. Leisure Activities | .145 |
| 6. Equalitarian Roles | -.107 |
| 7. Personality Issues | .087 |
| 8. Children and Parenting | .074 |
| 9. Family and Friends | -.058 |
| 10. Financial Management | -.055 |
| II. Couple Analysis | |
| 1. Sexual Relationship | .412 |
| 2. Communication | .391 |
| 3. Conflict Resolution | .269 |
| 4. Children and Parenting | .188 |
| 5. Leisure Activities | .167 |
| 6. Religious Orientation | .148 |
| 7. Equalitarian Roles | -.054 |
| 8. Personality Issues | -.046 |

Since the demographic variables were found to be related to marital satisfaction, further regression analyses were conducted including both ENRICH scores and demographic variables as predictors. This allows a test of the relative predictive capacity of the ENRICH scales and the background information. Categorical variables were entered into the analyses as dummy variables (e.g., parents' marital status was recorded married = 0, separated or divorced = 1). Background variables were entered as a block, followed by a stepwise entry of ENRICH scale scores. Both sets of predictors were then removed in turn to assess their relative level of predictive capacity.

The multiple correlation of the background variables with couple satisfaction was .34 ($R^2$ = .12, $p < .001$). When the individual scale scores were added, the $R$ increased to .83 (change in $R^2$ = .57, $p < .001$). When the demographic variables were removed from

the equation, $R^2$ was decreased by .02. When the couple scores were added to the background variables, $R$ increased to .80 (change in $R^2$ = .53, $p < .001$). When the background variables were removed from this equation, $R^2$ decreased by only .02. In other words, the scales added significantly to the amount of variance accounted for in satisfaction beyond that explained by background variables.

**Table 8**
**Regression Analysis Using Marital Satisfaction as Outcome**

| | B | *beta* | F |
|---|---|---|---|
| I. Individual Analysis (R = .82; $R^2$ = .67; $f$ = 950. p<.001) | | | |
| A. Husband Scores | | | |
| 1. Conflict Resolution | .009 | .155 | 147.3 |
| 2. Communication | .007 | .116 | 83.7 |
| 3. Sexual Relationship | .005 | .099 | 107.2 |
| 4. Personality Issues | .002 | .048 | 21.8 |
| 5. Leisure Activities | .002 | .043 | 21.2 |
| 6. Children and Parenting | .001 | .019 | 4.2* |
| B. Wife Scores | | | |
| 1. Communication | .009 | .155 | 147.3 |
| 2. Sexual Relationship | .008 | .152 | 239.2 |
| 3. Conflict Resolution | .006 | .110 | 80.6 |
| 4. Religious Orientation | .004 | .075 | 81.2 |
| 5. Personality Issues | .004 | .071 | 48.8 |
| 6. Egalitarian Roles | .003 | -.054 | 50.8 |
| 7. Children and Parenting | .002 | .032 | 10.5 |
| 8. Family and Friends | -.002 | -.030 | 12.7 |
| II. Couple Analysis (R = .79; $R^2$ = .63; $F$ = 916; p<.001) | | | |
| 1. Sexual Relationship | .012 | .262 | 492.9 |
| 2 Communication | .012 | .241 | 236.0 |
| 3. Conflict Resolution | .007 | .145 | 96.9 |
| 4. Religious Orientation | .005 | .113 | 123.4 |
| 5. Children and Marriage | .004 | .089 | 81.1 |
| 6. Leisure Activities | .004 | .081 | 43.0 |
| 7. Personality Issues | .003 | .049 | 13.1 |
| 8. Financial Management | .002 | .032 | 9.1 |
| 9. Family and Friends | .002 | .029 | 6.3* |

\* All *F* values are significant at p<.001 except those starred which are at p<.05 level.

## DISCUSSION

The validation of ENRICH produced confirmatory results. The pattern of scores indicates that couples who are unhappily married have less consensus about their marriage and that as individuals they see their marriage having a broad array of difficulties. The *t*-tests analyses of the scales revealed precisely the pattern of differential scores that would be expected of satisfied and dissatisfied couples. The dissatisfied

couples scored lower on all 10 positive couple agreement scores, which indicates that couple consensus is a clear discriminator of satisfied and dissatisfied couples.

With the exception of the wives' scores on the Equalitarian Roles scale, satisfied partners had higher scores on all individual scales, as well. Further, the differences between the two groups were very substantial, indicating that the overall marital satisfaction is reflected in all of the aspects of the marital relationship measured by ENRICH.

Although there were differences between the groups on the Equalitarian Roles scale, they were much less marked, and dissatisfied women had a higher score than satisfied females. The Marital Satisfaction Inventory also has a marital role scale. In Snyder's (1979) validation study, this scale was also the weakest predictor of overall marital satisfaction.

Individual scores above 60 on the ENRICH Equalitarian Roles scale indicate that the person desires a shared approach to husband-wife roles (Olson, Fournier & Druckman, 1983). Thus, on average, both satisfied and dissatisfied partners in this study expressed the desire for egalitarian roles and the couple agreement scores for both satisfied and dissatisfied groups futher indicate basic agreement on this issue. The differences between satisfied and dissatisfied couples in this area may be more apparent in the actual role behavior of the spouses than in the expressed role preferences. In any case, the discriminant validity of this scale is not as well established as the other scales and some revision may be in order.

The consistency of measurement of the scales across the satisfied/dissatisfied comparison adds empirical support to the multidimensional measurement of marital satisfaction, as well as providing evidence for ENRICH's discriminant and construct validity. These results point to a strong relationship between marital satisfaction and the various aspects of marital relationships. There was also a high degree of consistency between husbands' and wives' mean scores (see Table 4).

The major test of ENRICH's discriminant validity was conducted using discriminant analysis. The results were significant, showing that the inventory can be used to distinguish between distressed and nondistressed couples with considerable accuracy. Virtually all of the ENRICH scales were utilized in the categorization equations. These findings demonstrate high discriminant validity, and that the various scales of ENRICH exhibit a great deal of consistency. Further, the fact that the majority of the scales added significantly to the prediction is a strong indication of ENRICH's multidimensionality and the importance of multidimensional measurement. The proportion of couples correctly classified using discriminant analysis compares favorably with similar analyses done with the Dyadic Adjustment Scale (Haynes, Folingstad & Sullivan, 1979).

A general weakness in the literature is the lack of attention paid to demographic variables. The differences between the satisfied and dissatisfied couples in background characteristics can potentially confound discriminant validity assessments. Therefore, it is important to control their effects. When their influence was removed from the

regression analyses, there was little or no decrement in the amount of variance accounted for. The relatively slight contribution of the background variables in the regression analyses confirms the idea that the inventory's scales are more potent discriminators of happy and unhappy couples than demographics. Yet, the clear differences across these groups on some of the demographics indicates that background factors may play a role in the kind of relationship a couple can develop.

While background differences were small, they were statistically significant. This study was not designed to assess the casual significance of these variables, but it does indicate that even such traditional demographics as socioeconomic status, age, education, years married and the number of children in the family were associated with marital satisfaction. This is contrary to what Spanier and Lewis (1980) reported in their decade review. While further study is necessary, the general outlines provided in the demographics of these couples indicate that satisfied couples have more resources (e.g., education), are more often in a first marriage and live in more populated areas.

The regression analyses confirmed the results of the discriminant analyses in showing that the ENRICH scales are very good predictors of satisfaction. The most important predictors were the Communication, Sexual Relationship, and Conflict Resolution scales. The Religious Orientation, Children and Marriage, and Leisure Activities scales also contributed substantially to the predictions. It is noteworthy that the two of the three most prominent predictions involve measures of the interpersonal processes of communication and conflict resolution in spite of the fact that these tow scales are moderately correlated.

There is an important caution regarding this study. First, the subjects in the study comprised all of the couples who have taken ENRICH through the PREPARE/ENRICH office between January, 1983 and June, 1985. While this represents a national sample, it is based on availability rather than representativeness.


## SUMMARY

These findings indicate two important feature of ENRICH that can aid the clinician. The first is that the inventory as a whole has been shown to discriminate between satisfied and dissatisfied couples. This can assist the therapist to gauge the severity of distress among the couples coming for therapy. Second, the discriminant validity of the various scales has been established. This capacity can support the marital therapist's effort to focus the therapy on the specific areas of difficulty that the couple is experiencing.

The study is a significant advance over previous research on marital inventories on four counts. First, this study demonstrated the discrimination validity of ENRICH; it also included a confirmatory cross-validation. Second, most studies do not eliminate potential demographic confounds. When differences in background characteristics were controlled, ENRICH maintained its predictive capacity.

Third, this study indicates that both individual scores and positive couple agreement (PCA) scores predict overall satisfaction. The individual and couple scores in ENRICH were consistent in differentiating between satisfied and dissatisfied couples. Lastly, all of the scales were statistically significant predictors of marital satisfaction. These findings corroborate the inventory's multidimensional design.

The inventory's discriminant validity was clearly demonstrated in terms of both the individual scales and the instrument as a whole. The value of the multidimensional approach to the measurement of marital satisfaction was further enhanced by this study.

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