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ABSTRACT

A model for the prediction of marital adjustment is proposed which presents selected social background factors (e.g., education) and interactive factors (e.g., Bienvenu's Communication scale, Hurvitz' Role Inventory, Dean's Emotional Maturity and Commitment scales, Rosenberg's Self-Esteem scale) in order to account for as much of the variance in the Minimum Marital Adjustment score (husband's score or wife's score, whichever is lower) as possible. Communication, Perceived Emotional Maturit, and Congruency between Husband's Expectations and Wife's Role Behavior accounted for most of the variance, with a coefficient of multiple determination of .57 with marital adjustment, when Social Desirability was controlled. (Author)

IMPROVING MARITAL PREDICTION: A MODEL AND A PILOT STUDY*

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Statement of the Problem

The prediction of marital success has a fairly lengthy history, dating most noticeably from the classic studies of Terman (1938) and Burgess-Cottrell (1939). Despite the improving sophistication of social science generally, the attempt to account for the variance in marital success is still far from adequate.

The particular topic of this paper developed from the juxtaposition in class usage of the research by Hurvitz (1965) and Bienvenu (1970), the former indicating a negative relationship between his role scale and marital strain, and the latter indicating a positive association between his communication scale and marital adjustment. Items from Hurvitz seem to reflect task-orientation in the concept of role, while items from Bienvenu seem predominantly of the affective component. This posed the question of whether or not there was overlap between the two, and whether if different the use of both, modified as scales, might increase the accuracy of marital prediction. Hawkins and Johnson (1969) reported a -.8446 correlation between their Perceived Role Discrepancy and Current Marital Satisfaction scales, while Bienvenu noted that Navran (1967), reported a positive correlation of..82 between his Primary Communication Inventory and his Marital Relationship Inventory.

Each of the reports cited above utilized specially-constructed scales. Since the Locke-Wallace Marital Adjustment Scale (1959) has been the most widely used one, it was decided to "standardize" by utilizing that for the marital adjustment score, and modified versions of the Hurvitz and Bienvenu scales. It also seemed advisable to include several other potential marital predictors in the plans. Dean (1966) had determined correlations of around

.40 between his emotional maturity scale and the marital adjustment scores of husbands and wives; about the same level of correlation was found in his study of commitment and marital adjustment (1974). Cole's value scale (1973) and Rosenberg's Self Esteem scale (1965) also seemed promising and were included.

We are not unaware of objections to the marital adjustment concept and scaling devices. Lively (1969) decried its use because of the difficulty of specifying the source of marital happiness, happiness may change during the marriage, etc. Of course, one could say the same things about a thermometer! The criticisms of Safiolios-Rothschild (1969) and Spanier (1973) are more substantive; i.e., if one is dealing with marriage adjustment, there should be a score reflecting the family unit, rather than scores reflecting two individuals. We shall deal with this problem later. However, since so many variables are being considered on the "independent" side of the equation, it was thought desirable at this time not to manipulate the "right hand" or independent variable measurement.

The Instruments

It may be useful at this point to present sample items representing each of the major concepts. Selected items follow:

Communication. Does your spouse have a tendency to say things which would be better left unsaid? Does it upset you a great deal when your spouse gets angry at you? Does your spouse accuse you of not listening to what he (she) says?

Commitment. Though my marriage may not succeed, there is no more I can do to keep it going. I want very much for my marriage to succeed, and will do my fair share to see that it does. I want very much for my marriage to succeed, and will do all I can to see that it does.

Self Esteem. I feel that I have a number of good qualities. I am able to do things as well as most other people. I certainly feel useless at times.

Emotional Maturity. Tries to avoid unpleasant but necessary tasks. Faces the inevitabilities of life (such as illness or loss of job) with calm. Feels uneasy and apprehensive in the presence of his (her) supervisors.

Roles. I am a companion to my wife (husband). I practice the family religion and philosophy. I manage the family income and finances.

Note that husbands, for example, would answer the above for their own behavior, and then modified sentences for their expectations of their wives, e.g., "She is a companion to her husband." Wives responded to opposite forms.

Questionnaires were prepared incorporating all of the above scales plus a number of items pertaining to the usual social background variables. Since research in marital prediction has been criticized for not being sensitive to the problem of social desirability, the Crowne-Marlowe Desirability scale (1970) was included.

It may be recalled that Kurvitz utilized a rank-order scale for his sample; Bienvenu utilized a Likert-type scale with four possible responses; Dean used 5-point Likert scales; Crowne-Marlowe a yes-no format; Rosenberg a contrived combination of 2 to 4 items which had been presented in a 4-point Likert format; and Cole utilized the Certainty Method format. It seemed highly desirable to standardize all scales.

The Certainty Method for 11-point scales (Warren, Klonglan and Sabri, 1969) was selected since this gives greater weight to the "end responses". The format presents the respondent with a decision first as to whether he agrees or disagrees with a particular item, then requests him to indicate how certain he is in his response. Weighting is as follows:

Agree	A1 = 9, A2 = 10, A3 = 11, A4 = 13, A5 = 16*
	AD = 8
Disagree	D1 = 7, D2 = 6, D3 = 5, D4 = 3, D5 = 0

The above format seemed inappropriate for the Hurvitz Inventory. Therefore the questionnaire was set up so that comparisons could be made between the husband's expectations regarding his wife's role behavior and his wife's reported actual behavior and vice versa for the wife. Because past experience in survey research indicated that respondents would have difficulty rank-ordering the importance of the various behaviors (Hurvitz' original presentation), these items were converted to the Likert format for item-to-item comparisons of the felt importance of each partner's expectations and performance. Since this Inventory involves a matched response from each spouse and is not designed as a scale, we do not report on its reliability. However, to make all correlations positive, we converted the discrepancy score into a congruity score--i.e., the higher the score, the greater the agreement between husband and wife.

What would be the effect on the scales of the radically changed format? Alpha reliability coefficients were calculated in order to assess the reliability of the scales. In addition, item-total correlation analyses were performed with the items within each scale to identify any weak items which would not be acceptable for inclusion in the scales for further analysis.

The alpha values for the various scales were as follows: Communication (Bienvenu) .91; Commitment (Dean) .72; Emotional Maturity (Dean) .90; Social Desirability (Crowne-Marlowe) .82; Self Esteem (Rosenberg) .86; Marital Adjustment (Locke-Wallace) .81; Values (Cole) .50. The item-total correlation analysis indicated that none of the seven items selected from the Cole Values scale were

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*Negative items have a reversed scoring pattern.

acceptable. This, coupled with the fact that the scale had an alpha value considerably lower than the other scales (.50) prompted us to eliminate this scale from further analyses. Further item-total correlation analyses resulted in the elimination of two other items: one from the 22-item Communication scale and one from the 21-item Social Desirability scale.

A word about the dependent variable. Previous research has consistently found a correlation between husband's and wive's marital adjustment scores of about .60, despite the fact that the Nye-MacDougall Marital Adjustment scale was utilized by Dean (1966, 1968); the Locke-Wallace Marital Adjustment Scale was utilized by Burgess and Wallin (1944), Hurvitz (1965), Price (1969), Bienvenu (1970), Pitsiou (1971, 1973), Spanier (1972), Cole (1973), and Dean (1974). Given this disparity, what really, is the state of a couple's marital adjustment?

To the best of our knowledge, no rational argument has been put forward to determine how to obtain a "family" adjustment score--and since we are all talking of marital adjustment, some such attempt should be made, rather than the continued reporting of individual marital adjustment scores (and only in the last few years has there been care to select husband-wife pairs, the earlier research often selecting groups of unrelated husbands and wives).

The modest correlation of the husbands' and wive's scores prompted us to look at actual discrepancies. The distribution of husband-wife discrepancies on the marital adjustment score is presented in Table I.

Table I About Here

As may be noted, the range of discrepancy is from 0 to 64 points on the 158-point scale, with the majority (56.8%) having a discrepancy of 15 or fewer points. Various mathematical methods of averaging and weighting were considered

as a way of compromising the lack of agreement between husbands and wives, but were finally abandoned in favor of the minimum score, i.e., taking the lower score whether from husband or wife, and treating it as the family adjustment score.

This procedure was rationalized on the basis of a "weakest link" analogy. That is, in terms of exchange theory the partner who is receiving less "reward", who is less satisfied in the relationship, or whose "costs" are relatively high is the one who will withdraw or manipulate the other into withdrawing. Therefore, the score which will be utilized in all calculations is the lower of the two scores in the marriage, whether husband's or wife's, and will be designated as Minimum Marital Adjustment score. At least, this method has two advantages: (1) it results in a unit score and 2) avoids the folly of similar averages resulting, for example, from marital adjustment scores of 99 and 101 or 70 and 130.

The Sample

The resulting 15-page questionnaires were hand-distributed by a class of graduate students during the summer of 1973. Since convenience necessarily was a factor in this non-funded research, a village with a population of somewhat less than a 1,000 located some 12 miles from a university city was selected as the scene. At first it was planned to solicit from every third house, but when the unmapped village turned out to have a number of downtown businesses and a segment of elderly (widowed) people, the instructions were changed to contact every house. Where possible, questionnaires were collected the same night as the original distribution; in some cases, a day or two later. This availability sample finally yielded a net of fully-useable questionnaires of 44 paired couples, plus some few from one partner of a marriage.

The mean score on the North-Hatt Occupational Prestige scale for the husbands was 65, as compared to the national median of 68. The median income

was in the $11,000 - $12,999 bracket. Thus the sample may be termed middle-class (where, of course, most of the research on marital adjustment has been conducted).

Further descriptive information may give clearer conception of this sample (see Table II). Well over half (73.8 per cent) the subjects were under forty years of age; none were younger than twenty. Most of the res-

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Table II About Here

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pondents reported their maximum formal education level to be high school graduate or some college training without completion of degree requirements (41.4 per cent and 33.3 per cent, respectively). Generally, husbands were slightly more likely to report formal education beyond high school than wives, attested to by the fact that nearly 64 per cent of the husbands reported post-high-school formal education, while 56.5 per cent of the wives reported similar education experience. The length of marriage of our couples ranged from one to in excess of twenty years. Six to ten years was the most frequently reported length of marriage (31.8 per cent) and slightly more than half (56.8 per cent) the couples had been married less than ten years. Nearly all (96.6 per cent) spouses reported their present marriage as their first marriage. Most of the subjects reported their religious affiliation to be Protestant (87.4 per cent).

Results

The marital prediction model is presented below (Table III) with the correlations between the independent variables and Minimum Marital Adjustment

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Table III About Here

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indicated. Since several have criticized the possible contamination effect of social desirability (e.g., Cone, 1967) all correlations are presented with the social desirability score partialled out. Note that background variables (prior to marriage) are presented on the left, interacting variables (during the marriage) in the middle, and finally the dependent variable or Minimum Marital Adjustment score on the right.

As may be noted, the correlation between the Minimum Marital Adjustment score and Communication is .71; Commitment .42; Perceived Emotional Maturity (husband and wife rate each other) .55; Self Esteem .22; and the various role congruency scores about .40 and .30. Thus, interaction variables are much more closely associated with the Minimum Marital Adjustment score than are the social background variables. (Zero-order intercorrelations without adjustment for the effect of Social Desirability, are presented in Table IV.)

Table IV About Here

The significantly large correlation (.71) between Communication and Minimum Marital Adjustment led us to query as to the substantive independence of the two measures. We were concerned as to whether or not the items from the Communication scale measured the same phenomena as those of the Marital Adjustment scale.

To determine whether the correlations were spurious (i.e., are there actual differences, or are we measuring the same thing), a factor analysis was performed, utilizing the items from both scales. Although the specific results of this analysis will be reported elsewhere, it may be noted that the Communication scale is apparently measuring different phenomena than the Marital Adjustment scale. Only one item appeared in common in both scales.

Further, a similar procedure was undertaken to estimate the amount of possible contamination between Marital Adjustment and Perceived Emotional Maturity. Again, there was virtually no overlap of items. Nor did Communication and Perceived Emotional Maturity have more than an item or two which loaded on both factors (scales).

In an attempt to assess the relative importance of all the scales to the Marital Adjustment score, a step-wise regression analysis was performed, utilizing the Minimum Marital Adjustment score of the couple, and the individual scores of the scales appearing in the model. After accounting for Social Desirability, the Communication, Perceived Emotional Maturity, and Congruency between Husband's Expectations - Wife's Behavior were significantly added to the regression analysis, thus increasing the precision in predicting marital adjustment. Of these three variables, Communication appears to be the most "valuable" in predicting marital adjustment in that it accounted for 47 per cent of the variance in the dependent variable. By adding the remaining two significant variables, the explained amount of variance in marital adjustment increases to approximately 57 per cent.

Discussion

We began by noting that both Hurvitz' Role Inventory and Bienvenu's Communication scale were associated with good marital adjustment. It had been hoped that modified forms of scales would not overlap, (note they correlated only in the .30s), and that the addition of further scales might result in a coefficient of determination nearer the theoretical limit. Since the addition of several scales did not increase this noticeably, and since these correlations were reported with the effect of Social Desirability already partialled out, we are left with a considerable element unexplained. One is tempted to speculate that almost no matter what scale is utilized, one may be in effect measuring a halo effect; i.e., if the

husband or wife idealizes or diabiolizes the spouse, this evaluation is reflected through almost any instrument. Perhaps new measures which will tap behavior other than responding to questionnaires will have to be developed before predictability can be improved noticeably. Then we can deal with adjustment during the first year, after the first baby, after the first decade and silver anniversary!

Table I

Marital Adjustment Scores Discrepancies

Absolute Difference[1]	f	Per cent
0-5 points	14	31.8
6-10 points	6	13.6
11-15 points	5	11.4
16-20 points	3	6.8
21-25 points	6	13.6
26-30 points	4	9.1
31 or more points	6	13.6
	44[2]	99.9[3]

[1]The minimum and maximum differences were 0 (f=3) and 64 (f=1), respectively.

[2]This table is based on paired responses from 44 husband-wife pairs.

[3]Percentage not equal to 100 due to rounding.

The maximum possible discrepancy between husband-wife scores on this scale is one-hundred-fifty-eight points. The husband-wife marital adjustment score discrepancy for the majority (56.8 per cent) of our couples was fifteen-or-fewer points.

Table II

Description of Sample

	Combined		Husband		Wife	
	(f)	(Percent)	(f)	(Percent)	(f)	(Percent)
Formal Education Completed						
Some high school	3	3.4	2	4.5	1	2.3
High school graduate	36	41.4	14	31.8	22	51.2
Some college	29	33.3	15	34.1	14	32.6
College graduate	9	10.3	4	9.1	5	11.6
Post-graduate work	6	6.9	5	11.4	1	2.3
Advanced degree (M.S., M.A., Ph.D.)	4	4.6	4	9.1	0	0.0
	87+	99.9*	44	100.0	43+	100.0
Age						
20-29 years	42	47.7	20	45.5	22	50.0
30-39 years	23	26.1	11	25.0	12	27.3
40-49 years	11	12.5	6	13.6	5	11.4
50-59 years	8	9.1	5	11.4	3	6.8
60-69 years	2	2.3	1	2.3	1	2.3
70 or more years	2	2.3	1	2.3	1	2.3
	88	100.0	44	100.1*	44	100.1*
Religious Affiliation(1)						
Protestant	76	87.4	38	86.4	38	88.4
Catholic	7	8.0	3	6.8	4	9.3
None	4	4.6	3	6.8	1	2.3
	87+	100.0	44	100.0	43+	100.0
Present Serial Marriage						
First marriage	84	96.6	42	97.7	42	95.5
Second marriage	2	2.3	0	0.0	2	4.5
Third or more marriage	1	1.1	1	2.3	0	0.0
	87+	100.0	43+	100.0	44	100.0
Number of Years Married (2)						
1 year					2	4.5
2-5 years					9	20.5
6-10 years					14	31.8
11-20 years					9	20.5
21 or more years					10	22.7
					44	100.0

(Table 2 Cont.)	Combined (f)	Combined Percent	Husband (f)	Husband (Percent)	Wife (f)	Wife (Percent)
Income						
$5000-6999			3	7.0		
$7000-8999			4	9.3		
$9000-10999			10	23.3		
$11000-12999			8	18.6		
$13000-14999			7	16.3		
$15000-16999			3	7.0		
$17000 or more			8	18.6		
			43+	100.1*		

*Percentage not equal to 100 due to rounding.

+(f) reflects missing responses.

(1) The majority of the Protestants were Lutheran (37.9 per cent of sample) and Methodist (19.5 per cent of sample). There were no Jewish or other religions represented.

(2) The range in the sample for "Number of Years Married" was from one to 48 years.

Table III

Marital Prediction Model

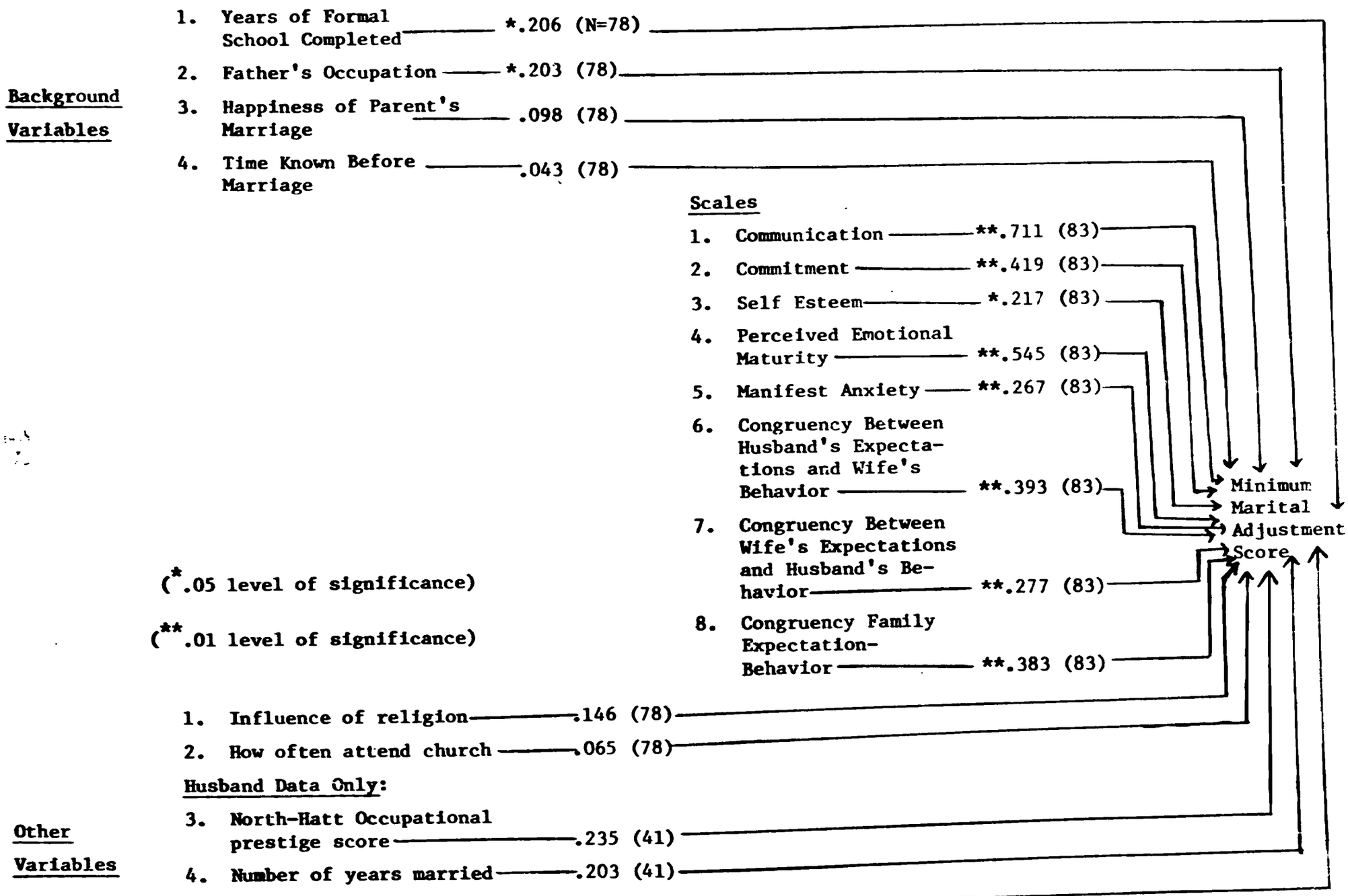

TABLE IV: SCALE CORRELATIONS (Zero-Order)

	CMMCATN	CMMTMNT	CONFAMEB	CONHEWB	CONWEHB	MANANXTY	MINADJ	PEREMMAT	SLFESTM	SOCDSR
CMMCATN										
CMMTMNT	**.529									
CONFAMEB	**.371	*.219								
CONHEWB	**.308	**.282	**.867							
CONWEHB	**.355	.101	**.874	**.515						
MANANXTY	**.459	**.283	**.311	**.278	**.269					
MINADJ	**.734	**.437	**.431	**.428	**.334	**.352				
PEREMMAT	**.481	**.303	*.208	*.191	*.185	**.399	**.569			
SLFESTM	**.362	**.382	*.234	*.236	.172	**.714	**.269	**.342		
SOCDSRBT	**.373	.140	**.309	*.226	**.309	**.499	**.257	*.209	**.257	

Table IV, Footnotes

(A) * - Significant at .05 level.
** - Significant at .01 level.

(B) Key to abbreviations:
COMCATN - Communication Scale
COMTMNT - Commitment Scale
CONFAMEB- Congruency within Family Expectation and Behavior (From Hurvitz' Role Inventory)
CONHEWB - Congruence between Husbands' Expectation and Wifes' Behavior (From Hurvitz' Role Inventory)
CONWEHB - Congruency between Wifes' Expectation and Husbands' Behavior (From Hurvitz' Role Inventory)
MANANXTY- Manifest Anxiety Scale
MINADJ - Minimum Marital Adjustment Score from Couple
PEREMMAT- Perceived Emotional Maturity
SLFESTM - Self Esteem Scale
SOCDSRBT- Social Desireability Scale

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