

The Validation of the Marital Spirituality Scale

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Abstract—This instrument-development project is aimed at developing the Marital Spirituality Scale (MSS). Specifically, this is aimed at constructing the items of the MSS and determining its validity and reliability. A total of 381 married respondents were chosen through referral technique. Findings from the study showed that from the initial 92-item, 5-factor structure MSS, the final form of the MSS has become a 31-item item, 6-factor structure MSS. The factors of the final form of the MSS are relationship with God, Existential, Traditional/Ritual, Intimacy, Forgiveness and Partnership. Furthermore, the MSS exhibits validity and reliability as evidenced by content validation of five (5) experts, convergent and discriminant validity as demonstrated by Exploratory Factor Analysis (EFA).

Index Terms—Marital spirituality scale, validation, test development, reliability.

I. INTRODUCTION

Among the many factors considered as important to the foundation of a healthy marriage is the spiritual dimension of marriage and family system. A growing awareness on the importance of spirituality in marriage is gradually accepted in the areas of counseling and therapy today. The expanding accumulation of researches have documented the salutary relationship of spirituality with marital health [1], marital satisfaction [2]-[3], marital adjustment, happiness [4], stability [5], intimacy, communication, and commitment [6], sexual fidelity [7], and resiliency [8].

As there are numerous evidences suggesting the salience of spirituality on marital relationship, it is therefore timely and important to explore the phenomenon of spirituality among married couples. Attempts have been made to concretize the concept of spirituality specific to individuals in a relationship. Some authors call it relational spirituality [9] while others call it marital spirituality [10]-[12]. Nevertheless, this endeavor to give a distinct name for the phenomenon or concept implies that spirituality between couples is different from a personal or individual spirituality. Several authors have offered to describe marital spirituality in terms of its characteristics and generally their descriptions have commonality [13]-[15]. These characteristics are roughly described as love for each other, love for the Transcendent or Divine and obedience to His teachings or laws, and the sharing of the love to others and the community.

These authors may have some differences in their views regarding what marital spirituality is, however, these

differences are just a matter of ways the characteristics are organized and presented.

One glaring need that comes out of these studies is the need to measure marital spirituality as the role of spirituality in marriage is gradually acknowledged in the areas of psychology, counseling and marital/family therapy. There is a need to develop a valid assessment tool of marital spirituality for it to be used with clients.

Essentially, the assessment of marital spirituality as a tool in counseling could help therapists and counselors enhance their competency. It can also provide a tool for identifying and employing spiritual and religious strengths that may be used in the amelioration of problems. And finally, the use of assessment tool of marital spirituality in counseling helps facilitate the integration of clients' spiritual values and beliefs into the counseling process [16]. This measure of marital spirituality may also help in scientific researches that will facilitate more accumulation of data in Psychology and counseling. While many counselors and psychologists are trained in the administration, scoring, and interpretation of standardized tests, the construction and development of one's own test to contribute to the accumulation of existing inventory of psychological tests in the Philippines will greatly help in the practice and study of counseling and psychology.

Although, there are already existing assessment tools that measure spirituality among families, most of these lack specificity to the Filipino culture as these are made mostly by foreign authors. Some assessment tools are also qualitative in nature adapting the creative techniques in assessment and creative therapy, examples of which are the spiritual genogram, spiritual ecomap and spiritual lifemap [17]. Qualitative assessment tools could offer an in-depth and extensive description of the subject or examinee on the trait being measured; however, quantitative tools could facilitate easier and faster administration and more objective scoring and interpretation.

The Marital Spirituality Scale (MSS) would therefore offer a quantitative measure of marital spirituality among couples that could be employed in psychotherapy and counseling, research, and marital improvement programs. The MSS could be a complimentary tool to the qualitative means of measuring marital spirituality, as this is a quantitative tool that will facilitate easy and fast administration and objectivity in scoring and administration.

It was therefore the aim of this study to establish the validity of the Marital Spirituality Scale which is a self-report measure of a person's perception and belief of God and his perception and belief of his interaction with or involvement of God in his marriage life.

Manuscript submitted May 22, 2012; revised June 26, 2012.

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II. METHOD

A. Participants

All of the 381 participants in this study were identified using snowball sampling technique. The help of psychology major students were sought to refer respondents for the study who were given a copy of the questionnaire. The students were asked to give the questionnaire to heterosexually married individuals of their choice. Confidentiality of information was assured which was made clear in the cover letter. Participation in the study was done merely out of volunteerism. There were 381 participants for the pilot-test of the 83-item MSS. In particular, majority of the respondents were females (62.7%) and more than majority of them were Roman Catholics (69.3%). The respondents had a mean age of 42.03 ($SD=9.78$), with an average number of years of marriage of 16.49 ($SD = 9.75$), average number of children was three ($SD = 1.49$), with a median monthly income of P45,000.00 ($min = P4,000.00$, $max = P800,000.00$), average educational attainment is college graduate ($SD = 1.67$).

B. Instruments

The evaluation sheet for content validation of the constructed Marital Spirituality Scale was one of the instruments used in this study. This evaluation sheet was used by the experts to indicate whether each item in the MSS is a valid and relevant item for the test of marital spirituality. The items were judged by the validators in terms of suitability of the item to the domain which it supposes to represent, clarity of the items, and specificity of the items.

The 83-item Marital Spirituality Scale which initially had five dimensions included was used in this study. The MSS is a Likert type scale with six response options from never to always. Respondents could indicate the frequency to which they exhibit certain behavior described in an item. The responses varied from never= 1 to always =6.

Likewise, the marital satisfaction questionnaire [18], a researcher-made instrument, was also used in this study. This instrument is a uni-dimensional scale that measures satisfaction of individuals of their marital relationship. Sample items are "I feel that my partner is affectionate enough" and "I feel that our life together is dull". Cronbach's alpha of this scale is 0.93 while exploratory factor analysis using principal axis factoring with direct oblimin rotation revealed two-factor structure of the instrument. The factor analysis extracted two factors, where the negatively- worded and positively-worded items were separated into two factors. Difference in content of the items was not noted in the factor structure.

C. Procedure

This validation phase of the project went through the content validation, Exploratory Factor Analysis, and method of contrasted groups.

Three teachers in test construction, one marital/pastoral counselor, and one Islam religion teacher were requested to evaluate the preliminary form of MSS for content validity. The Islam religion teacher was requested to content validates the items of the MSS to explore whether the items were applicable to the Islam religion because it was initially

planned that the MSS would be applicable also to clients in the Islam religion. The marital/pastoral counselor was also chosen and requested to content validate the items of the MSS to clarify whether each of the items were applicable to the Christian faith. The three teachers in test construction and psychological testing were also requested to content validate the items of the MSS.

Content validity describes how adequately a test samples behavior representative of the universe of behavior that the test was designed to sample [19]. An agreement of at least three out of five validators is sufficient for an item to be retained in the item pool. However, because the Islam religion teacher had already suggested that many items in the MSS are not applicable to the Islam religion, then only the evaluations of the four content validators were considered. At this stage, the researcher considered the item to be retained if all four validators adjudged the item to be specific, clear, and suitable. Hence, from an initial 92-item MSS, it has become an 83-item MSS after content validation.

In the item analysis, a reliability analysis was run first to determine the items to be retained or rejected. Corrected item-total correlations were used to identify items that will be deleted or retained. A minimum of 0.50 and a maximum of 0.90 were set to retain an item. Items in each dimension with corrected item-total correlations below 0.50 or above 0.90 were deleted. Items within the range of 0.50 and 0.90 were retained [20]. The item-deletion was guided by the hypothesized 5-factor structure of the scale.

Factor analysis was then used to establish construct validity. Factor analysis is a technique employed to obtain convergent and discriminant evidence of construct validity. In this study, exploratory factor analysis was used to estimate or extract factors; to decide how many factors to retain and to rotate factors to an interpretable orientation. The Statistical Package for Social Sciences version 16 was used to analyze the data. The principal axis factoring was chosen as the extraction method because the dataset was not multivariate normal [21]. A factor loading of at least 0.32 was set to retain an item. Likewise, an item that had crossloading of 0.32 with other factors was also deleted to avoid cloning of items in the scale.

Likewise, the method of contrasted group was conducted to further establish the construct validity of the MSS. The MSS was also administered to another set of samples who initially answered the Marital Satisfaction Questionnaire. Fifty participants with the highest scores in marital satisfaction were compared with the other 50 participants who scored low in the marital satisfaction.

III. RESULTS

The first step in ensuring validity of the test was to examine the content of the test. Content validity is the extent to which the items in the test are representative of the attribute that is being measured. To achieve this, the researcher systematically identified the domains before the test was constructed. Based on the domains formed, item pools were created for each of the domains of the MSS. Five content validators examined the items for suitability of each item to the domain it represented.

Another evidence of validity of the MSS is the Exploratory Factor Analysis (EFA). Data screening for sampling adequacy and test of sphericity was conducted before factor analysis. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0.94, indicating that the number of samples is adequate. While the Bartlett's Test of Sphericity is significant ($\chi^2(1540) = 12651.439, p = .000$), indicating that the variables do relate with one another enough to run an exploratory factor analysis. Principal axis factoring was used as extraction method because the main purpose was to understand the shared variance in a set of measurement through a small set of latent variables called factors [22]. Promax rotation was used because it was assumed that the factors of the MSS are related with each other and not independent of each other.

There were nine (9) factors extracted using Principal Axis Factoring and Promax rotation. The initial eigenvalues showed that the first factor explained 37.45% of the variance, the second factor 7.24% of the variance, the third factor 5.61% of the variance, the fourth factor 2.86% of the variance, the fifth factor 2.51% of the variance and the sixth factor 2.13% of the variance. However, three factors had to be deleted because there were less than three items that were loaded to them.

Likewise, some items also had to be deleted because of crossloading on more than one factor. Crossloading of item decreases the discriminant validity of the factors. Discriminant validity refers to the extent to which the factors are distinct and uncorrelated [23]. If there is poor discriminant validity, then there would be items that are redundant in the test. To avoid crossloading of items on other factors, the items that had at least 0.32 loading on more than one factor were excluded [24]. Another evidence of validity that was examined was the face validity of items. Though an item may load highly on a factor but does not seem to make sense with the other items in the factor, the item was also deleted. Factors that exhibit adequate face validity should be easy to label. Therefore, there were only six (6) factors retained with 34 items after exploratory factor analysis.

The initial 5-factor structure composed of relationship with God, relationship with spouse, relationship with others, traditional/ritual, and existential of the MSS was modified. The EFA revealed a 6-factor structure where the relationship with others was dropped, and the factor on relationship with spouse was broken down into three specific factors of intimacy, partnership and forgiveness.

After Exploratory Factor Analysis, six (6) dimensions of marital spirituality were revealed. These dimensions are relationship with God, existential, traditional/ritual, intimacy, partnership, and forgiveness. The initial dimension of relationship with spouse was broken down into three (3) separate dimensions which are intimacy, partnership, and forgiveness. These are the same elements of marital spirituality that were discussed by [25] and [26].

The other three (3) dimensions remained as dimensions of marital spirituality; relationship with God, existential and traditional/ritual. The initial dimension of relationship with others was dropped and not included in the final factor structure of the MSS. Figure 1 shows the conceptual scheme of Marital Spirituality Scale as revealed by Exploratory

Factor Analysis (EFA).

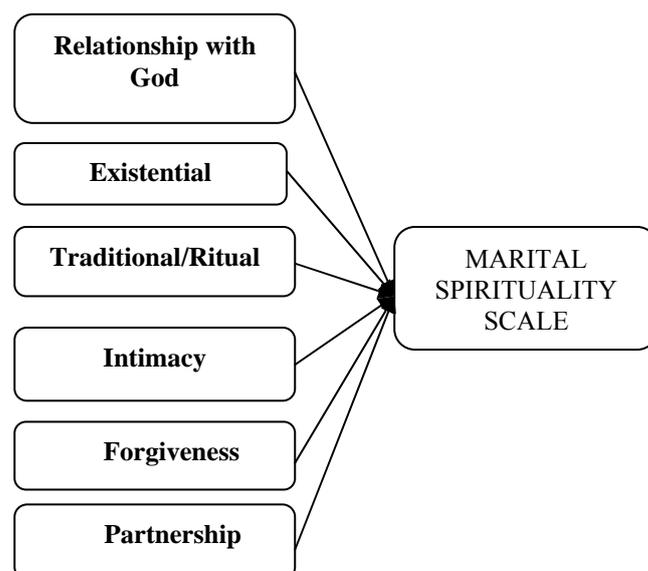


Fig. 1. Conceptual scheme of marital spirituality scale.

To further investigate the construct validity of the MSS, a method of contrasted group was also conducted. Method of contrasted groups, also referred to as evidence from distinct groups, is one way of providing evidence for the validity of a test by demonstrating that scores on the test vary in a predictable way as a function of membership in some group [27]. The high scorers and the low scorers in the Marital Satisfaction Questionnaire were then compared in terms of their marital spirituality scores. The marital spirituality scores between the two comparison groups were significantly different across all dimensions of the MSS. In the dimension of relationship with God, the high marital satisfaction group ($M = 40.70, SD = 4.25$) had higher scores than the low satisfaction group, ($M = 33.32, SD = 6.72$), $t(82.76) = -6.55, p = .000$. In the dimension of traditional/ritual, the high satisfaction group ($M = 33.90, SD = 4.79$) also showed significantly higher score than the low satisfaction group ($M = 24.30, SD = 7.16$), $t(85.48) = -7.87, p = .000$. In intimacy dimension, the high satisfaction group ($M = 35.40, SD = 1.12$) showed higher score than the low satisfaction group ($M = 25.30, SD = 6.31$), $t(52.10) = -11.12, p = .000$. In the dimension of forgiveness, the high satisfaction group ($M = 23.28, SD = 1.32$) also showed significantly higher score than the low satisfaction group ($M = 16.48, SD = 4.77$), $t(56.51) = -9.70, p = .000$. In the dimension of partnership, the high satisfaction group ($M = 23.74, SD = 0.87$) showed significantly higher score than the low satisfaction group ($M = 15.48, SD = 4.79$), $t(52.27) = -11.99, p = .000$. Finally, in the existential dimension, the high satisfaction group ($M = 23.52, SD = 2.55$) still showed significantly higher score than the low satisfaction group ($M = 17.96, SD = 4.43$), $t(78.38) = -7.68, p = .000$.

There is a large difference between the respondents who have high marital satisfaction and the respondents who have low marital satisfaction. The effect sizes between the two groups are large ranging from 1.31 to 2.40. This finding further provides evidence of construct validity of the MSS. The result of this study confirms the prior findings demonstrating that spirituality is significantly associated with

marital satisfaction [28]-[32]. Therefore, this difference in marital spirituality scores between the high satisfaction and low satisfaction groups may be explained by emotional interconnection and interdependence between the spouses. Perhaps marital spirituality of the individual could affect his subjective evaluation of his marriage overall, whether his needs, expectations, and desires are met in marriage. Although, determining the causal path between marital satisfaction and marital spirituality is outside of the scope of this study, nevertheless, the results suggest that individuals with different levels of marital satisfaction also differ in their level of marital spirituality. This highlights that marital spirituality is characteristic of people with differing level of marital satisfaction. Specifically, people with high marital satisfaction are more likely to have higher marital spirituality than those who have low marital satisfaction.

To further explore the psychometric properties of the MSS, reliability tests were conducted by determining the Cronbach's alpha of each factor. Coefficient alpha or the Cronbach's alpha is used to measure the degree of interrelatedness of items or indicators which are designed to measure a single construct. Reference [33] recommends that the coefficient alpha of a new scale should be at least 0.80. The Cronbach's alpha of the six factors of the MSS are within the range recommended by [34]. The values are high ranging from 0.79 to 0.87.

TABLE I: INTERNAL CONSISTENCY OF THE SUBSCALES OF THE MARITAL SPIRITUALITY SCALE

Factor	Cronbach's α
Relationship with God	0.86
Traditional/Ritual	0.84
Intimacy	0.87
Forgiveness	0.79
Partnership	0.82
Existential	0.82

Overall, these analyses indicated that the Marital Spirituality Scale has six underlying factors as revealed by the Exploratory Factor Analysis and it is internally consistent as evidenced by the Cronbach's alpha of each of its dimension/factor.

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