

The Indonesian Moslem Marital Quality Scale: Development, Validation, and Reliability

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The development of the Indonesian Moslem Marital Quality Scale (IMMQS) is presented. In the first study, data from 258 respondents were subjected to an exploratory factor analysis. Exploratory factor analysis uncovered 3 factors: friendship, harmony, and satisfaction with child. In the second study, data from 370 respondents were subjected to a confirmatory factor analysis, which provided support for the factor structure derived from the first study. Additional evidence of IMMQS reliability was also found. Implications for future directions for research are also discussed.

Keywords: marital quality, collectivism, exploratory factor analysis, multi-group confirmatory factor analysis

Marriage is the most important institution for people who are very different from other social institutions, especially in terms of duration, intensity, and function (Lasswell and Lasswell, 1987). The institution of marriage has an important function for the community. As mentioned in the Marriage Act No.1 year 1974 Chapter IV section 30 that the husband and wife have an obligation to enforce the household for the basic joint of societal structure (Walgito, 2004).

Spanier (Young, 2004) suggests that the functioning of marriage can be seen from two things, that is: marital quality and marital stability. In family studies, marital quality received considerable attention from researchers because of the research that has been conducted shows marital quality promoting the achievement of mental health (Cohen, Geron, and Farchi, 2009; Proulx, Helms and Buehler, 2007) and physical health (Umberson, Williams, Powers, Liu and Needham, 2006; Wickrama, Lorenz, Conger and Elder, 1997). Marital quality is also found as a deterrent to the domestic problems such as domestic violence (Byrne and Arias, 1997; Stith, Green, Smith and Ward, 2008), infidelity (Previti and Amato, 2004; Shackelford, Besser and Goetz, 2008; Susilawati and Suciptawati, 2005; Thompson, 1983), and divorce (Hirschberger, Srivastava, Marsh, Cowan and Cowan, 2009; White and Booth, 1991).

Marital quality was found to correlate positively with children's ability to establish relationships with peers (David, 2009; Forehand, Long, Brody and Fauber, 1986; Gottman and Katz, 1989). Other research suggests marital quality is negatively correlated with child behavior problems (Benzies, Harrison and Magill-Evans, 2004; Chang, Lansford, Schwartz and Farver, 2004; Emery and O'Leary, 1984; Parke, Leidy, Coltrane and Duffy, 2009) and emotional problems of child (Fishman and Meyers, 2000; Peleg-Popko and Dar, 2001). In addition, the poor marital quality is also one of the causes of child abuse. Mollerstrom, Patchner and Milner (1992) found a negative correlation between marital qualities with child abuse. Longitudinal study conducted by DiLillo, Peugh, Kate, Jillian, Emily and Sarah (2009) found the effect of marital quality on child abuse.

The results of these studies indicate an important role of marital quality on mental health. Thus, research on marital quality is important, but marital quality has conceptual weaknesses (Chung, 1990; Crane, Allgood, Larson and Friffin, 1990; Fincham, Beach and Kemp-Fincham, 1997; Glenn, 1990). Johnson, White, Edwards and Booth (1986) describes marital quality as an umbrella term for marital adjustments, marital satisfaction, marital happiness, marital interaction, marital disagreement, and the propensity to divorce. Another opinion says that marital quality, marital adjustment, and marital satisfaction often used interchangeable (Harper,

Schaalje and Sandberg, 2000). The same thing also expressed by Fincham and Rogge (2010) that marital quality, marital satisfaction, marital adjustment, marital success, and friendship are often used interchangeably, but in fact all of them reflect relationship quality.

According to Glenn (1990), the opinions on the concept of marital quality can be classified into two groups. The first group is the group that conceptualized marital quality as a multidimensional concept, while the second group is the group that conceptualized marital quality as a unidimensional concept. Spanier (1976) is one researcher who suggests that marital quality is a multidimensional concept that consists of four dimensions of marital quality, namely: satisfaction, consensus, cohesion, and expressions of love. In line with the opinion of Spanier (1976), Snyder (1979) also suggested that marital quality is a multidimensional concept that describes the interaction of marriage in 10 areas, namely: global distress, affective communication, communication, problem solving, time with, disagreement about finances, sexual dissatisfaction, role orientation, family history associated with distress, dissatisfaction with child, and conflicts related to parenting. Fowers and Olson (1989) argue that there are many sides to attach the marital relationship and each contributes to the quality of the marriage. There are 10 critical areas that contribute to the quality of marriage, namely: identity, communication, conflict resolution, financial management, leisure, sex, child and parenting, family and friends, equalitarian roles, religious orientation, marital cohesion, and marital changes.

Marital quality is a multidimensional concept has been criticized by some researchers. According to them, the concept of multidimensional has conceptual problems due to overlap with interpersonal processes in marriage which is actually an antecedent of marital quality (Bradbury, Fincham and Beach, 2000; Hendrick, 1988; Norton, 1983; Sabatelli, 1984). Fincham and Rogge (2010) also prefer to use the concept of marital quality is unidimensional, the subjective evaluation of the individual as a whole about the marriage relationship. Further Fincham and Rogge (2010) explain that the unidimensional concept has a clear interpretation allowing direct antecedents testing, correlation and consequences of marital relationship quality.

The opinion that the quality of the marriage is a unidimensional concept drew criticism from Fowers and Owenz (2010). According Fowers and Owenz (2010), the concept of marital quality is a unidimensional concept has simplified the concept of marital quality is in fact a complex concept. Further Fowers and Owenz (2010) argues that the concept of marital quality that only reveal what is perceived by the individual regarding his marriage has been ruled out marriage aimed at giving meaning to the individual.

Fowers and Owenz (2010) then argued that marriage is an activity in pursuit of a goal to be the criteria for determining the level of marital quality. High levels of marital quality can only be achieved when the individual has a goal of marriage which has the dimensions of constitutive goals and shared goal. Walgito (2004) suggested that marriage consists of two persons, there is a possibility between the two objectives are not the same. Goals should be rounded so that there is a unity of goal.

According Fowers and Owenz (2010), the purpose of marriage which has the dimensions of the constitutive goals and shared goals can be determined by a large

family, culture and religion. Thus, according to Fowers and Owenz (2010), to determine the criteria of marital quality required idiographic study on the subject to be studied. Based on suggestions Fowers and Owenz (2010), Wahyuningsih (2012) conducted an exploratory study in order to reveal the criteria of marital quality in accordance with the culture of the place doing research. Exploratory study conducted on four couples who are Muslim and the marriage is already over 25 years old. The results showed there are three marital quality criteria, namely: friendship, harmony, and satisfaction with the child.

It can be concluded that the opinions on the concept of marital quality in general can be divided into two groups, that is multidimensional and unidimensional concept. In this study, marital quality is a multidimensional concept because the unidimensional concept is too simplified of marital quality as a feeling of satisfaction or dissatisfaction with the marriage. Nevertheless, multidimensional concept that has been presented by some experts also have disadvantages because it also includes the factors that affect the marital quality such as personality, conflict resolution, role orientation, religious orientation, communication, parenting and family background. Therefore, researchers prefer to use the concept of marital quality of the results of research conducted by Wahyuningsih (2012), namely: friendship, harmony, and satisfaction with the child. Research to be conducted is aimed at developing construct validity of marital quality with Indonesian cultural backgrounds, particularly the Islamic religious background embraced by the majority of the Indonesian population.

Studi 1: Scale development and exploratory factor analysis

Study Purpose

The purpose of study 1 was to develop items for the IMM QS that reflected the construct of marital quality and to investigate the factor structure of those items.

Method

Participants

The sample for this study consisted of 258 Moslem married people (131 husbands and 127 wives). Most of them are Javanese people.

Procedure

Scale development. For the purposes of the new measure, marital quality is defined as an evaluation of his/her marriage by using goal of marriage as objective evaluation criteria (Fowers and Owenz, 2010). IMM QS based on three criteria marital quality that found in preliminary studies (Wahyuningsih, 2012), that is: friendship, harmony, and satisfaction with children. An initial pool of 30 items was then generated by the team for content validity. Content validity was conducted by Content Validity Ratio (CVR—Lawshe, 1975). Testing content validity by using CVR produces 24 items. A total of 24 items were generated to reflect each of the three marital quality criteria, that is: friendship (7 items), harmony (8 items), and satisfaction with children (9 items). Items are rated on a 4-point Likert-type scale ranging from very appropriate (1) to very not appropriate (4).

Data analysis. According to Netemeyer, Bearden and Sharma (2003), there are two types of analysis methods that are often used by researchers when conducting exploratory factor analysis, it is the principle component analysis (PCA) and

exploratory factor analysis / common factor analysis / principle axis analysis (EFA). According Fabrigar, Wegener, MacCallum and Strahan (1999), where researchers aim to reduce the number of aitem and maximize the variance that can be explained by the measuring instruments (total variance explained), the researchers simply use PCA method. Further Fabrigar et al (1999) suggested that if the goal of the researchers wanted to investigate the factors underlying a construct of a measuring instrument and simultaneously reduce the amount aitem, then researchers should use the EFA.

Exploratory factor analysis method to be used in this study is the EFA (common factor analysis / principal axis factoring) with varimax orthogonal rotation because this study aims to test the model in which includes testing the theoretical constructs of each construct / latent variables used in this study. According to Floyd and Widaman (1995), when researchers will then forward the results of exploratory factor analysis to confirmatory factor analysis, the results of the factor analysis EFA method will be more successful than the tested results of the factor analysis with PCA method. Reliability analyses were then conducted to examine the internal consistency of the resulting subscales.

Results and Discussion

Exploratory Factor analysis

According to Costello and Osborne (2005), exploratory factor analysis can be said to fit when it has received a clean factor structure. The structure factor can be cleared if: (1) the value of item factor loading above 0.3, (2) there is no or little item cross-loading, and (3) there are at least three item in each factor. Further Costello & Osborne (2005) explains that in order to obtain a clean factor structure, researchers can manipulate the number of factors. If not clean factor structure by manipulating the number of factors, it may be possible to dispense item-item aitem problematic as having a low value of load factor or item-item that have cross-loading. The number of factor to be extracted was then determined by (a) eigenvalues above 1.0 (Kaiser, 1960), (b) Cattell's scree test (Cattell, 1966), and (c) the scree plot (Zwick & Velicer, 1986).

Based on those opinions, three factor solutions was chosen. The significance of Bartlett's test of sphericity ($< 0,001$) and the size of the Kaiser-Meyer-Olkin measure of sampling adequacy (.87) revealed that the set of IMM QS items had adequate common variance for factor analysis (Tabachnick & Fidell, 1996). Three factors had eigenvalues greater than 1.0. Together, they accounted for 52.589% of the variance. The first factor (eigenvalue = 3.278) accounted for 25.213% of the variance; its factor loadings ranged from .565 to .70 (7 items). This factor and subscale was labeled friendship. The second factor (eigenvalue = 2.082) accounted for 16.018% of the variance; its factor loadings ranged from .701 to .808 (3 items). This factor and subscale was labeled satisfaction with children. The third factor (eigenvalue = 1.477) accounted for 11.358% of the variance; its factor loadings ranged from .515 to .806 (3 items). This factor and subscale was labeled harmony. Item factor loadings, as well as the variance explained by the item in the factor, are presented in Table 1.

Table 1
Item Analysis and Internal Reliability for the Indonesian Moslem Marital Quality Scale

Item	Factor Loading			Item- total Correlati on	M	SD
	1	2	3			
Me and my spouse always help each other in educating children	.700			.641	3.50	.553
Me and my spouse have an agreement on how to interact with an extended family	.645			.574	3.24	.600
Me and my spouse have agreed on how to hang out with friends	.635			.511	3.22	.598
Me and my spouse have an agreement in spending money	.610			.580	3.28	.603
Me and my spouse have an agreement in educating children	.609			.645	3.46	.551
Me and my spouse solve problems together	.588			.654	3.50	.613
Me and my spouse often do activities together	.565			.568	3.27	.701
I am satisfied with the progress made by my child		.808		.514	3.32	.606
I am satisfied with the advantages possessed my child		.765		.444	3.33	.608
I am satisfied with the achievements my child		.701		.431	3.26	.682
Me and my spouse rarely fight			.806	.412	3.13	.635
Differences of opinion between me and my spouse does not cause strife			.584	.544	3.15	.649
Me and my spouse more often get along than fight			.515	.586	3.45	.558
Eigenvalue	3.278	2.082	1.477			
% of variance	25.21	16.01	11.35			
	3	8	8			
Numbers of item	7	3	3			

Note 1 = friendship; 2 = satisfaction with the child; 3 = harmony

Internal consistency reliability evidence for IMMQS

The internal consistency reliabilities (coefficient alpha) .848 for friendship subscale, .824 for satisfaction with children subscale, and .761 for harmony subscale. For each subscale, corrected item-total correlations were all above .30.

Studi 2: Further Examination of Factor Structure and Reliability

Study purpose

The primary purpose of study 2 was to examine the stability of the factor structure obtained in study 1. A secondary purpose was to examine IMMQS's reliability.

Method

Participants

They are 370 moslem married people (185 Moslem married couples). Cultural background of most of them are Javanese (husbands = 93.5%; wives = 93.5%). Marriage duration ranged from 1 to 38 years ($M = 14.26$ years). Ages ranged from 23 to 68 old years ($M = 40.01$ years) for husbands and 23 to 58 old years ($M = 36.91$ years) for wives. Most of them have 2 children (42.7%) and the high school educated (husbands = 47.6%; wives = 50.3%). Husbands who works there is 99.05%, while wives worked only 51.4%.

Measure

The 13-item IMMOS, discussed in study 1, was used in study 2. Internal reliability (coefficient alpha) .848 for friendship subscale (7 items), .824 for satisfaction with children subscale (3 items), and .761 for harmony subscale (3 items).

Data analysis

Structural Equation Modeling (SEM) was employed to analyze the data in this study by using AMOS 20 (Arbuckle, 2011). The present study used second-order confirmatory factor analysis. Multigroup confirmatory factor analysis was used to test the invariance of structure across gender. Goodness-fit-indexes used in the present study included CFI and RMSEA (Byrne, 2010). In the equivalence test, there are two criteria that can be used, ie using Δ chi-square and Δ CFI (Byrne, 2010). According to Cheung and Rensvold (Byrne, 2010), to test the equivalence would be more realistic if it refers to the value of Δ CFI than Δ chi-square.

Reliability

Based on literature studies, Widhiarso (2009) argued that most researcher in the field of psychology when estimating reliability using Cronbach alpha coefficient. Whereas Cronbach alpha coefficient has a certain criteria in order to have accurate estimates. One of the criteria that must be met is unidimensional data, therefore, according to Widhiarso (2009), researcher first need to identify the underlying constructs measuring instruments used. If the measuring instrument is based multidimensional construct, it would be more accurate if the estimated reliability multidimensional.

Widhiarso (2009) further argues that in order to ascertain whether a measure is unidimensional or multidimensional, researchers can conduct factor analysis before estimating the reliability of measuring instruments used. If the identification results showed unidimensional, then it can use in estimating the reliability of Cronbach alpha, Spearman-Brown, or KR-20. If the identification results show multidimensional data, then it should use in estimating the reliability of multidimensional reliability. Based on the information needed to calculate the reliability of multidimensional, reliability can be divided into two, namely reliability must be preceded by a confirmatory factor analysis (such as McDonald construct reliability, maximal reliability, and composite reliability Raykov) and which does not require factor analysis (such as stratified Cronbach alpha reliability). This study will use the maximum reliability as previous confirmatory factor analysis to test the stability of the three factors of IMMOS. Maximum reliability of a modified form of reliability McDonald which is not able to accommodate different weights in each dimensions (Mueller & Hancock, 2008).

Results and discussion

Multigroup confirmatory factor analysis

The fit of the multigroup confirmatory factor analysis model was satisfactory (CFI = .924, RMSEA = .047). According to Browne and Cudeck (Byrne, 2010), RMSEA values < .05 indicate good fit. Meanwhile, according to MacCallum et al (Byrne, 2010; Kenny, 2011) RMSEA values of less than .01 indicates excellent, less than .05 indicates a good, less than .08 indicates moderate, between .08 to .10 showed considerable conformity between the model hypotheses with empirical data and RMSEA values > .10 indicate poor fit. According to Byrne (2010), CFI values between .90 - .95 showed the suitability of the medium and above .95 indicated good fit.

The results of multi-group confirmatory factor analysis of IMMQS show Δ CFI at: measurement weight model = .002 (<.01), structural covariances model = .003 (<.01), and measurement residuals model = .003 (<.01). Multigroup confirmatory factor analysis supported the three factor structure, demonstrated the invariance of this structure across gender. According Byrne (2010), invariance identified when delta CFI (Δ CFI) value < .01. Delta CFI (Δ CFI) is the difference between the baseline models (unconstrained model) with a model of equality.

Estimated value of the correlation between friendship and harmony is $r = .76$ ($p < .001$), estimated value of the correlation between friendship and satisfaction with children is $r = .43$ ($p < .001$) and estimated value of the correlation between harmony and satisfaction with children is $r = .31$ ($p < .01$). Estimated value of these correlations indicated IMMQS has good discriminant validity. According Kenny (2012), the correlation between two factors is or is very close to one or minus one indicated poor discriminant validity. A correlation of .85 or larger in absolute value indicates poor discriminant validity.

Range of factor loadings from .56 to .83 indicates IMMQS has good convergent validity. According Ghazali (2008), convergent validity in a confirmatory factor analysis can be seen from the value of factor loading. High factor loading values on one factor showed that they converge on a single point. Therefore, the charge could be significant factors lower the value, the standardized factor loading estimates should be equal to .50 or more and ideally should be .70. Meanwhile, according to Brown (2006), the value of factor loading above .3 or .40 in the study also has to be considered good. The results of multi-group confirmatory factor analysis of IMMQS can be seen in Figure 1.

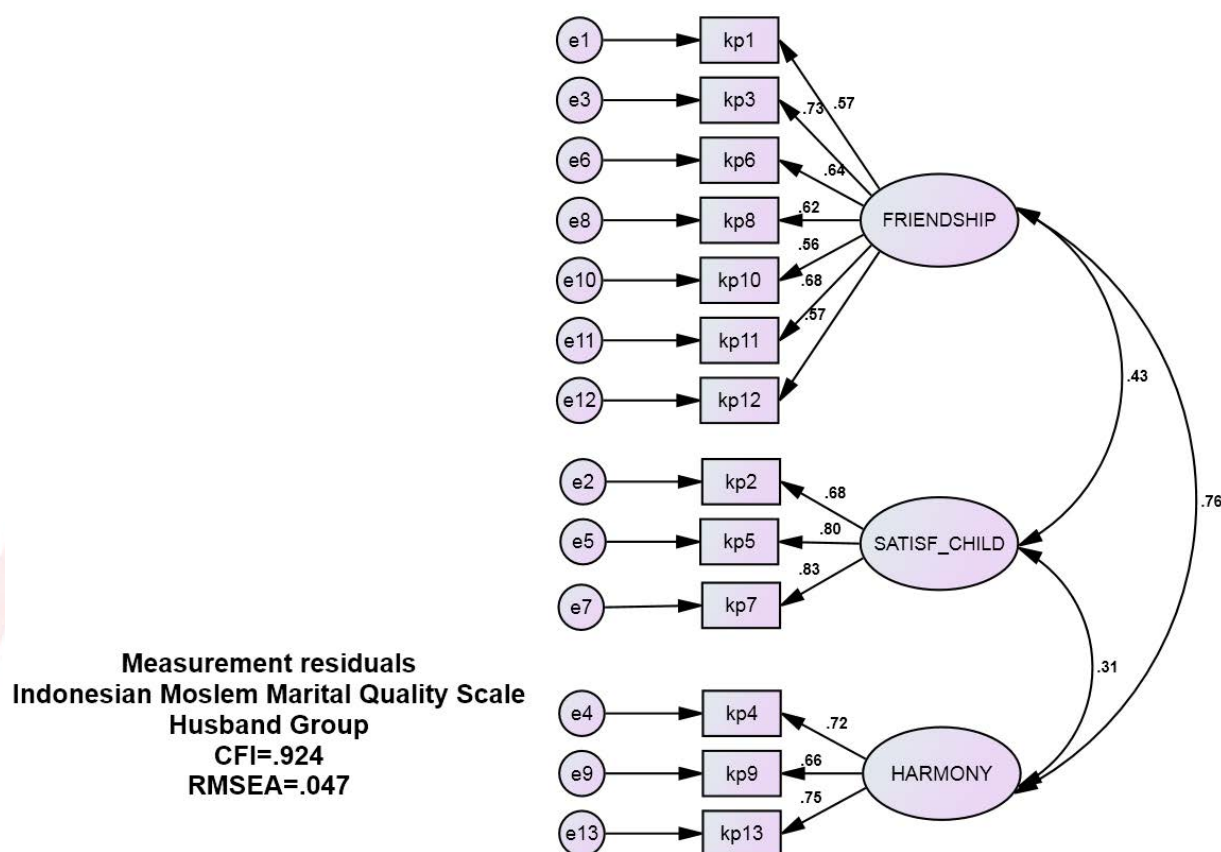


Figure 1. The results of multi-group confirmatory factor analysis of IMMQS

Reliability

Reliability of IMMQS then estimated by maximal reliability (Mueller & Hancock, 2008; Widhiarso, 2009). The estimates show IMMQS have a reliability coefficient of .927 in both husbands and wives.

Summary and Overall Discussion

The aim of the present research was to assess the factor structure and reliability of the IMMQS, a new measure of marital quality for Indonesian Moslem. The results of final EFA with varimax rotation revealed a 13-item IMMQS that reflected three subscales: the 7-item friendship, the 3-item satisfaction with children, and the 3-item harmony. Confirmatory factor analysis provided support for the factor structure derived from EFA.

EFA and CFA results support the results of an exploratory study conducted by Wahyuningsih (2012) who identified three criteria for marital quality, namely: friendship, harmony, and satisfaction with the child. This reinforces the opinion of Fowers and Owenz (2010) that the marital quality lately by researchers conceptualized as a unidimensional concept does not really reflect the actual reality of marital quality is a complex concept. According to Knapp and Holman (2010), this is because most researchers in conducting the study did not use a theoretical framework that researchers often characterize the marital quality taken for granted.

The study results also reinforce the idea Fowers and Owenz (2010) that marriage is an activity that has a goal, so that marriage has a high marital quality is a marriage that has the constitutive goal and shared goal in which these goals can be defined by religion. As stated by Wahyuningsih (2012) that marital quality criteria found in his research is closely related to the purpose of marriage in Islam is expressed by Al-Faruqi (1985).

This research still has its limitations. The first limitation is related to the subject of the study is limited to people who have children, so that future studies can do the same research with subjects who did not have children. The second limitation is related to the results of exploratory factor analysis in which there is some cross-loading items were removed. After scrutiny again, these items actually reflects the main purpose of marriage in Islam, which is serenity. This may indicate that the actual marital quality has a hierarchical structure. Thus in future studies, this measure need to be improved further in order to reflect the actual quality of the marriage is indeed a complex concept.

References

- Al-Faruqi LLI (1985) Marriage in islam. *Journal of Ecumenical Studies* 22(1):55-68.
- Arbuckle JL (2011) *IBM® SPSS® Amos™ 20 User's Guide*. Chicago:Smallwaters.
- Benzies KM, Harrison MJ and Magill-Evans J (2004) Parenting stress, marital quality, and child behavior problems at age 7 years. *Public Health Nursing* 21(2): 111–121.
- Bradbury TN, Fincham FD and Beach SRH (2000) Research on the nature and determinants of marital satisfaction: a decade in review. *Journal of Marriage and the Family* 62(4): 964-980.
- Brown TA (2006) *Confirmatory Factor Analysis For Applied Research*. New York: The Guildford Press.
- Byrne BM (2010) *Structural Equation Modeling With Amos: Basic Concepts, Applications, And Programming*. New York: Routledge.
- Byrne CA and Arias I (1997) Marital satisfaction and marital violence: Moderating effects of attributional processes. *Journal of Family Psychology* 11(2): 188-195.
- Cattell JL (1966) The scree test for the number of factors. *Multivariate Behavioral Research*, 1: 245–276.
- Chang L, Lansford JE, Schwartz D and Farver JM (2004) Marital quality, maternal depressed affect, harsh parenting, and child externalising in Hong Kong Chinese families. *International Journal of Behavioral Development* 28(4): 311–318.
- Chung H (1990) Research on the marital relationship: A Critical review. *Family Science Review* 3(1):41-64.
- Cohen O, Geron Y, and Farchi A (2009) Marital quality and global well-being among older adult israeli couples in enduring marriages. *The American Journal of Family Therapy* 37(4): 299-317
- Costello AB and Osborne J (2005) Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation* (10)7: 1 - 9.
- Crane DR, Allgood SM, Larson JH and Friffin, W (1990) Assessing marital quality with distressed and nondistressed couples: A comparison and equivalency table for three frequently used measures. *Journal of Marriage and the Family* (5): 87-93.

- Davies JC (2011) Preserving the "us identity" through marriage commitment while living with early-stage dementia. *Dementia* 10(2): 217–234.
- DiLillo D, Peugh J, Kate W, Jillian P, Emily T and Sarah E (2009) Child maltreatment history among newlywed couples: A longitudinal study of marital outcomes and mediating pathways. *Journal of Consulting and Clinical Psychology* 77(4): 680-692.
- Emery RE and O'Leary KD (1984) Marital discord and child behavior problems in a nonclinic sample. *Journal of Abnormal Child Psychology* 12(3): 411-420.
- Fabrigar LR, Wegener DT, MacCallum RC and Strahan EJ (1999) Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods* 4(3): 272-299.
- Fincham FD and Beach SRH (2010). Marriage in the new millennium: A decade in review. *Journal of Marriage and Family* 72(3): 630 – 649.
- Fincham FD, Beach SRH and Kemp-Fincham S (1997) Marital quality: A new theoretical perspective. In RJ Sternberg & M Hojjat (Eds.) *Satisfaction In Close Relationships*. New York: Guilford Press.
- Fincham FD and Rogge R (2010) Understanding relationship quality: Theoretical challenges and new tools for assessment. *Journal of Family Theory & Review* 2: 227–242.
- Fishman EA and Meyers SA (2000) Marital satisfaction and child adjustment: Direct and mediated pathways. *Contemporary Family Therapy* 22(4): 437 – 452.
- Floyd FJ and Widaman KF (1995) Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment* 7(3): 286-299.
- Forehand R, Long N, Brody GH and Fauber R (1986). Home predictors of young adolescents school behavior and academic performance. *Child Development* 57(6): 1528-1533.
- Fowers BJ and Olson DH (1989) Enrich marital inventory: A discriminant validity and cross-validation assessment. *Journal of Marital and Family Therapy* 15(1): 65–79.
- Fowers BJ and Owenz MB (2010) A eudaimonic theory of marital quality. *Journal of Family Theory & Review* 2: 334–352.
- Ghozali I (2008) *Konsep dan Aplikasi dengan Program Amos 16.0*. Semarang: Badan Penerbit Universitas Diponegoro.
- Glenn ND (1990) Quantitative research on marital quality in the 1980s: A critical review. *Journal of Marriage And The Family* 52(4): 818 – 831.
- Gottman JM and Katz LF (1989) Effects of marital discord on young children's peer interaction and health. *Developmental Psychology* 25(3): 373-381.
- Harper JM, Schaalje BG and Sandberg JG (2000) Daily hassles, intimacy, and marital quality in later life marriage. *The American Journal Of Family Therapy* 28: 1-18
- Hendrick SS (1988) A generic measure of relationship satisfaction. *Journal of Marriage and Family* 50(1): 93-98.
- Hirschberger G, Srivastava S, Marsh P, Cowan, CP and Cowan PA (2009) Attachment, marital satisfaction, and divorce during the first fifteen years of parenthood. *Personal Relationship* 16(3): 401 – 420.
- Johnson DR, White LK, Edwards JN and Booth A (1986) Dimensions of marital quality: toward methodological and conceptual refinement. *Journal of Family Issues* 7(1): 31-49.
- Kaiser HF (1960) The application of electronic computers to factor analysis. *Educational and Psychological Measurement* 20: 141–151.

- Knapp SJ and Holman TB (2010) Introducing a special issue: On the need to theorize marital quality. *Journal of Family Theory & Review* 2: 221–226.
- Kenny DA (2011) Measuring model Fit. Available at: <http://davidakenny.net/cm/fit.htm>
- Kenny DA (2012) Multiple factor models: Confirmatory factor analysis. Available at: <http://davidakenny.net/cm/mfactor.htm>
- Lasswell M and Lasswell T (1987) *Marriage And The Family*. California: Woodsworth, Inc
- Lawshe CH (1975) A quantitative approach to content validity. *Personnel Psychology* 28: 563 – 575.
- Mollerstrom WW, Patchner MA and Milner JS (1992) Family functioning and child abuse potential. *Journal of Clinical Psychology* 48(4): 445 – 454.
- Mueller RO and Hancock GR (2008) Best practices in structural equation modeling. In JW Osborne (Ed.) *Best Practices in Quantitative Methods*. Thousand Oaks, CA: Sage Publications, Inc, 488 – 508.
- Netemeyer RG, Bearden WO and Sharma S (2003). *Scaling Procedures: Issues and Applications*. London: Sage Publications.
- Norton R (1983) Measuring marital quality: A Critical look at the dependent variable. *Journal of Marriage and the Family* 45(1): 141-151.
- Parke RD, Leidy MS, Coltrane S and Duffy S (2009) Positive marital quality, acculturative stress, and child outcomes among Mexican Americans. *Journal of Marriage and Family* 71: 833 – 847
- Peleg-Popko O and Dar R (2001) Marital quality, family patterns, and children's fear and social anxiety. *Contemporary Family Therapy* 23(4): 465–487.
- Previti D and Amato PR (2004) Is infidelity a cause or a consequence of poor marital quality? *Journal of Social and Personal Relationships* 21(2): 217-230.
- Proulx CM, Helms HM and Buehler C (2007) Marital quality and personal well-being: A meta-analysis. *Journal of Marriage and Family* 69(3): 576–593.
- Sabatelli RM (1984) The Marital Comparison level index: A Measure for assessing outcomes relative to expectation. *Journal of Marriage and the Family* 46(3): 651-662.
- Shackelford TK, Besser A and Goetz AT (2008) *Individual Differences Research* 6 (1): 13-25.
- Snarey JR and Dollahite DC (2001) Varieties of religion-family linkages. *Journal of Family Psychology* 15(4): 646-651.
- Spanier GB (1976) Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and Family* 38(1): 15-28.
- Stith SM, Green NM, Smith DB and Ward DB (2008) Marital satisfaction and marital discord as risk markers for intimate partner violence: A Meta-analytic review. *Journal of Family Violence* 23(3): 149-160.
- Susilawati M and Suciptawati NP (2005) Persepsi wanita terhadap perselingkuhan. *Jurnal Penelitian* 1(17):753-767.
- Tabachnick BG and Fidell LS (1996) *Using Multivariate Statistics (3rd Ed)* New York: HarperCollins.
- Thompson AP (1983) Extramarital sex: A review of the research literature. *Journal of Sex Research* 19(1): 1-22.
- Umberson D, Williams K, Powers DA, Liu H and Needham B (2006) You make me sick: Marital quality and health over the life course. *Journal of Health and Social Behavior* 47(1) 1-16.

- Wahyuningsih H (2012) Faktor-Faktor Penentu Kualitas Perkawinan (Studi Eksplorasi Kualitas Perkawinan Pada Pasangan Muslim). In Widodo B, Setya W, Jaka S, Sarwidi and Widodo (eds) *Menuju Masyarakat Madani dan Lestari Prosiding Seminar Nasional*, Yogyakarta: Universitas Islam Indonesia, 53-66.
- Walgito B (2004) *Bimbingan Dan konseling perkawinan*. Yogyakarta: Andi Offset
- White LK and Booth A (1991) Divorce over the life course the role of marital happiness. *Journal of Family Issues* 12 (1): 5-21.
- Wickrama, Lorenz FO, Conger RD and ElderGH (1997) Marital quality and physical illness: A latent growth curve analysis. *Journal of Marriage and Family* 59(1): 143-155.
- Widhiarso W (2009) Koefisien reliabilitas pada pengukuran kepribadian yang bersifat multidimensi. *Psikobuana* 1(1): 39-48.
- Young MA (2004) Healthy relationships: Where's the research? *The Family Journal* 12 (2): 159-162.
- Zwick WR and Velicer WF (1986) Comparison of five rules for determining the number of components to retain. *Psychological Bulletin* 99 (3): 432-442.

The logo for the International Association for Family and Relationship Research (iafor). It features the lowercase letters "iafor" in a light blue, sans-serif font, centered within a large, faint circular graphic composed of several overlapping, curved lines in shades of blue and red.

