

# Developing a Test Battery to assess Determinants of Marital Relationship Satisfaction in Saudi Arabia

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## Abstract

A sample of 50 wives and 50 husbands from Saudi Arabia completed a battery of scales assessing different aspects of couple relationship functioning which had been translated from English to Arabic. The selection of measures was based on the Vulnerability-Stress-Adaptation Model (VSA, Karney & Bradbury, 1995) and included measures of partner attachment, conflict behaviour, and relationship with members of the family-in-law as predictors and marital satisfaction as criterion variable. All scales of the test battery showed acceptable reliability. The newly developed conflict behaviour scale consisted of three theoretically meaningful factors (Positive behaviour, Negative behaviour, and Abuse). All instruments showed evidence for convergent validity and contributed significantly to the prediction of relationship satisfaction. The results showed in general a similar pattern of correlations in Saudi Arabia as previous studies in Western countries.

**Keywords:** Attachment style, conflict behaviour, marital satisfaction, arranged marriage, Saudi Arabia.

## ملخص

هدفت هذه الدراسة الى تطوير بطارية اختبارات لتقييم العوامل المرتبطة بالرضا عن العلاقة الزوجية في المجتمع السعودي. ولتحقيق هذا الهدف قامت عينة مكونة من 50 زوجا و 50 زوجة، بالإجابة على عدد من المقاييس المترجمة من اللغة الانجليزية و التي تتناول جوانب مختلفة من الحياة الزوجية. أختيرت هذه المقاييس إستنادا إلى نموذج "الضعف الدائم – الأحداث المجهد – إجراءات التكيف" (VSA, Karney & Bradbury, 1995). واشتملت البطارية على مقياس التعلق بالطرف الآخر، مقياس السلوك المشكل، مقياس العلاقة مع أهل شريك الحياة ، حيث اعتبرت جميعها متغيرات مستقلة للتنبؤ بالرضا الزوجي كمتغير تابع . وقد أظهرت جميع المقاييس مستوى جيد من الثبات . أما المقياس المستحدث للسلوك المشكل فقد أظهر ثلاث عوامل ذات مغزى من الناحية النظرية ( السلوك الايجابي، السلوك السلبي، و إساءة المعاملة). جميع هذه الأدوات أبيت دلائل لصدق التقارب ( الإلتقاء) وأسهمت بشكل كبير و دال في التنبؤ بعلاقة زوجيه مرضيه . أظهرت النتائج بصفه عامه وجود نمط مماثل من الإرتباطات في المملكة العربية السعودية مماثل لما ذكر في الدراسات السابقه في البلدان الغريبه.

مفاتيح البحث: نموذج التعلق بالطرف الآخر، السلوك المشكل، الرضا الزوجي، الزواج المرتب (التقليدي)، المملكة العربية السعودية.

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Despite all differences between the cultures of the world, virtually all of them know the social institution of marriage that legitimizes a committed and lasting relationship between men and women as the kernel of a family. There are large cross-cultural differences with respect to how spouses meet each other, how many spouses are considered socially appropriate and legal, which social roles are assigned to married men and women, what is expected from partners with respect to intimacy, romance, and sexuality, and whether and how marital relationships can be terminated. All these differences notwithstanding, all over the world, most people strive for marital relationships, and when they are married, they try to be happy in their marriage. Hence, the longing for a stable and happy couple relationships appears to be a human universal.

In the last century, thousands of studies have been conducted to better understand why marriages succeed or fail. And although there are presumably substantial cross-cultural differences with respect to marital systems and marital functioning, almost all our empirical knowledge is confined to Western cultures in North America, Europe, and Australia, representing less than 20% of the current world population. Very little published research on marital functioning has been done in the countries of South America, Africa, and Asia with more than 80% of the world population. In an attempt to shed some light on the intriguing question of marital functioning in non-Western cultures, the present study focuses on marital happiness in Saudi Arabia. In contrast to Western countries, Saudi Arabia is characterized by Islam as the only religion and basis of the legal system, strong traditional gender roles, legal polygyny, and a traditional arranged marriage system. The aims of the present study are twofold. First, we aim at translating, developing and validating a number of questionnaire measures of relationship quality and functioning into Arabic, to make them available to researchers and clinical and counselling practitioners in the Arab world. Second, we aim at investigating whether a number of predictors of marital happiness that have been identified in the Western world are also viable in the different cultural context of Saudi Arabia. This research question is equally important for the applied field of clinical and counselling psychology as for relationship research in general. Importantly, this is an open, strictly empirical question. It is conceivable that the obvious differences in the social, legal, and religious boundary conditions of marriage are causing substantial differences in marital functioning. But it is equally plausible that all these cultural differences do not touch the core of couple

functioning that may be more reflecting human universals than a specific cultural context. Both practitioners and relationship researchers would benefit from knowing what makes marriages succeed or fail in Saudi Arabia as a prototypical Arab country.

### *Marital success*

Both the quality and the stability of marriage have been used as indicators of marital success (Glenn, 1990; Gottman, 1994; Robinson & Blanton, 1993). Although both tend to be correlated, this correlation is not very high empirically (e.g., Gottman, 1994). Given that divorce is possible and quite common in Saudi Arabia, both measures could be used as indicators of marital success. However, due to the cross-sectional design of the present study, only marital satisfaction is used as the criterion variable of marital success. Previous studies have referred to marital quality, satisfaction and happiness as interchangeable terms (e.g., Spanier, 1979; Fincham & Bradbury, 1993), whereas others have differentiated between these terms (e.g., Lively, 1969; Glenn, 1990; Crouse, Karlins, & Schroder, 1968). The concept marital quality and its measures can refer to the mere evaluation of the marriage from the perspective of the spouses using items such as “I am happy in my marriage” (e.g., Hendrick, 1988), or to specific interaction patterns of the spouses such as “We have a lot of disputes” that are considered to be symptoms of low (or high) relationship quality (e.g., Spanier, 1979). Although the latter type of quality measures provides more information, it confounds causes and effects of relationship satisfaction and makes it difficult to understand the reasons of low marital satisfaction. In the present research, we therefore use the Relationship Assessment Scale (RAS, Hendrick, 1988) as a generic measure of relationship satisfaction that makes no assumptions about behavioural causes or symptoms of relationship satisfaction.

### *Predictors of marital quality*

Based on an extensive meta-analysis of longitudinal studies of marital success, Karney and Bradbury (1995) proposed a general model of marital functioning. The model identifies three classes of variables that predict marital success (Figure 1), namely enduring vulnerabilities, stressful events, and adaptive processes. The concept *enduring vulnerabilities* denotes trait-like variables of the spouses and the dyad that

are related to marital success. Whereas earlier research in this domain has focused on personality variables such as neuroticism (e.g., Kurdeck, 1993), it was the concept of adult or partner attachment that has dominated romantic relationship research since the seminal publication of Hazan and Shaver (1987). In a large number of studies adult attachment has been found to predict the quality and stability of romantic relationships (e.g., Bpanse, 2004; Feeney, 1999). Based on the two-dimensional attachment model of Bartholomew (1990), measures of the four attachment styles secure, fearful, preoccupied, and dismissive are included in the present study.

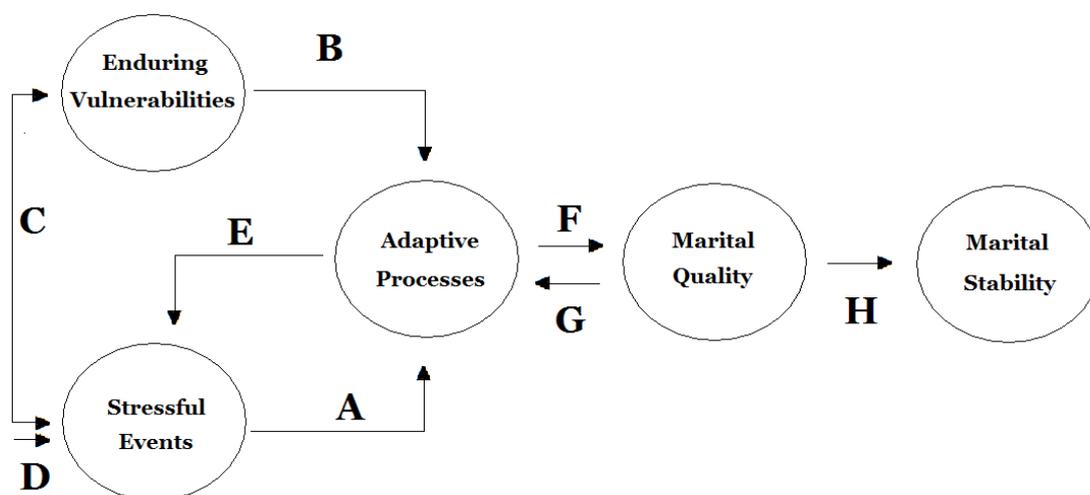
The term *stressful events* comprise variables measuring external challenges of couple functioning such as economic problems, or critical life events. One potentially important but somewhat neglected stressor of couple relationships is the relationship quality or conflicts with members of the extended family, namely with the family-in-law (Euler, Hoier, & Rhode, 2001). The role of this potential stressor is explored in the present study.

The term *adaptive processes* comprise a large range of variables that characterize the way couples interact. In this domain, research has mainly focused on marital communication in general (Noller & Feeney, 2002), dyadic coping with external stressors (Revenson, Kayser & Bodenmann, 2005), and how couples deal with relationship conflicts (e.g., Gottman, 1994; Hahlweg & Jacobson, 1984). For the purposes of the present study, we have developed a measure that covers a wide range of conflict behaviours ranging from leaving the situation to physical abuse.

The Vulnerability-Stress-Adaptation Model not only postulates which variables influence marital success, but also the causal pathways of this influence. Most notably, *enduring vulnerabilities* and *stressful events* are not directly influencing marital satisfaction, but their effect is mediated by *adaptive processes* (see path A and B in Figure 1). Only the adaptive processes are related to marital quality (path F), that is in turn related to marital stability (path H).

Figure 1

The Vulnerability-Stress Adaptation Model of Marital Success (Karney & Bradbury, 1995)



*Aims of the present study*

The present study is part of a larger cross-cultural project investigating the determinants of marital success in different cultural contexts that differ from Western countries but have so far been neglected by marital research. In a first step it was our aim to develop a comprehensive test battery in Arabic that includes measures of the three classes of variables enduring vulnerability, adaptive processes, and stressful events that are postulated marital success according to the model of Karney and Bradbury (1995). Given the very large number of potential variables in each of the three groups, the choice of predictors included in the present study is exemplary rather than exhaustive.

The first aim of the study is to translate or develop scales to measure important aspects of relationship functioning and relationship quality in Arabic. To do that, the reliability, factorial structure, and convergent as well as discriminant validity of the scales will be examined. The second aim is to establish that the variables related to partner attachment, own and partner's conflict behaviour, as well as the relationship quality with mother and father-in-law are all related to marital satisfaction. However,

we do not expect that the relationship quality with the family-in-law is related with the attachment or conflict behaviour scales.

Third, we aim at exploring the relation between attachment and conflict behaviour. Pistole (1989) found that secure individuals were more likely than insecure individuals to use constructive problem solving strategies. Feeney, Noller and Callan (1994) found that attachment anxiety was related to coercive, distressing and destructive conflict behavior. Bartholomew, Henderson and Dutton (2001) found that secure attachment was associated with low levels, and fearful and preoccupied attachment with high levels of abusive behavior. The findings for dismissive attachment were inconsistent. We expect to replicate the findings of Bartholomew et al. (2001).

## **Method**

### *Participants*

One hundred participants (50 wives, 50 husbands), none of whom were married to each other, took part in this study. Participants were recruited among outpatients and employees of King Fahad Medical City. All participants were Saudi citizens, and their age ranged from 19 to 58 years (mean = 30.42, SD = 5.02 for husbands; mean = 29.36, SD = 6.37 for wives). The duration of marriage ranged from 1 to 36 years, with 88% of the husbands and 72% of the wives being in their first ten years of marriage. Over 90% of the sample were in their first marriage and had never been divorced. A total of 86% of the wives were the first wife for their husbands, and 100% of the husbands were married to only one wife. Perhaps this contradiction refers to the husbands' preference to keep their second and later marriages secretive, especially from their first wife. Almost all (99%) participants had between one and four children.

With regard to educational level, 54% of the husbands and 50% of the wives held a Bachelor degree. 60% of the husbands and 48% of the wives earned between 5000-10000 SR per month (£650-£1300), which can be considered a middle class income in Saudi Arabia. The vast majority of the participants were married through arranged marriages (88% of the husbands and 84% of the wives), and 82% of the sample lived separately, not with the family-in-law of either of the spouses. A large

proportion of the participants (70% of the husbands and 78% of the wives) had no contact with their spouses prior to their engagement or marriage. The small remaining percentage refers to spouses who had contact with each other before marriages were cousins or relatives who had seen each other occasionally or had a short conversation by chance.

### *Measures*

*Partner attachment.* The Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) consists of four self-report items describing the four attachment prototypes proposed by Bartholomew and Horowitz (1991); i.e., Secure, Preoccupied, Fearful, and Dismissing. Participants indicated to what extent the prototype vignettes adequately describe their relationship using a 5-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree”. The items and answer formats for all scales are in the Annex.

*Relationship with Family-in-Law.* For the mother-in-law and the father-in-law, three items assessed liking, closeness, and the amount of problems: How much do you like your mother/father-in-law?, How close are you to your mother/father-in-law?, How many problems do you have with your mother/father-in-law? Answers were indicated on a 5-point Likert scale with the labels 1 = “not at all” and 5 = “very much”. The third item was reverse-coded.

*Conflict Behaviour Scale.* The newly developed Conflict Behaviour Scale (CBS) comprised items from the Rusbult Problem Solving Scale (Rusbult, Johnson, & Morrow, 1986) with the positive behavior subscales Voice (communicating problems actively), Loyalty (waiting passively for the situation to improve), and the negative behaviours Exit (thinking about ending the relationship), and Neglect (ignoring the partner for a while). To cover the range of hostile and abusive behaviours, nine items from the Conflict Tactics Scale (Straus, 1979) were added. These items ranged from mild to severe abusive behaviours such as “Hit or tried to hit with something”. To reflect the fundamentally dyadic nature of conflict behaviour, the answer format of the Conflict Tactics Scale (Straus, 1979) was adopted. The participants indicated on separate scales how often they and their spouse showed each behaviour during the last year on a 7-point frequency scale with the labels Never, Once, Twice, 3-5 Times, 6-10 Times, 11-20 Times, More Than 20 Times.

*Relationship Assessment Scale.* Marital satisfaction was assessed using the Relationship Assessment Scale (RAS; Hendrick, 1988) with seven items. In order to increase the number of items in the scale and to broaden the scope of assessment of marital satisfaction, four additional items were generated. These items address the degree of freedom, passion, care, and romance in the relationship that were presumed to be potentially important for marital relations in Saudi Arabia. In order to facilitate intercultural comparisons without relying on the exact semantic meaning of the scale anchors, a new answer format was generated. Participants were asked to imagine 100 married people. The extremes of the 7-point Likert scale were defined by the 5% least satisfied people in their marriage and the 5% happiest people in their marriage. The participant is asked to score his or her answers within this range.

## **Results**

### *RQ Attachment*

As expected, secure attachment showed the highest mean of 4.19 ( $SD=1.05$ ), followed by preoccupied attachment ( $M=2.24$ ,  $SD=1.34$ ), dismissive ( $M=1.73$ ,  $SD=1.33$ ), and fearful attachment ( $M=1.61$ ,  $SD =1.14$ ). Intercorrelations between all scales are presented in Table 2. All three insecure attachment styles were positively correlated. As expected by the model of Bartholomew (1990), secure attachment correlated negatively with fearful attachment and was not correlated with preoccupied and fearful attachment styles. Deviating from Bartholomew's model but in line with earlier research (e.g., Banse, 2004), the dismissing and preoccupied scales showed not strong negative but a weak positive correlation. In summary, the four scales distinguish between secure and insecure attachment, and insecure attachment unfolds in three distinct insecure attachment styles.

### *Relationship with Family-in-Law*

The reliability analyses of the 3-item scales for mother and father-in-law showed low item-total correlations for the third item "How many problems do you have with your mother/father-in-law". This item was excluded. The Cronbach's alpha for the two remaining items was .80 for Mother-in-law and .72 for Father-in-law. The

mean relationship with the mother-in-law was 2.98 ( $SD=.75$ ) and towards the father-in-law 2.85 ( $SD = .79$ ), the correlation between the two scales was  $r = .41, p < .001$ .

Table 1. Items and factor loadings for Own-Conflict Behaviour Scale

| No | Item  | Factors    |                   |                   |
|----|---|------------|-------------------|-------------------|
|    |   | Abuse      | Negative Behavior | Positive Behavior |
| 27 | Beat up the partner (a)   | <b>.94</b> | .09               | .04               |
| 25 | Slapped the partner (a)   | <b>.94</b> | .08               | -.01              |
| 26 | Hit or tried to hit with something (a)  | <b>.94</b> | .11               | .02               |
| 24 | Pushed, grabbed, or shoved the partner (a)  | <b>.82</b> | .24               | .19               |
| 22 | Threatened to hit or throw something at the partner (a)   | <b>.82</b> | .27               | .14               |
| 23 | Threw or smashed or hit or kicked something (a)   | <b>.79</b> | .19               | .03               |
| 28 | Threatened with an object that could hurt (a)   | <b>.79</b> | .13               | .04               |
| 20 | Insulted or swore at the partner (a)  | <b>.57</b> | .49               | -.05              |
| 18 | Refusing to talk to the partner about problems (n)  | .23        | -.15              | .17               |
| 7  | Criticizing the partner for things that are unrelated to the real problem (n)   | .12        | <b>.68</b>        | .09               |
| 9  | To do things to drive the partner away (e)  | .24        | <b>.65</b>        | -.15              |
| 15 | Spending less time with the partner (e.g. I spend more time with friends, watch a lot of television, work longer hours, etc.) (n) | -.06       | <b>.58</b>        | .10               |
| 21 | Stomped out of the room/house (a)   | .24        | <b>.57</b>        | .31               |
| 1  | Thinking about ending the relationship (e)  | .36        | <b>.53</b>        | .00               |
| 11 | Ignoring the partner for a while (n)  | .16        | <b>.52</b>        | .15               |
| 3  | Sulking rather than confronting the issue (n)   | .26        | <b>.51</b>        | .17               |
| 2  | Talking about what's upsetting (v)  | .04        | <b>.46</b>        | -.06              |
| 13 | Talk to the partner about breaking up (e)   | .22        | <b>.46</b>        | -.24              |
| 5  | Discussing to end the relationship (e)  | .61        | <b>.40</b>        | -.12              |
| 17 | Telling the partner what's bothering (v)  | .03        | .19               | .07               |
| 12 | Giving things some time to cool off on their own rather than taking any actions (l)   | -.07       | .15               | <b>.74</b>        |
| 10 | Suggesting a compromise solution (v)  | -.01       | .01               | <b>.68</b>        |
| 19 | Giving partner, the benefit of the doubt and forgetting about it (l)  | -.02       | -.24              | <b>.60</b>        |
| 16 | Accepting partner's faults and weakness and not trying to change the partner (l)  | .32        | .07               | <b>.59</b>        |
| 6  | Suggesting changing things in the relationship in order to solve the problem (v)  | -.09       | .40               | <b>.51</b>        |
| 14 | Consider getting advice from someone else (Friends, counsellor, parents) (v)  | -.02       | .17               | <b>.45</b>        |
| 4  | Patiently waiting for things to improve (l)   | .11        | -.11              | <b>.39</b>        |
| 8  | Saying nothing and simply forgiving the partner (l)   | .07        | .16               | <b>.38</b>        |

Note: Letters in parenthesis indicate original scale structure (a: abuse, e: exit, n: neglect, l: loyalty, v: voice); loadings printed in bold indicate the items chosen for each scale.

Table 2. Correlations between all scales

| Scales                 | 2     | 3    | 4    | 5     | 6      | 7     | 8      | 9    | 10     | 11     | 12     | 13      |
|------------------------|-------|------|------|-------|--------|-------|--------|------|--------|--------|--------|---------|
| 1. RQ Secure           | -.23* | .01  | -.20 | .15   | .11    | .00   | .04    | .06  | -.01   | -.06   | .16    | .29**   |
| 2. RQ Fearful          |       | .26* | .23* | -.24* | .07    | .16   | .02    | -.03 | .23*   | .19    | -.11   | -.31**  |
| 3. RQ Preoccupied      |       |      | .26* | .01   | .17    | .25*  | .13    | .10  | .34**  | .27**  | .15    | -.17    |
| 4. RQ Dismissive       |       |      |      | -.17  | -.16   | .29** | .15    | .04  | .28**  | .22*   | -.01   | -.31**  |
| 5. Mother-in-Law scale |       |      |      |       | .42*** | .03   | .01    | .03  | .00    | -.03   | .06    | .25*    |
| 6. Father-in-Law scale |       |      |      |       |        | .09   | .22*   | -.06 | .13    | .18    | .05    | -.02    |
| 7. Own-Abuse           |       |      |      |       |        |       | .50*** | .09  | .63*** | .60*** | .17    | -.28**  |
| 8. Own-Negative        |       |      |      |       |        |       |        | .23* | .51*** | .75*** | .25*   | -.41*** |
| 9. Own-Positive        |       |      |      |       |        |       |        |      | .15    | .25*   | .74*** | -.10    |
| 10. Part.-Abuse        |       |      |      |       |        |       |        |      |        | .72*** | .08    | -.34**  |
| 11. Part.-Negative     |       |      |      |       |        |       |        |      |        |        | .27**  | -.45*** |
| 12. Part.-Positive     |       |      |      |       |        |       |        |      |        |        |        | -.04    |
| 13. Mar. Satisfaction  |       |      |      |       |        |       |        |      |        |        |        |         |

### *Conflict Behaviour*

The factor structure of the Conflict Behaviour Scale for own behaviour was examined by conducting a Principal Component Analysis. An examination of the Scree plot suggested a two, three or four-factor solution. The three-factor-solution was chosen because of its best interpretability. The three factors accounted for a total variance of 46.98% with Eigenvalues of 7.91 for the first factor, 2.88 for the second, and 2.36 for the third. These factors were labelled Abuse (8 items), Negative behaviour (10 items), and Positive behaviour (8 items). The factor loadings are presented in Table 1. All items of the abuse scale (Straus, 1979) load on the first factor except item 21 (“stomped out of the room/house”). Items measuring exit and neglect loaded on the second factor. This factor can be interpreted as negative behaviour. One additional item by Straus (stomped out of the room/house) is also loading on this factor. The third factor contains items measuring voice and loyalty which can be interpreted as positive conflict behaviour. Items 17 and 18 do not show a substantial loading on any factor and were excluded. Item 5 (discussing to end the

relationship) showed a double loading on Factor 1 and 2 but will be considered as a part of the Negative behaviour scale for theoretical reasons. Item 1 (thinking about ending the relationship) is measuring a similar content and was assigned to the same scale. The assignment of all items to the three factors is indicated in Table 2. Reliability analysis indicated Cronbach's  $\alpha = .92$  for the Own-abuse;  $\alpha = .77$  for Own negative behaviour;  $\alpha = .67$  for own positive behaviour.

A similar factor analysis of the partner's conflict behaviour items (without items 17 and 18) showed very similar results. The three factors accounted for a total variance of 53.62 with Eigenvalues of 9.04, 3.07, and 1.83, respectively. The factor structure was similar to the Own behaviour scale except for item 13 ("talk to the partner about breaking up") which shows a higher loading on the Partner's Abuse than on the Partner's negative behaviour scale, and item 20 ("insulted or swore at the partner") which loaded higher on the Partner abuse than on the Partner's negative-behaviour-scale. In spite of this, the scales were computed as for the Own behaviour scale. The Cronbach's alphas were .92 for Partner's abuse, .86 for Partner's negative behaviour, and .72 for Partner's positive behaviour. Although the self-report of own abusive behaviour is very sensitive, mean values were all significantly different from the lowest scale point 1 (95 percent confidence interval ranged between 1.32 and 1.72) and the scales showed substantial variability. Mean values ranged from 1.52 (Own abuse,  $SD=.99$ ) to 3.78 (Own positive behavior,  $SD=1.14$ ). The intercorrelations of all six scales are presented in Table 2. For Own behaviour and Partner behaviour all scales showed weak to moderate positive correlations except for the non-significant correlations between Positive behaviour and Own abuse and Partner's abuse scales, respectively.

### *Relationship satisfaction*

A Principle Component Analysis of the extended 11-item version of the RAS yielded a single factor that accounted for 53.48% of the variance. The item loadings ranged from .32 to .79, and the Cronbach's alpha was .90. The mean value of relationship satisfaction was 5.42 ( $SD=1.14$ ) on a 7-point scale.

### *Convergent and discriminant validity*

In order to establish the convergent validity of all scales, a correlation analysis was conducted (Table 2). With respect to the correlations between the RQ and CBS scales, it was expected that RQ Secure attachment would show a positive correlation with the Positive conflict behaviour scale. However, no significant correlation was observed with either Negative or Positive conflict behaviour. In line with previous results, preoccupied attachment correlated positively with Own and Partner's abuse and Partner's negative conflict behaviours, results for dismissive attachment were mixed in previous studies, here we observed a significant correlation with Own and Partner's abuse. Furthermore, the expected correlation of fearful attachment emerged only for Partner's-abuse. The Positive behaviour scales were not related to any attachment scales.

There is no theoretical reason to expect a relationship between the attachment or conflict behaviour scales and relationship with members of the family-in-law. Zero correlations would therefore be considered as evidence for discriminant validity. Out of 20 possible correlations only two were significant: RQ Fearful attachment showed a weak negative correlation with the relationship with the mother-in-law, and Own negative behaviour with the relationship with father-in-law.

### *Criterion validity*

Almost all predictor scales showed significant correlations with RAS in the expected direction. The exceptions were Preoccupied attachment, Own positive behaviour, Partner-positive behaviour, and relationship with father-in-law. According to Karney and Bradbury's (1995) model adaptive processes are expected to fully mediate the relation between enduring vulnerabilities/stressful events and marital satisfaction. To test this assumption, partial correlations between attachment styles, relationship with mother/father-in-law, and relationship satisfaction were computed controlling for all six conflict behaviour scales. If conflict behaviour mediates the relation between predictors and marital satisfaction, all significant correlations should drop to zero (full mediation) or be reduced (partial mediation). However, the correlations between secure and dismissive attachment and RAS remained unchanged. The correlation between fearful attachment and RAS were minimally reduced from -

.31 to -.29, and the correlation between relationship with mother-in-law increased from .25 to .28. Thus, there is no evidence that own or partner's conflict behaviours partially or totally mediated the correlation between attachment scales or relationship with family in law and marital satisfaction. All three groups of predictor variables were directly related to marital satisfaction, not via conflict behaviour.

In order to investigate to what extent the relationship variables of the present study accounted independently for marital satisfaction, a stepwise multiple regression analysis was conducted. When relationship satisfaction was regressed on all predictor variables, one variable of each predictor group showed a significant relation with marital satisfaction: secure attachment ( $\beta=.22, p <.05$ ), relationship with mother-in-law ( $\beta=.28, p <.01$ ), and partner's negative behaviour in case of conflict ( $\beta=-.46, p <.001$ ). These three variables explain 33% of variance,  $F(3, 79)=13.10, p <.001$  of marital satisfaction.

## Discussion

The aim of the present study was to create a test battery that covers important aspects of the three groups of predictors of marital success postulated by the Vulnerability-Stress-Satisfaction Model by Karney and Bradbury (1995). To reach this aim, specific scales were selected as exemplary measures for enduring vulnerabilities, stressful events, and adaptive processes. The translation and back-translation process revealed no major problems in establishing an Arabic version of the original scales on a linguistic level.

In a next step the factor structure, reliability and validity of the Arabic version of all scales was tested empirically. The intercorrelation of the RQ attachment scales did not fully confirm the two orthogonal dimensions underlying the four attachment prototypes proposed by Bartholomew (1990). However, the results showed a similar pattern of correlations as previous studies (e.g., Bpanse, 2004; Schmitt et al., 2004) in which the scales first differentiated between secure and insecure attachment, and insecure was further differentiated into three moderately correlated but distinct styles.

A Conflict Behaviour Scale was created drawing on earlier questionnaires assessing the frequency of a number of behaviours shown in conflict situations (Rusbult, Johnson, and Morrow, 1986; Straus, 1979). Rusbult and Zembrodt (1983) found four types of conflict behavior (voice, loyalty, exit and neglect) in a

multidimensional scaling analysis based on similarity judgments. These behaviors can be located on the two dimensions “constructive – destructive” and “active – passive”. Voice and loyalty are seen as constructive behaviors, exit and neglect as negative behaviours. A factor analysis showed that the items measuring voice and loyalty loaded on one factor and the items measuring exit and neglect loaded on a second factor. In our sample, constructiveness and destructiveness are not extremes of one dimension but rather two independent dimensions. This divergence can be explained by different statistical analyses (factor analysis based on correlations instead of multi-dimensional scaling based on similarity judgments). The third factor of the CBS in our analysis included the abuse behaviors for the Conflict Tactics Scale by Straus (1979). In general, the three-factor solution is theoretically meaningful and replicated when analyzing the partner’s conflict behavior. The Own and Partner’s abuse subscales and Negative behaviour subscales correlated negatively with marital satisfaction.

Surprisingly, the Own and Partner positive behaviour sub-scales did not correlate with marital satisfaction. This can be explained by considering the meaning of not agreeing with the items of this scale: If spouses report no constructive conflict solution strategies this can be either due to the absence of constructive conflict behaviour or the absence of conflicts. If one could hold the amount of conflict constant, the positive conflict behaviour scale may contribute significantly to marital satisfaction. For the remaining scales with an expected one-factorial structure the one-factorial structure was confirmed for the Arabic version. Furthermore, the relationship with family-in-law and the relationship satisfaction scale (RAS) showed satisfactory or acceptable reliability.

Overall, at least one scale out of all three variable groups suggested by Karney and Bradbury (1995) were significantly related to marital satisfaction. All attachment scales except preoccupied attachment, the relationship with mother-in-law, own and partner’s abuse and negative conflict behaviour showed moderate correlations with marital satisfaction in the expected direction. This result indicates that the present development of an Arabic test battery of predictors of marital quality was successful. However, when all scales of the test battery were simultaneously used as predictor of marital satisfaction, they accounted only for 33% of the variance. This result suggests that the present test battery represents only a subset of important variables that

contribute to marital satisfaction. Further research is needed to achieve a more complete coverage of important predictors of relationship satisfaction.

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## ANNEX

العبارات التالية تصف علاقتك مع زوجك , فضلا ضعي دائرة على الإجابة المناسبة لك من 1- 5 لتشير على مدى موافقتك أو عدم موافقتك على كل واحد من هذه العبارات .

| لا أوافق ----- أو أبشده |  |
|-------------------------|--|
| 5 - 4 - 3 - 2 - 1       | سهل علي الاقتراب عاطفياً من زوجي , كما ارتاح بالاعتماد عليه وان يعتمد كذلك , ولا أقلق من فكرة أن أكون لوحدي أو أن لا يتقبلني زوجي أحيانا .                                       |
| 5 - 4 - 3 - 2 - 1       | راح بالاقتراب من زوجي , مع أنني أريد علاقة عاطفيه قريبه لكنه من الصعب علي الوثوق به تماماً أو أن اعتمد عليه , لأنني أخاف من أن إذا سمحت لنفسني بالاقتراب العاطفي الشديد منه .    |
| 5 - 4 - 3 - 2 - 1       | ن أكون عاطفياً حميمه تماماً مع زوجي , ولكن كثيراً ما أجد ه بالاقتراب مني كما أرب . إنني لا أرتاح عندما لا أكون في علاقة عاطفيه , ولكن أحياناً أخشى أن لا يقدرني زوجي كما أقدره . |
| 5 - 4 - 3 - 2 - 1       | بعدم قربي العاطفي من زوجي , فمن الضروري لي أن أشعر بالاستقلال عه الذاتيه , كما أفضل أن لا أعتد عليه أو أن يعتمد هو علي .   |

كل زوجه لها علاقة خاصة مع أهل زوجها , أرجوا وصف علاقتك مع أفراد أهل زوجك ذو التأثير , و خاصة علاقتك مع والده زوجك , والد زوجك , أول شخص مهم في عائلة زوجك له تأثير على حياتك , وكذلك إذا كان هناك فرد ثان آخر من عائلة الزوج

### والدة الزوج

1. إلى أي درجة تحبين والدة زوجك؟
 

|  |                   |                   |
|--|-------------------|-------------------|
|  | 5 - 4 - 3 - 2 - 1 | لا توجد محبه أبدا |
|--|-------------------|-------------------|
  2. إلى أي درجة أنت قريبه من والدة زوجك ؟
 

|  |                   |                |
|--|-------------------|----------------|
|  | 5 - 4 - 3 - 2 - 1 | لست قريبه أبدا |
|--|-------------------|----------------|
- ، مدى توجد مشاكل بينك و بين والدة زوجك؟
- |  |                   |                    |
|--|-------------------|--------------------|
|  | 5 - 4 - 3 - 2 - 1 | لا توجد مشاكل أبدا |
|--|-------------------|--------------------|

### والد الزوج

- ، درجة تحبين والد زوجك؟
- |  |                   |                   |
|--|-------------------|-------------------|
|  | 5 - 4 - 3 - 2 - 1 | لا توجد محبه أبدا |
|--|-------------------|-------------------|
- ، درجة أنت قريبه من والد زوجك ؟
- |  |                   |                |
|--|-------------------|----------------|
|  | 5 - 4 - 3 - 2 - 1 | لست قريبه أبدا |
|--|-------------------|----------------|
- ي مدى توجد مشاكل بينك و بين والد زوجك؟
- |  |                   |                    |
|--|-------------------|--------------------|
|  | 5 - 4 - 3 - 2 - 1 | لا توجد مشاكل أبدا |
|--|-------------------|--------------------|

بغض النظر عن مدى اتفاق زوجين بشكل جيد, هناك أوقات يختلفان فيها على كثير من القرارات , ينزعج أحدهما من تصرف الآخر أو يحدث بينهما مشاحنات أو مشاجرات. قد يكون السبب أن أحدهما في مزاج سيء أو متعب أو لأي سبب آخر. كذلك يستخدمان طرق مختلفة لحل هذه الخلافات , مايلي قائمه لأشياء قد يجوز أنك و زوجك قد قمتما بها عندما كنتما مختلفان. أرجوا منك وضع دائره حول الرقم من 1 - 7 الذي يشير إلى مدى تكرار تصرف معين صدر منك أو من زوجك خلال السنة الماضية.

| أنت   | زوجك  |  |
|---|---|--|
| أكثر من 20 مره<br>11 - 20 مره<br>6 - 10 مرات<br>3 - 5 مرات<br>مرتان<br>مره واحده<br>بشئ | أكثر من 20 مره<br>11 - 20 مره<br>6 - 10 مرات<br>3 - 5 مرات<br>مرتان<br>مره واحده<br>بشئ |  |
|   |   | عندما يحدث خلاف فإنتي و زوجي نقوم.....   |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | إنهاء الزواج.  |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | تبدأ بما يزعجنا.   |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ ببدل امن مواجهة الموقف.   |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ ببهودء حتى تتحسن الأمور.  |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | إنهاء الزواج.  |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ بتغيير بعض الأشياء في العلاقة الزوجيه من أجل حل المشكله.                            |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ بأشياء ليس لها علاقه بالمشكله الحقيقيه.   |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | تعلق ومسامحه الزوج ببساطه.   |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | بأمور تدفع بالزوج بعيداً.  |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ بتنازلات للوصول إلى حل.   |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ الزوج لفترة.  |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ بعض الوقت حتى تهدأ الأمور بنفسها بدلاً من القيام بأي تصرف.                          |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ مع الزوج بشأن إنهاء الزواج.   |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | تمام بأخذ نصيحه من شخص آخر ( صديق, الوالدين, مرشد).                                      |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ وقت أقل مع الزوج ( أقضي وقت أكثر مع الأصدقاء , مشاهدة أكثر, العمل لساعات أطول, الخ) |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | أخطاء الزوج و ضعفه وعدم محاوله تغييره.   |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ الزوج بما يزعج.   |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ بالتحدث عن المشكله مع الزوج.  |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ بالنظر بالزوج, ونسيان الموضوع.  |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ أو شتم الزوج.   |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ من الغرفه أو البيت.   |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ بضرب أو رمي شيء على الزوج.  |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ أو تحطيم أو ضرب أو رفس شيء.   |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | أو الإمساك بقوة بالزوج.  |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | مع الزوج.  |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ أو محاوله ضرب الزوج.  |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ الزوج.  |
| 7 6 5 4 3 2 1   | 7 6 5 4 3 2 1   | يبدأ بشيء يؤدي.  |

تخيلي 100 من الأزواج يعيشون في زواج مثل زواجك , موجودين على مدرج قياسي , في أقصى عالي الميزان يوجد 5 من هؤلاء  
100 من الأزواج الذين يعيشون في منتهى السعادة في زواجهم , و في أقصى نهاية أو أسفل الميزان يوجد 5 من هؤلاء الأزواج الذين  
يعيشون في أقل سعادة ( تعاسة) في زواجهم . أين تضعي زواجك على هذا الميزان مقارنة هؤلاء الأزواج.

|  |   |
|--|---|
| ل مدى يشبع زوجك احتياجاتك؟   |   |
| إلى أقل درجة مثل 5% الأقل سعادة                                      | 6-5-4-3-2-1 إلى أكثر درجة مثل 5% الأكثر سعادة |
| عام إلى أي مدى أنت راضيه عن زواجك؟                                   |   |
| غير راضيه مثل 5% الأقل سعادة   | 6-5-4-3-2-1 راضيه مثل ال 5% الأكثر سعادة      |
| ل مدت تعتبرين زواجك جيد مقارنة بالآخرين؟                             |   |
| سيء مثل 5% الأقل سعادة   | 6-5-4-3-2-1 جيد مثل 5% الأكثر سعادة           |
| ل مدى تمنيت أنك لم تكوني في هذا الزواج؟                              |   |
| كثيراً مثل 5% الأقل سعادة  | 6-5-4-3-2-1 نادراً مثل 5% الأكثر سعادة        |
| ل مدى هذا الزواج حقق توقعاتك؟  |   |
| إلى أقل درجة مثل 5% الأ  | 6-5-4-3-2-1 إلى أكثر درجة مثل 5% الأكثر سعادة |
| ل درجة تحب زوجك؟   |   |
| قليلاً جداً مثل 5% الأ   | 6-5-4-3-2-1 كثيراً جداً مثل 5% الأكثر سعادة   |
| ل المشاكل في زواجك؟  |   |
| قليله جداً مثل 5% الأ  | 6-5-4-3-2-1 الأكثر سعاده كثيرة جداً مثل 5%    |
| ل مدى أنت سعيدة بمقدار الحرية و الاستقلالية التي لديك في هذا الزواج؟ |   |
| غير سعيدة مثل 5% الأقل سعادة   | 6-5-4-3-2-1 الأكثر سعادة                      |
| ل مدى علاقتك الزوجية مع زوجك عاطفيه؟                                 |   |
| غير عاطفيه مثل 5% الأقل سعادة  | 6-5-4-3-2-1 عاطفيه مثل 5% الأكثر سعادة        |
| ل ي درجة يهتم زوجك بك؟   |   |
| قليلاً جداً مثل 5% الأقل سعادة                                       | 6-5-4-3-2-1 5% الأقل سعادة                    |
| ل ي درجة زواجك رومانسيا؟   |   |
| غير رومانسياً مثل 5% الأقل سعادة                                     | 6-5-4-3-2-1 رومانسياً مثل 5% الأكثر سعادة     |

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