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Psychometric Properties of Two Questionnaires Measuring Emotional Divorce in Iranian Context

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Abstract

Introduction: Research on emotional divorce as a period prior to the legal divorce is of great importance especially in countries where divorce is a taboo. This study aimed to assess the reliability and validity of two questionnaires evaluating emotional divorce in Iranian context.

Methods: Five hundred twenty people visiting Kerman referral hospitals (in Iran)were asked to participate in this study. A questionnaire consisting of four sections was completed. Two questionnaires, one of which had 24 questions and the other one was made up of 1 question, measured emotional divorce. Kansas Marital Satisfaction Scale constituted the third part, and the fourth part included demographic questions. To assess the reliability, Cronbach's alpha and corrected item-total correlation were calculated. Known group comparisons, concurrent validity and factorial validity methods were used to evaluate the validity.

Results: A total of 466 people were analyzed (89.6%). Of them, 258 were female (55.4%). The mean (±SD) age of participants was 35.2 ± 9.6. The Cronbach`s alpha was 0.94 for the 24-item questionnaire; corrected item-total correlation was higher than 0.3 for all questions. Using the Kansas Marital Satisfaction Scale, the correlation coefficient of the 24-item and 1-item questionnaires was -0.74 and -0.53 respectively. Factor analysis yielded a single factor structure for the 24-item questionnaire. The Factor loading all items was higher than 0.3.

Conclusions: Both questionnaires had acceptable psychometric properties. Since the single-item questionnaire is short and has a pragmatic definition, it may be used to assess the prevalence of emotional divorce in the society.

Keywords: Marital satisfaction; Divorce; Questionnaire; Iran

Introduction

Concerning the increasing trend of modernization and individualism, divorce has increased in many countries, including Iran [1]. Moreover, the relationship between marital dissolution and different aspects of health has been confirmed by researchers [2]. Social consequences and the devastating effects of divorce on children and future generations have also been taken into consideration [3]. Divorce acts as a barometer which reflects the social changes; therefore, being aware of divorce and its earlier stages have been taken into account by family scholars and sociologists in recent decades [4].

According to the "trajectory to divorce" theory, people who get a legal divorce are those who have experienced an unhappy marriage before [5]. Although marital dissatisfaction is necessary for divorce, marital dissatisfaction even in severe cases does not lead to divorce [5]. A couple may continue to live together (especially in Asian countries) despite cold relationships and different reasons, including concerns about the devastating effects of divorce on children, the pressures of society and the shame of divorce [6]. According to Bohannan, before a couple get a legal divorce, they experience several stages; the first stage which leads to divorce is the emotional divorce [7]. Emotional divorce is mainly seen in non-Western countries because cultural barriers and factors causing people to live together despite dissatisfaction is highlighted more in Asian countries including Iran [6].

Measuring marital satisfaction and marital dissolution can pursue two objectives. One of them is related to counseling and family therapy in order to determine a plan for therapeutic interventions and counselling; to do this, it is necessary to use questionnaires with detailed questions in counseling centers (theoretical questions) [8]. The second one is related to the empirical or practical aspects of evaluation (empirical questions); it is used for epidemiological studies and to identify its frequency in the society [9].

Some researchers believe that the prevalence of emotional divorce is more than that of the legal divorce in Iran (14); they divide the divorce into explicit divorce (legal divorce) and hidden or silent divorce (emotional divorce). The Gottman questionnaire is the most widely used questionnaire which assesses emotional divorce in Iran. It includes 24 yes-no questions [10] whose reliability has been approved implicitly as a byproduct in Iranian studies [11]. However, there is no study which can primarily evaluate its psychometric features.

Experts of measuring marital satisfaction recommend that it is better to use short questionnaires, for epidemiological purposes, so

Table 1: Frequency of marital dissatisfaction and emotional divorce in male and female participants.

Education (n)	Marital dissatisfaction (%)	At risk of emotional divorce (%)	Living with emotional divorce (%)
Male (258)	72 (34.6)	65 (31.2)	26 (12.5)
Female (208)	134 (51.9)	101 (39.1)	50 (19.4)
Total (466)	206 (44.2)	166 (35.6)	76 (16.3)
P value	<0.001	0.077	0.047

*Based on 24-item questionnaire.
**Based on single item measure.

Table 2: Frequency of marital dissatisfaction and emotional divorce according to education.

Education (n)	Marital dissatisfaction (%)	At risk of emotional divorce (%)	Living with emotional divorce (%)
primary (62)	35 (56.5)	30 (48.4)	15 (24.2)
secondary (165)	76 (46.1)	66 (40.0)	27 (16.4)
college (219)	86 (39.3)	65 (29.7)	28 (12.8)
P value	0.015	0.006	0.029

*Based on 24-item questionnaire.
**Based on single item measure.

as to increase the quality of data [8]. Making use of single-question questionnaires is common practice in different health areas such as sleep [12] and physical activity [13].

This study pursued two goals; to assess the reliability and validity of the Persian version of the questionnaire commonly used in Iranian studies (i.e., the 24-item questionnaire) and to evaluate the psychometric properties of the proposed single-item questionnaire.

Materials and Methods

This study was conducted in Kerman, one of the metropolises in southeastern Iran. The study protocol was approved by the ethics committee; the participants were told about the anonymous questionnaires. After the informed consent was obtained, the participants were enrolled. The sampling framework included visitors of the patients hospitalized in three referral hospitals in Kerman. In a private place, the participants were asked to complete the questionnaire. The inclusion criterion was marriage. Previous studies have shown that respondents in this setting could, to a large extent, be similar to the population-based studies [14,15]. They were given a questionnaire consisting of four sections. The first part was the Persian version of the Gottman emotional divorce questionnaire; if the participants had more than 8 positive answers, they were at the "end of the distance and isolation cascade or emotional divorce" [10] or "at risk of emotional divorce" (11). The second part was a single item about the emotional divorce using an empirical definition: "although my spouse and I live under the same roof, we have no relationship". This definition was taken from the relevant studies which had present edit [6,14,16]. The third part consisted of the Kansas marital satisfaction questionnaire (a 3-item questionnaire with a 7-point Likert scale) whose validity and reliability were confirmed in Persian; the score greater than or equal to 17 meant marital satisfaction [17]. The final part included demographic questions including age, sex, education, duration of marriage. To assess the reliability, Cronbach's alpha and corrected item-total correlation were used. To test the validity, the three concurrent validity (the correlation between emotional divorce questions and marital satisfaction questionnaire), known group comparisons and factorial validity methods were performed using the principle axis method [18]. If the factor loading was higher than 0.3,

the questions were kept [19].

Results

Five hundred twenty people were invited to participate in this study. Of them, 491 people completed the questionnaire; 25 were excluded due to unqualified completion. Finally, 466 questionnaires were analyzed (89.6%). Two hundred fifty-eight participants were female (55.4%). The mean (±SD) age of participants was 35.2 ± 9.6 and the mean duration of their marriage was 11.6 ± 9.2.

Table 1 shows the frequency of marital dissatisfaction, emotional divorce based on 24-item scale (i.e., at risk of emotional divorce) and a single-item questionnaire (i.e., living with emotional divorce).

Table 2 shows the frequency of these three variables in terms of educational level.

Cronbach's alpha was 0.94 for the 24-item questionnaire. The correlation coefficient of the 24-item questionnaire and the single item measure with the Kansas questionnaire were -0.74 and -0.53, respectively. Corrected item-total correlation between single item measure and the 24-item questionnaire was 0.64.

Using the scree criterion, the exploratory factor analysis indicated the single-factor structure of the 24-item questionnaire. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.95. The factor loading of the questions was between 0.34 and 0.78 (Table 3).

More than one-third of participants were at risk of emotional divorce, and one-sixth had emotional divorce (Table 1).

Discussion

It was shown in this study that the reliability and validity of the 24- and 1-itememotional divorce questionnaires were acceptable. To reach the "loneliness" stage known as the emotional divorce in Iranian studies [6,15,16], Gottman defined four stages [10]. In the first stage, couples realize the seriousness of their marital problems and feel that their marriage has reached an "unfortunate point". In the second stage, couples conclude that talking to their spouses is useless and they should count on themselves more. In the third stage, they conclude that they have nothing in common with their spouses

Table 3: Corrected item-total correlation and factor loadings of the 24 items of the emotional divorce questionnaire.

Item number	Corrected item-total correlation	Cronbach`s alpha if item deleted	Factor loading
1	0.64	0.94	0.66
2	0.57	0.94	0.59
3	0.63	0.94	0.65
4	0.53	0.94	0.54
5	0.66	0.93	0.69
6	0.34	0.94	0.34
7	0.6	0.94	0.61
8	0.64	0.94	0.67
9	0.53	0.94	0.54
10	0.67	0.93	0.69
11	0.36	0.94	0.37
12	0.59	0.94	0.6
13	0.62	0.94	0.65
14	0.64	0.94	0.67
15	0.66	0.93	0.67
16	0.71	0.93	0.75
17	0.66	0.93	0.69
18	0.7	0.93	0.73
19	0.57	0.93	0.59
20	0.63	0.93	0.64
21	0.57	0.94	0.58
22	0.64	0.94	0.64
23	0.7	0.94	0.74
24	0.75	0.94	0.78

and they do most of their activities by themselves. Finally, although they are still married, their life is similar to their single life [10]. This stage is realized using the Gottman 24-itemquestionnaire; when a person has 8 or more that 8 positive answers, he/she is in the fourth stage, and is "at risk" of emotional divorce [11,20]. The Psychology Dictionary defines emotional divorce as "The marital relationship where both partners live separate lives with no interactions" [21]. It is largely similar to the definition used in the relevant studies [6,14,16] and is the concept of the single-question questionnaire used in this study.

Cronbach's alpha of the 24-itemquestionnaire was higher than the acceptable level of 0.7 [18]. Corrected item-total correlation of all items of the questionnaire was higher than the minimum acceptable level (i.e. 0.3) (18). If the single-item questionnaire is considered one of the questions of the 24-item questionnaire, its correlation with 24 questions reflects the acceptable reliability of this questionnaire.

Moreover, the frequency of emotional divorce showed a significant difference in terms of sex and education except for one case (Tables 1 and 2). It is in favor of the validity of both questionnaires [18] because the marital dissatisfaction is expected to be more in women than in men and more in lower education than in higher education [5]. High correlation coefficient between both of the emotional divorce questionnaires and the Kansas questionnaire reflected their concurrent validity.

Exploratory factor analysis revealed that all of the 24 items of the questionnaire loaded on one factor and the factor loadings of all of them were more than the minimum acceptable level of 0.3 [19].

Therefore, the validity and reliability of both questionnaires were acceptable. The frequency of the emotional divorce seems to be less in the single-item questionnaire than in the 24-itemquestionnaire (Table 1); that is because the 24-itemquestionnaire shows people who are "at risk of emotional divorce" [11,20], while the single-item questionnaire empirically shows people with emotional divorce; in other words, those couples who "just live under the same roof, while their relationship is completely disconnected" [16].

Conclusion

Thus, the 24-itemquestionnaireis good for assessing emotional divorce, counseling and couple therapy; however, the single-item questionnaire can be used to assess the prevalence of emotional divorce and to carry out pragmatic researches.

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