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Investigating psychometric properties of the scale of emotional experience towards the spouse

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© 2023 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License. **Objective:** The objective of the present study was to establish and assess the psychometric properties of the scale of emotional experience towards the spouse in 2018-19.

Methods and Materials: For this purpose, all the married women in the city of Isfahan were considered as the statistical population from which 300 married women were selected as the statistical sample using convenience sampling. The research instruments included the scale of emotional experience towards the spouse, extroversion and introversion subscales of NEO Personality Inventory (Costa & McCrae, 1992), and triangulation (Dehghani & Yousefi, 2019). The data were analyzed using descriptive statistics, mean and standard deviation) and inferential statistics (correlation analysis, exploratory factor analysis, and norm determination. Findings: Convergent validity and divergent validity results revealed that the subscale of negative emotional experience towards the spouse was significantly positively related to neuroticism and triangulation (convergent validity), but negatively related to extroversion (divergent validity). The subscale of positive emotional experience towards the spouse, on the other hand, had a positive relationship to extroversion (convergent validity) and a significantly negative relationship to neuroticism and triangulation (divergent validity). Exploratory factor analysis showed two basic factors called positive emotional experience towards the spouse and negative emotional experience towards the spouse. Test-retest coefficients, at a three-week interval, confirmed test-retest reliability.

**Conclusion:** Thus, based on what the results revealed, this test can be used to assess the scale of emotional experience towards the spouse in the married women both in research and psychotherapy.

Keywords: emotional experience, validity, reliability, spouse, scale

# 1. Introduction

Marriage is the most important intimate relationship in adulthood; hence, it is the main source of emotion and emotional experiences (Bloch, Haase, & Levenson, 2014). One of the effective factors in a marital relationship is the *emotional* aspect which is considered as the foundation for human development and their relationships by contemporary researchers. Emotion, in general, it can be described as a complex multidimensional phenomenon which leads to action disposition (Frijda, 2003). Some have divided all types of emotion into two behavioral approaches: set favoring approach, the emotions involving attachment and consummatory behavior and set disposing approach, the emotions involving avoidance, escape, and defense (Lang, Bradley, & Cuthbert, 1990). From their point of view, emotion is a type of "action disposition"" and, therefore, can be categorized into positive (appetitive) emotions such as happiness and strength and negative (aversive) emotions, such as sadness and anger. Thus, six basic emotions are more significant given the age at which they emerge: fear, anger, disgust, sadness, joy and interest. Some of these emotions are considered negative and others are positive (Lang, Bradley, & Cuthbert, 1990).

Understanding emotions like fear, anger, disgust, contempt, sadness, joy and interest is easy since they are pervasive experiences. Basic emotions are inevitable in everyone's emotional repository regardless of age, gender, culture, or historical period. These emotions have clear, identifiable antecedents and create valid behavioral, cognitive and social effects (Reeve, 2018). According to him, fear arises from one's interpretation of danger, a threat to one's well-being, or vulnerability to danger. Fear's functional purpose is to motivate self-protection. Anger arises from an obstacle in the path of one's goal and the feeling that the situation is not what it is supposed to be. Anger's functional purpose is to overcome obstacles and correct mistakes. An aversion to a contaminated object triggers disgust, but it can also arise from cognitive, social, and moral contaminants. Joy is rooted in desirable outcomes such as receiving love, progress towards goals, or pleasant feelings. Joy's functional purpose is to partake in social interactions and not to give up on goals. Envy is a painful emotional experience arising from others' good fortunes; it functions to level one's status with others (Reeve, 2018). Sadness is caused by separation or failure and its function is to fix and correct that failure or loss. Sadness can take the form of depression when it is accompanied by rumination. Interest arises from environmental novelties, new experiences and opportunities that involve fulfilling the needs and desires. Its function is to revitalize exploration and engagement. Considering the importance of emotions and their significant role in everyone's life (Reeve, 2018) there is no surprise that any emotional agitation can lead to marital conflicts and even psychological trauma.

Experiencing the above-mentioned positive or negative emotions towards the spouse can affect the marriage and family life. More than a mere marriage course is required for the spouses to have a healthy marital relationship. Marital life is followed by a context full of emotions and effects, and most conflicts between the spouses are rooted in emotional arousal. People are different in perceiving and recognizing their own effects and those of others. A lack of true understanding of marital emotions can lead to emotional dysregulation and, in turn, sadness and even psychological trauma (Birnbaum & Reis, 2019). Conflicts in intimate relationships mostly occur when one of the spouses has felt resentful. Indeed, what is hurt in the relationship is the one's positive feelings about the self and the significant other (the spouse). When the emotions towards the spouse are interrupted, trust is replaced by mistrust and attachment is threatened. With the perceived threat in attachment or esteem, thus, the emotional safety of the partners will be jeopardized (Prager et al., 2019).

Emotion acts as a guide, shows the couples their needs, develops responses and attachment behaviors, and activates core cognitions about the self, others, and the nature of existing relationships. Furthermore, emotion is a primary relationship signaling system that determines interactions (Johnson, 2012; Johnson & Talitman, 1997).

Negative emotions in the relationship of the spouses might cause them to experience such high arousal of negative emotions that they, to forget this painful experience, show harmful behaviors such as avoidance and verbal or physical aggression, leading to marital dissatisfaction and conflicts. In fact, dissatisfied couples are more likely to express negative emotion, which is answered by the other spouse's negative emotion (Fruzzetti & Iverson, 2006).

Today, emotions towards the spouse are so highly important that many couple therapies have been formed based on emotions. One of the couple therapies is emotionally focused therapy (EFT) formulated and organized by Johnson (1997). Since emotions play an important role in EFT, this therapy addresses the role of emotion and emotional interactions in organizing interactional patterns and has considered the transforming power of emotion in the relationship. In EFT, emotions have a leading role in the couple's interactions. This therapy encourages them to talk about their emotions, to discuss their experiences, and transform emotions into secure attachment bonds between them (Johnson, 2012; KeshavarzAfshar et al., 2014).

The studies show that the affective and emotional responses the people experience towards each other is significantly related to their satisfaction with the relationship. In a study conducted by Yelsma and Sherilyn (2003) the difficulties with emotional expressiveness and



marital satisfaction were investigated in 66 couples. The results revealed that when the husband and wife have difficulties with emotional expressiveness and regulation, their marital satisfaction is negatively affected (Yelsma & Marrow, 2003). Bloch et al, (2014) showed that wives' greater downregulation of negative emotions would decrease destructive communication behaviors and increase marital satisfaction (Bloch, Haase, & Levenson, 2014).

Howland and Simpson (2014), in another study, found out that positive emotion can moderate the effects of negative emotions and, accordingly, destructive marital interactions. They showed that a spouse's use of affiliative humor results in less intense negative emotions, less conflict behavior, more constructive conflict resolution strategies, more intimacy, and less tension (Howland & Simpson, 2014). Wiebe et al. (2017) believe that secure bonds improve well-being, health, relationship quality, and emotion regulation. Indeed, by increasing the spouses' psychological resilience, these bonds cause them to properly manage critical situations and show better emotion regulation skills (Wiebe et al., 2017). In another study, Wiebe and Johnson (2016) investigated the effect of emotionally focused therapy on the components of marital satisfaction and proved effective. They also showed that insecure attachment bonds and emotional distress play an important role in marital conflicts (Wiebe & Johnson, 2016).

Based on neuroscience findings, Grecucci, Fredrickson and Job (2017) examined the importance of emotions in our daily lives and bonds. This study emphasizes that emotions in relationships express our desires and needs; when there is a problem, emotions arise to fix them (Grecucci, Frederickson, & Job, 2017). However, emotions might not be appropriately regulated; that is the very moment pathology begins. This study's new emotionally focused strategies and approaches were grounded in affective neuroscience and experimental research. Study showed that that negative emotions can reduce one's capacity to trust (Engelmann et al., 2019).

Despite the importance of emotional experiences towards the spouse, no research instrument, i.e., a questionnaire, has been published to evaluate these emotions objectively. Indeed, a questionnaire will be useful in evaluating the effectiveness of individual and conjoint therapies of the spouses and the pursuit of relevant research. Hence, the present study was conducted to create a questionnaire of emotional experience towards the spouse and to answer whether the scale of emotional experience towards the spouse meets appropriate psychometric properties.

#### 2. Methods and Materials

#### 2.1. Study design and Participant

The present study aimed to establish and determine the validity and reliability of the scale of emotional experience towards the spouse in couples in Isfahan. Since the study presents a development and validation study of the questionnaire, it will regarded as a survey that is applied in terms of purpose and correlation due to a part of statistical methods determining the reliability and validity. All the married women in the city of Isfahan in 2018 comprised the study's statistical population. Considering that the present study investigated the psychometric properties and that one of the validation methods was exploratory factor analysis, 300 people were acceptable for the analysis (Mundfrom, Shaw, & Ke, 2005), and the required sample size was increased to 300. The statistical population consisted of all the married women in the city of Isfahan, out of which 300 married women who referred to the counseling centers were selected as the statistical sample using convenience sampling. The participants were informed about the volunteer nature of participation and were required to have been married for at least one year. 41% of the participants were over the age of 40 and the rest were under the age of 40. The marriage duration of 46% of the participants was less than 15 years and more than 15 years for the rest. 65% of the participant's level of education was a bachelor's degree and lower, and the rest had higher levels of education. 12% of the participants had three or more children, and the rest had two or fewer children.

First and foremost, having studied the relevant texts and books and interviewed family counseling specialists and couple therapists, the researchers prepared quite a lot of questions (~ 100) containing items proportionate to the assessment of the married women's emotional experiences towards their husbands and two subscales of positive and negative emotions. The final selection of each item was based on the research and clinical experiences of supervisors and advisors, family consultants, and a couple of therapists. In each item examination, some questions were omitted; thus, their number decreased. For the content validity of the questionnaire, a thorough investigation of the previous studies was done and the researchers sought experts' opinions. That is, to ensure the consistency of the items in the scale of emotional experience towards the spouse, they asked five experts specialized in this field to independently determine the extent to which each item within the questionnaire relates to the conceptual framework using the



Likert scale (it is appropriate=5, it is appropriate= 4, I have no idea= 3, It is inappropriate= 2, and it is not appropriate at all). Many questions were omitted in this step. In order to determine the face validity of the scale of emotional experience towards the spouse, an evaluation form was developed to help respondents and assess each question in terms of 1) the transparency, 2) the respondent's ability to answer each question, and 3) the preliminary plan and style. 300 married women were selected from the whole statistical population using convenience sampling. They completed the face validity evaluation form with the five-point Likert scale, i.e., I completely agree= 5, I agree= 4, I have no idea=3, I disagree=2, I completely disagree=1. In this stage, the questions were reviewed regarding comprehensibility, and some were changed or omitted, given the participants' responses.

## 2.2. Measures

Because one of the purposes of the present study was to investigate convergent validity and divergent validity, neuroticism (because of negative emotions) and extroversion (because of positive emotions) subscales of NEO five-factor Inventory (Costa Jr & McCrae, 1992), and triangulation scale (Dehghani Sheshdeh & Yousefi, 2019) were used.

## 2.2.1. Extroversion & neuroticism subscales of NEO

The extroversion factor in NEO five-factor inventory deals with positive emotions, assertiveness, emotion seeking, sociability and social closeness, gregariousness, and activity. Levels of sociability, excitability, and activity define extroversion (E). Another factor used to examine the validity was that of neuroticism. Neuroticism (N) is defined by stress, anxiety, depression, a sense of guilty, and irritability (Costa Jr & McCrae, 1992). Working on a sample of 502 people in Shiraz, Iran, Haghshenas (1999) concluded that Cronbach alpha coefficients for extroversion were .83 and .71 for neuroticism (Haghshenas, 1999).

# 2.2.2. Dehghani Sheshdeh and Yousefi's (2019) Triangulation Scale

This questionnaire includes 16 items developed based on Minuchin's structural theory (Minuchin & Fishman, 1981) and is scored on a five-point scale ranging from "I completely agree" to "I completely disagree", and evaluates one's desire to cope with interactional problems through a third party. This scale has a total score. Family experts specialized in this field confirmed its face validity and its internal consistency was investigated via Cronbach alpha ( $\alpha$ = 0.874), which was acceptable. It needs to be pointed out that the total score of triangulation counted. The construct validity, convergent validity, and divergent validity of this instrument were confirmed by Dehghani and Yousefi (2019) in terms of reliability. The test-retest reliability of this scale was reported as r =0.8 after a two-week interval (Dehghani Sheshdeh & Yousefi, 2019).

# 2.3. Data Analysis

Cronbach alpha was used in order to test the internal consistency. To obtain construct validity, convergent validity, divergent validity, each question's correlation with the total score, exploratory factor analysis, and each scale's correlation with the total score were used. The correlation of the person's self-assessment scores with the subscales of neuroticism and, extroversion and triangulation were used to assess convergent and divergent validity within the questionnaire. The number of factors in this scale was determined through exploratory factor analysis. Consequently, the factors were retained before the point eigenvalues were in descending order. Furthermore, Varimax, the most common factor rotation method, was used to maximize its loading on each variable and minimize its loading on the other factors.

# 3. Findings and Results

The mean and standard deviation analysis of the raw scores of each of the two subscales of positive and negative emotional experience towards the spouse showed that since the items of each subscale of emotional experience towards the spouse are scored on a five-point scale, the mean of each item more than 2.5 was above the mean and less than 2.5 was below it (Table 1).

## Table 1

Cronbach alpha for the overall scale of emotional experience

towards the spouse and its subscales

Scale	Alpha	Ν
The overall scale of emotional experience toward the spouse	.93	41
Negative Emotional experience toward the spouse	.89	25
Positive emotional experience toward the spouse	.77	16

This analysis showed that the Cronbach alpha coefficient of the overall scale and its subscales is higher than 0.90



(Table 1). In order to determine the test-retest reliability, 45 married women were given the test the second time at a 3-week interval. The results showed that the reliability coefficient was (P< 0.05, r=0.222) for the subscale of negative emotional experience towards the spouse, and it was (p<0.05, r=547) for positive emotional experience towards the spouse and (p<0.05, r=0.622) for the overall

scale. In order to investigate the convergent validity and divergent validity of the subscales of emotional experience towards the spouse, the correlation of these two subscales' scores with the subscales of neuroticism and extroversion of five-factor personality inventory and triangulation scale was investigated. The results can be seen in Table 2.

#### Table 2

The results of Pearson correlation analysis between the scores of negative emotional experience towards the spouse and positive emotional

experience towards the spouse and the subscales of neuroticism, extroversion, and triangulation

Row	variable	negative emotional experience toward the spouse	Sig	positive emotional experience toward the spouse	Sig
1	Extroversion	521	.001	.421	.001
2	Neuroticism	.621	.001	365	.001
3	Triangulation	.342	.001	356	.001

Table 2 shows that the subscales of neuroticism and triangulation are significantly positively related to the negative emotional experience toward the spouse, confirming convergent validity. On the other hand, triangulation and neuroticism is significantly negatively related to the positive emotional experience, which confirms divergent validity. Moreover, as seen in Table 2, the subscale of extroversion has a significant positive relationship with

the positive emotional experience toward the spouse, which confirms convergent validity. On the other hand, extroversion has a significant negative relationship with the negative emotional experience towards the spouse, confirming divergent validity. To analyze the construct validity, the correlation of the items in the subscales of emotional experience towards the spouse with the total score was examined. Table 3 shows the results of this analysis.

#### Table 3

Correlation coefficient of every item of the negative emotional experience and the positive emotional experience towards the spouse with the

total score.

Scale	Item	R	Item	Correlation coefficient	Item	R	Item	Correlation coefficient
Negative emotional experience toward the spouse	1	.764"	9	.708"	17	.670"	25	.395"
	2	.720"	10	.496"	18	.667"	26	.449"
	3	.780"	11	.725"	19	.718"	37	.795"
	4	.773"	12	.727"	20	056"	38	.784"
	5	.693"	13	.616"	21	.777"	39	.811"
	6	.706"	14	.733"	22	.675"	40	.815"
	7	.691"	15	024	23	.751"	41	.810"
	8	.555"	16	.791"	24	.624"		
Positive emotional experience toward the spouse	27	.568"	30	.773"	33	.785"	36	.703"
	28	.735"	31	.760"	34	.543"		
	29	.729"	32	.835"	35	.699"		

"= (p<0.000)

'= (p<0.000)

As observed in Table 3, except for the correlation coefficients of items 15 and 20, the other correlation coefficients of the items have a significant relationship with the total score. In this stage, therefore, items 15 and 20 were omitted. Furthermore, all the items in this scale were

analyzed through exploratory factor analysis to provide evidence for the construct validity. The analysis results are presented in tables 4, 5, and 6. Table 4 shows the factor analysis for the scale of emotional experience towards spouse. All the coefficients are positive and significant.



# Table 4

Factors	Eigenvalue	Sum of extracted lo	bads	Sum of loa	Sum of loadings in rotated mode			
		Percentage of variance	Cumulative percentage of variance	Total	Percentage of variance	Percentage of variance		
1	19.510	47.584	47.584	12.748	31.092	31.092		
2	3.178	7.752	55.336	9.940	24.244	55.336		

factors.

The factor analysis for the scale of emotional experience towards the spouse.

As shown Table 4, 55.336% of the variance of emotional experience towards the spouse was determined by these two

# Table 5

Presents extracted factors, their names, and also factor loading of the items in each factor.

	Title	Factor 1	Factor 2
1	I am afraid of my spouse	.742	
2	I am afraid that my spouse might know some events in my life	.722	
3	I am always afraid that my spouse questions my respect and honor.	.751	
4	My spouse is so unpredictable that I am afraid of him/her.	.712	
5	My spouse is so unpredictable that I am afraid of him/her when I am alone with him/her.	.688	
6	Sometimes I think I wish I could take revenge on my spouse.	.693	
7	Sometimes I get so angry with my spouse that I don't like to do anything for him/her.	.583	
8	Most of the times I talk to my spouse angrily and harshly.	.491	
9	Sometimes I get so angry with my spouse him that I like to beat him/her.	.594	
10	Sometimes I get angry of my spouse's relatives and revenge on him/her.	.438	
11	I curse my spouse very often.	.697	
12	I envy my spouse's achievements.	.748	
13	I become jealous of my spouse's relationships with his/her family	.661	
14	I become jealous when my spouse is admired by the others.	.783	
15	I feel good when my spouse fails in his/her affairs.	.787	
16	I get depressed and sad when I compare my spouse with others.	.550	
17	I often feel anxious and worried when I am alone with my spouse.	.681	
18	When we are in a society, I should be very careful lest my spouse shows any uncalculated reaction.	.497	
19	I am always worried when my spouse is alone with his/her family.	.346	
20	I don't bear when my spouse gets annoyed. I cannot see him/her annoyed.	.635	
21	I hate my spouse	.626	
22	Sometimes I feel like his/her death.	.680	
23	I wish I died to get rid of my spouse.	.734	
24	I would like my spouse to be in miserable disruption. I would like it comes a day I can see his/her misfortune.	.757	
25	I hate my spouse so much that I like not to be where he/she is.	.659	
26	In comparison to my spouse, I can say that his/her positive features are more than mine.		393
27	I get sad when I think about my life and my spouse's.		521
28	I have experienced so much sadness and grief from the beginning of marital life that if I return to the past, I will not choose him/her.		694
29	Most of the time I spend with my spouse is full of happiness and joy.		.666
30	When my spouse is not with me, I am in a depressed mood.		.616
31	When I think about the future of myself and my spouse, I get anxious.		639
32	My spouse's family make me anxious and agitated.		422
33	I am so hopeful about my life with my spouse.		.613
34	I think the marriage with my spouse has been one of the best events in my life		.771



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35	My husband is a good support and back to hope for future.	.752
36	I am happy and joyful when I am with my husband.	.835
37	If I return to the past and want to choose a spouse again, I will choose my spouse again.	.818
38	I miss my spouse when my spouse is not with me.	.807
39	I feel enthusiastic about my spouse him/her most of the time.	.798
40	The thought of losing my spouse bothers me. It annoys me if someday I don't love him/her any more.	.685
41	I seek my spouse's happiness. I use every opportunity to make my spouse happy.	.622

As it is observed in Table 5, the first factor has 25 items and given the content of the items, it was named "negative emotional experience towards the spouse". The second factor with 16 items was entitled "positive emotional experience towards the spouse" that the 26, 22, 17, 18 and 15 are scored reversed. Moreover, to provide evidence for the construct validity, the correlation of each factor with the total score was examined. Table 6 shows the correlation coefficients between the subscales and the total score of the scale of emotional experience towards the spouse.

#### Table 6

Presents extracted factors, their names, and also factor loading of the items in each factor.

The coefficient of the factors with the total score of emotional experience toward the spouse	The total score of emotional experience toward the spouse	First factor	Second factor
Emotional experience toward the spouse	1	.940"	070
First factor		1	.402"
Second factor			1

"= (p<0.000)

'= (p<0.000)

Table 6 shows that the correlation coefficient of all the subscales with the total score is statistically significant. These results confirm the construct validity of the scale of emotional experience towards the spouse. Finally, the frequency distribution and the bar graph of the raw scores of the scale of emotional experience toward the spouse and its subscales were examined. The frequency distribution the analysis showed that the subscale of negative emotional experiences towards the spouse followed the normal distribution with a little positive skewness, which shows that scores tend to be higher in this subscale. The subscale of positive emotional experience towards the spouse followed a normal distribution.

#### 4. Discussion and Conclusion

The present study aimed to establish and assess the psychometric properties of a forty-one-item scale of emotional experience towards the spouse among married women in the city of Isfahan. Cronbach's alpha coefficient for the scale and its subscales was above 0.70, which ensured good internal consistency and could be used to identify emotional experience towards the spouse. It can be stated that the items are conceptually related to each other and, thus, appropriate to evaluate emotional experience towards the spouse, the focus of the study. The test-retest reliability coefficient over a two-week interval was examined. It proved positive and significant, which is indicative of the ability of this instrument to evaluate emotional experience towards the spouse on both positive and negative sides over time. To confirm the internal consistency, the correlation of the scores from the items of the overall scale with the total score and the items of each subscale with the score of each subscale were examined. All the scores except for items 15 and 20 in the subscale had a significant positive correlation coefficient with the total score of each subscale, which shows that the remaining items were designed very well for the concepts related to each subscale.

Providing evidence for the construct validity, the researchers examined divergent validity and convergent validity and studied the relationship between extroversion and conscientiousness as well as triangulation and the subscales of emotional experience towards the spouse. As expected, there was a significant negative relationship between negative emotional experiences towards the spouse and the extroversion. The reason is that extroversion is defined by the individual's tendency for sociability, activity, and assertiveness (Carvalho & Nobre, 2019). Moreover, one



of the important components in extroversion is to experience positive emotions. Therefore, the results for the subscale of negative emotional experiences toward the spouse confirm divergent and convergent validity for positive emotional experiences toward the spouse. As for neuroticism, there was a significant negative relationship between the subscale scores of positive emotional experience towards the spouse and neuroticism. Since Neuroticism is defined by stress, anxiety, depression, a sense of guilt, and irritability (Fisher & Robie, 2019), such women are expected to be in more pain and suffering in their daily affairs of life, including those related to their spouse, which causes them to have more conflicts with their spouses and their spouses be more unsatisfied with them. This way, these women experience more negative emotional experiences towards their spouses. However, the opposite pattern occurred for positive emotional experiences, which was also expected. That is, a woman with high neuroticism will probably face many problems by experiencing low mood and anxiety in her everyday life, which causes her to receive negative reactions from her husband and experience negative emotional experiences towards her husband accordingly. These results confirm divergent validity for the subscale of positive emotional experience towards the spouse and convergent validity for negative emotional experience towards the spouse.

Moreover, it was shown that triangulation has a significant negative relationship with positive emotional experiences towards the spouse. Given the definition of triangulation, i.e, coalition with a third person against the spouse when they are unable to resolve their problems mutually and experience high levels of stress in the family (Yuan, 2019), a woman who does not allow for triangulation is expected to resolve family problems with her husband or has a husband who has the necessary skills to manage the family matters in different aspects. These women have a positive emotional experience towards their spouses. In contrast, the women who cannot resolve their problems or whose husbands cannot manage family matters will permit more triangulation and experience more conflicts accordingly. These women experience higher negative emotional experiences towards their spouses. These findings confirm divergent validity for positive emotional experience towards the spouse and convergent validity for negative emotional experience towards the spouse.

Another kind of validity evidence examined for the construct validity was the exploratory factor analysis. This analysis showed that the first factor with 25 items entitled "negative emotions toward the spouse" included such items as "My spouse is so unpredictable that I am afraid of him/her when I am alone with him/her." All the items of this subscale imply negative emotional experience towards the spouse. The second factor with 16 items entitled "positive emotional experiences towards the spouse" included such items as "I am hopeful about my future with my spouse." This analysis showed that all the items were loaded on one of the factors and the correlation between each item and one of the factors was higher than 0.300. Based on the results, this scale to have construct validity and properly evaluates the concept of emotional experience towards the spouse. In order to confirm the construct validity, the correlation between the total score of each factor and the total score of the scale was examined. The results showed that all the factors significantly correlate with the total score. In explaining this finding, it can be said that all factors assess a concept related to emotional experience toward the spouse. Finally, the data's frequency distribution shows that the scores' distribution in both the total score and its subscales is nearly a normal distribution. Considering all the findings of the present study, it can be concluded that this instrument can be used for assessment in research, training and treatment purposes among married individuals.

# 5. Limitations

Like any other study, the present study had some limitations. Given the study's large sample size, random selection was not possible. Inter-rater reliability and predictive validity were not examined. The study was done on married women in Isfahan, so generalizing the results has some limitations.

#### 6. Suggestions and Applications

It is suggested that other researchers select the samples randomly for other studies. Examining inter-rater reliability in other studies is highly recommended. In order to increase the generalizability, similar studies can be conducted in different cities with different cultures.

It is also suggested that counselors interested in family emotions use this questionnaire to evaluate couple therapy and counseling. This questionnaire can be used for research evaluations as well.



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#### **Declaration of Interest**

The authors of this article declared no conflict of interest.

#### **Ethics principles**

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.

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