

# Development and Psychometricity of a New Questionnaire for Assessing the Couple-Friendly Services in Premarietal Counseling

Tahmineh Farajkhoda<sup>1</sup>, Saeedeh Najafihedeshi<sup>2\*</sup>, Hassan Zareeimahmoodabadi<sup>3</sup>, Hossein Fallahzadeh<sup>4</sup>

<sup>1</sup> Associate Professor, PHD in Reproductive Health, Research Center for Nursing and Midwifery Care, Shahid Sadoughi University of Medical science, Yazd, Iran.

<sup>2</sup> Msc Student in Midwifery Counseling, Shahid Sadoughi University of Medical Sciences Yazd, Iran.
<sup>3</sup> Assistant Professor, Departmant of Psychology, Yazd University, Yazd, Iran.

<sup>4</sup> Professor of Biostatistics, Departmant of Biostatistics & Epidemiology, Shahid Sadoughi University of Medical

Sciences, Yazd, Iran.

#### ABSTRACT

Background & Aim: The quality of provided marriage services and couples' empowerment on the brink of marriage is of great importance. Couples-friendly center is an appropriate tool for providing services of maximum quality and effectiveness for the clients. The aim of this study was to develop and psychometrically evaluate couples-friendly services questioner among volunteered married couples. Methods & Materials: The present study is a methodological research carried out in 3 stages. In the first and second stages, the concept of couples-friendly service was defined by reviewing the texts and views of the field specialists and then, the main items of the questionnaire were determined. Then, in the third step, the psychometric properties of the questionnaire were assessed using face validity, content validity, construct validity, internal consistency and stability. Results: Based on the results of the first and second stages of the study, the initial questionnaire was comprised of 44 items. After determining the factual and content validity, the statements of the questionnaire decreased to 42 items. The result of the confirmatory factor analysis in this questionnaire revealed the existence of four structures: "Provision of services (8 items)", "Effective services (11 items)", "Providing educational needs for clients (11 items)," "The desire to provide services (12 items) ". Reliability of the questioner was confirmed with a Cronbach's alpha of 0.89 and Pearson correlation of 0.91. Conclusion: The present questionnaire, with regard to the psychometric sciences through the mentioned steps, magnitudes and type of psychometric measurements, can be referred to and used as a tool with an appropriate number of items and structures that can be completed within  $20.3 \pm 5.4$  minutes.

Key Words: Pre-marital, Health services, User friendly, Psychometric, Questioner.

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## **INTRODUCTION**

The use of pre-marriage/premarital counseling services makes couples become more informed and knowledgeable about themselves and their future spouse, as well as the importance and goals of marriage [1]. Couples who received pre-marital training had 31% less

chance of separation [2]. Several studies show that although these counseling services increase the knowledge and attitudes of couples, but this increase in the couplesawareness level and their attitudes changes are not expected and acceptable [3-6]. Pre-marital counseling classes are the first contact of couples with the health system and the couples' perceptions and their satisfaction play an important role in continuing their use of these

Corresponding author: Saeedeh Najafihedeshi

E-mail: S\_najafi2016 @ yahoo.com

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Address: Msc Student in Midwifery Counseling, Shahid Sadughi University of Medical Sciences Yazd, Iran.

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services [7-9]. The World Health Organization (WHO) emphasizes the importance of providing quality health services based on the effectiveness, price, and social acceptancecriteria [10].

A high quality health system is a customer-centric, comprehensive, responsive, and cost-effective systems which cares from health promotion to prevention. This system is based on the regular assessment of the needs and desires of the people and in order to continuously improve the quality, it monitors its performance [10]. Designing user friendly centers is a good way to help clients to obtain high quality and effectiveness of the services [11, 12]. Lucia Naves Alves and colleagues in their study showed that the Breastfeeding-Friendly Primary Care Unit has led to an increase in the prevalence of continued breastfeeding rates from 30.6% in 2003 to 46.7% in 2006 [11]. Carai et al is also believed that youth-friendly-health-services led to significantly improve on the quality of health care services and they can attract more young people to these centers [12]. The design of user-friendly centers is part of a broad strategy that requires comprehensive collaboration between the government, the health system, and the community [13].

As defined by the WHO, health services are considered as user friendly if they have the following criteria: 1) availability, accessibility, and affordability, 2) providing safe and effective services, 3) meeting the clients' needs, and 4) encouraging service providers [14-17]. Moreover, compared to the delivery of high quality services for adults, in user-friendly centers it is emphasized on the respect of the users' rights, availability of health services, confidentiality of information, preventive care and community support [18, 19]. One of the requirements of the designing couple-friendly centers is a measurement tool for marriage services based on the specific features of Iranian society. Many years after signing the treaty of user-friendly services, there is a lack of tools, methodologies, and appropriate indicators for determining the user-friendly centers in the health care system, including marriage-counseling centers in the country. But nowadays, the necessity of such centers has been confirmed by many policy makers and health care providers [20].

Although Ramezan Khani, Mohebbi, and Salarwand with their co-workers reviewed the quality and satisfaction of marriage counseling in Iran [7, 21, 22], but according to our literatures search, it seems that such a tool has not been designed in Iran until now. The aim of this study was to design and psychometricity of the assessing Couple-Friendly Services questionnaire for married couples.

## **MATERIALS AND METHODS**

This Methodoliogical research was a methodological research carried out in Shahid Sadoughi University of Medical Sciences in 2017. The study proposal was approved by Ethics Committee of Shahid Sadughi University of Medical Sciences (Code: IR.SSU.SPH.REP.1395.98) and all subjects gave written "informed consent" before participation in the study. The inclusion criteria were having the Master of Science (M.Sc.) or Doctor of Philosophy (Ph.D.) educational degree with at least three years work experience for teachers participating in the study, also for marriage volunteers, getting married for the first time, passing the training premarital courses for the first time, having the literacy skills, Iranian race, and willingness to participate in this research. Sampling site for masters (teachers group) was in Nursing and Midwifery Faculty, Shahid Sadoughi University, Yazd, Iran and for marriage volunteers was Akbari Marriage Counseling Center, the only marriage counseling center in Yazd. The design of the tool was carried out in 3 steps described by Schneider et al [23]:

**Stage I:** First, the concept of marriage-friendly services was explained with extensive study on articles [14, 24, 25], the WHO [26], and related Persian and English texts [20, 27, 28], as well as under the supervision of professors in the field of reproductive health, midwifery, family health, and psychology.

**Stage II:** Based on the concept extracted from the first stage, the main structures of the questionnaire, including the structure of "availability of services", "effective services", "providing educational needs of the Couples", "eagerness to provide services" were retrieved [17, 24]. Then, the appropriate phrases, each of which formed the different parts of the concept of couple-friendly services were developed. The items were measured through the 5-point Likert scale ranging from totally disagree with the score of 1, to totally agree with the score of 5.

**Step III:** After the initial design of the tool, the psychometric steps were begun. For psychometric evaluation, , the qualitative and quantitative face validity methods, content validity (ratio and index), and construct validity were used for assessing the tool's validity. For determining its reliability,the internal consistency and stability were used.

**Face validity:** To assess the qualitative face validity, after writing the interview of 10 persons who are volunteers for marriage, the items were evaluated regarding their

relevance, difficulty, and clarity then the necessary corrections were applied and reviewed by the research team. Afterwards, to determine the quantitative face validity, the impact index of the item [29] was used. Then from 20 volunteers marriage eligible for the study were asked to answer to each item in the 5-item Likert scales.Each item with the impact score of equal or greater than 1.5 was appropriate for the subsequent analysis [29]. **Content validity:** Qualitative and quantitative methods

were used to determine the content validity. In qualitative content validity, researchers asked 20 professors (teachers) of the Faculty of Nursing and Midwifery, Yazd Shahid Sadoughi university to review the conceptand scope of the tool; after that the necessary changes and modifications were made. To evaluate the content validity quantitatively, two methods of the content validity ratio (CVR) and content validity index (CVI) were used [30]. To determine the content validity ratio, 20 faculty members of the Faculty of Nursing and Midwifery were asked to score the 3-item Likert scales (necessary, useful but not essential, and not essential) between 1 to 3 points.Scoring should be based on the Lawshe Table, the items with the content validity ratios more than 0.42 (based on the assessment of the 20 professors) were kept. In order to evaluate the content validity index (CVI), Waltz and Bausell [30] methods were used. For this purpose, 20 of the professors were asked to rate each item in the 4-item Likert scales based on the relevancy, simplicity, and clarity. The score 0.79 and higher were recommended for accepting the items based on the CVI scores [31]. Obtaining the scores of 0.90 and more on the average results of the content validity index indicated that the tool was acceptable.

**Construct validity:** Factor structure of the questionnaire was evaluated using confirmatory factor analysis. 200 volunteers of marriage were purposefully entered into the study. To ensure the adequacy of the sample size, a Kaiser-Meyer-Olkin (KMO) test was also performed. Participants were asked to mark their rate of acceptance of eachitem on the 5-item Likert scalesfrom totally agree to totally disagree in the relevant column.

Since the needed minimum factor structure to include an item in a structure depends on the number of items in the questionnaire and the specific value considered [32], for keeping an item, the cut-off point of 0.4 was considered as the minimum factor structure. Then, based on the fact that each item has the most factor load on which of the four structures, it was considered as an item related to that structure. Confirmatory factor analysis of this questionnaire was performed using AMOS software version 18.

In this analysis, first, the possible model was determined according to the theoretical basis of the questionnaire as

well as the results obtained from exploratory factor analysis. Then, the model was analyzed for the obtained fitness indicators. It should be noted that in the present study, the correlation matrix of questions in all four dimensions was studied.

A review of the reliability of the questionnaire: To calculate the reliability, the appropriate number of samples should be15 to 20 [30]. To calculate the questionnaire reliability, the sample size between 15 and 20 people is appropriate. To measure the internal consistency, Cronbach's alpha was used. Cronbach's alpha should be considered between 0.7-0.8 [33]. Among the 200 volunteers of marriage completed the questionnaire, the Cronbach's alpha coefficient for each item, structure, questionnaire was calculated. Stability and total assessment performed through was the testretest reliability study (Pearson Correlation Coefficient) by asking the 17 volunteers of marriage to complete the questionnairs and determining the correlation coefficient with the time interval two weeks between the two tests [34]. Then the average of the time for completing the questionnaire was also determined.

## **RESULTS:**

In the first phase of the research, based on the extensive literature review, the concept of couple-friendly service was defined. Accordingly, the health services were considered the couple-friendly ones if they were 1) availability, accessibility, and affordability 2) providing safe and effective services, 3) meeting the clients' needs, and 4) encouraging service providers.

In the second stage, based on the extracted concept from the first stage, the main structure of the questionnaire were derived. Then, the appropriate phrases, each of which formed the different parts of the concept of couplefriendly services were developed. The items extracted by the research team were examined and the phrases with overlapping concepts were merged, then the original questionnaire consisted of 44 items on the 5-item Likert scale was designed (totally agree, agree, disagree, undecided, and totally disagree). Items were arranged in four structures: availability of services (8 phrases), effective services (13 terms), providing educational needs of the couples (11 phrases), and eagerness to provide services (12 phrases).

In the third stage of the research, after calculating the impact score, considering that the amounts of tool items were higher than 1.5, none of them was considered to be omitted, and all of them, in terms of the target group, were regarded important and appropriate and they were kept for the following stages.

Based on the qualitative content validity of the tool, the items of 24 and 25 were merged into each other and designed a new item titled "The consultant replied the content if necessary" and items 43 and 44 were changed into the item titled "I was satisfied with the training package received from the counseling center". The results of the survey on the content validity ratio showed that this ratio varied from 0.42 to 1. In addition, considering that the value of the content validity index of the items of the tool was  $\geq 0.79$ , none of them was deleted.

Thus, 42 items remained for the next stage, which included: the availability of services (8 phrases), effective services (11 phrases), the provision of educational needs of the couples (11 phrases), and the eagerness to provide services (12 phrases). The content validity index of the entire tool was considered 0.92 [30]. (Table 2). Meanwhile, based on the views of the target group and the experts, through the qualitative method, determining the face, and content validities were revised and necessary amendments were made.

**Factor analysis:** Before performing the factor analysis, the adequacy of the sample size was evaluated using the KMO index and Bartlett's test. The KMO value was 0.829, which is close to one and is representative of the sufficient sample size. Also, the –p- value of bartlett test is less than than 0.001, which indicates that the null hypothesis of this study was rejected; therefore, factor

analysis for identifying the model is appropriate in this study.

Confirmatory factor analysis was used to confirm the structures. The questions related to the four structures were entered into the program and analyzed; the amount of DF/CFMIN was 2.043, the comparative fit index (CFI)= 0.95, the P-value of the chi-square was less than 0.001, and Root-mean-square error of approximation (RMSEA) was 0.062.

In the last stage of the research, two methods for determining internal consistency and stability were used to determine the reliability of the questionnaire. The highest Cronbach alpha in the case of deletion was 0.892. The highest Cronbach's alphabet (0.86) was related to the eagerness to provide services and the least (0.7) was related to the availability of services. Also, the highest correlation coefficient (0.83) was related to the effective service structure and the least (0.67) related to the service availability structure. Therefore, no phrase was deleted at this stage (Table 3). After completing the psychometric steps, the questionnaire, as the final instrument in a 5-item Likert scale, was determined for assessing the provision of couple-friendly services in volunteers of marriage; the questionnaire was consisted of 42 items with a minimum score of 42 to a maximum score of 210 and the average response time of  $20.3 \pm 5.4$  minutes.

Construct validity		nstruct validity Content validity		face validity		validity		
Standard deviation	Mean	Standard deviation	Mean	Standard deviation	Mean		ariable	
4.91	23.91	9.25	42.68	4.19	26.82	Age		
Percent	Frequency	Percent	Frequency	Percent	Frequency	Male	Sex	
36.5%	73	15.8%	3	50%	20			
63.5%	127	84.2%	16	50%	20	Female		
18%	36	-	-	2.5%	1	Under the diploma		
19.5%	39	-	-	17.5%	7	Diploma	Education	
62.5%	125	MSc (55%) Phd (% 45)	MSc (11) Phd (9)	80%	32	College education		

 Table 1: Distribution of Absolute and Relative Frequency of Units Depending on Demographic Specifications

Table 2. Impact ii	ndex of the item	and content	validity index
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CVR	CVI			the impact seens	Items
Necessity	Being simple	clear	related	<ul> <li>the impact score</li> </ul>	Items
0.42	0.84	0.84	0.8	1.5	1
0.47	0.89	0.94	0.94	3.37	2
0.57	0.94	0.79	0.89	2.7	3
0.7	0.79	0.79	0.84	3.09	4
0.6	1	1	0.79	2.1	5
0.8	1	1	0.89	1.9	6
0.68	0.94	0.94	0.89	3.5	7
0.68	1	1	1	2.9	8

0.68	1	0.89	0.94	3.8	9
0.89	1	0.84	0.94	4.4	10
1	0.94	0.84	1	2.6	11
0.8	1	0.89	0.84	2.5	12
0.8	1	0.94	0.84	2.3	13
0.89	1	0.94	0.94	4.3	14
1	1	1	0.94	4.2	15
0.89	0.94	0.94	1	4.05	16
0.89	1	0.94	0.94	3.65	17
0.79	0.89	0.89	0.89	4.5	18
0.89	1	1	1	4.6	19
0.79	1	1	1	4.1	20
0.89	1	1	1	4.5	21
0.57	0.94	0.94	0.89	4.1	22
0.89	1	0.89	0.94	4	23
0.8	0.84	0.9	0.89	3.7	24
0.78	1	1	0.94	3.4	25
0.7	0.8	0.85	0.79	3	26
0.89	1	1	1	4	27
1	0.94	0.94	1	4.1	28
0.68	1	1	1	3.5	29
0.79	0.94	0.89	0.94	3.8	30
0.57	0.79	0.95	0.84	4.1	31
0.57	1	0.89	0.84	3.3	32
0.89	1	1	1	3.8	33
0.57	0.89	0.84	0.89	3.1	34
0.8	1	0.89	0.89	2.9	35
0.89	0.89	0.89	0.89	4.5	36
0.57	0.94	0.89	1	3.7	37
0.68	0.89	0.84	0.89	4.1	38
0.57	0.89	0.89	0.89	4.4	39
0.79	0.94	1	1	4.7	40
0.89	1	0.84	0.94	3.8	41
0.68	0.94	0.94	0.94	4.5	42

# Table 3. Cronbach's Alpha Coefficients and Structural Correlation Coefficients and Total Questionnaire

Structures (number of Items)	Cronbach alpha	correlation coefficient	P-Value
(8) availability of services	0/7	0/67	0/003
(11)effective services	0/71	0/85	0/000
(11) providing educational needs of the Coup	0/8	0/79	0/000
(12) eagerness to provide services	0/86	0/83	0/000
(42) Whole scale	0/89	0/91	0/000

# Table 4. Rotational matrix of Questionnaire for assessment of couples-friendly marriage services

Items	Factor 1	Factor 2	Factor 3	Factor 4
1- A guide for accessing the bus station close to the counseling center was fitted at the right place.	0/4			
2- A guide for accessing various units of the counseling center (such as admissions, laboratories, counseling classes) was fitted at an appropriate place.	0/43			
3- The designed space for the marriage counseling center was appropriate.	0/47			
4- Welfares of the facility (such as water cooler, chairs, and lavatory) were suitable	0/5			
5-Entertainment (such as TV, magazine, newspaper) was available for the clients before the initiation of the educational class.	0/59			



		1	1	
6- A Suggestion Box was available at an appropriate place in the marriage Counseling Center.	0/5			
7- The cost for marriage counseling was appropriate.	0/41			
8- Labels of the names and professions of the staff were properly installed at their				
workplace.	0/51			
9- Educational posters regarding marriage were located appropriately in the waiting		0.140		
room of the counseling center.		0/49		
10- Educational pamphlets about marriage and family were available at the waiting		0/46		
room.		0/46		
11- The waiting time before the marriage counseling course was appropriate.		0/48		
12- The environment of the classroom (such as light, sound, ventilation) was		0/54		
appropriate.		0/54		
13- The number of participants in the course was appropriate.		0/38		
14- I was told that all of my information would remain confidential.		0/43		
15- I was pleased with the educational method that was selected by the counselor		0/67		
16- I was satisfied with the duration of the course.		0.41		
17- I will apply the received training during the course in my marital life		0.65		
18- I was pleased with the training package I received from the marriage counseling		0/37		
center.		0/37		
19- I was satisfied with the services I received at the marriage counseling center.		0/49		
20- At the beginning of the course, the counselor expressed the importance of the			0/53	
marriage counseling program.			0/33	
21- The consoler gave us the right to make personal decisions after the			0/59	
presentation.			0/39	
22- I had the opportunity to ask a question privately after the counseling course was			0/62	
ended.			0/02	
23- The counselor mentioned the phone number of the center for answering the			0/52	
questions.			0/52	
24- Other hours were mentioned, besides the consulting hours that the counselor is			0/42	
available for answering questions.			0, 12	
25- The counselor introduced online educational websites about marriage for more			0/67	
information.				
26- The counselor introduced educational books about marriage for further reading.			0/56	
27-The counselor introduced specialized counseling centers (such as genetics, sex,			0/68	
infertility, nutrition).				
28- The counselor introduced other services provided at the marriage Counseling			0/69	
Center.				
29- I properly received the information I needed about marriage counseling.			0/5	
30- Educational materials were presented as needed, based on the different age			0/41	
conditions of the couples.				
31- The behavior of the counseling center's employee was good.				0/4
32- The marriage counseling staff responded to my questions with interest.				0/41
33- The counselor's behavior was respectful.				0/74
34- The counselor had sufficient ability for providing the necessary materials.				0/74

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35- At the beginning of the course, the counselor asked about our required educational content.	0/49
36-The counselor's speech was understandable for me.	0/74
37- Counselor's manner for expressing the educational content (such as hand and face motions) was appropriate.	0/78
38-The counselor presented the contents in categories.	0/65
39-The counselor repeated the content, if necessary.	0/54
40-The counselor, using the right questions, increased our participation in the classroom.	0/53
41- The counselor completed the course by appropriately summarizing the contents.	0/55
42- The counselor asked us to give feedback on the manner of provision of marriage counseling services.	0/45

## **DISCUSSION:**

The main goal of this study was to design and psychometricity the questionnaire entitled "Measuring the couple-friendly services among volunteer couples".The results of the study showed that the questionnaire with 42 items had a good validity and reliability.Various foreign literatures have been reviewed in different areas of service provision to identify most studies have been carried out qualitatively to provide a basis for quantitative studies, or they have been performed by using the guidelines provided by the World Health Organization (WHO) [15, 25].

Thomee et al. (2016) conducted a qualitative study aimed at assessing the challenges and strategies of youthfriendly health centers from the perspective of specialists. Data collection method was a semi-structured interviews organized according to the WHO guidelines for providing youth-friendly services [15].

Woo et al. (2013) also conducted a qualitative study titled "Early Healthcare for the Elder-friendly" which evaluated how to provide services to elderly people in Hong Kong. In order to assess the centers, the World Health Organization (WHO) guideline was used to measure the early healthcare of elder-friendly, including information, education, health, treatment, management of health systems and the physical environment [25]. With regard to the design and psychometric evaluation of user-friendly services, Malm et al. (2017), with the aim of assessing the youth-friendly nature of Swedish youth clinic services, the questionnaire of the assessment of youth-friendly healthcare based on the WHO guideline with 84 items wasrevised,localized and psychometric. The internal consistency of the questionnaire was determined; the Cronbach's alpha was 0.95 and its correlation coefficient was 0.79 [35]. Haller et al. (2012) also designed a tool to assess the youth-friendly health services based on the WHO Guideline. In thier study, based on the content validity process, 49 items in the tool were compiled and the total correlation coefficient was 93% [24].

In the two recent studies [24, 35], the design and psychometric evaluation of youth-friendly services has been evaluated, but in Malm and colleagues research, the stages of content validity, face validity, and structural validity have not been explained. In addition, in the study of Haller and coworkers, the steps, type and the face, and content validity were not explained; they were used to analyze the validity of the structure and the reliability of the instrument. Although the four tool structures and the method of determining the reliability of the tools mentioned above are consistent with the present study, due to the nature of the user-friendlyof both questionnaires that need to be shared in a number of items, but since the items in these tools are not designed to provide services to marriage volunteers, obviously, the content of a number of items and structures is different from the tool used in the current study.

In most of the studies from other countries that are about counseling and marriage training program, a researchermade questionnaire has been used; and no information about the method of determining the validity and reliability, questions and structures of the research tool have been provided. Kepler et al. (2015) conducted a descriptive study of the impact of pre-marriage counseling on marital satisfaction. The data gathering tool was a researcher-made questionnaire with 10 questions, and the researchers did not provide an explanation on how to determine the validity of the tool [36]. Also, in Shaikha Al et al. study (2009), in order to assess the satisfaction of marriage volunteers from pre-marital counseling services, only the use of a 10-item questionnaire was mentioned, and no information about the method of determining the validity and reliability of the research tool was provided [37].

In a study performed in Iran by Hazavehi et al. (2012), a 38-item researcher-made questionnaire was designed to evaluate the effectiveness of the educational programs for pre-marital counseling center. The evaluation and validation of content and structure of the questionnaire were carried out through the use of expert opinions in the field of study. After completing a pilot study with 30 couples in Hamedan province, the final form of the questions was determined (the Cronbach's alpha= 76.0). In this study, the stages, type, and the values of content validity were not mentioned [38]. In another study by Yazdan Panah et al. (2014), the failure to provide the accurate and relevant information on the psychometric steps of the research tool on the effectiveness of premarital educational programs in Iran was clear, as well as in a study conducted by Mohebi et al. (2015) entitled "the view points of users on the quality of the pre-marital counseling program" was evident; in these two studies, the validity and reliability of the tool clearly identified and mentioned [28, 39].

Salarwand et al. (2011), in their study to assess the quality of premarital counseling classes, designed a researchermade questionnaire containing questions about the individual characteristics, the research units, and the form of assessment of the quality of pre-marital counseling classes. Content validity was confirmed by applying corrective comments of 10 faculty members; its correlation coefficient was 98. The limitations of this study were also low number of specialists in the panel, lack of qualitative and quantitative reporting, ratio, index of content validity, and Cronbach's alpha, also lack of review of the literature [21].

The SERVQUAL questionnaire, which has 32 questions in two groups of 15 (one group includes expectations and one group includes perceptions), was used to assess the quality of health care services This questionnairewas first developed by Parasuraman et al. [40] as well as Berry et al. [41]; its validity and reliability have been examined by Heidarnia et al. in Iran [42].

Ramezankhani and coworkers (2010) used a questionnaire to determine the gap in the quality of the pre-marital counseling programs. Considering the characteristics of the premarital program, brief changes were given to the questionnaire, which was why its validity and reliability were re-examined. One of the strengths of this study was to determine the reliability of the tool, but there are some limitations such as the failure to report the number of panel members of the experts, the ratio and content validity index in this study [8].

In addition, compared to the service quality measurement tool, in couple-friendly centers, respect for the rights of the coupeles, the availability of services, confidentiality of information,, preventive care, and community support are also emphasized and evaluated, in fact, the quality of service provision is one the dimensions of the userfriendly service [18, 19, 29]. Based on the related studies, it has not yet established and designed a tool adapted to the national culture of Iran to measure the provision of couple-friendly services in marriage volunteers and other areas, most studies that performed in the field of marital counseling have used the translated version of foreign tools or by the other researchers, and based on the objectives of the study, or without any precise steps and principles of design and psychometric evaluation of the tool [8, 21, 22].

Since the results of studies that relate to the questionnaire and tools are completely dependent on the validity and reliability of the instrument as well as its relevance to the culture of that society and its localization, therefore, it seems that the questionnaire designed in this study, in addition to the related scientific resources of user-friendly services, including World Health Organization studies and other related texts [13, 17, 24, 25, 28, 36], in terms of the professors and marriage volunteers, which is the target group of instrumental evaluation, has been psychometrically measured in Iranian society.

In addition, in the design and psychometric evaluation of this questionnaire, both quantitative and qualitative methods have been used, the psychometric steps are performed on the basis of valid sources [23, 30], the acceptable values of validity and reliability are valid based on the quantities specified in scientific sources; the stages, sequencing, the type and the psychometric values of the tool are designed accurately for the structures and the whole tool, as well as the total score of the tool, including the least, the most, and the method of rating of the tool, as well as the average time of completion the tool is well described. Additionally, the appropriate values of the impact score and the reliability of the tool indicate that an understanding of the tool is also easy for the target community. The limitation of our study is the sampling of male volunteers by a male counselor in the marriage counseling center, which is inevitable due to the nature of the program; to eliminate the limitation, the research team by holding coordination and training sessions for male counselor before sampling in male volunteers managed this problem.

# CONCLUSION

In the present study, at the same time with designing a reliable and valid tool for evaluating the provision of couple-friendly services for volunteers of marriage, the reader gets sufficient information about the quality of the instrument's reliability and how it is assessed. Therefore, this tool can easily be accessed by other researchers and

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they can refer to them. In addition, understanding and completing it by the target community is easy and can easily be completed with minimal reading and writing skills in a short time.

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## **Conflict of interest**

The authors of the article declare no conflict of interest in the study.

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