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Psychometric properties of the Female Sexual Distress Scale-Revised among a sample of non-clinical Iranian women

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Abstract

Objective. The present study aimed to investigate the psychometric properties of a Persian version of the Female Sexual Distress Scale-Revised (P-FSDS-R) among a sample of healthy Iranian women. **Methods.** A total of 562 healthy Iranian women completed a battery of questionnaires, including the P-FSDS-R, Depression Anxiety Stress Scales (DASS), Positive and Negative Affect Scales (PANAS) and Locke-Wallace-Marital Adjustment Test (LWMAT). The factor structure and the convergent and divergent validity of the P-FSDS-R were examined, using exploratory and confirmatory factor analysis and Pearson product-moment correlations, respectively. To examine the discriminant validity of the P-FSDS-R, data collected from 562 healthy participants were compared with data from 108 women with sexual problems who completed the P-FSDS-R measure. **Results.** The results of exploratory and confirmatory factor analyses indicate that the P-FSDS-R is conceptualized within a one - factor model. The results also indicate that the P-FSDS-R has good internal consistency and test-retest reliability. Significant correlations in the predicted directions between the P-FSDS-R scores and the scores of DASS, PANAS and LWMAT support both the convergent and divergent validity of the FSDS-R. The results also indicate that the scores of the P-FSDS-R tests significantly differentiated women with and without sexual problems. **Conclusions.** In general, these findings support the reliability and the validity of the P-FSDS-R among Iranian women.

Key words: Female Sexual Distress Scale Revised, factor structure, reliability and validity

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Introduction

Masters and Johnson (1966) introduced a model of four stages of sexual response including excitement, plateau, orgasm, and resolution. The model provides a basis for international diagnostic systems such as DSM-IV and DSM-V (American Psychiatric Association 1994, 2013) and ICD-10 (World Health Organization 1992). Although these diagnostic systems are different, they are common in the two following characteristics: 1- Female sexual dysfunctions are classified into three broad categories of disorders in sexual interest/arousal, female orgasmic disorder and genito-pelvic pain/penetration disorders, and 2- experience of sexually-related personal distress has been emphasized as one of the necessary diagnostic criteria. This means that female sexual dysfunction (FSD) is diagnosed only when both criteria of low sexual function and sexual distress are present.

Previous studies have shown that not all women with problems in their sexual activities have experienced (or report) personal distress. These studies showed that the prevalence of sexual dysfunctions accompanied by distress

are notably lower than the prevalence of sexual dysfunction *per se* (Bancroft et al. 2003; Witting et al. 2008; Hayes et al. 2008; Burri et al. 2011). It seems that cultural, psychological, interpersonal and contextual factors are important determinants in experiencing personal distress among women with low levels of sexual performance (Witting et al. 2008; Burri et al. 2011; Connor et al. 2011; Dimitropoulos et al. 2012; Stephenson and Meston 2012; Stephenson et al. 2012). For example, there is some evidence that the ability to communicate one's sexual needs, intimacy and compatibility with the partner may play a protective role in the experience of sexual distress among women (Bancroft et al. 2003; Hayes et al. 2008; Witting et al. 2008).

Sexually-related personal distress refers to a negative and distressing feeling that a woman may perceive regarding her level of sexual function (Hayes 2008). According to Derogatis et al. (2002), this criterion identifies and differentiates women with sexual dysfunction with good motivation to improve their quality of sexual activity from those who, despite experiencing problems during their sexual activities, are not distressed by these experiences and do not perceive these experiences as a negative aspect of their self-concept or sexual life.

Although there are a number of psychometrically sound measures for the assessment of female sexual dysfunction,

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For example Female Sexual Function Index (FSFI) (Rosen et al. 2000), Brief Index of Sexual Functioning for Women (BISF-W) (Taylor et al. 1994) and the Golombok Rust Inventory of Sexual Satisfaction (GRISS) (Rust and Golombok 1986), they do not include questions about sexually-related personal distress. Considering the importance of this criterion when assessing and diagnosing sexual dysfunction, having access to a valid and reliable tool to evaluate sexually related personal distress is inevitable.

Derogatis et al. (2008) developed and validated a brief instrument to quantify sexually-related personal distress. The measure consists of 12 items and assesses sexual distress associated with sexual activities during the past 4 weeks. Each item is rated on a 5-point Likert scale from 0 (never) to 4 (always). Studies have provided good support for the reliability of the Female Sexual Distress Scale (FSDS) (Cronbach's alpha ranged from 0.80 to 0.97 and test-retest reliability varied from 0.80 to 0.99) (Derogatis et al. 2002; Derogatis et al. 2008; Ter kuile et al. 2006). The convergent validity of the FSDS has also been confirmed, by calculating the Pearson correlations between the FSDS scores and the scores of a group of measures including psychological distress, negative affect and marital problems (Derogatis et al. 2002; Ter kuile et al. 2006; Dennerstein et al. 2008; Hayes et al. 2008). The divergent validity of the FSDS was also supported through the calculation of negative correlations between the FSDS scores with marital adjustment, positive affect, overall emotional well-being and a good relationship with the partner (Derogatis et al. 2002; Bancroft et al. 2003; Witting et al. 2008). Furthermore, the FSDS appears to be able to differentiate between women with and without sexual dysfunction (Derogatis et al. 2002, 2008; Ter kuile et al. 2006). The scale has also shown a strong sensitivity to treatment change (Derogatis et al. 2002).

In 2008, FSDS was revised and published as the FSDS-R (Derogatis et al. 2008). The revised measure has 13 items (the additional item is related to distress arising from low sexual desire). Like the FSDS, the FSDS-R asks respondents to answer each item on a 5-point Likert scale (ranging from 0 to 5). The full scale score, which is the sum of the 13 items, may range from 0 to 52, with higher scores indicating higher sexual distress. The reliability (internal consistency and test-retest) and validity of the FSDS-R has been confirmed (Derogatis et al. 2008).

To date, the psychometric properties of the FSDS-R have not been investigated among Persian females. Therefore the present study aimed to investigate the psychometric properties of this scale with a sample of healthy Iranian women.

Materials and methods

Study participants

The sample size on which the factor structure, divergent and convergent validity and internal consistency of the P-FSDS-R were tested, consisted of 750 healthy participants who were living in Tehran, Iran. These participants were selected using a convenience sampling method. The participants had to meet the following inclusion criteria: (i) willingness

to participate in the study; (ii) married and having a stable sexual relationship with their spouses for at least the past 6 months and (iii) having at least 12 years of formal education. The exclusion criteria in this study were: (i) suffering from chronic and severe medical illnesses; (ii) seeing a psychiatrist, a psychologist or a gynecologist due to sexual-related problems over the past 6 months, and (iii) unwillingness to participate in the study. After consenting to the study, a battery of questionnaires were given to each participant by the first author (MG). She explained the purpose of the study and the method of completion of the measures. Of the 750 collected questionnaires, 92 were excluded from the analysis due to incomplete data. Data from the remaining 652 participants were included in this study. The study protocol was approved by Medical Ethics Committee of Shahed University.

In addition, the test-retest reliability of the P-FSDS-R was examined, using data collected from a sub-sample of these healthy participants ($N = 40$) over a four-week interval.

Study measures

The Persian-language version of Female Sexual Distress Scale-Revised (P-FSDS-R). The current guidelines for cross-cultural adaptation of measures generally recommend a multi-step process, including forward and backward translation and steps to ensure the conceptual equivalence of the measures (Guillemin et al. 1993; Gjersing et al. 2010). In our translation of the FSDS-R, we incorporated some of these recommendations as follows: (1) two bilingual mental health practitioners independently translated the original version of the FSDS-R from English into Farsi and differences were solved by agreement; (2) another two mental health practitioners who were fluent in Farsi and English and had no knowledge regarding the questionnaire carried out back translations; and (3) pilot testing was performed on a sample of 50 participants. These participants were asked to report any problems they had in understanding the P-FSDS-R items. On the basis of the results of this pilot study, some additional changes were made to the P-FSFI. In addition, as the Farsi language is a right-to-left language (while English is a left-to-right language), each statement is written from right to left in the P-FSDS-R. Apart from the above, the P-FSDS-R was very similar to the original version without compromising its comprehensibility and adequacy in the Farsi language. As in the original version of the FSDS-R, the P-FSDS-R consists of 13 items. Items refer to the past 4 weeks and each item is rated on a 5-point Likert scale, from 0 to 4.

The short form of the Depression Anxiety Stress Scales is DASS-21 (Lovibond and Lovibond 1995). This measure was developed to assess depression, anxiety and stress. Seven items are allocated to each measure of depression, anxiety and stress. All items are rated on a 0 to 3 scale, with higher scores indicating more severe levels of depression, anxiety and stress. The scores are doubled so that they are comparable with the scores for the full 42-item version, which range between 0 and 42, with higher scores indicating more severe levels of depression and anxiety. The Persian version of the DASS-21 has been shown to be reliable and valid among Iranian samples (Asghari et al. 2008).

Positive and Negative Affect Scales (PANAS) (Watson et al. 1988). The PANAS is a 20-item self-report measure that measures two mood dimensions including positive affect (PA; 10 items) and negative affect (NA; 10 items). All items are rated on a 1–5 Likert scale where 1 equals very slightly or not at all and 5 equals extremely. The PANAS has been shown to have excellent psychometric properties (Watson et al. 1988). The psychometric properties (i.e., validity and reliability) of the PANAS have been confirmed among Iranian samples (Bakshpour and Dezhkam 2006).

Locke-Wallace Marital Adjustment Test (LWMAT) (Locke and Wallace 1959). The MAT is one of the most frequently used measures of marital quality. This 15-item test can be answered in 5–10 min. The MAT yields a score ranging from 2 to 158, with higher scores indicating better marital functioning (Locke and Wallace 1959). The Persian-language version of the LWMAT has been shown to be reliable and valid among Iranian samples (Mazaheri 2000; Sadeghi et al. 2010)

In addition to the above measures, all participants also reported their age, education, occupation, duration of marriage, number of children and menopause status.

Statistical analysis

All data were collected, scored and entered into a secure database by the first author (MG). Prior to the analyses, data were examined through the SPSS program for accuracy of data entry, missing values, normal distributions and possible outliers (Tabachnick and Fidell 1996).

In this study, data were analyzed in a number of ways:

A principal component analysis (PCA) was used to identify components of the P-FSDS-R. Eigen values and a scree plot were used to determine the number of components underlying the P-FSDS-R. Although these two methods are the most popular, they are potentially unreliable and may lead to 'over factoring' (Tabachnick and Fidell 1996; Ferguson and Cox 1993).

Parallel analysis (PA) (Horn 1965) was employed to ascertain the optimal number of components to extract. PA requires the researcher to randomly generate a raw data matrix on the same 'rank' as the actual raw data matrix. For example, if one had a 1–4 Likert scale data for 200 subjects on 10 variables, a 200 × 10 raw data matrix consisting of 1, 2, 3 and 4 would be generated. This random data can be factor analyzed to produce a set of eigenvalues. The eigenvalues associated with the matrix of association based on the observed data are also computed. The number of extractable factors is equal to the number with observed eigenvalues greater than the point on the plot where the observed and random eigenvalues cross (Ferguson and Cox 1993; Horn 1965).

The adequacy of the component structure of the P-FSDS-R obtained from PA was tested in the sample via structural equation modelling (SEM) with the AMOS software package (v.6) (Amos Development Corporation, Spring House, PA, USA). Given that the interpretation of model fit in SEM is not without some degree of controversy, several indices of fit were used, and the evaluation was based on convergence among findings. The root mean square error of approximation (RMSEA) with 90% confidence interval was evaluated.

The RMSEA expresses fit per degree of freedom of the model and should be < 0.08 for an acceptable fit, with 0.05 or lower indicating a very good fitting model (Browne and Cudeck 1993). The adjusted goodness of fit index (AGFI) which adjusts for the number of parameters estimated, ranges from 0 to 1, with values of 0.90 or greater indicating a good fitting model. The comparative fit index (CFI) assesses the fit relative to a null model by using non-centrality parameters (Bentler 1988). Finally, the normal Chi-square (Chi-square divided by degree of freedom) should be less than 3 for an acceptable model (Mulaik et al. 1989).

The reliability of the P-FSDS-R was evaluated by examining both the internal consistency and test–retest stability of the P-FSDS-R (Nunnally and Bernstein 1994). To examine the convergent and the divergent validity, Pearson product-moment correlations between the P-FSDS-R scores and a series of interested variables including Depression, Anxiety, Stress Negative and Positive Affect and Marital Adjustment were calculated. In order to examine the predictive validity of the P-FSDS-R, the scores of healthy participants ($n = 562$) were compared with the scores of a group of 108 females referred to sexual clinics due to female sexual dysfunction.

All statistical analyses were conducted with the use of the Statistical Package for Social Science (SPSS) version 17.0 for Windows and the AMOS Software Package (v.6) (Amos Development Corporation, Spring House, PA, USA).

Results

Sample characteristics

The sample's mean age was 31.9 (SD = 8.16) years (Range: 19–57). All participants had at least a high school certificate (i.e., 12 years of formal education) and were predominantly (61%) working in the public sector. On average, they had been married for 100 (85) months (Range: 6–372).

Principal component analysis

Principal component analysis (PCA) was used to identify the dimensions of the P-FSDS-R. The results from the Kaiser-Meyer-Olkin's (coefficient = 0.94) and the Bartlett's tests ($\chi^2 = 4881.789$, $P \leq 0.0001$) indicated that the data from 652 participants were suitable for performing factorial analyses. The decision between orthogonal and oblique rotation was made by examining the correlations among factors. Since the correlation between factor 1 and 2 was greater than 0.32 (i.e., $r = 0.64$), the resulting factors were subjected to oblique (Oblimin) rotation.

Using the principal components analysis with oblique rotation, 2 factors were extracted. The eigenvalue of these factors were greater than 1.0. Also, the examination of the scree plot suggested that one or two dimensions underlie the P-FSDS-R. This model accounted for 65.86% of the variance in P-FSDS-R item scores. Table I shows the factor loadings, communalities (h^2), eigenvalues and percentage of variance for the two-factor solution.

It seems that this analysis has two problems. As can be seen in Table I, the factor loadings of items 13, 4 and 12 are similar to each other. The differences in these factor loadings

Table I. Principal component analysis of the Persian language version of the FSDS-R factor loadings and communalities (h^2) for the two-factor solution.

Item number and description	F1	F2	h^2
10. How often did you feel embarrassed about sexual problems?	0.84		0.71
6. How often did you feel inferior because of sexual problems?	0.83		0.63
7. How often did you feel worried about sex?	0.82		0.70
8. How often did you feel sexually inadequate?	0.79		0.63
3. How often did you feel guilty about your sexual difficulties?	0.74		0.55
5. How often did you feel stressed about sex?	0.74		0.59
9. How often did you feel regrets about your sexuality?	0.70		0.49
13. How often did you feel bothered by low desire?	0.61	0.55	0.42
2. How often did you feel unhappy about your sexual relationship?		0.89	0.80
11. How often did you feel dissatisfied with your sex life?		0.88	0.79
1. How often did you feel distressed about your sex life?		0.87	0.77
4. How often did you feel frustrated by your sexual problems?	0.70	0.80	0.72
12. How often did you feel angry about your sex?	0.73	0.78	0.70
Eigenvalue	7.46	1.1	
Percentage variance	57.40	8.46	

The bold values are only for discrimination from the above values.

were 0.06, 0.10 and 0.05, respectively. The content of items loaded on these two factors were also similar to each other.

As has been mentioned above, in this study, PA was employed to ascertain the optimal number of factors underlying the P-FSDS-R. The results of this analysis are presented in Table II. As can be seen, only one eigenvalue of the P-FSDS-R was higher than those obtained from PA, therefore, a one-factor model was appropriate.

After determining the optimal number of factors by parallel factor analysis, data obtained from the sample (562 subjects) were analyzed using oblique rotation.

Table III demonstrates the factor loadings, communalities (h^2), eigenvalues and percentage of variance for the one-factor solution. This factor accounted for 57.4% of the variance in female sexual distress scores.

Confirmatory factor analysis

Confirmatory factor analysis was performed on the covariance matrix of the P-FSDS-R items. The model parameters were estimated using maximum likelihood. Considering the content of the P-FSDS-R items, in this model, all 13 items were loaded on one factor. A close examination of the

Table II. Comparison between eigenvalues obtained from principal component analysis and level of percentage of eigenvalues obtained from PA.

Eigenvalues of obtained from principal component analysis using varimax rotation	Percent	Mean	Root
7.46	1.32	1.26	1
1.1	1.23	1.19	2
0.68	1.17	1.14	3
0.65	1.13	1.10	4
0.56	1.09	1.06	5
0.49	1.05	1.02	6
0.40	1.02	0.99	7
0.35	0.98	0.96	8
0.31	0.95	0.92	9
0.29	0.91	0.88	10
0.26	0.88	0.85	11
0.23	0.84	0.81	12
0.20	0.79	0.76	13

content of the items of the P-FSDS-R suggested that some of the items have more similar content than others. For example, item 1: "How often did you feel distressed about your sex life?" and item 2: "How often did you feel unhappy about your sexual relationship?"; item 4: "How often did you feel frustrated by your sexual problems?" and item 5: "How often did you feel stressed about sex?"; item 8: "How often did you feel sexually inadequate?" and item 10: "How often did you feel embarrassed about sexual problems?". Based on the inspection of modification indices produced by the statistical package, specific error covariance terms were freed sequentially. That is, after freeing error covariance between specific items, the fit indices were examined to see if they improved. Freeing four of the error covariance terms between the above

Table III. Factor loadings of the Persian language version of the FSDS-R.

Item number and description	Factor	h^2
11. How often did you feel dissatisfied with your sex life?	0.83	0.69
12. How often did you feel angry about your sex?	0.83	0.68
7. How often did you feel worried about sex?	0.82	0.67
4. How often did you feel frustrated by your sexual problems?	0.82	0.67
6. How often did you feel inferior because of sexual problems?	0.80	0.65
2. How often did you feel unhappy about your sexual relationship?	0.77	0.60
5. How often did you feel stressed about sex?	0.76	0.58
10. How often did you feel embarrassed about sexual problems?	0.75	0.56
8. How often did you feel sexually inadequate?	0.73	0.53
1. How often did you feel distressed about your sex life?	0.71	0.50
3. How often did you feel guilty about your sexual difficulties?	0.68	0.47
9. How often did you feel regrets about your sexuality?	0.65	0.43
13. How often did you feel bothered by low desire?	0.64	0.42
Eigenvalue	7.43	
Percentage variance	57.40	

The bold values are only for discrimination from the above values.

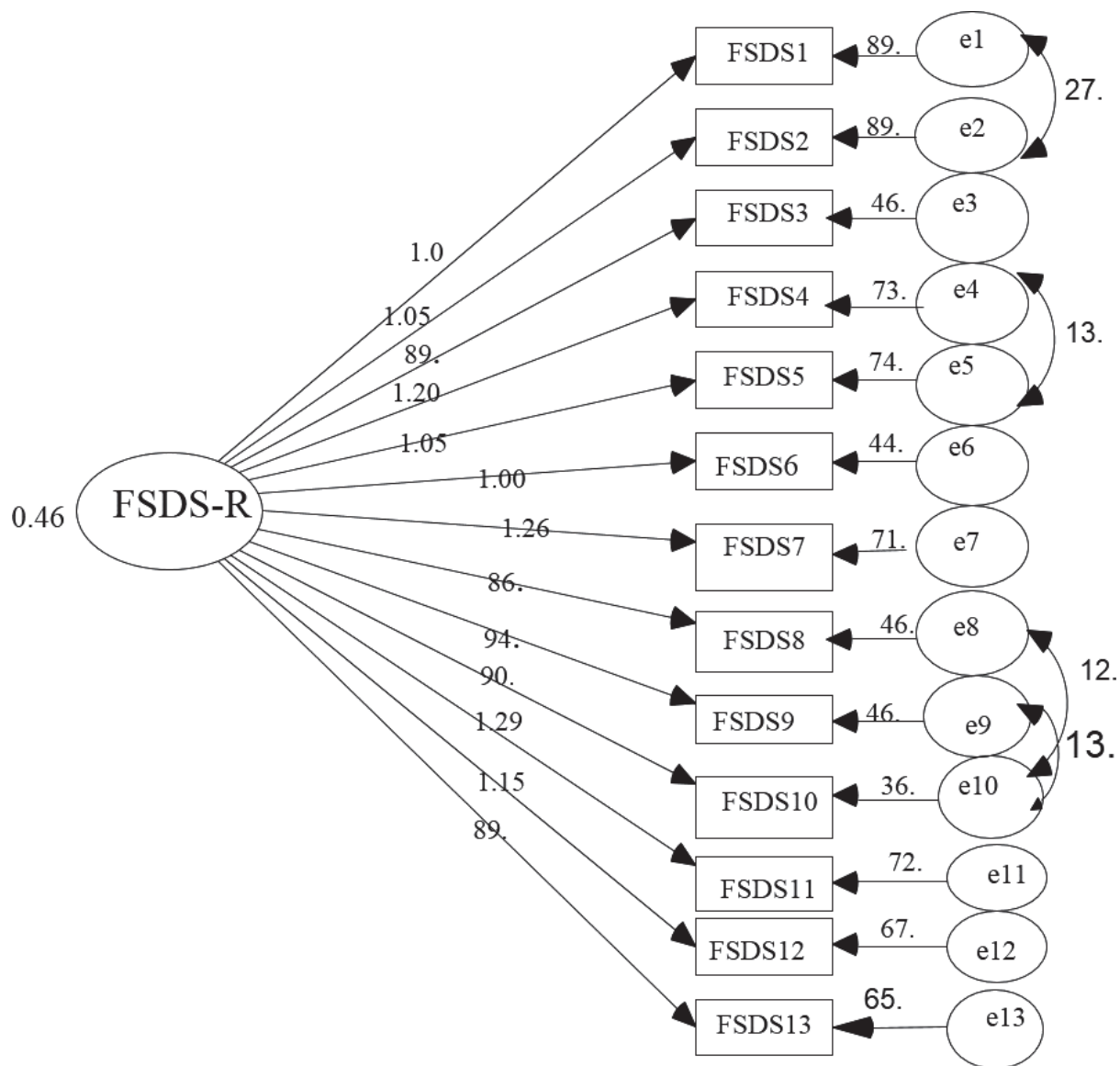


Figure 1. Final model for one-factor solution.

mentioned items (i.e., 1 and 2; 4 and 5; 8 and 10 and 9 and 10) sequentially improved the goodness of fit indices. The goodness of fit indices of the final model are as follows: Chi Square = 243.73; $df = 61$; Chi Square/ $df = 4$; CFI = 0.94; RMSEA = 0.10 (90% confidence intervals: 0.08-.11) and AGFI = 0.90 (please see Table VI and Figure 1). These results indicate that the one factor model was weakly approved by the data collected in this study.

Reliability

In this study, the reliability of the P-FSDS-R was determined in two ways:

Table IV. Comparison between clinic and healthy samples.

Factor	Healthy participants ($n = 562$) Mean (SD)	Clinic sample ($n = 108$) Mean (SD)	T	Level of significance
Female Sexual Distress (0-52)	8.10 \pm 9.37	26.15 \pm 6.30	-24.91	0.0001

Internal consistency. The measure of internal consistency of items, Cronbach's alpha coefficient, was calculated as 0.92, which indicates that the instrument has excellent internal consistency.

Test-retest reliability. Forty participants from the original sample (562) were randomly selected to complete the P-FSDS-R again 4 weeks after the initial assessment. The Pearson correlation was calculated between the Time 1 and Time 2 assessments for the P-FSDS-R. The results showed that the P-FSDS-R has excellent reliability ($r = 0.89$) ($P < 0.0001$) (Tables IV and V).

Predictive validity

In order to establish the predictive validity of the P-FSDS-R, data from 562 healthy participants were compared with the data of 108 women with Female Sexual Dysfunction referred to a public and a private Family and Sexual Health Clinic over a period of 5 months (March– July 2010), using a series of independent sample *t*-tests. The assumption of equality of variance between the two groups was examined by Levene's test. In order

Table V. Correlation between factors of P-FSDS-R with MAT and subscales of DASS and PANAS ($n = 562$).

Factor	Depression	Anxiety	Stress	Negative affect	Positive affect	Marital adjustment
Female sexual distress	0.64*	0.44*	0.60*	0.43*	-0.30*	-0.57*

$P < 0.001^*$

to control for the risk of type I errors, a Bonferroni adjustment was applied the levels of significance ($0.05/5 = 0.01$). Therefore, only t values at or below 0.01 were considered significant.

The mean age of the clinical sample was 32.4 years ($SD = 4.3$) (Range: 23–42). All participants had at least a high school certificate (i.e., 12 years of formal education) and 60% were homemakers. They were married in average for 94.52 ($SD = 52$) months (Range: 6–370).

Table II summarizes the results of these analyses. As expected, the healthy participants reported better sexual functioning than the clinic (patients) sample. These results support the predictive validity of the P-FSDS-R.

Convergent and divergent validity of the P-FSDS-R scale

In order to examine the convergent validity of the P-FSDS-R, it was hypothesized that there are significant and positive correlations between the scores of the P-FSDS-R and the scores of measures of depression, anxiety, stress and negative affect. Also, in order to establish the divergent validity of the P-FSDS-R, it was hypothesized that there are significant and negative correlations between the scores of the P-FSDS-R and scores of the measures of positive affect and marital adjustment. The results of these analyses are presented in Table III. These results confirm both the convergent and the divergent validity of the P-FSDS-R.

Discussion

This study, which examined the psychometric properties of the P-FSDS-R, supports the validity and reliability of the study measure. The measure has shown good to excellent reliability. This finding is consistent with the findings which have previously been reported by others (e.g., Derogatis et al. 2002, 2008; Ter kuile et al. 2006). The results of the present study also show that the study measure (P-FSDS-R) was able to differentiate between women with and without sexual dysfunction, which is consistent with the findings that have previously been reported in other studies (Derogatis et al. 2002, 2008; Ter kuile et al. 2006). The results also confirm the construct validity as well as the convergent and the divergent validity of the P-FSDS-R. These findings are consistent with findings of Shifren et al. (2008) and Bancroft et al. (2003).

This study has a number of limitations. The participants were not selected from the population on a random

basis. Thus, the sample may not be representative of Iranian females. This means that the generalizability of the results of the present study cannot be assumed for all Iranian females. As mentioned above, our study is cross-sectional, so the directions of causality between variables cannot be assumed. Despite these limitations, the present study has a number of strengths. These strengths include the use of widely recognized methods for translating of the FSDS from English into Farsi, the adequate size of the sample studied for the analyses conducted, the employment of other well validated and established scales for comparison, as well as the consistency in findings with those that have previously been reported in the literature for other countries.

The results obtained with P-FSDS-R provide support for its use in the assessment of sexual distress accompanied by sexual dysfunction among Iranian women. In DSM-V, female sexual dysfunctions are a heterogenous group of disorders including female orgasmic disorder, female sexual interest/arousal disorders and genito-pelvic pain/penetration disorder. Each of these disorders has specific diagnostic criteria. The disorder should cause clinically significant distress in the individual to be diagnosed. Therefore, experiencing personal distress is one of the diagnostic criteria of female sexual dysfunction. This criterion has been emphasized in the ICD-10 and also in the American Foundation for Urologic Disease (AFUD).

As mentioned in this paper's introduction, the prevalence of sexual dysfunctions accompanied by distress is notably lower than the prevalence of sexual dysfunction per se. For example, Witting et al. (2008), in a study with 5463 women aged 18–49 years, reported that while the prevalence of Female Dysfunction Disorder ranged from 11% (for sexual desire) to 55% (for lubrication), the prevalence of FSD accompanied by sexual distress was considerably lower and ranging from 7% (for sexual desire) to 23% for (for lubrication). These findings indicate that women may experience sexual problems without being distressed by them and vice versa. In fact, the emotional and sexual quality of the relationship with the partner is one of the important determinants of sexual distress in women (Bancroft et al. 2003; Hayes et al. 2008). On the other hand, a poor emotional relationship with the partner might lead to distressed feelings when having a sexual relationship with the partner, without the existence of sexual dysfunction problems (Bancroft et al. 2003; Witting et al. 2008). For example, Bancroft et al. (2003) have found that sexual problems are not strong predictors of sexual distress in women, but the strongest predictors of sexual distress were general emotional well-being as well as the quality of the emotional relationship with the partner during sexual activity. This finding is indicative of importance of mental health and the quality of relationship with the partner in sexual distress experiences.

In the present study we calculated the adjusted goodness of fit index (AGFI), adjusting for a number of parameters. Descriptive

Table VI. Summary of the model fit index ($n = 562$).

Model	Free parameters	Chi Square	DF	Chi-Square/DF	CFI	RMSEA (90% CI)	AGFI
1	Error covariance 1.2, 4.5, 8.10 and 9.10 are free	243.73	61	4	0.94	0.10 (0.08–0.11)	0.90

goodness of fit indices are a valuable tool in finding a structural equation model (Schermelleh-Engel and Moosbrugger 2003).

In general, the assessment of sexual distress has a key role when diagnosing female sexual dysfunction. It helps to differentiate sexual problems that require clinical attention from disorders which do not require clinical attention. Hence, it is necessary to access a sound psychometric measure for assessing sexual distress when diagnosing and/or treating females with sexual dysfunction.

Conclusion

In conclusion, the results obtained with the P-FSDS-R provide support for the psychometric properties of the measure among Iranian woman suffering from sexual dysfunction.

Key points

- The P-FSDS-R has excellent internal consistency.
- The P-FSDS-R has acceptable reliability.
- The P-FSDS-R has acceptable validity and reliability in the population studied.

Statement of interest

None of the authors reports conflicts of interest.

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