Original Article

Designing, factor structure, validity, and reliability of the New Partner-Related Obsessive-Compulsive Symptoms Inventory (New PROCSI): A questionnaire based on Iranian culture

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Abstract

Introduction: The present study aimed to investigate the factor structure, validity and reliability of the revised Partner-Related Obsessive-Compulsive Symptoms Inventory (New PROCSI) with respect to Iranian culture.

Materials and Methods: The statistical sample consisted of 341 married students studying in Tehran universities in the academic year 2019-2020 that were selected by the convenient sampling method. The New PROCSI, Obsessive-Compulsive Inventory-Revised (OCI-R), Obsessive Beliefs Questionnaire (OBQ), Depression, Anxiety and Stress Scale (DASS), Dyadic Adjustment Scale (DAS) and Relationship Beliefs Inventory (RBI) were the tools of the present study.

Results: The Content Validity Index (CVI) and Content Validity Ratio (CVR) of the new PROCSI were good. Also, there was a significant and negative correlation between all subscales and the total score of the new PROCSI with all subscales and the total score of the DAS, and there was also a significant and positive correlation between the subscales and the total score of the new PROCSI with the subscales and the total score of OBQ, OCI-R, RBI, and DASS. Furthermore, the one-factor model explained 28.41% of the variance in the new PROCSI, and the Chi-Square/df index of the new PROCSI was better than the Chi-Square/df index of the original scale. On the other hand, the CFI and RMSEA of the original scale were better than the new PROCSI. The results of the test-retest correlation and the Cronbach's alpha of the new PROCSI were 0.86 and 0.91, respectively.

Conclusion: It seems that the original and new PROCSI are different and require further research.

Keywords: Culture, Factor structure, Reliability, Validity

Introduction

Doron et al. (1) have introduced a new theme of OCD called Relationship Obsessive-Compulsive Disorder (ROCD). This disorder is often related to the person's mental occupations and hesitation to the feelings he/she has towards his/her spouse, the feelings his/her spouse has towards him/her, as well as the degree of "correctness" of the relationship (obsession focused on relationships). In addition, in this disorder, mental occupations may be related to the perceived impairment of the spouse (obsession focused on spouse). The Partner-Related Obsessive-Compulsive Symptoms

Inventory (PROCSI) is one of the diagnostic tools of ROCD, a 24-item self-report scale that measures the severity of Obsessive Compulsive (OC) symptoms focused on spouse in six domains. These six areas are: physical appearance, sociability, morality, emotional stability, intelligence, and competence. In the study of Doron et al. (2), this tool showed good internal correlation and had good test-retest reliability. Internal correlation coefficients of the subscales of this scale were obtained in the range of 0.57 to 0.87, which all were significant at $P< 0.001$. Regarding the validity of this tool, its subscales showed a good correlation with the subscales of Obsessive-Compulsive Inventory-Revised (OCI-R), Obsessive Beliefs Questionnaire (OBQ), which all were significant in the range of 0.17 to 0.44 ($P< 0.001$). The results of Trak and Inözü (3), which aimed to investigate the psychometric properties of the Turkish version of PROCSI on married individuals aged 18 to 63 years, showed that in confirmatory factor analysis, the factor structure corresponds to the factor structure of the original PROCSI (2). In addition, the results of their study showed that this scale has good predictive and concurrent validity. Also, it has good internal correlation and good test-retest reliability (3).

In Iran, the psychometric properties of several questionnaires in the field of OCD have been studied so far. It is noteworthy that in mentioned psychometric researches, some special themes of OCD such as death obsession, hoarding and mental contamination have been addressed, but so far no attention has been paid to the relationship theme of OCD. The evaluation of the relationship theme of OCD is important, because in addition to personal distress, the relationship theme of OCD often leads to disturbances in marital communication (1). On the other hand, given that different cultural habits can influence the phenomenology, prevalence and themes of OCD through the creation of different beliefs and attitudes (4) and it can be argued that the role of culture in conceptualizing ROCD and providing a culturally sensitive diagnostic tool is important, and therapists should consider this topic when evaluating mental disorders (including ROCD) (5), due to the reconstruction of the concept of ROCD in the Iranian sample (6), the diagnostic tool of PROCSI should also be restored based on this reconstruction. Thus, the purpose of the present

study is to investigate the validity and reliability of the revised PROCSI with respect to Iranian culture.

Materials and Methods

This research was approved by the Ethics Committee of Shahed University. The present study, in the form of a descriptive design, repaired the items of the original PROCSI scale, then the psychometric properties of the new PROCSI scale were examined. The statistical population included all married students of universities in Tehran in the academic year 2019-2020. In this regard, 341 married students of Tehran, Shahid Beheshti, Shahed, Tarbiat Modares, Allameh Tabatabai, Amir Kabir, Sharif, and Kharazmi universities agreed to participate in the research. The sampling method of the current study was the convenient method. The inclusion criteria included being married (male or female), having been married for at least 6 months, and agreeing to participate in the research. The incomplete questionnaires were excluded.

In this study, to check the reliability and validity of the new PROCSI scale, the methods of the Cronbach's alpha and correlation of two runs, as well as convergent, divergent and construct validity were used, respectively. To obtain convergent validity, the correlation of this questionnaire with OCI-R, Depression, Anxiety and Stress Scale (DASS), RBI and OBQ questionnaires was examined. For divergent validity, its correlation with the Dyadic Adjustment Scale (DAS) was evaluated. For construct validity, exploratory factor analysis (with the help of SPSS software) and confirmatory factor analysis (with the help of LISREL software) were used.

Research instruments
A) *New* *Partner-Related* *Obsessive-Compulsive* *Symptoms* *Inventory* *(New PROCSI) (in accordance with Iranian culture):* The new PROCSI, based on the previous study (6), after extracting the categories from qualitative interviews with patients with ROCD and collecting the opinion of the reviewers on the appropriateness of its content validity was designed and constructed. More information about this scale is provided in the results section.
B) Obsessive-Compulsive Inventory-Revised (OCI-R): This scale has 18 items that are

classified into 6 subscales. The subscales of this instrument measure washing, obsessing, hoarding, ordering, checking, and neutralizing. The items of this scale are scored based on a 5-point scale (from 0 to 4). This scale has shown good internal correlation and test-retest validity (7-9). Mohammadi and Zamani showed the moderate to good internal correlation of this tool. Also, in their study, the Cronbach's alpha coefficient of this tool was in the range of 0.50 to 0.72 (10). In addition, the six-factor structure of this instrument was confirmed by confirmatory factor analysis.

C) Obsessive Beliefs Questionnaire (OBQ) (Obsessive Compulsive Cognitions Working Group (OCCWG): This questionnaire has 44 items, which was designed by the by the OCCWG (11), in order to detect and evaluate the level of obsessive beliefs. The subscales of this questionnaire measure the feeling of responsibility for harm and damage, the evaluation of threat and danger, perfectionism, the need for certainty, giving importance to thoughts, and controlling thoughts. This questionnaire is graded on a 7-point scale from 1 completely disagree to 7 completely agree. The Cronbach's alpha of the subscales of this scale is 0.87 to 0.93. The correlation between the two implementations of these subscales shows 0.48 to 0.83. Also, the correlation of this questionnaire with the disturbing thoughts interpretation list (III) was in the range of 0.41 to 0.79 (*P*< 0.001).

D) Depression, Anxiety and Stress Scale (DASS): This scale consists of 21 statements that examine negative emotions such as depression, anxiety and stress. Lovibond and Lovibond (12) reported the Cronbach's alpha for depression, anxiety, and stress subscales as 0.91, 0.81, and 0.89, respectively. Also, the results of their research showed that the three-factor model has a better fit with the data. In the study of Asghari-Moghadam et al. (13) the three-factor structure of this tool was also confirmed. Also, the results of their study showed that in all subscales, the Cronbach's alpha was higher than 0.70 and the retest coefficients for the depression scale were 0.84, for the anxiety scale 0.89 and for the stress scale 0.90. Thus, the validity of the scales of this tool was confirmed (*P*< 0.001).

E) Dyadic Adjustment Scale (DAS): This questionnaire has 32 questions that evaluate the quality of marital relationship from the point of view of husband and wife or two people who

live together. This scale measures dimensions such as two-person satisfaction, two-person solidarity, two-person agreement, and expression of affection. The total Cronbach's alpha score was 0.96, which indicates significant internal consistency. The internal correlation of its subscales was obtained as follows: two-person satisfaction, 0.94, two-person correlation, 0.81, two-person agreement, 0.90, and affection expression, 0.73 (*P*< 0.001) (14). Sharply and Cross showed the validity of this scale to be 0.96 (15). Spanier and Thompson also reported the Cronbach's alpha coefficient of this scale as 0.91 (16).

F) Relationship Beliefs Inventory (RBI): Eidelson and Epstein (17) designed this scale. This tool contains 40 questions and 5 subscales. The Cronbach's alpha coefficient of the subscales of this tool was obtained in the range of 0.72 to 0.81 (17). In the study of Mazaheri and Pouretemad (18), the total Cronbach's alpha coefficient was 0.75. Dehshiri reported that the Cronbach's alpha of RBI was 0.88 (19).

Results

The results should be mentioned in two stages. The first step is to design a new PROCSI. The second stage is the factor structure, validity and reliability of the new PROCSI.

First step: Designing the new PROCSI

In order to fit the PROCSI with Iranian culture, after extracting the concepts derived from the clinical interview in the previous study (6), these concepts were designed as a question and after going through the Content Validity Index (CVI) and Content Validity Ratio (CVR) which was accomplished by expert evaluation, some items were included on the PROCSI and eventually became PROCSI which is applicable in Iranian culture. Based on the categories obtained from interviews with individuals, 23 questions were finally designed (Table 1). Then, to evaluate CVI and CVR, these questions were presented to 10 experts and their views on the necessity of the terms, relevance to the content of the categories, simplicity and fluency, as well as transparency and clarity, were examined. It is worth noting, however, that in the new PROCSI, previous items of the original scale were retained and these new items were added to the previous items after expert evaluation. The results of expert evaluation showed that the CVI of all items were above 0.79. The Scale- level Content Validity Index/Averaging (S-CVI/Ave) of the

designed items was 0.95, which is within the acceptable range according to Hyrkas et al. (20). As such, it can be said that designed items have good content validity. As for the CVR, all items except 9, 14, 17, 18, 19 and 20 had high CVR. In other words, according to Lawshe's view, when evaluating 10 experts, the CVR is considered to be at least 0.62, it can be said that generally designed items had a good CVR (21). In relation to items 9, 14, 17, 18, 19, and 20, items 9, 14, and 20 were omitted due to the low frequency at the time of interviewing people and items 17, 18 and 19 were modified due to

the higher frequency at the time of interviewing people and re-presented to experts to assess the CVI and CVR. The re-evaluation results showed that the CVI and CVR of these three items were 1, which indicate good content validity and good content validity ratio of these items. Finally, these three modified items were randomly included in the original PROCSI along with the previous items.

In other words, items 1 to 23 (by removing items 9, 14, 20, and modifying items 17, 18, and 19) were randomly included in the original PROCSI.

Table 1. Designed phrases

Number	Designed phrases
1	I repeatedly evaluate my spouse's commitment to religion
2	I often think of religious differences between myself and my spouse
3	I'm worried about the impact of religious differences between myself and my spouse on my child and I think about it many times
4	To avoid repeating thoughts like "my spouse is different from me religiously", I try to avoid attending congregations where religious beliefs are challenged.
5	Doubt that my spouse is interested in someone else, annoys me
6	By saying such warnings as Astaghferollah or others, I try to free my mind from the repeated conflict over infidelity.
7	To avoid repeating thoughts like, "my spouse will infidelity me," I try to avoid going to places where my spouse is approaching the opposite sex
8	Letting go of the idea that my spouse has no good relationship with our child, bothers me
9	It is difficult for me to abandon the idea that my spouse is not a good role model for our child
10	When I repeatedly question my spouse's good relationship with my child, I try to rid myself of these doubts by thinking about my spouse's good qualities.
11	The thought that my spouse does not respect cleanliness, hurts me so much
12	When I have doubts about my spouse being clean, I try to get him to do the washing
13	It is difficult for me to give up the thought that my spouse is ill and infects me
14	Whenever I have doubts about my spouse being ill, I try to get her to go to the doctor or get a test
15	The thought that "my spouse's feelings are not too strong" often comes to mind and annoys me
16	It is difficult for me to give up the thought that "my spouse is neglecting me"
17	The thought that "my spouse doesn't understand me" keeps coming to my mind and suffers me
18	When I think about my spouse's lack of emotion, I try to get comfortable with talking to him
19	When I think repeatedly about "my spouse doesn't understand me", I try to calm myself down by talking to others (such as my friends)
20	The thought that my spouse is not using his intelligence to the full, often comes to mind and annoys me
21	Doubt about my spouse's independence is constantly bothering me
22	When I repeatedly engage with my spouse's poor social skills, I try to free my mind from this by focusing on good features of my spouse
23	When I think about my spouse's poor job skills, there is nothing I can do in practice, and only these unpleasant thoughts are repeated in my mind

Second stage: Factor structure, validity and reliability of the new PROCSI

The results of the present study showed that 71.55% of the samples were women and 28.44% were men. Also, Tehran University (20.2%) had the highest sample size and Sharif University and Amir Kabir University of Technology (6.5% and 6.74%, respectively) had the lowest sample size. In addition, studying in humanities (59.8%) and art (0.9%) were the highest and the lowest, respectively. In terms of degrees, undergraduate (44%), and

associate (0.6%) degrees had the highest and the lowest sample size, respectively. The mean age of students was 26.83 years (SD= 7.01) and their marriage duration average was 56.88 months or 4.74 years (SD=69.74 months or 5.81 years). Also, as the results of the study showed, most of the sample individuals were not employed (77.1%) and most of the students had no children (73.6%). In addition, the results of the current study showed that the mean of the total score of the new PROCSI was 12.98 (SD=12.28). Also, the descriptive results of the

other scales were as follows: the mean total score of the DAS was 121.26 (SD= 19.76). The mean of depression, anxiety and stress of DASS were 3.33 (SD= 3.34), 2.77 (SD= 2.66) and 6.11 (SD= 4.04), respectively. The mean score of the OCI-R was 16.24 (SD= 11.10). The mean total score of the RBI was 79.22 (SD= 16.56)

and the mean total score of the OBQ was 166.63 (SD= 40.50). The results of the divergent validity of the new PROCSI in the form of correlation with DAS and the results of the convergent validity of the scale in the form of correlation with DASS, OBQ, OCI-R, and RBI are presented in Table 2.

Table 2. The results of correlation of the new PROCSI with DAS, DASS, OCI-R, OBQ, and RBI

		PROCSI
DAS	Dyadic satisfaction	-0.71**
	Dyadic cohesion	-0.56**
	Dyadic consensus	-0.62**
	Affectional expression	-0.64**
	Total score	-0.75**
DASS	Depression	0.45**
	Anxiety	0.27**
	Stress	0.42**
OCI-R	Washing	0.25**
	Obsession	0.35**
	Hoarding	0.28**
	Ordering	0.28**
	Checking	0.33**
	Undoing	0.31**
	Total score	0.40**
RBI	"Disagreement is destructive"	0.49**
	"Mind reading is expected"	0.27**
	"the partner cannot change"	0.45**
	"Sexual perfectionism"	0.23**
	"the sexes are different "	0.23**
	Total score	0.54**
OBQ	Responsibility for injury/ threat estimation	0.31**
	Perfectionism/ need for certainty	0.28**
	Importance of thoughts/ control of thoughts	0.24**
	Total score	0.32**

** P< 0.01   * P< 0.05

As the results in Table 2 show, there is a significant and negative correlation between all subscales and the total score of the new PROCSI with all subscales and the total score of the DAS. There was also a significant and positive correlation between the subscales and the total score of the new PROCSI with the subscales and the total score of OBQ, OCI-R, RBI, and DASS.

For the purpose of factor analysis, Kaiser-Meyer-Olkin measure (KMO) of sampling adequacy was calculated to ensure the adequacy of sample size. Then, since the

correlation between the test questions is the basis of factor analysis, to determine the correlation between the variables is not zero, in the third step, the Bartlett's test of sphericity was used. Table 3 shows the results of these tests.

As shown in Table 3, the KMO values were 0.85. Since this value is greater than 0.60, the sample size is sufficient for factor analysis. Also, the Chi-square in Bartlett's test was 4.24 which was statistically significant ($P< 0.001$) and indicated that the data correlation matrix is not zero in society (22,23).

Table 3. The results of KMO and Bartlett's Test

Kaiser-Meyer- Olkin Measure of Sampling Adequancy (KMO)		0.85
Bartlett`s Test of Sphericity	Chi-Square	4.24
	df	946
	P	0.000

The principal axis factoring method with quartimax rotation was used for factor analysis. Table 4 shows the factor loadings, eigenvalues and percent of variance for the factor obtained from the quartimax rotation. The results of Table 4 show that the one-factor model explains 28.41% of the variance in the new PROCSI. Items that were included in this scale based on materials obtained from interviews with individuals and ultimately remained in exploratory factor analysis were items 17 (number 4 in new scale), 18 (number 5 in new scale), 19 (number 6 in new scale), 34 (number 14 in new scale), 38 (number 16 in new scale), 42 (number 18 in new scale), and 48 (number 22 in new scale) that item 38 focuses on religion, item 19 is independence of practice, and the rest items focus on spouse emotional intelligence. After analysing the content of the factor, it included a combination of obsessions and compulsions related to spouse characteristics (such as intelligence, social competence, sociability, morality, emotional stability, and physical appearance).

Table 4. Factor loadings, eigenvalues, percentage of variance and cumulative variance percentage for extracted factors

PROCSI	Factor
Item 29	0.70
Item 36	0.70
Item 17	0.67
Item 31	0.65
Item 12	0.65
Item 26	0.64
Item 14	0.64
Item 43	0.63
Item 4	0.63
Item 39	0.62
Item 28	0.61
Item 46	0.61
Item 34	0.59
Item 19	0.59
Item 48	0.58
Item 33	0.58
Item 42	0.57
Item 18	0.57
Item 25	0.57
Item 30	0.53
Item 38	0.52
Item 44	0.51
Eigenvalues of extracted factors	12.50
Percent of variance	28.41

In the next step, parallel analysis was used to select the acceptable factors obtained from exploratory analysis. The results of the parallel analysis showed that the eigenvalues of all the main factors were higher than the special percentile level values obtained from the parallel analysis, but according to Table 4, one factor was considered. Overall, this factor predicts 28.41% of the variance in the new PROCSI scores. In order to verify the construct validity of the new PROCSI, confirmatory factor analysis of this scale was performed and compared with the results of factor analysis of its original scale. The indicators associated with confirmatory factor analysis without covariance liberalization are shown in Table 5.

The results of Table 5 show that the Chi-Square/df index, which is one of the most important indicators of confirmatory factor analysis - of the new PROCSI is better than the Chi-Square/df index of the original scale. Of course, the rest of the indicators are better at the

original PROCSI. Regarding the reliability of the new PROCSI, the results of test-retest correlation of the PROCSI factor (with two weeks interval) and the Cronbach's alpha of it were 0.86 and 0.91, respectively. Thus, based on the results, generally we can say that the new PROCSI has good validity and reliability. Figure 1 shows the structural model of the new PROCSI.

Table 5. Evaluation indicators for model fitting

	New PROCSI	Original PROCSI	
Index	Index value	Index value	Acceptable value (Tabachnick and Fidell, 2007)
Chi-Square/df	3.49	6.94	3<
RMSEA	0.12	0.11	0.06 < or 0.08<
Standardized RMR	0.09	0.08	0.05 < or 0.08<
GFI	0.71	0.77	0.8 > or 0.9>
AGFI	0.64	0.71	0.8 >
NFI	0.81	0.91	0.8 > or 0.9>
NNFI	0.83	0.92	0.9 >
CFI	0.85	0.93	0.90 > or 0.95>
RFI	0.79	0.90	0.9 >
IFI	0.85	0.93	0.9 >

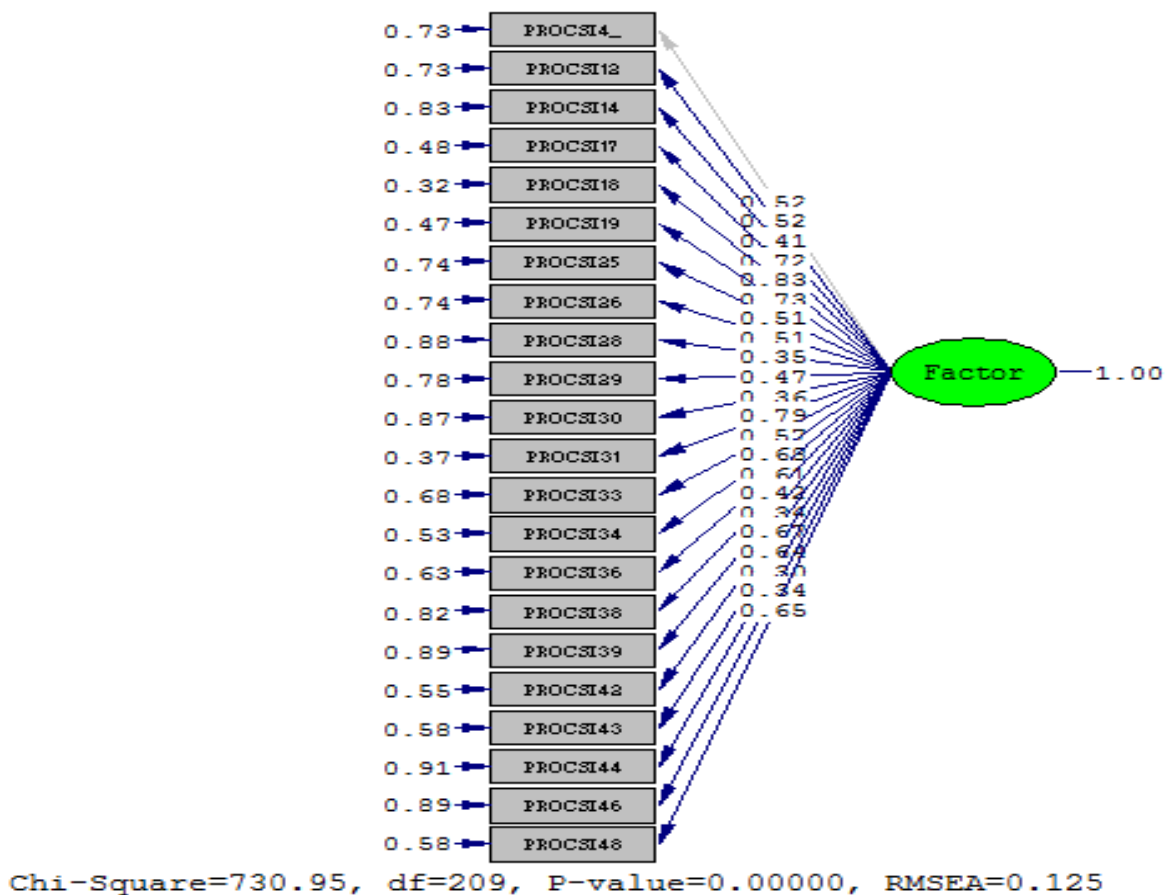Chi-Square=730.95, df=209, P-value=0.00000, RMSEA=0.125

Figure 1. Structural model of the new PROCSI

Discussion

The results of the current study showed that the new PROCSI has good convergent, divergent, and construct validity and it has good reliability (test-retest correlation and Cronbach's alpha). The results also showed that the new PROCSI, with respect to indicators of confirmatory factor analysis and with the exception of the Chi-square which represents the more appropriate index in this new scale, is not significantly different from the original PROCSI, but has better divergent and convergent validity especially with the OBQ than the original PROCSI. In fact, confirming the high similarity of the items of the new PROCSI with the original PROCSI (2), the results of epidemiological studies on OCD in different cultures can be considered. The results of these epidemiological studies in Europe, Asia, and Africa indicated a relatively high prevalence of this disorder in different cultures. Their results also showed that despite the difference in the content of obsessive-compulsive symptoms, their shape has undeniable similarities (24). For example, the question of doubt about spouse infidelity is one that seems to be important in other societies as well. A lot of emphasis on the intimate relationship to create a sense of value in the person and the fear of abandonment increase the vulnerability to this disorder (25).

After implementation of the new PROCSI, its validity and reliability were evaluated. In general, the results of the reliability findings, using the Cronbach's alpha method and the test-retest correlation of new PROCSI are consistent with the research of Doron et al. (2), and Trak and Inözü (3).

In the current study, the DASS, OCI-R, RBI and OBQ were used to evaluate the convergent validity of the new PROCSI. Also, the DAS was used to evaluate the divergent validity of this scale. Negative and significant correlation between the new PROCSI and the DAS indicate that people who have doubts about social competence, intelligence, morality, emotional intelligence, social relationships, and job skills of their spouse, their marital adjustment is low. This result is in line with the results of a study by Doron et al. (2) that showed a negative relationship between PROCSI and marital adjustment. The results of the various studies consistent with the current study indicated the negative impact of OCD on marital satisfaction, for example Staebler et al. (26) reported a negative correlation between OCD and marital satisfaction, and this indicates that OCD in each couple disrupts their relationships and reduces marital satisfaction between them. Amongst all psychiatric disorders, OCD is recognized as one of the most serious causes of disability and impaired quality of life in family and social relationships (27). This disorder causes a waste of time and creates significant problems in the normal and natural process of life, job function, usual social activities or personal relationships (28). In fact, ROCD symptoms have a significant impact on marital satisfaction (29). Repeated doubt about a spouse or relationship with him/her can severely damage the core of marital communication and directly affect relationship durability (30). In fact, randomized controlled trials show that 60 to 70% of couples who seek therapy experience as much as a 50% improvement in the relationship difficulties for which they sought professional help. The literature indicating the efficacy of couples-therapy targeting relationship distress is expansive, however research investigating couples-therapy whose aim is to target mental illness in one of the partners is scarce (31).

Also, the results of the current study showed that there is a positive and significant relationship between new PROCSI and OCI-R. In this regard, the results of the current study are in line with the results of Doron et al. (2) and Trak and Inözü (3) who found a positive and significant relationship between ROCD and OCD. In the study by Doron et al. (2) consistent with the current study, a moderate correlation was found between the total score of PROCSI with the total score of OCI-R (r= 0.44) and the scores of its subscale (which were obtained in the range of 0.28 for order and symmetry to 0.40 for obsessions) (2). In fact, it can be said that ROCD is a type of OCD that is exaggerated, not based on reality or has a limited relationship to reality and contrasts with real feeling of the person towards the spouse. As such, the person with ROCD has limited adaptation to the relationship-focused and spouse-focused obsessions and most likely following these obsessions, she/he start neutralizing behaviors. What is important is that a stressful event can trigger a chronic pattern of OCD (32). In addition, the results of the current study showed that there is a positive and significant relationship between the new PROCSI and the DASS. So it can be said that people with ROCD are likely to show high

levels of anxiety and depression. This finding is in line with the findings of Doron et al. (2) and Trak and Inözü (3). In this regard, Doron et al. showed in another study that people with ROCD feel guilty and embarrassed about their doubts and mental occupations. Following this sentiment, they may continue to criticize themselves and so, their psychological well-being is affected (1). Also, in line with the current study, the results of various studies showed that at least one third of patients with OCD suffer from depression disorder at the first treatment session (evaluation session) (33,34).

Epidemiological studies indicate a high coexistence of depression disorder with OCD. Mental rumination, which is a central component of MDD, is seen in 41% of patients with OCD and is one of the most important predictors of response to OCD treatment (35). Also, more than one-third of patients with OCD showed symptoms of depressive mood and one-third of them had disturbed job performance. In addition, sleep problems and physical symptoms accounted for approximately one-fifth of them (36). Also, the dominant conceptual model of OCD indicates that the underlying cause of OCD is anxiety (37), as in 40% of cases, anxiety symptoms can be seen at various stages of OCD (38). The results of various studies have also shown that there is a history of anxiety in the family of people with OCD (39). A positive and significant correlation between the new PROCSI and RBI is another result of this study. In this regard, Szepsenwol et al. (40) in line with the current research showed that individuals with ROCD achieved high scores on maladaptive communication-related beliefs. As a result, it can be said that maladaptive communication-related beliefs play a prominent role in the formation and persistence of ROCD (40).

In this respect, it can be said that repeated doubts about the spouse or relationship with him /her can seriously damage the core of marital communications and directly affect the durability of the communication. Conversely, positive perception of the spouse and relationship with him/her is a positive and efficient belief that plays a role in the continuity of intimate and successful communication (30,41). Also, another result of the current study was the positive correlation between the new PROCSI and the OBQ.

In this regard, the current study is in line with the study by Doron et al (2) and Trak and Inözü

(3). In fact, this is a confirmation of the role of maladaptive beliefs in the aetiology of OCD. The cognitive model of OCD assumes that the power of such beliefs is related to the severity of obsessions and compulsions. Researches that are predominantly found in the United States population have substantiated this assumption (42,43). Many studies show that dysfunctional (meta-) cognitive beliefs, cognitive biases and coping strategies are associated with OC symptoms and that targeting these features may reduce OC symptoms (44).

In addition, the results of this study fitted well to single-agent model of the new PROCSI scale. In this regard, the results of the study by Doron et al. (2) in line with the current study, suggested the existence of a higher level of general factor related to spouse-centred OC symptoms. One of the most important limitations of the current study was the use of student sample and consequently the inability to generalize the results to other married groups. Also, using the convenient sampling method and restricting access to professionals to evaluate new items on the new PROCSI scale were other limitations of this study.

Conclusion
The results of the current study showed that the new Partner-Related Obsessive-Compulsive Symptoms Inventory (PROCSI) has the good convergent, divergent, and construct validity and has good reliability (re-test and the Cronbach's alpha). Also, the results showed that the new PROCSI scale is not significantly different from the original PROCSI scale in relation to the confirmatory factor analysis indicators, except for the Chi-square which shows a more suitable index in this new scale, but it has a more suitable convergent and divergent validity, especially with OBQ scale compared to original PROCSI. It seems that the original scale and the new PROCSI scale are different, and more research is needed in this area.

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