



# Validating the Persian Version of the Self-stigma of Seeking Help (SSOSH) Scale

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## Abstract

**Background:** Stigma presents significant barriers to mental health treatment, influencing treatment decisions and recovery outcomes. Standardized rating scales play a crucial role in assessing Self-stigma, which is essential for intervention efforts aimed at improving mental health outcomes globally.

**Objectives:** This study aims to investigate the internal consistency, face validity, content validity, and factor structure of the Persian version of the Self-stigma of Seeking Help (SSOSH) scale in a group of people with mental health disorders referred to the outpatient clinics of Roozbeh Psychiatry Hospital and several private clinics in Tehran, Iran.

**Methods:** First, a bilingual psychiatrist translated the scale into Persian. Content and face validity were then evaluated by six psychiatrists. A pilot test was conducted with ten patients to assess comprehensibility. A back translation into English was performed by a non-professional, and the result was compared to the original version by a bilingual psychiatrist. The final Persian version of the questionnaire was administered to 347 patients with various mental health disorders, recruited from Roozbeh Hospital, a referral psychiatry hospital, and several private clinics in Tehran. Demographic characteristics were collected via questionnaires, and the type of disorder was determined based on the specialist's evaluation. This process was conducted from October 2023 to May 2024. The Content Validity Index (CVI) and Content Validity Ratio (CVR) were calculated, and internal consistency was analyzed using Cronbach's alpha and McDonald's Omega tests. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were performed to explore and understand the data structure.

**Results:** The Persian version demonstrated reasonable comprehensibility and translation equivalence, ensuring both semantic and content equivalence. The SSOSH achieved a CVI > 0.8 and CVR > 0.96. All items obtained an acceptable score (greater than 1.5) for face validity. The internal consistency of the total score was good ( $\alpha = 0.733$ ,  $\omega = 0.818$ ). The EFA revealed that the Persian version had three factors accounting for 57% of the total variance, and the CFA suggested this model fits the data reasonably well, though there is room for improvement.

**Conclusions:** The Persian SSOSH scale exhibits good internal consistency and acceptable face and content validity for use in Persian-speaking patients with mental health disorders. While the three-factor structure identified by the EFA requires further investigation, the application of this tool among other Iranians warrants additional evaluation.

**Keywords:** Behavior, Help-Seeking, Self-stigma, Validation Study

## 1. Background

According to a report by the World Health Organization, in 2020, one out of every eight people experienced at least one mental disorder, highlighting mental health issues as significant contributors to the global disease burden, accounting for 15.6% of years lived with disability (YLD) (1, 2). In Iran, mental health problems were the leading cause of disability among

individuals aged 10 - 40 years in 2010, with two-thirds of those affected not utilizing mental health services (3, 4). This underscores a significant treatment gap despite the availability of effective treatments (5).

Various barriers impede access to treatment, including insufficient services, high costs, poor help-seeking experiences, low perceived need, low mental health literacy, and underdiagnosis. However, stigma remains one of the most critical obstacles for

individuals seeking help (6). Gulliver *et al.* conducted a systematic review showing that both social and Self-stigma are the most significant barriers to help-seeking for mental health issues in several studies (7). In Asian communities, stigma is the predominant barrier for individuals with mental health disorders (8). Societal stigma often leads to Self-stigma, where individuals internalize negative societal views, which adversely affect self-esteem and empowerment—a concept known as Self-stigma (9). This form of stigma significantly influences attitudes toward help-seeking (10). Stigma related to mental health disorders or mental health services is directly linked to reduced engagement in seeking help (11). For instance, evidence indicates that help-seeking from formal mental health services for suicidal individuals in Iran is notably low (12).

The impact of stigma on mental health extends beyond reducing access to therapy, affecting other opportunities and crucial decision-making processes, often leading individuals to forgo therapy (13). A longitudinal study indicated that increased Self-stigma from baseline to follow-up was associated with poorer recovery outcomes after one and two years (14). Thus, measuring Self-stigma is a critical first step in efforts to reduce its impact.

Standardized rating scales, whether observer-rated or self-reported, are essential tools for improving the assessment of psychopathology. They help measure the severity of conditions, response to treatment, prognosis, treatment selection, diagnosis, and classification (15, 16). Beyond clinical practice, these scales are widely used in research to collect large amounts of data on participants' subjective experiences (17). Several questionnaires are available to examine stigma and Self-stigma in various populations, including the Self-stigma of Mental Illness Scale-short form (SSMIS-SF) (18), Stigma and Self-stigma Scales (SASS) (19), Perceptions of Stigmatization by Others for Seeking Help Scale (PSOSH) (20), Paradox of Self-stigma Scale (PaSS-24) (21), Disclosure Expectations Scale (DES) (22), and the Stigma of Suicide Scale-Short Form (SOSS-SF) (23). Some have been validated in Persian, such as the Persian version of SOSS-SF, which has shown good internal consistency and reliability for measuring suicide stigma among patients and their families (24).

Among these scales, the Self-stigma of Seeking Help (SSOSH) scale (13) is particularly useful. It is concise, consisting of only ten questions, and specifically measures Self-stigma related to help-seeking an essential factor in seeking professional help. It assesses the impact of seeking help on self-esteem, self-confidence, and overall self-perception. Revised

versions, such as the SSOSH-7 and the Ultra-Brief SSOSH-3, provide flexibility for researchers based on study goals and context (25).

The original SSOSH scale, developed by Vogel *et al.*, was designed to evaluate Self-stigma related to help-seeking behavior, demonstrating good internal reliability and factor structure. Subsequent studies confirmed its construct, criterion, discriminant, predictive validity, and test-retest reliability (13).

This scale has been translated into more than 15 languages, including Arabic, Chinese, and Turkish. However, there is currently no instrument available to assess the SSOSH in Persian.

## 2. Objectives

This study aims to validate and evaluate the psychometric properties of the Persian version of the SSOSH scale, which will facilitate further research on Self-stigma and help-seeking among Iranian individuals with mental health disorders.

## 3. Methods

### 3.1. Study Design

This study was conducted by asking patients to fill out questionnaires either face-to-face, online, or via phone, from October 2023 to May 2024. Following the commonly recommended guideline of having at least 10 participants per item on the scale, and since the SSOSH has 10 items, a minimum of 100 participants was required. For more comprehensive analysis, a total of 347 patients with various mental health disorders were included. These disorders comprised major depressive disorder, generalized anxiety disorder, bipolar disorder, panic disorder, schizoaffective disorder, schizophrenia, obsessive-compulsive disorder, and attention-deficit hyperactivity disorder.

The participants were recruited from both online and face-to-face visits at Rozbeh Hospital outpatient clinics and several private clinics in Tehran, Iran. Due to the smaller population of online visits at Rozbeh Hospital, all such patients were included in the study. The remaining participants were selected through convenient sampling among patients attending face-to-face visits. Only patients older than 18 years, with at least an elementary school education, and the ability to read Persian without severe intellectual disabilities were recruited.

Participants were provided with information about the study's purpose and a brief description of the tool, which was initially developed in English and then

translated into Persian. All participants voluntarily agreed to participate, and informed consent was obtained from each of them. This study adheres to the Helsinki Ethical Principles for Medical Research Involving Human Subjects.

### 3.2. Measures and Scales

The SSOSH Scale is a psychometric tool designed to assess the level of Self-stigma individuals associate with seeking psychological help. Developed by Vogel *et al.* (13), it measures the extent to which people experience negative attitudes, beliefs, and emotions about themselves regarding help-seeking for mental health concerns. The scale consists of ten questions, each rated on a Likert-type scale where respondents indicate their agreement or disagreement with each statement (e.g., 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree).

For scoring, items 2, 4, 5, 7, and 9 are reverse-scored. After adjusting for these reverse-scored items, the total score is calculated by summing the responses. The scale has demonstrated strong psychometric properties, including an internal consistency of 0.91, with all factor loadings above 0.50, confirming a unidimensional factor structure. Additionally, the SSOSH scale has shown validity in terms of construct and criterion validity, along with excellent 2-month test-retest reliability.

### 3.3. Procedure

We followed five steps to adopt the World Health Organization guideline (26) as the methodological model for the Persian translation of the SSOSH scale. In the first phase, two bilingual health professionals collaborated to translate the original questionnaire from English to Persian. They reached a consensus on the translation of words, phrases, and items. In the second step, six independent academic psychiatrists evaluated the cultural appropriateness and content validity. They provided ratings to assess the understandability and translation equivalence, ensuring both semantic and content equivalence between the Persian and English versions. To evaluate each item's representativeness and content validity, they rated the extent to which each item captured the intended content using a 5-point Likert scale.

In the third step, pilot testing and revision were conducted with ten patients from the target population to identify words or phrases that were unclear or difficult to understand. In the fourth step, an additional bilingual translator, who had no prior knowledge of the original English version, performed a back-translation.

This ensured that the meaning of the Persian version matched the original version. Finally, in the fifth step, a panel of seven academic psychiatrists with expertise in the field reviewed and compared the original and back-translated versions. They rated content equivalence using a 5-point Likert scale. After comparing the back-translation with the original questionnaire and making minor revisions, the Persian version was deemed ready for use.

The internal consistency and reliability of the Persian version of the SSOSH scale were evaluated with a convenience sample of 347 patients with mental health disorders recruited from a referral public hospital and several private clinics. Participants completed the questionnaires online, in person, or by telephone. Interviewers assisted participants who faced difficulties in filling out the questionnaire. Demographic data such as age, gender, education, employment status, and family history of mental health disorders were collected. Additionally, each participant was assigned a code, and the psychiatrists involved in the project were given a form to indicate the type of psychiatric disorder of each client according to their respective code.

### 3.4. Statistical Analysis

The participants were characterized using descriptive statistical techniques. To assess the internal consistency of the scale and ensure that all items measured the same underlying construct, Cronbach's alpha and McDonald's Omega were used.

Face validity was evaluated both qualitatively and quantitatively to determine how effectively the scale aligned with its stated aims. Qualitative face validity was gathered from academic psychiatrists and ten patients with mental health disorders. Quantitative face validity was assessed using the impact score method via the Likert scale. The expert panel provided feedback, leading to multiple assessments and adjustments of the questions' qualitative content validity. To calculate quantitative content validity, the Content Validity Index (CVI) and Content Validity Ratio (CVR) were used. For the CVR, academic psychiatrists classified each question as "necessary," "useful but unnecessary," or "unnecessary." To calculate the CVI, experts rated each item on a Likert scale in terms of appropriateness, relevance, and simplicity.

Exploratory factor analysis (EFA) was performed using principal component analysis (PCA) with orthogonal (varimax) rotation to explore the data structure. The Kaiser-Meyer-Olkin (KMO) measure verified the sampling adequacy (KMO = 0.73), and Bartlett's Test of Sphericity ( $\chi^2(45) = 311.968$ ,  $P < 0.000$ )

confirmed that the correlation matrix was suitable for factor analysis. Guided by the results of the EFA, confirmatory factor analysis (CFA) was conducted using the maximum likelihood estimation method to validate the factor structure of the Persian translation.

For data analysis, Statistical Software for Data Science (Stata) Version 17 and the Statistical Package for Social Sciences (SPSS) Version 26 were used.

## 4. Results

### 4.1. Pilot Study

Ten participants completed the scale, which took about five minutes to fill out. The second and fifth questions were difficult to understand, so they were revised. In question two, "If I seek professional help, my self-confidence will not suffer" was changed to "If I seek professional help, my self-confidence will not be threatened." The main change in question five was the use of the present tense instead of the future tense. The final Persian version was then developed and used in the main study.

### 4.2. Characteristics

A total of 347 patients participated in this study, including 139 men (40.1%) and 208 women (59.9%). Of these, 215 (60.0%) reported a family history of mental health disorders. There was no missing data. Since the scale had only 10 items, the questionnaires were mostly completed face-to-face; however, some patients declined to participate, potentially due to Self-stigma or other factors.

The mean age of participants was 38.09 years (SD = 12.7). Regarding the method of data collection, 192 participants (55.3%) completed the questionnaire in person, while 155 (44.7%) completed it online or via telephone. All patients who contributed to the qualitative face validity provided their feedback face-to-face. The total SSOSH score ranged from 10 to 50, with a mean score of 21.82 (SD = 5.63) for this sample. Detailed characteristics are provided in [Table 1](#).

### 4.3. Reliability

The Cronbach's alpha coefficient was 0.730, indicating that the internal consistency of the scale is acceptable. No significant change in alpha was observed when any of the items were removed. The minimum Cronbach's alpha, if an item was deleted, was 0.679 for the eighth question, and the maximum was 0.718 when item 10 was deleted. Additionally, to provide a more comprehensive assessment of internal consistency, the

Omega coefficient was calculated, revealing a value of 0.818. This suggests a good level of internal consistency reliability, meaning approximately 82% of the variance in the total scores can be attributed to true score variance, demonstrating strong reliability in measuring the underlying construct.

### 4.4. Validity

Most items did not undergo significant changes during the translation and cultural adaptation process. However, items two and five initially had low impact scores and were revised. Six psychiatrists involved in the translation process suggested simplifying sentences, reducing the number of verbs, and highlighting key points in the introduction of the translated SSOSH version. They also recommended using the Persian translation of "psychotherapist" instead of "therapist," which was used in the original version. The final Persian version of the SSOSH questionnaire had a mean impact score of 4.561 (out of 5) for semantic equivalence and 4.504 for content equivalence. The minimum semantic equivalence score was 4.174 for items one and eight, while the maximum was 4.851 for items four, nine, and ten. The minimum content equivalence score was 4.174 for items six and eight, and the maximum was 4.851 for items four and ten. All questions achieved an acceptable impact score (above 1.5). The mean CVR was determined to be 1.00, with experts agreeing that 100% of the items were necessary, meeting the minimum acceptable CVR value of 0.99 per the Lawshe table ([27](#)). The mean CVI was greater than 0.8, with a CVI of 1 for all ten questions in the relevance and transparency indices. In the simplicity index, five questions had a CVI of 1, and five had a CVI of 0.8.

Exploratory Factor Analysis using the principal component analysis (PCA) method was conducted, as shown in [Table 2](#). The KMO measure of sampling adequacy was 0.733, and Bartlett's test of sphericity was significant ( $\chi^2 (45) = 311.968$ ,  $P < 0.001$ ), indicating that the data were suitable for factor analysis. The EFA revealed that the Persian version consists of three factors accounting for 57% of the total variance. The eigenvalues for these factors were 3.151, 1.286, and 1.185, respectively. Items 1, 3, 6, 8, and 10 loaded onto Factor 1; Items 4 and 7 loaded onto Factor 2; and Items 2, 5, and 9 loaded onto Factor 3. These three factors were labeled as "Negative Self-evaluation," "Self-esteem Boost," and "Resilience of Self-image."

Confirmatory Factor Analysis was conducted to test the three-factor model derived from the EFA using the maximum likelihood estimation method, as shown in [Table 2](#). The model fit was assessed using several fit

**Table 1.** Participants' Demographic Data <sup>a</sup>

Characteristics	Values
<b>Gender</b>	
Male	139 (40.1)
Female	208 (59.9)
<b>Age</b>	38.09 ± 12.7
<b>Job</b>	
Had a medical-related job	37 (10.0)
Had other jobs	250 (72.0)
Retired	25 (7.2)
No job	35 (10.1)
<b>Education</b>	
Below diploma	45 (13.0)
Highschool Diploma	121 (34.9)
Bachelor	100 (28.8)
Master and higher	81 (23.4)
<b>Disease</b>	
Mood disorders	160 (46.0)
Anxiety disorders	40 (11.5)
Psychotic disorders	17 (14.9)
Others	95 (27.4)
No information	35 (10.1)
<b>Family history</b>	
Yes	215 (62.0)
No	130 (37.5)
No information	2 (0.6)
<b>Type of data gathering</b>	
Online/telephone	155 (44.7)
Face-to-face	192 (55.3)
<b>SSOSH scale score (minimum- maximum)</b>	21.82 ± 5.63 (10 - 43)

Abbreviation: SSOSH, self-stigma of seeking help.

<sup>a</sup> Values are expressed as No. (%) or mean ± SD unless otherwise indicated.**Table 2.** Rotated Exploratory Factor Analysis of the Self-stigma of Seeking Help

Variables	Factor 1	Factor 2	Factor 3
<b>Item 1</b>	0.7174		
<b>Item 2</b>			0.5614
<b>Item 3</b>	0.7786		
<b>Item 4</b>		0.8179	
<b>Item 5</b>			0.6904
<b>Item 6</b>	0.6900		
<b>Item 7</b>		0.7990	
<b>Item 8</b>	0.6476		
<b>Item 9</b>			0.7680
<b>Item 10</b>	0.4899		

indices. While the CFI (0.918) and SRMR (0.050) values indicate a good fit, the RMSEA (0.069) and TLI (0.884) values suggest a marginal fit. These results collectively

suggest that, although the model fits the data reasonably well, there is room for improvement, particularly with regard to the TLI. Additionally, the

Coefficient of Determination (CD) was 0.949, indicating that the model explains a substantial portion of the variance.

## 5. Discussion

This study evaluated the reliability, face validity, content validity, and factor structure of the Persian version of the SSOSH scale for Iranian patients with mental health disorders. Our sample's size provided essential data on the characteristics of such individuals. According to Lynn's guidelines, the CVI should exceed 0.78 when judged by six or more experts, and in our study, each item achieved a CVI above this threshold (28). Additionally, Cronbach's  $\alpha$  demonstrated satisfactory internal consistency for the final instrument, while an Omega coefficient of 0.818 further indicated a good level of internal reliability. This could be attributed to varying factor loadings across the items.

While the original SSOSH scale had a unidimensional factor structure, our analysis revealed a three-factor structure for the Persian translation. We labeled these factors "Negative Self-Evaluation," "Self-Esteem Boost," and "Resilience of Self-Image," each reflecting an important aspect of the Self-stigma associated with seeking help. The emergence of this three-factor structure may be influenced by cultural differences, unique interpretations of the items, and variations in the sample population.

Interestingly, both the Revised (SSOSH-7) and Ultra-Brief (SSOSH-3) versions of the SSOSH scale (25) include items 1, 6, and 8. Since these scales are constructed by considering factor loadings and other psychometric properties, this may suggest that Factor 1, labeled "Negative Self-Evaluation," plays a central role in how individuals react to the idea of seeking psychiatric help in the Persian context.

However, the subsequent CFA did not fully support this three-factor structure. The EFA, being more flexible, can identify patterns that CFA, with its stricter criteria, may not confirm. To address this discrepancy, future studies could use larger, more demographically diverse samples and conduct cognitive interviews to further investigate and refine the Persian version of the SSOSH scale.

As mentioned, the SSOSH scale has been translated into various languages. In a cross-national examination of the SSOSH scale across six nations (England, Greece, Israel, Taiwan, Turkey, and the United States), internal reliability ranged from 0.77 in Greece to 0.89 in England for the 10-item scale, demonstrating its adequacy for research purposes (29). This study also confirmed the

unidimensional structure of the scale across these countries, showing that the SSOSH scale can be used globally to investigate Self-stigma related to help-seeking. Yan Zhou *et al.* translated the SSOSH scale into German and Chinese (30) following Brislin's recommended translation-back-translation method (31). Similarly, we used the WHO translation method, which also included translation-back-translation but with a different approach.

The Spanish version of SSOSH was validated among a group of Colombian medical students by Brayan Larrahondo *et al.*, who reported an internal consistency of 0.80 and a test-retest repeatability CCI of 0.77 (32). In Greece, the scale was validated with college students, similar to the Spanish version, and demonstrated satisfactory discrimination and criterion validity, with a test-retest reliability of 0.89 (33). Our Persian version of the SSOSH scale also demonstrated acceptable reliability and validity in this study, although our sample population included individuals with mental health disorders, in contrast to the student populations in other versions. Additionally, while other studies calculated test-retest reliability, structural, convergent, and divergent validity, our study did not include these due to methodological differences.

Before the development of the SSOSH scale (13), no sufficient conceptual or measurement tool existed for assessing internalized Self-stigma and help-seeking tendencies. As a short and easy-to-complete scale, the SSOSH provides an efficient tool for evidence-based research and interventions. Our study enables the measurement of Self-stigma among Iranian patients, offering mental health professionals in Iran a reliable tool to detect and address Self-stigma, which could promote help-seeking behaviors. Researchers can now use the Persian version to assess Self-stigma in various mental health settings. Furthermore, comparing Self-stigma among Iranians and residents of other countries could inform mental health policies and interventions. This validation supports further research on mental health stigma in Persian-speaking communities, contributing to better public health strategies and improving access to mental health services, ultimately enhancing patient outcomes.

This study had several limitations. We lacked a comparable instrument to assess test-retest reliability and different aspects of construct validity, which should be evaluated in future studies. Additionally, the convenience sampling method limits the generalizability of our findings. Future research should focus on assessing other types of validity for the SSOSH scale to complement the results of this study.

### 5.1. Conclusions

The Persian SSOSH scale demonstrates good internal consistency, as evidenced by Cronbach's alpha and McDonald's omega values, along with acceptable face and content validity for use among Persian-speaking patients with mental health disorders. However, while the three-factor model derived from EFA and used in CFA fits the data reasonably well, there remains room for improvement. This study provides solid evidence to recommend the adoption of the Persian version of the SSOSH scale for assessing Self-stigma in Iranian patients. Additionally, its application will enable researchers to compare Self-stigma research findings among Iranian patients with studies conducted in other countries.

### Footnotes

**Authors' Contribution:** A. M., H. A., and Z. M. developed the main idea and reviewed the manuscript; A. M. supervised the study process and did the coordination; F. H. was the main researcher, analysing the data and writing the manuscript.

**Conflict of Interests Statement:** The authors declare no conflict of interest regarding the publication of this paper.

**Data Availability:** The dataset presented in the study is available on request from the corresponding author during submission or after publication. The data are not publicly available due to confidentiality.

**Ethical Approval:** The study was approved by the Tehran University of Medical Science ethics committees (IR.TUMS.MEDICINE.REC.1401.335).

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**Informed Consent:** Informed consent was obtained from the participant.

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