

Psychometric Properties of an Arabic Translation of the Shortest Version of the Obsessive Beliefs Questionnaire (OBQ-9) in Adults

Ali Hemade¹, Feten Fekih-Romdhane^{2,3}, Sahar Obeid⁴, Souheil Hallit⁵⁻⁷

¹Faculty of Medicine, Lebanese University, Hadath, Lebanon; ²The Tunisian Center of Early Intervention in Psychosis, Department of Psychiatry "Ibn Omrane", Razi Hospital, Manouba, 2010, Tunisia; ³Tunis El Manar University, Faculty of Medicine of Tunis, Tunis, Tunisia; ⁴Social and Education Sciences Department, School of Arts and Sciences, Lebanese American University, Jbeil, Lebanon; ⁵School of Medicine and Medical Sciences, Holy Spirit University of Kaslik, Jounieh, Lebanon; ⁶Department of Psychology, College of Humanities, Effat University, Jeddah, 21478, Saudi Arabia; ⁷Applied Science Research Center, Applied Science Private University, Amman, Jordan

Correspondence: Souheil Hallit, School of Medicine and Medical Sciences, Holy Spirit University of Kaslik, P.O. Box 446, Jounieh, Lebanon, Email souheilhallit@hotmail.com

Background: Obsessive-Compulsive Disorder is a chronic and debilitating mental health condition characterized by intrusive thoughts and repetitive behaviors. The Obsessive Beliefs Questionnaire-9 is a concise tool designed to assess the dysfunctional beliefs central to OCD. This study aimed to translate, adapt, and validate the OBQ-9 for use in Arabic-speaking populations.

Methods: A cross-sectional study was conducted on 392 Lebanese adults. Participants completed the Arabic OBQ-9, the Eating Attitudes Test-7, and the Obsessive-Compulsive Inventory-12 through online self-administered questionnaires. The OBQ-9 was translated using a forward-backward method and validated through confirmatory factor analysis (CFA), internal consistency reliability, gender invariance testing, and concurrent validity assessment.

Results: The CFA supported a three-factor structure of the Arabic OBQ-9, with fit indices improving significantly after minor modifications ($\chi^2/df = 4.23$, RMSEA = 0.091, SRMR = 0.060, CFI = 0.941, TLI = 0.908). The OBQ-9 demonstrated good internal consistency, with adequate Cronbach's alpha and McDonald's omega values for the total score and subscales as follows: total score ($\omega = 0.84$; $\alpha = 0.84$), Factor 1 ($\omega = 0.74$; $\alpha = 0.73$), Factor 2 ($\omega = 0.71$; $\alpha = 0.70$) and Factor 3 ($\omega = 0.81$; $\alpha = 0.81$). Gender invariance was confirmed, with no significant differences between male and female scores ($p = 0.446$). Concurrent validity was supported by significant correlations between OBQ-9 scores and both EAT-7 ($r = 0.21$, $p < 0.001$) and OCI-12 ($r = 0.41$, $p < 0.001$) scores.

Conclusion: The Arabic OBQ-9 is a reliable and valid instrument for assessing obsessive beliefs in Arabic-speaking populations. It can enhance the accuracy of OCD diagnosis and treatment in clinical and research settings. Future research should focus on longitudinal studies and broader demographic samples to further validate the OBQ-9 and explore its applicability in other cultural contexts.

Keywords: obsessive beliefs, obsessive compulsive disorder, obsessive beliefs questionnaire, short form, scale validation, Arabic

Introduction

Obsessive-Compulsive Disorder (OCD) is a chronic and debilitating mental health condition characterized by the presence of obsessions and compulsions.¹ Obsessions are persistent, intrusive thoughts, images, or urges that cause significant anxiety and distress, while compulsions are repetitive behaviors or mental acts that an individual feels compelled to perform in response to an obsession or according to rigid rules.¹ Common symptoms include excessive washing, checking, ordering, and mental rituals like counting or repeating. The cognitive theory of OCD posits that dysfunctional beliefs, often referred to as obsessive beliefs, play a crucial role in the development and persistence of these symptoms. These obsessive beliefs include inflated responsibility, overestimation of threat, perfectionism, intolerance of uncertainty, and the need to control thoughts. These cognitive distortions contribute to the misinterpretation of

intrusive thoughts as highly significant or dangerous, reinforcing compulsive behaviors in an attempt to neutralize perceived threats.²

OCD can lead to severe impairment in daily functioning, affecting an individual's personal, social, and occupational life. The disorder is associated with high levels of comorbidity with other psychiatric conditions, such as depression and anxiety disorders,³ and can significantly reduce the quality of life and well-being of affected individuals.⁴ OCD affects approximately 2–3% of the global population, making it a significant public health concern.³ The disorder typically begins in late adolescence or early adulthood, with the average age of onset around 19 years.¹ Despite its prevalence, many individuals with OCD do not receive adequate treatment. Studies indicate that only about 40% of those with OCD seek treatment, and of those, only a fraction receive evidence-based interventions such as cognitive-behavioral therapy (CBT) or pharmacotherapy with selective serotonin reuptake inhibitors (SSRIs).⁵ Effective treatments, including CBT and SSRIs, have been shown to reduce symptoms in up to 70% of those treated, yet the chronic nature of the disorder means that many individuals experience residual symptoms and require long-term management.⁶

According to the Salkovskis' model, OCD arises when individuals appraise intrusive thoughts as highly significant, dangerous, or indicative of personal responsibility for preventing harm.^{2,7} This misinterpretation creates a sense of inflated responsibility and threat, prompting compulsive actions aimed at neutralizing the perceived danger. Rachman's theory complements this view by highlighting that the interpretation of intrusive thoughts as meaningful and threatening leads to obsessive fear and the development of rituals to mitigate this fear.^{8,9} Several dysfunctional or obsessive beliefs (OB) have been theoretically linked to the etiology of OCD, including perfectionism, over-importance of thoughts, overestimation of threat, intolerance of uncertainty, inflated responsibility, and need to control thoughts.^{10–12} Cognitive models emphasize the role of these OB in exacerbating OCD symptoms.¹³ These cognitive distortions reinforce a cycle of obsessions and compulsions, where the failure to perform compulsions results in increased anxiety and further intrusive thoughts.¹⁴ Empirical support for these models comes from studies demonstrating that cognitive-behavioral interventions targeting these dysfunctional beliefs can effectively reduce OCD symptoms.^{15,16} Furthermore, OB were shown to be strongly associated with other negative mental health outcomes, such as psychological distress and eating disorders, suggesting that OB may play a significant role in these conditions,¹⁷ and that OCD and eating pathology may share common cognitive and affective features.¹⁸ All these observations highlight that measuring OB is crucial for understanding and diagnosing OCD as they help identify specific cognitive distortions that contribute to the maintenance of the disorder.

Measures of OB could enable clinicians and researchers to quantify the severity and nature of obsessive thoughts, aiding in the development of targeted cognitive-behavioral interventions. Research consistently shows a significant association between the severity of OCD and the intensity of obsessive beliefs. Obsessive beliefs, such as inflated responsibility, perfectionism, and intolerance of uncertainty, are key cognitive distortions that contribute to both the onset and maintenance of OCD symptoms. Studies suggest that individuals with more severe OCD symptoms tend to exhibit stronger and more rigid obsessive beliefs. For example, higher scores on the OBQ have been found to correlate with greater OCD symptom severity, as measured by scales such as the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS).¹⁹ These cognitive distortions reinforce compulsive behaviors, creating a cyclical relationship in which obsessive beliefs exacerbate OCD symptoms, and the persistence of these symptoms, in turn, strengthens the beliefs. This association underscores the importance of targeting these beliefs in cognitive-behavioral therapy (CBT) to reduce symptom severity and improve treatment outcomes.¹⁶

Measurement Instruments of OB

Among the widely used scales is the Obsessive Beliefs Questionnaire OBQ.²⁰ The original 87-item OBQ was developed by the Obsessive-Compulsive Cognitions Working Group (OCCWG) to assess dysfunctional beliefs that are considered central to the development and maintenance of OCD.¹⁹ The factor structure of the OBQ was later refined to a shorter version, the OBQ-44, which focused on three core dimensions: responsibility/threat estimation, perfectionism/intolerance of uncertainty, and importance/control of thoughts.²¹ The initial validation of the OBQ showed excellent internal consistency and stability, with good evidence of validity across different cultural contexts. The subsequent development of shorter forms, including the OBQ-20 and OBQ-9, aimed to retain the scale's robustness while enhancing its

practicality for both clinical and research settings.²² The Arabic version of the original OBQ was developed and validated on a group of Kuwaiti university students to address the need for culturally relevant tools in assessing obsessive-compulsive beliefs in Arabic-speaking populations.²³ The validation study²³ demonstrated that the Arabic OBQ retained the original three-factor structure of responsibility/threat estimation, perfectionism/intolerance of uncertainty, and importance/control of thoughts, with good internal consistency and construct validity. In previous research, the Yale-Brown Obsessive-Compulsive Scale has been widely used, including its validated Arabic version, to assess the severity of OCD symptoms. The YBOCS is a clinician-administered tool that measures the presence and intensity of obsessions and compulsions, which are core features of OCD.^{24,25} In contrast, the nine-item version of the OBQ-9 is designed to assess the dysfunctional beliefs that contribute to the development and maintenance of OCD, such as exaggerated responsibility, overestimation of threat, perfectionism, and intolerance of uncertainty. These beliefs often underlie the obsessions and compulsions measured by the YBOCS.

The OBQ-9

The OBQ-9 is the shortest version of the original OBQ, developed to provide a more efficient assessment tool without compromising reliability and validity.²¹ The OBQ-9's brevity makes it unique, offering a quick yet comprehensive measure of OB that is particularly useful in both clinical settings and large-scale research studies. Its development involved selecting the highest-loading items from the OBQ-44, thus retaining its effectiveness while reducing the burden on respondents. This makes the OBQ-9 particularly valuable for routine outcome monitoring, as it allows for frequent assessment without overwhelming patients. The OBQ-9 has been translated to and validated in Turkish²⁶ where the original three-factor structure was replicated. To the best of our knowledge, the OBQ-9 has not been validated for use in the Arabic language.

Aim and Rationale of the Present Study

This study aims to address the above-mentioned gaps by validating the OBQ-9 scales in a sample of Arabic-speaking adults from Lebanon. We believe this is crucial for several reasons, such as unique cultural, linguistic, and social factors that influence the presentation, diagnosis, and treatment of the disorder. Moreover, cultural context shapes how these beliefs are experienced.²⁷ In many Arab societies, communal responsibility norms prioritize collective welfare over individual autonomy, which may amplify threat-estimation and over-responsibility cognitions.²⁸ Prevalence studies in Arabic-speaking samples further highlight this: in a Jordanian university cohort, 18% of students exhibited clinically significant responsibility beliefs,²⁸ and in a Lebanese community survey, 22% scored high on perfectionism-related cognitions.²⁹ This is relevant, given that the phenomenology of OCD was shown to vary across cultures, and to have some peculiarities in the Arab contexts.^{30,31} Furthermore, our study will add significant advancements to the existing research on the Arabic version of the OBQ-44²³ by validating the shorter, more economic and more convenient-to-use OBQ-9. Our study extends the validation of the OBQ-9 beyond the Kuwaiti context by including a broader sample from Lebanon, enhancing the scale's generalizability across different Arabic-speaking populations. Unlike previous research that focused on university students, our study utilizes a general population sample, which supports the broader applicability of the findings and ensures that the results are representative of the wider community. In Arabic-speaking countries, there is a significant gap in the availability of evidence-based treatments for OCD, partly due to the scarcity of specialized mental health services, cultural stigma, and religious concerns.³² Furthermore, research has shown high prevalence rates of obsessive-compulsive symptoms among adolescents in Arabic-speaking regions, highlighting the need for validated diagnostic tools and therapeutic approaches tailored to these populations.²⁵ By translating and validating instruments like the OBQ-9 in Arabic, we can improve the accuracy of OCD diagnosis and enhance the effectiveness of treatments, ultimately leading to better mental health outcomes for Arabic-speaking individuals. This research not only fills a critical gap in the literature but also supports the global effort to understand and address OCD across diverse populations. We hypothesize that our Arabic translation of the OBQ-9 will show significant reliability, replicate the original three-factor structure of the original scale, will be invariant across sexes, and also show concurrent validity by correlating with measures of OCD and eating disorders.

Methods

Participants

This study is a cross-sectional study, done between February and March 2024. Inclusion criteria included the following: being an adult from the general population of Lebanon, aged 18 years and older, with no self-reported psychiatric conditions diagnosed by a healthcare provider, having access to the Internet, and willing to participate in the study. Participants were excluded if they did not meet the inclusion criteria, declined to participate, failed to provide their consent, or initiated the paper survey but did not complete it.

Data Collection

Data was collected through self-administered questionnaires online through Google forms. The questionnaire consisted of demographic questions and relevant scales. Informed consent was obtained electronically from all participants, where they indicated their agreement to participate after reading a detailed information sheet about the study's purpose, procedures, risks, and benefits. To ensure data quality, the questionnaire underwent pilot testing with a small group of participants to identify and address any issues. Clear and standardized instructions were provided, key questions were made mandatory to prevent missing data, and real-time monitoring was conducted to track completion rates and address any issues promptly. Confidentiality was prioritized by designing the questionnaire to be anonymous, encrypting data transmission, storing data on secure servers with restricted access, and requiring all research team members to sign confidentiality agreements.

Measures

Obsessive Beliefs Questionnaire-9 (OBQ-9) is a concise self-report instrument designed to measure dysfunctional beliefs that are central to OCD.²¹ Comprising 9 items, the OBQ-9 is derived from the longer Obsessive Beliefs Questionnaire-44 (OBQ-44) and focuses on the key cognitive domains relevant to OCD. An example item from the OBQ-9 is "If I don't act when I think something bad might happen, I am responsible for the outcome." This scale measures three primary domains of OB: Responsibility/Threat Estimation, Perfectionism/Intolerance of Uncertainty, and Importance/Control of Thoughts. Respondents rate each item on a 7-point Likert scale ranging from 1 (disagree very much) to 7 (agree very much), reflecting the degree to which they endorse each belief. The highest possible total score on the OBQ-9 is 63, with higher scores indicating a greater degree of dysfunctional OB. Higher scores are associated with more severe OCD symptoms and greater cognitive distortions.

Eating Attitudes Test-7 (EAT-7) is a brief, self-report questionnaire designed to assess symptoms and concerns characteristic of eating disorders. Comprising seven items, the EAT-7 is derived from the longer EAT-26 and EAT-40 scales, which are widely used in both clinical and non-clinical settings. An example item from the EAT-7 is "I am terrified about being overweight." Each item on the scale measures specific attitudes, behaviors, and concerns related to eating, weight, and body shape. Respondents answer each item on a 6-point Likert scale ranging from "Always" to "Never", with scores assigned from 3 for "Always" to 0 for "Never." The highest possible total score on the EAT-7 is 21, indicating severe symptoms of eating disorders. Higher scores on the EAT-7 suggest a greater degree of pathological eating attitudes and behaviors, signaling potential eating disorder risks that may require further clinical evaluation. The Arabic validated version was used in our study.³³ Internal reliability in our study was good ($\omega = 0.82$; $\alpha = 0.82$).

Obsessive-Compulsive Inventory-12 (OCI-12) is a shortened version of the Obsessive-Compulsive Inventory-Revised (OCI-R), specifically developed to provide a brief, yet effective, assessment tool for measuring obsessive-compulsive symptoms. The OCI-12 comprises 12 items, selected through rigorous psychometric analyses to represent the core dimensions of OCD. An example item from the OCI-12 is "I check things more often than necessary." This scale measures four primary dimensions of OCD: washing, checking, ordering, and obsessing, while excluding the hoarding and neutralizing factors found in the OCI-R. Each item is answered on a 5-point Likert scale ranging from 0 (not at all) to 4 (extremely), indicating the degree to which the individual is affected by each symptom. The highest possible score on the OCI-12 is 48, with higher scores indicating greater severity of obsessive-compulsive symptoms. The Arabic version was used in our study.³⁴ Internal reliability in our study was good ($\omega = 0.88$; $\alpha = 0.88$).

Translation and Adaptation Process

Prior to its application in the present study, the OBQ-9 underwent translation and cultural adaptation to suit the Arabic language and context. This process involved translating the scale into Arabic to maintain semantic consistency between the original and Arabic versions, adhering to global standards and guidelines.³⁵ The translation was conducted through a forward and backward method. Initially, a Lebanese translator not involved in the study translated the scale from English to Arabic. Then, a Lebanese psychologist proficient in English retranslated it back into English. This approach aimed to balance direct and contextual translations. The original and retranslated English versions were then reviewed by a panel of experts, including two psychiatrists, one psychologist, the research team, and the translators, to address any discrepancies and ensure translation accuracy.³⁶ Additionally, the scale was adapted to the specific study context to clarify any item ambiguities and facilitate interpretation, thereby preserving the conceptual integrity of the scale across both the original and Arabic contexts.³⁷ Following the translation and adaptation, a pilot test confirmed the clarity of the questions, and no further modifications were needed.

Analytic Strategy

There were no missing responses in the dataset. To examine the factor structure of the OBQ-9, we conducted a Confirmatory Factor Analysis on the total sample via SPSS AMOS v.29 software. A minimum number of 180 participants was needed based on 20 items per scale's items.³⁸ Parameter estimates were obtained using the maximum likelihood method. Calculated fit indices were the normed model chi-square (χ^2/df ; ≤ 5), root mean square error of approximation (RMSEA; $\leq .08$), standardized root mean square residual (SRMR; $\leq .05$), the Tucker-Lewis Index (TLI; $\geq .90$) and the comparative fit index (CFI; $\geq .90$).³⁹ Convergent validity was confirmed via the calculation of the Average Variance Extraction (AVE), with values higher than .50 considered acceptable. Multivariate normality was not verified at first; therefore, we performed non-parametric bootstrapping procedure.

To examine gender invariance of OBQ-9 scores, we conducted multi-group CFA using the total sample.⁴⁰ Measurement invariance was assessed at the configural, metric, and scalar levels.⁴¹ We accepted $\Delta CFI \leq .010$ and $\Delta RMSEA \leq .015$ or $\Delta SRMR \leq .010$ as evidence of invariance.⁴⁰ Comparison between males and females was done using the Student's *t*-test only if scalar or partial scalar invariance.

Composite reliability in both subsamples was assessed using McDonald's ω and Cronbach's alpha, with values greater than .70 reflecting adequate composite reliability. Normality of the OBQ-9 score was verified since the skewness and kurtosis values for each item of the scale varied between -1 and $+1$.⁴² Pearson test was used to correlate OBQ-9 scores with other continuous variables. Correlation coefficients values $\leq .10$ were considered weak, $\sim .30$ were considered moderate, and $\sim .50$ were considered strong correlations.⁴³

Results

Three hundred ninety-two participants filled the survey, with a mean age of 21.43 ± 4.22 . A total of 70.9% were females, and 97.4% were single (Table 1). The mean/SD of the scores were as follows: OBQ-9 (32.41 ± 10.29), EAT-7 (4.03 ± 4.43) and OCI-12 (18.29 ± 10.21).

Table 1 Characteristics of the Participants (n = 392)

	N (%)
Gender	
Male	114 (29.1%)
Female	278 (70.9%)

(Continued)

Table 1 (Continued).

	N (%)
Marital status	
Single	382 (97.4%)
Married	10 (2.6%)
Education	
Secondary or less	9 (2.3%)
University	383 (97.7%)
Age (years)	21.43 ± 4.22
Body Mass Index (kg/m ²)	23.23 ± 8.27

Confirmatory Factor Analysis

CFA indicated that fit of the three-factor model of the OBQ-9 was borderline: $\chi^2/df = 129.06/24 = 5.38$, RMSEA = 0.106 (90% CI.088,0.124), SRMR = 0.066, CFI = 0.916, TLI = 0.875. Those fit indices improved after adding a correlation between residuals of items 6–8 (since the modification index was high): $\chi^2/df = 97.19/23 = 4.23$, RMSEA = 0.091 (90% CI.073,0.110), SRMR = 0.060, CFI = 0.941, TLI = 0.908. The standardized estimates of factor loadings were all adequate (Figure 1). The AVE value was satisfactory for the total scale (=0.50), Factor 1 (=0.49) and Factor 3 (=0.58) but below

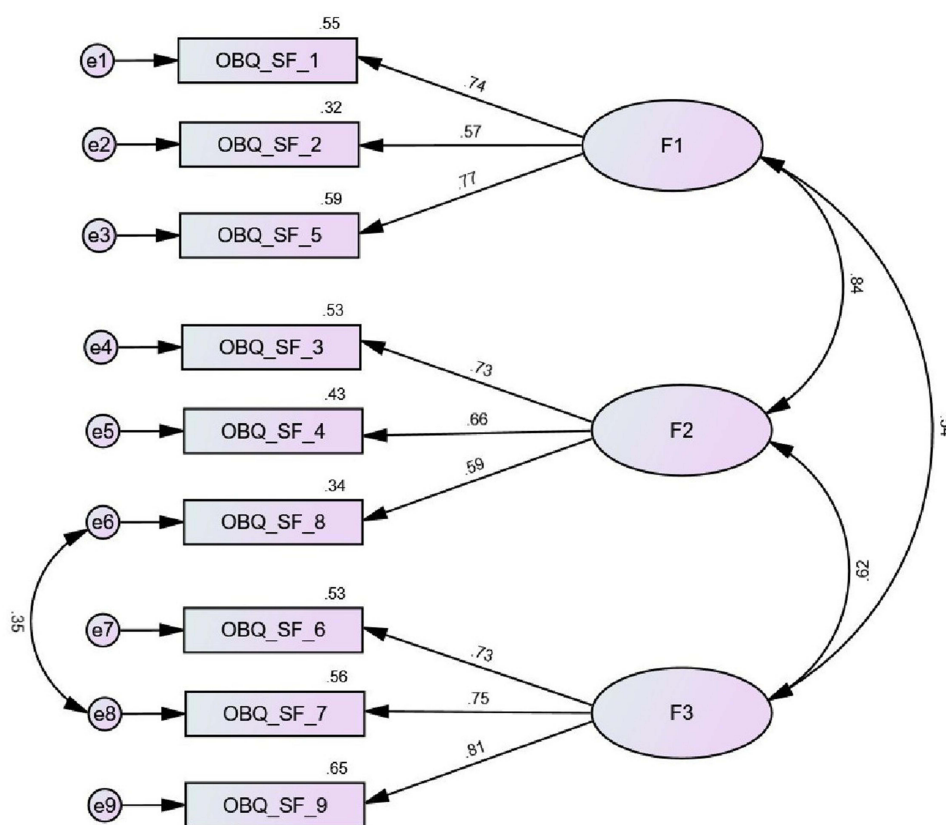


Figure 1 Standardized Estimates of Factor Loadings from the Confirmatory Factor Analysis of the OBQ-9 scale in the total sample.

Table 2 Measurement Invariance Across Gender in the Total Sample

Model	CFI	RMSEA	SRMR	Model Comparison	Δ CFI	Δ RMSEA	Δ SRMR
Configural	0.941	0.065	0.076				
Metric	0.933	0.065	0.096	Configural vs metric	0.008	<0.001	0.020
Scalar	0.926	0.065	0.096	Metric vs scalar	0.007	<0.001	<0.001

Abbreviations: CFI, Comparative fit index; RMSEA, Steiger-Lind root mean square error of approximation; SRMR, Standardized root mean square residual.

average for Factor 2 ($\omega=.44$). Internal reliability was satisfactory for the total score ($\omega=.84$; $\alpha=.84$), Factor 1 ($\omega=.74$; $\alpha=.73$), Factor 2 ($\omega=.71$; $\alpha=.70$) and Factor 3 ($\omega=.81$; $\alpha=.81$).

The fit indices of the second order model were as follows: $\chi^2/df= 97.19/23 = 4.23$, RMSEA =0.091 (90% CI.073,0.110), SRMR =0.060, CFI =0.941, TLI =0.908.

The fit indices of the two-factor model were poor as follows: $\chi^2/df= 322.48/26 = 12.40$, RMSEA =0.171 (90% CI.154,0.188), SRMR =0.010, CFI =0.764, TLI =0.673.

Sex Invariance

Indices suggested that configural, metric, and scalar invariance was supported across sex (Table 2). No significant difference was found between males and females in terms of OBQ-9 scores (31.79 ± 9.85 vs 32.66 ± 10.47 , $t(390) = -0.76$, $p = 0.446$).

Concurrent Validity

Higher OBQ-9 scores were significantly associated with higher disordered eating symptoms ($r = 0.21$; $p < 0.001$) and greater obsessive-compulsive symptoms ($r = 0.41$; $p < 0.001$).

Discussion

Our study aimed to validate the Arabic translation of the OBQ-9 scale and assess its psychometric properties in a sample of Lebanese adults. The CFA supported a three-factor model of the OBQ-9 with good internal reliability. Configural, metric, and scalar invariance across sex was also proved. Concurrent validity was confirmed by demonstrating a significantly positive associations with obsessive compulsive symptoms and disordered eating. Therefore, our Arabic translation of the OBQ-9 is psychometrically valid for use on Arabic-speaking populations.

Our Arabic adaptation of the OBQ-9 showed a three-factor structure similar to the original version⁴⁴ and Turkish adaptation.²⁶ A high correlation between factors 1 and 2 was noted. Thus, a higher-order factor analysis was performed in order to increase the discriminant validity between those highly-correlated factors and to ensure that the total factor represents the data better. Acceptable fit indices were obtained for the second-order model, which acknowledges that the two factors may share conceptual similarities in overlap in the constructs they represent. This means that they are related dimensions of a broader underlying construct as shown by the higher-order factor. Therefore, findings suggest that the Arabic OBQ-9 retains the conceptual integrity of the original scale, capturing the same underlying constructs of “Responsibility and Threat Estimation”, “Perfectionism and Intolerance for Uncertainty”, and “Importance and Control of Thoughts”. The correlation between items 6 and 8 may reflect shared variance beyond their primary factor; it can be explained by the conceptual overlap between these items, likely due to both items capturing maladaptive interpretations of intrusive thoughts and an exaggerated sense of personal responsibility- core features of obsessive-compulsive beliefs. The adequate standardized estimates of factor loadings and a satisfactory average variance extracted (AVE) value of .50 further affirm the robustness of the scale’s factorial validity. It is of note that although the corrected three-factor model showed improved fit, some indices remained marginal ($\chi^2/df = 4.23$ and RMSEA = 0.091). One possible reason is the low degree of freedom (< 50), which is known to artificially inflate RMSEA values and penalize otherwise acceptable models.⁴⁵ In addition, cultural differences in how individuals interpret obsessive beliefs, particularly around responsibility and thought control, may have influenced item responses and inter-item relationships, contributing further to the

suboptimal fit. The AVE for Factor 2 was slightly below the conventional threshold ($0.44 < 0.50$), which may reflect some conceptual overlap among items or measurement limitations due to the brevity of the scale. However, the adequate AVE values for the total scale and the satisfactory fit indices of the second-order model support the presence of an overarching higher-order construct. This suggests that despite the slightly lower AVE for Factor 2, the items still contribute meaningfully to the general obsessive beliefs factor.

Internal reliability in our study was good ($\omega = 0.84$, $\alpha = 0.84$), which is similar to the original ($\alpha = 0.85$)⁴⁴ and Turkish version ($\alpha = 0.77$).²⁶ The subscales also showed good internal reliability, with α ranging from .70 to .81. These results indicate that the items within each subscale consistently measure the same underlying construct, providing confidence in the scale's reliability when used with Arabic-speaking individuals. The high internal consistency ensures that the OBQ-9 can reliably differentiate between individuals with varying levels of OB, making it a valuable tool for both clinical assessment and research purposes.

The sex invariance analysis of our Arabic translation of the OBQ-9 demonstrated that the scale is equally valid for both male and female participants. Our study tested for configural, metric, and scalar invariance across genders. The configural invariance model indicated that the basic structure of the OBQ-9 was the same for both males and females, suggesting that the same factors were relevant and similarly organized in both groups. The metric invariance model showed that the factor loadings were equivalent across genders, meaning that men and women interpreted the items in a comparable manner. Finally, the scalar invariance model confirmed that the item intercepts were also equivalent, indicating that males and females with the same level of OB had similar expected scores on the OBQ-9 items. In our study, we found no significant differences between male and female participants in their OBQ-9 scores, indicating that OB, as measured by this scale, are equally prevalent and similarly intense across sexes. This finding aligns with some previous research, which suggests that while there are notable gender differences in the symptom presentation and comorbidities of OCD, the core OB might not differ significantly between men and women.⁴⁶ Several studies have reported that the age of onset, symptom types, and comorbid conditions associated with OCD can vary by gender. For example, males tend to have an earlier onset of OCD and more symmetry and ordering symptoms, while females are more likely to present with contamination-related symptoms and higher rates of comorbid depression and anxiety.⁴⁷ Despite these differences, the fundamental OB underpinning these symptoms may be consistent across genders.

The concurrent validity of the Arabic OBQ-9 was demonstrated through significant correlations with other established measures of OCD and related symptoms, specifically the EAT-7 and OCI-12. The significant positive correlation with the EAT-7 scale indicates that higher levels of OB, as measured by the OBQ-9, are associated with more severe disordered eating symptoms and concerns. This finding is consistent with previous research highlighting the overlap between OCD and disordered eating, where cognitive distortions related to control, perfectionism, and threat overestimation are common in both conditions.¹⁷ The positive significant association of the Arabic OBQ-9 with the OCI-12 scale indicates that the cognitive distortions assessed by the OBQ-9 are closely related to the actual symptoms of OCD, and underscores the relevance of OB in driving OCD symptomatology, supporting the notion that cognitive distortions such as excessive responsibility, threat overestimation, and intolerance of uncertainty are central to the disorder.²¹

The findings of this study align with prior evidence that obsessive beliefs cluster into three domains: responsibility/threat estimation, perfectionism/certainty, and importance/control of thoughts. However, the observed loadings and model fit indices also highlight potential cultural influences specific to Arab populations. For instance, the relatively strong endorsement of responsibility and threat estimation items may reflect collectivist moral frameworks in Arab societies, where individual actions are often perceived as having broader consequences for family honor and communal welfare.⁴⁸ In such contexts, the sense of inflated responsibility and need for certainty—central to cognitive models of OCD—may be culturally reinforced rather than purely pathological. Previous work in Middle Eastern populations has shown that intrusive thoughts are more likely to be interpreted through a religious or moral lens, which intensifies efforts to control or neutralize them.⁴⁹ These cultural dimensions could partially explain the acceptable but slightly suboptimal RMSEA and CFI values in our CFA, suggesting subtle semantic or conceptual deviations in item interpretation despite accurate translation.

Limitations

Several limitations must be acknowledged. First, although the sample size exceeded the minimum required for factor analysis, it was drawn using convenience sampling and may not be fully representative of the broader Arabic-speaking population. The majority of participants were young, university-educated, and urban-dwelling Lebanese adults, which limits the generalizability of findings to older adults, rural populations, or individuals from other Arab countries with differing dialects and sociocultural norms. Second, the cross-sectional design precludes assessment of test–retest reliability or predictive validity, which are important for establishing longitudinal stability. Third, cultural adaptations of psychometric instruments must extend beyond linguistic translation to encompass conceptual and experiential equivalence. Although our translation followed recommended guidelines, subtle variations in how obsessive beliefs are interpreted within Arab subcultures may have influenced item responses. Finally, all data were self-reported and collected online, which may introduce selection bias and social desirability effects, particularly in assessing morally sensitive beliefs such as responsibility or thought control.

Practical Implications and Future Research Directions

The findings of this study have several practical implications for clinical practice and research in Arabic-speaking populations. The validated Arabic OBQ-9 provides clinicians with a reliable and efficient tool for assessing dysfunctional beliefs associated with OCD, enabling tailored treatment plans. Its brevity makes it suitable for routine clinical use, facilitating frequent assessments without overwhelming patients. Additionally, the OBQ-9 can be used to monitor treatment progress and outcomes, helping clinicians to adjust interventions as needed. For researchers, the Arabic OBQ-9 offers a validated instrument for studying cognitive distortions in OCD, contributing to a better understanding of the disorder's cognitive underpinnings in different cultural contexts. This can lead to the development of more effective, culturally sensitive therapeutic approaches. Beyond its practical utility, this study also contributes to the theoretical understanding of obsessive-compulsive beliefs across cultures. Cognitive-behavioral models of OCD were primarily developed and tested in Western populations. By validating the OBQ-9 in an Arabic-speaking context, our study provides empirical support for the cross-cultural applicability of these cognitive constructs while also highlighting areas where cultural nuances may alter the expression or endorsement of specific beliefs. For example, the differential item loadings observed in our CFA suggest that responsibility-related cognitions may carry different social implications in collectivist versus individualist cultures.

As for research perspectives, future studies should address the limitations of this study to further validate and expand the applicability of the Arabic OBQ-9. Longitudinal studies are necessary to establish the stability of the Arabic scale over time. Expanding the sample to include more diverse age groups and cultural contexts will enhance the generalizability of the findings. Combining self-report measures with clinician-administered interviews can provide a more comprehensive assessment and reduce potential response biases. Additionally, validating the OBQ-9 in other languages and cultural settings is essential for broader applicability. Future studies should also systematically assess and control for common psychiatric comorbidities, such as generalized anxiety disorder and major depressive disorder, to better understand their impact on OB and OCD symptoms. Incorporating in-person assessments could yield more detailed data and allow for immediate clarification of participant responses. These future research directions will help solidify the OBQ-9's utility in diverse clinical and research settings and enhance our understanding of OB in OCD. Overall, the availability of a validated Arabic version of the OBQ-9 enhances the resources for both clinicians and researchers, improving the assessment and treatment of OCD in Arabic-speaking individuals.

Conclusion

This study provides the first psychometric validation of the OBQ-9 in Arabic, offering a culturally adapted and statistically robust tool to assess obsessive beliefs in Arab-speaking populations. The Arabic OBQ-9 retained the original three-factor structure, demonstrated good internal consistency, and showed acceptable fit indices, supporting its cross-cultural applicability. Its brevity and clarity make it especially suitable for both clinical settings and large-scale research in the Arab world, where lengthy assessments are often impractical. Beyond its practical value, the study also contributes

to cognitive theories of OCD by confirming the relevance of core dysfunctional beliefs—such as inflated responsibility and thought-control—within a non-Western cultural framework. These findings enhance the global applicability of cognitive models of OCD and underscore the importance of culturally responsive psychological assessment tools.

Data Sharing Statement

Because of ethical committee constraints, none of the data collected or analyzed during this study are publicly available. However, the corresponding author may make the data available upon reasonable request.

Ethics Approval and Consent to Participate

The Lebanese International University's School of Pharmacy ethics committee granted this study ethics permission (2024RC-028-LIUSOP). When filling out the online form, each participant provided written informed consent. All methods were performed in accordance with the relevant guidelines and regulations (in accordance with the Declaration of Helsinki).

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Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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