

## Research article Ερευνητική εργασία

# Psychometric properties and factor structure of the Greek version of the Reflective Functioning Questionnaire

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The ability to mentalize, namely to understand, interpret and effectively communicate the mental state of self and others is considered important in self-organisation and affect regulation. The aim of the present study was to provide data on the validation process of Reflective Functioning Questionnaire (RFQ), a recently developed measure of mentalizing, in order to evaluate its use in research and in clinical practice for Greek populations. A total of 219 participants (102 people with type 1 diabetes and 117 healthy individuals) completed the RFQ. A principal component analysis supported the 2-factor model (RF certainty for mental states and RF uncertainty for mental states) in both samples. Internal consistencies of both subscales were satisfactory ( $\alpha=0.80$  for RF certainty and  $\alpha=0.79$  for RF uncertainty). Relationships with validity measures of psychological distress, empathy and emotional intelligence provided further support for the psychometric properties of the scale. As expected, there were positive associations between the degree of certainty concerning mental states and emotional intelligence ( $r=0.390$ ,  $p<0.01$ ), as well as empathy ( $r=0.292$ ,  $p<0.01$ ) in general population. Conversely, negative associations were found between the degree of certainty about mental states and psychological distress in the diabetes group ( $r=-0.470$ ,  $p<0.01$ ) and in general population ( $r=0.320$ ,  $p<0.01$ ). A reverse pattern of associations was observed between the degree of uncertainty about mental states and emotional intelligence ( $r=-0.265$ ,  $p<0.01$ ) in general population, as well as psychological distress in both the diabetes group ( $r=0.590$ ,  $p<0.01$ ) and in general population ( $r=0.330$ ,  $p<0.01$ ). Also, as expected, there were differences across age groups, with older participants reporting a more balanced reflective functioning - with higher certainty levels in the diabetes group ( $t=-2.133$ ,  $p>0.05$ ) and the healthy participants ( $t=-2.738$ ,  $p>0.05$ ) and lower uncertainty levels in the diabetes group ( $t=-2.480$ ,  $p>0.05$ ) and the healthy participants ( $t=-2.779$ ,  $p>0.05$ ). The data collected so far support the reliability and validity of the measure that can be used in research to address mentalizing impairments. However, further research is needed to evaluate its consistency thought time with a

test-retest analysis, and to evidence its factorial structure with a confirmatory factor analysis. In addition, it is of primary importance to extend the validity testing of RFQ in clinical populations to further support its use in clinical practice.

**Key words:** Reflective functioning questionnaire, factor structure, psychometric properties, validity, reliability.

## Introduction

Mentalizing refers to a person's capacity to express and consciously communicate one's mind, to infer the minds of others based on their thoughts and their emotions, to reflect on one's self in relation to other people, and to engage in empathetic relationships.<sup>1</sup> The ability to mentalize is vital for affect regulation and self-organization. It contributes in developing a sense of identity, a sense of a stable self. By acquiring a deep awareness of oneself and others, one also acquires the ability to easily adapt to different situations, fulfilling one's goals with greater flexibility and engaging in close, lasting relationships with others.<sup>2</sup> People with satisfactory levels of reflective function generally have considerable resistance to stress and adversity.<sup>3,4</sup> Deficits in the reflective function have been linked to a series of mental disorders, such as borderline and antisocial personality disorder,<sup>5</sup> eating disorders,<sup>6</sup> and depression.<sup>7</sup> Research have led to developing mentalized-based interventions, the effectiveness of which has been documented in randomized controlled studies and naturalistic observational studies.<sup>8-11</sup>

An instrument specifically designed to evaluate a person's ability to mentalize has been developed by Fonagy et al (2016).<sup>12</sup> The Reflective Functioning Questionnaire (RFQ) is a self-administered questionnaire, consisting of two subscales that assess Certainty (RFQc) and Uncertainty (RFQu) about the mental states of self and others. Impairments in reflective functioning are expressed through extreme scores on each subscale, i.e., hypermentalizing and hypomentalizing respectively. Hypermentalizing involves making assumptions about the mental states of others that are not justified on the basis of observable data. Hypomentalizing, by contrast, is characterized by an absence or unwillingness to develop more complex models of the mind of others and/or the self and reflects concrete thinking. The psychometric properties of the RFQ, including fac-

tor structure, have been evaluated by its developers with findings that support convergent, predictive, and discriminant validity.<sup>12</sup> The two-factor structure of the RFQ has been assessed in the original study<sup>12</sup> and in the French version.<sup>13</sup> Evidence suggests that the RFQ constitutes a useful means of understanding the way a person mentalizes and functions accordingly.

The present study is part of a larger study on reflective functioning (RF) in diverse populations. The aim of the study was to examine the factorial structure and psychometric properties of the Greek version of RFQ in a sample of people with a chronic health condition, such as diabetes, and in healthy individuals. More specifically, we sought to replicate the two-factor structure of the RFQ in both groups and to assess the internal consistency of both scales. In addition, we examined the convergent validity of the RFQ through correlations with clinical variables such as psychological distress and variables of psychological capacities such as empathy and emotional intelligence, as these concepts have been linked with RF both theoretically and empirically in the past. Based on previous studies, validity of the RFQ was further assessed on the basis of known-group comparisons, such as expected differences in RF across age groups, but not across gender.<sup>12,13</sup>

## Material and method

### *Participants and procedure*

Participants were 102 adults with type 1 diabetes [age: (mean±SD) 38.85 ±10.08 years, females 63%] attending the diabetes clinic of a general hospital and 117 healthy individuals (age: 36.1±10.7 years, 59% females) recruited from a sample of undergraduate and post-graduate student population. Participants were informed in written of the purpose of the study, their ensured anonymity and data protection, the possibility of non-participation without any health implications for the care they will receive, and the

ability to communicate with the researchers. After obtaining authorization by its developers, the RFQ was translated from English into Greek by independent Greek and English native speakers, following a forward-backward-forward procedure. In addition, the instrument was split translated using a committee based approach.<sup>14</sup> Any discrepancies that emerged from the comparison of the two approaches were discussed and a few minor adjustments were applied.

### **Measures**

Reflective Functioning Questionnaire is a recently developed instrument to measure mentalizing in lieu of Reflective Functioning of the Adult Attachment Interview. Based on previous studies that validated the RFQ,<sup>12,13</sup> clinical measures such as general symptoms of psychopathology, and measures of psychological capacities such as empathy and emotional intelligence were used to examine validity of RFQ, as these concepts have been linked with RF both theoretically and empirically in the past. Moreover, because the present study is part of a larger study examining reflective functioning in diverse populations, the diabetes group did not complete the measures of emotional intelligence and empathy for reasons of avoiding respondent fatigue in this specific group due to a large assessment battery.

#### **The Reflective Functioning Questionnaire (RFQ)**

The RFQ is a 8-item measure that assess reflective functioning (RF), the capacity of thinking about mental states of the one's self and others.<sup>12</sup> It consists of two subscales, the Certainty about mental states and the Uncertainty about mental states with statements such as "Sometimes I do things without really know why" or "Strong feelings often cloud my thinking" and has demonstrated good psychometric properties within different samples.<sup>12,13</sup> High scores on the Certainty subscale suggest a rigid stance of one's own mental states and those of others, whereas lower scores suggest more adaptive levels of reflective functioning. High scores on the Uncertainty subscale suggest an almost complete lack of knowledge about mental states, and lower scores reflect acknowledgment of the opaqueness of one's own mental states and those of others.

#### **Symptom Checklist for psychological distress (SCL-10R)**

The Symptom Checklist Short (SCL-10R) is a 10-item revised version<sup>15</sup> of the widely used SCL-90R measure for psychological distress.<sup>16</sup> It assess a number of symptoms that involve depression, anxiety, obsessive-compulsive, interpersonal sensitivity, hostility, phobic anxiety, psychoticism, paranoid ideation and somatisation (e.g., "How often did you feel like you were worrying too much?") on a 5-point Likert scale ("not at all" to "very often"). Internal consistency in the present sample was 0.89.

#### **Wong and Law Emotional Intelligence Scale (WLEIS)**

The WLEIS was used to investigate the convergent validity of the RFQ. It is a measure of emotional intelligence<sup>17</sup> that contains 16 items measuring self-emotion appraisal (e.g., "I really understand what I feel"), emotion appraisal of others (e.g., "I am a good observer of others' emotions"), use of emotion (e.g., "I am a self-motivated person"), and regulation of emotion (e.g., "I have a good control of my own emotions") measured on a 7-point scale ("completely agree" to "completely disagree"). Internal consistency for the total score in the present sample was 0.89.

#### **The Toronto Empathy Questionnaire (TEQ)**

The TEQ was used to investigate the convergent validity of the RFQ. It is a uni-dimensional measure that consists of 16 items (e.g., "When someone else is feeling excited, I tend to get excited too") each rated on a 5-point scale ("never" to "often") developed to assess the empathy levels of individuals.<sup>18</sup> Internal consistency in the present sample was 0.79.

#### **Statistical analyses**

Principal components analysis (PCA) with promax rotation was conducted to evaluate construct validity of the scales. The adequacy of the sample was valued with the Kaiser-Meyer-Olkin test (KMO) (values between 0.80 and 1.00 are considered good, 0.70–0.79 acceptable, 0.60–0.69 fair, and lower than 0.60 inadequate) and a Bartlett's test of sphericity ( $p < 0.05$  is considered adequate). The internal consistency of the subscales were analysed with Cronbach's alpha. Reliability equal to or greater

than 0.70 was considered acceptable. Convergent validity was assessed through correlations of the subscales with psychological distress, emotional intelligence and empathy. Validity was further assessed on the basis of known-group comparisons that involved expected differences among age groups, and were analyzed with independent t-tests, applying Levene's test for equality of variances. Statistically significant level was set at 0.05 level and analyses were conducted using SPSS Statistical Software version 23.

## Results

### Factor structure

The PCA results showed that all items loaded on their intended factors in both groups (Table 1). Item #c2 had a high negative loading on RF uncertainty (-0.582 for the diabetes group and -0.560 for the healthy group) instead of a higher one on its predicted RF certainty factor (0.345 for the diabetes group and 0.350 for the healthy group). Because its loading was above the cut-off value of 0.32 suggested by Tabachnick and Fidell (1996)<sup>19</sup> in absolute values, this item was assigned to its predicted factor (table 1).

### Internal consistency and scale descriptives

Descriptive statistics for RFQ subscales for both groups are presented in table 2. Diabetes group: Internal consistency was good for RF certainty (Cronbach's alpha=0.861, mean inter-item correlation=0.509) and similarly good for RF uncertainty (Cronbach's alpha=0.810, mean inter-item correlation=0.414). Healthy group: Internal consistency was good for RF certainty (Cronbach's alpha=0.806, mean inter-item correlation=0.405) and satisfactory for RF uncertainty (Cronbach's alpha=0.791, mean inter-item correlation=0.389).

The data of the RF uncertainty subscale for both the diabetes and the healthy group did not meet the assumptions of normality for Skewness and Kurtosis (-2.00 to 2.00; Field, 2009)<sup>20</sup> and data transformation using a square root function was performed. The RF uncertainty subscale indicated normal distribution after transformation for both groups (table 2).

### Convergent and known-groups validity of RFQ

Diabetes group: Psychological distress was negatively correlated with RF certainty ( $r=-0.470$ ,  $p<0.01$ ) and positively with RF uncertainty ( $r=0.590$ ,  $p<0.01$ ). All the SCL-10R subscales were significantly correlat-

**Table 1.** Factor loadings for the RF certainty and RF uncertainty for the diabetes and the healthy group.

RFQitems	Type 1 diabetes		Healthy group	
	Factor 1	Factor 2	Factor 1	Factor 2
c4	0.868	-0.132	0.803	-0.085
c3	0.839	-0.187	0.829	-0.149
c5	0.740	-0.222	0.492	-0.399
c6	0.603	-0.469	0.523	-0.473
c1	0.400	-0.264	0.247	-0.301
c2	0.345	-0.582	0.350	-0.560
u4	-0.544	0.459	-0.494	0.380
u2	-0.035	0.797	-0.100	0.787
u6	-0.285	0.723	-0.212	0.731
u5	-0.500	0.500	-0.252	0.534
u8	-0.375	0.518	-0.284	0.468
u7	-0.103	0.320	-0.068	0.466

All factor loadings  $\geq 0.32$ . KMO coefficient equal to 0.81 and Barlett  $\chi^2$  value equal to 646.9 ( $p<0.001$ ) for the diabetes group. KMO coefficient equal to 0.79 and Barlett  $\chi^2$  value equal to 552.0 ( $p<0.001$ ) for the healthy group

**Table 2.** Descriptive statistics for and internal consistencies of the RF certainty and the RF uncertainty for diabetes and healthy groups.

	Type 1 diabetes		Healthy group	
	RF certainty	RF uncertainty	RF certainty	RF uncertainty
Mean (SD)	1.24 (0.95)	0.60 (0.73)	0.97 (0.79)	0.49 (0.57)
Median	1.08	0.33	0.83	0.57
Skewness (SE)	0.35 (0.23)	0.36 (0.23)	0.56 (0.22)	0.28 (0.22)
Kurtosis (SE)	-1.10 (0.47)	-0.77 (0.47)	-0.51 (0.44)	-0.47 (0.44)

ed with the RF subscales with the exception of anxiety that was not related to the RF certainty subscale (table 3). Healthy group: Psychological distress was negatively correlated with RF certainty ( $r=-0.320$ ,  $p<0.01$ ) and positively with RF uncertainty ( $r=0.330$ ,  $p<0.01$ ). Emotional intelligence was positively correlated with RF certainty ( $r=0.390$ ,  $p<0.01$ ) and negatively with RF uncertainty ( $r=-0.265$ ,  $p<0.01$ ) as expected. Empathy was positively correlated with RF certainty ( $r=0.292$ ,  $p<0.01$ ) as expected, but there was no relationship between empathy and RF uncertainty ( $r=0.079$ ).

Regarding known-groups validity, comparisons based on gender revealed that there were no gender differences for either RF certainty or RF uncertainty in neither group [diabetes group ( $t=0.492$ ,  $p>0.05$ ), healthy group ( $t=0.965$ ,  $p>0.05$ ); diabetes group ( $t=0.220$ ,  $p>0.05$ ), healthy group ( $t=0.058$ ,  $p>0.05$ )]. However, there were age differences (median split < 38 years) in both groups, as younger participants reported significantly lower certainty in the diabetes group ( $t=-2.133$ ,  $p>0.05$ ) and the healthy group ( $t=-2.738$ ,  $p>0.05$ ) and higher uncertainty in the diabetes group ( $t=-2.480$ ,  $p>0.05$ ) and the healthy group ( $t=-2.779$ ,  $p>0.05$ ) than older participants.

## Discussion

The aim of the present study was to provide preliminary data on the validation of the RFQ for screening purposes and to examine its factorial structure and psychometric properties in a sample of people with a chronic health condition, such as diabetes, and in healthy group.

With respect to the dimensionality of the measure, our results did replicate the two-factor structure of

the original scale. The internal consistency ranged from good to excellent for both RF certainty and RF uncertainty in both groups. The mean scores were not uniform across the subscales, with people scoring higher in RF certainty than RF uncertainty in both groups. In the original study by Fonagy et al (2016) and other studies that used samples with severe psychopathology, such as borderline personality disorder, the reported mean uncertainty scores were higher.<sup>12,13</sup> Significant associations were observed between RFQ subscales and empathy, emotional intelligence and psychological distress as expected. Positive associations were observed between RF certainty and the psychological capacities of empathy and emotional intelligence, and negative correlations between RF certainty and psychological distress. These findings are congruent with previous research with RFQ.<sup>12,13</sup> A reverse pattern of associations between psychological distress, emotional intelligence and the RF uncertainty scale was observed as expected. Empathy was not associated with RF uncertainty subscale, a finding that also in line with previous research<sup>12,13</sup> and may suggest that the inability to develop complex models of the mind of others and the self is not related to the ability to manifest empathetic concern towards others.

With regard to psychological distress, the results for the two samples were broadly similar with a few exceptions. Depression was not related to neither of the RFQ subscales in the healthy group in contrast with the diabetic group, in which a negative relationship was found with RF certainty and a positive one with RF uncertainty. These findings suggest that the degree of certainty or uncertainty about the mental state of others and/or the self is not related to de-



**Table 3.** Relationships of RF certainty and RF uncertainty with psychological distress (SCL-10R) for both groups.

	Type 1 diabetes		Healthy group	
	RF certainty	RF uncertainty	RF certainty	RF uncertainty
Depression	-0.365**	0.486**	-0.041	0.150
Psychoticism	-0.415**	0.463**	-0.356**	0.422**
Interpersonal sensitivity	-0.406**	0.441**	-0.286**	0.250**
Anxiety	-0.177	0.365**	-0.017	0.196*
Obsessive-compulsiveness	-0.359**	0.454**	-0.260**	0.319**
Somatization	-0.206*	0.227*	-0.270**	0.073
Phobic anxiety	-0.273**	0.347**	-0.213*	0.095
Hostility	-0.399**	0.495**	-0.339**	0.239**
Paranoia	-0.342**	0.426**	-0.259**	0.208*

\* $p < 0.05$ , \*\* $p < 0.01$

pression in people who do not face a somatic condition. In addition, somatization and phobic anxiety were not associated with the RF uncertainty subscale in the healthy group, in contrast with the diabetic group, in which positive relationships were observed between these variables. Thus, being uncertain about the mental state of one's self, or of others' is not related to somatization, neither phobic anxiety, in people who do not face a somatic condition. Moreover, anxiety was not related to RF uncertainty in neither group suggesting that the degree of certainty about the mental states of others and/the self is not linked to experiencing anxiety. However, anxiety in SCL-10R is defined as feeling "tense or keyed up". This may be inferred to account for an inability to feel relaxed, and thus, different measures of anxiety need to be used in order to further clarify this relationship. Regarding participant demographics both RFQ subscales were unrelated to gender. However, a more balanced reflective functioning - reflected in significant higher certainty and lower uncertainty levels - was observed in older participants in both groups, suggesting that as time goes by people tend to feel more certain in the ability to understand their own and other people's mental world, and to regulate their emotions more effectively. Both of these findings were congruent with findings from the original validation study.<sup>12</sup>

The present study has some limitations. A test-retest analysis, to further evaluate the reliability of the instrument, was not included. Another limitation is that a confirmatory analysis was not performed. The reliability and validity of the RFQ need to be tested with test-retest analysis and confirmatory analysis respectively in future research. Moreover, the measures of emotional intelligence and empathy were only completed by the healthy group. Further research is necessary to replicate the findings across diverse populations.

In conclusion, although these preliminary findings support the reliability and validity of the measure that can be used in research to address problems of mentalizing, it is of primary importance to extend the validity testing of RFQ in clinical populations to further support its use in clinical practice.

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**APPENDIX**  
**Reflective Functioning Questionnaire**  
**Ερωτηματολόγιο Αναστοχαστικής Λειτουργικότητας**

Για κάθε μια από τις επόμενες 8 ερωτήσεις επιλέξτε έναν αριθμό μεταξύ 1 (διαφωνώ απόλυτα) και 7 (συμφωνώ απόλυτα) ανάλογα με το πόσο διαφωνείτε ή συμφωνείτε με τη δήλωση και γράψτε τον αριθμό δίπλα στη δήλωση. Μην το σκεφτείτε πάρα πολύ – οι αρχικές σας απαντήσεις είναι συνήθως οι καλύτερες.

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1. Το πώς σκέφτονται οι άλλοι είναι για μένα ένα μυστήριο
  2. Δεν ξέρω πάντα γιατί κάνω ό,τι κάνω
  3. Όταν είμαι θυμωμένος, λέω πράγματα χωρίς να ξέρω πραγματικά γιατί τα λέω
  4. Όταν είμαι θυμωμένος λέω πράγματα που μετά μετανιώνω
  5. Αν νιώσω ανασφάλεια μπορεί να συμπεριφερθώ με τρόπο που εκνευρίζει τους άλλους
  6. Μερικές φορές κάνω πράγματα χωρίς να ξέρω πραγματικά γιατί
  7. Ξέρω πάντα τι νιώθω
  8. Τα έντονα συναισθήματα συχνά θολώνουν τη σκέψη μου
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## Ψυχομετρικές ιδιότητες και παραγοντική δομή της ελληνικής εκδοχής του Ερωτηματολογίου Αναστοχαστικής Λειτουργικότητας

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Η αναστοχαστική λειτουργικότητα αναφέρεται στην ικανότητα του ατόμου, να συμπεραίνει την ψυχική κατάσταση του εαυτού και των άλλων, να αναστοχάζεται για τον εαυτό του σε σχέση με τους άλλους, και να εμπλέκεται μαζί τους σε έναν βαθμό συναισθαντικής επικοινωνίας. Σκοπός της παρούσας μελέτης είναι η παρουσίαση δεδομένων σχετικά με τη διαδικασία στάθμισης του ερωτηματολογίου αναστοχαστικής λειτουργικότητας (Reflective Functioning Questionnaire, RFQ), προκειμένου να αξιολογηθεί η χρήση του στην έρευνα και στην κλινική πρακτική για τον ελληνικό πληθυσμό. Συνολικά 219 συμμετέχοντες (102 άτομα με διαβήτη τύπου 1 και 117 άτομα γενικού πληθυσμού) ολοκλήρωσαν το RFQ. Για την παραγοντική δομή της κλίμακας χρησιμοποιήθηκε

διερευνητική παραγοντική ανάλυση που υποστήριξε το αρχικό μοντέλο των δύο παραγόντων (Βεβαιότητα και Αβεβαιότητα για την ψυχική κατάσταση εαυτού και άλλων) και στα δύο δείγματα. Η αξιοπιστία αξιολογήθηκε με τον δείκτη εσωτερικής συνοχής και ήταν ικανοποιητική και για τις δύο υποκλίμακες ( $\alpha=0,80$  για τη βεβαιότητα και  $\alpha=0,79$  για την αβεβαιότητα). Η εγκυρότητα αξιολογήθηκε μέσω συσχέτισης με την ψυχολογική δυσφορία, τη συναισθηματική νοημοσύνη και την ενσυναίσθηση καθώς και με βάση τις αναμενόμενες από τη βιβλιογραφία διαφορές μεταξύ ηλικιακών ομάδων. Όπως ήταν αναμενόμενο, υπήρχαν θετικές συσχετίσεις μεταξύ του βαθμού βεβαιότητας σχετικά με τις ψυχικές καταστάσεις και της συναισθηματικής νοημοσύνης ( $r=0,390$ ,  $p<0,01$ ), καθώς και της ενσυναίσθησης ( $r=0,292$ ,  $p<0,01$ ) στον γενικό πληθυσμό. Αντίθετα, βρέθηκαν αρνητικές συσχετίσεις μεταξύ του βαθμού βεβαιότητας για τις ψυχικές καταστάσεις και της ψυχολογικής δυσφορίας ( $r=-0,470$ ,  $p<0,01$ ) για τους συμμετέχοντες με διαβήτη αλλά και για τον γενικό πληθυσμό ( $r=0,320$ ,  $p<0,01$ ). Παρατηρήθηκε ένα αντίστροφο μοτίβο συσχετίσεων του βαθμού αβεβαιότητας σχετικά με τις ψυχικές καταστάσεις και της συναισθηματικής νοημοσύνης ( $r=-0,265$ ,  $p<0,01$ ) στον γενικό πληθυσμό, καθώς και της ψυχολογικής δυσφορίας για τους συμμετέχοντες με διαβήτη ( $r=0,590$ ,  $p<0,01$ ) και για τον γενικό πληθυσμό ( $r=0,330$ ,  $p<0,01$ ). Επίσης, όπως αναμενόταν, υπήρχαν διαφορές μεταξύ των ηλικιακών ομάδων, με τους μεγαλύτερους σε ηλικία συμμετέχοντες και στις δύο ομάδες να παρουσιάζουν μια πιο ισορροπημένη αναστοχαστική λειτουργία – με υψηλότερα σκορ βεβαιότητας για την ομάδα του διαβήτη ( $t=-2,133$ ,  $p>0,05$ ) και τον γενικό πληθυσμό ( $t=-2,738$ ,  $p>0,05$ ) και χαμηλότερο σκορ αβεβαιότητας για την ομάδα διαβήτη ( $t=-2,480$ ,  $p>0,05$ ) και τον γενικό πληθυσμό ( $t=-2,779$ ,  $p>0,05$ ). Τα δεδομένα που συλλέχθηκαν ως τώρα υποστηρίζουν την αξιοπιστία και την εγκυρότητα της κλίμακας, ωστόσο είναι πρωταρχικής σημασίας η επέκταση της στάθμισης του RFQ σε κλινικούς πληθυσμούς για περαιτέρω υποστήριξη της χρήσης του στην κλινική πρακτική.

**Λέξεις ευρητηρίου:** Ερωτηματολόγιο αναστοχαστικής λειτουργικότητας, παραγοντική δομή, ψυχομετρικές ιδιότητες, εγκυρότητα, αξιοπιστία.

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