

Research article
Ερευνητική εργασία

**Assessment of the Greek
worry-related metacognitions:
The Greek version of the Metacognitions
Questionnaire (MCQ-30)**

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The Metacognitions Questionnaire-30 (MCQ-30), developed by Wells and Cartwright-Hatton (2004), represents a multidimensional measure of metacognitive factors considered to be important in the metacognitive model of psychological disorders. The primary aim of the present study was to examine internal consistency, test-retest reliability, convergent validity and the factor structure of the Greek version of the MCQ-30. Moreover, we investigated the associations of the extracted factors with trait anxiety in a Greek sample. The study sample consisted of 547 non-clinical participants (213 males and 334 females). All participants completed the Greek version of the MCQ-30. A subsample of 157 participants also completed the Trait Anxiety subscale of the State –Trait Anxiety Inventory and the Meta-worry subscale of the Anxious Thought Inventory. Thirty participants were retested with the MCQ-30 over a retest interval ranging from three to five weeks. The results confirmed the dimensionality of the MCQ-30 and five factors were extracted consistent with the original English version: (1) positive beliefs about worry, (2) negative beliefs about worry concerning uncontrollability and danger, (3) cognitive confidence, (4) beliefs about the need to control thoughts and the negative consequences of not controlling them, and (5) cognitive self-consciousness. The MCQ-30 showed high levels of internal consistency and test-retest reliability. The correlation between MCQ-30 total score and AnTI-MW was strong, indicating high level of convergent validity. Moreover, all correlations between MCQ-30 total and subscale scores and STAI-T were significant apart from the correlation between ‘cognitive confidence’ and trait anxiety. The Greek

sample scored higher in the MCQ-30 and its subscales than the English sample in the original study. Women scored significantly higher than men in the overall MCQ-30 and the "uncontrollability and danger" and "need to control thoughts" subscales, whereas no significant differences between genders had been found in the original study. The assumption that the differences in score levels and the gender effect might reflect cultural differences warrants further investigation. The findings of the present study indicate that the Greek version of the MCQ-30 is a comprehensible and psychometrically adequate instrument, as well as a reliable tool in assessing a range of dimensions of worry-related metacognitions in the Greek population. The Greek version of this scale facilitates cross-cultural research in metacognition and wider testing of the metacognitive approach to emotional vulnerability, psychological disturbances and mental disorders

Key words: Metacognitions questionnaire, psychometric properties, metacognitive beliefs, worrying, psychological disorders.

Introduction

Metacognition is a complex concept referring to the cognitive control and regulation of many types of cognitive processes. Theory and research in metacognition initially appeared in the areas of developmental and cognitive psychology.^{1,2} In the field of clinical psychology the self-regulatory executive function (S-REF) theory^{3,4} was the first to conceptualize metacognitive factors as components of information processing that affect the development and persistence of psychological disorders.^{3,5,6} A basic hypothesis of this approach is that metacognition contributes to response styles that lead to the development and persistence of disorder. In particular, people have positive and negative beliefs about their thoughts (metacognitions), e.g., "I must worry in order to be prepared"; "I cannot control my thoughts", that influence appraisal and also have implicit procedural metacognitions that form plans for guiding cognition and action. These metacognitive components direct the individuals towards maladaptive forms of coping strategies and affect the development and the persistence of psychological disorders.^{3,7} Consistent with this assumption metacognitions have been found to be associated with psychopathological conditions, such as pathological worry and obsessive-compulsive symptoms,^{8,9} generalized anxiety disorder,¹⁰ depression¹¹ and psychosis.¹²

Following the conceptual analysis offered by the S-REF theory,^{3,4} Cartwright-Hatton and Wells¹³ developed the Metacognitions Questionnaire (MCQ), a 65-item scale designed to assess several dimensions of metacognition, thought to be relevant to

psychopathology. The scale was further revised into a 30-item shorter form (MCQ-30).¹⁴ Two studies^{14,15} confirmed that the MCQ-30 is composed of five correlated but conceptually distinct factors, consistent with the initial MCQ form: (1) positive beliefs about worry, which measures the extent to which a person believes that worrying is useful, (2) negative beliefs about worry concerning uncontrollability and danger, which assesses the extent to which a person thinks that worrying is uncontrollable and dangerous, (3) cognitive confidence, which assesses confidence in attention and memory, (4) beliefs about the need to control thoughts and the negative consequences of not controlling them, and (5) cognitive self-consciousness, which measures the tendency to monitor one's own thoughts and focus attention inwards. The five-factor structure of the MCQ-30 in non-clinical populations has been further assessed in two studies in Turkey^{16,17} and two more recent studies in Poland¹⁸ and South Korea.¹⁹

The primary aim of the present study was to examine internal consistency, test-retest reliability, convergent validity and the factor structure of the Greek version of the MCQ-30. Moreover, we investigated the associations of the extracted factors with trait anxiety in a Greek sample.

Material and method

Participants

Five hundred and forty seven (547) individuals participated in the study. The sample consisted of 390 undergraduate and postgraduate students from different Departments of the University of Athens and 157 University and health service employees. The

whole sample was composed of 213 males (37.1%) and 334 females (58.2%). The mean age of the sample was 27.5 years (± 8.30) ranging from 18 to 66 years and the mean years of education 15.78 (± 2.11).

Measures

1. The Metacognition Questionnaire-30 (MCQ-30).¹⁴ The MCQ-30 assesses individual differences in metacognitive beliefs, judgments and monitoring tendencies. It consists of five subscales assessed by 30-items in total. Each item on MCQ-30 is rated on a 4-point Likert scale. Scores range from 30 to 120 points and higher scores indicate greater pathological metacognitive activity.
2. The Meta-worry subscale of the Anxious Thoughts Inventory (AnTI-MW).²⁰ The Anxious Thoughts Inventory (AnTI) is a multidimensional measure of generalized worry, that comprises of three basic dimensions: social worry, health worry, and meta-worry (worry about worry). The meta-worry subscale of AnTI-MW consists of 7 items, which are answered on a 4-point Likert scale. Previous research has demonstrated that the AnTI-MW is reliable in terms of internal consistency and test-retest stability.²⁰
3. The Trait Anxiety scale of the State-Trait Anxiety Inventory (STAI-T).²¹ The STAI-T is a 20 items measure used to assess anxiety proneness. Each item is rated on a 4-point Likert scale; almost never (1) to almost always (4). Higher scores indicate more anxiety. The Greek adaptation of the scale was assessed by Fountoulakis et al.²²

Procedure

Three of the study authors, fluent in both languages, translated the MCQ-30 and the AnTI-MW independently into Greek. After the translation team agreed on the best translations, the measures were independently blindly back-translated by another person, who holds an English Language Degree from the University of Athens and an MA in English Studies from the University of London. The author of the original scales, Prof. Adrian Wells, compared the back-translated versions to the originals and made suggestions on 3 MCQ items which were applied on the scale. Prof. Wells was satisfied with the new translations and the Greek versions were consequently formed (available upon request).

All participants completed the MCQ-30. Moreover, a subsample of 157 participants (63 males and 94 females) completed also the STAI-T and the AnTI-MW. The mean age of the sub-sample was 36.97 (± 8.42), ranging from 21 to 66 years. Thirty participants were retested with the MCQ-30 over a retest interval ranging from three to five weeks. Participation in the project was entirely voluntary and anonym. Ethical approval for the study was granted by the ethical committee of the Eginition Hospital.

Statistical analysis

A multivariate analysis of variance (MANOVA) and t-test were used to assess the effect of gender on MCQ-30 subscales and total score, respectively. In order to investigate the factor structure of the Greek version of the MCQ-30, scores obtained from the scale were subjected to an exploratory factor analysis using principal components analysis and rotation of extracted factors to achieve simple structure. The Scree plot was examined as the criterion for determining the number of factors to extract. Pearson's product moment coefficients (r) were computed to determine inter-item correlations, correlations between each item and the total score minus that item as well as between the subscales of MCQ-30. Cronbach's alpha and Guttman split-half coefficients were estimated in order to examine the internal consistency of the scale and its subscales. Test-retest reliability was evaluated using Pearson's correlation coefficients for the total and subscale scores. The convergent validity of the MCQ-30 and its associations with trait anxiety were examined through the Pearson's correlation coefficients between MCQ-30 total and subscale scores, AnTI-MW and STAI-T, respectively. For the statistical evaluation the SPSS.¹⁹ package was used.

Results

Descriptive statistics and gender effect

Means and Standard Deviations for the total MCQ-30 scale and its subscales are presented in table 1. The total and subscale means in the Greek sample tended, as a whole, to be higher than those in the original study.¹⁴ All subscales were found to be positively inter-correlated with the exception of cognitive confidence and cognitive self-consciousness. The inter-correlation matrix appears in table 2.

Table 1. Mean MCQ-30 total and subscale scores for men and women.

MCQ-30	Total sample (n=547) Mean (SD)	Men (n=213) Mean (SD)	Women (n=334) Mean (SD)
Cognitive confidence	10.19 (3.65)	10.03 (3.51)	10.30 (3.79)
Positive beliefs	11.52 (3.82)	11.48 (4.02)	11.52 (3.73)
Cognitive self-consciousness	15.64 (3.62)	15.64 (3.68)	15.62 (3.76)
Uncontrollability and danger	11.96 (4.19)	11.20 (3.80)	12.39 (4.33)
Need to control thoughts	12.00 (3.67)	11.53 (3.70)	12.23 (3.63)
Total score	61.27 (12.59)	59.71 (12.87)	62.12 (12.45)

Table 2. Intercorrelation matrix of the MCQ-30 and its subscales (n=547).

Scale	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	MCQ Total
Cognitive confidence (1)	–	0.10*	–0.05	0.35**	0.19**	0.46**
Positive beliefs (2)		–	0.33**	0.31**	0.42**	0.65**
Cognitive self-consciousness (3)			–	0.29**	0.53**	0.62**
Uncontrollability and danger (4)				–	0.52**	0.76**
Need to control thoughts (5)					–	0.80**
MCQ Total						–

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

Gender differences in the five metacognitive factors were assessed using multivariate analysis of variance (MANOVA). Wilk's λ was significant ($F=3.16$, $p < 0.05$, $\eta^2=0.03$). A significant main effect of gender was found on factors "uncontrollability and danger" ($F^{1,520}=11.90$, $p=0.001$) and "need to control thoughts", ($F_1, 520=5.05$, $p < 0.05$). Women scored significantly higher than men on both these factors. Moreover, women scored higher than men in total metacognitions (62.12 ± 12.45 versus 59.72 ± 12.87 , $t=-2.10$, $p < 0.05$).

Factor structure

An exploratory factor analysis was conducted on the Greek version of the MCQ-30 using principal components factoring. The Kaiser-Meyer-Olkin measure of sampling adequacy was found to be 0.89, and Bartlett's test of sphericity was significant ($df=435$, $p < 0.001$). Scree plot and eigenvalues indicated five factors with eigenvalues of 7.19, 3.92, 2.46, 1.84 and 1.19 for extraction. These factors were subjected to an oblique rotation since previous research with the MCQ and MCQ-30 demonstrated that dimensions of the MCQ are inter-correlated. The variances explained by these five factors were

23.97%, 13.07%, 8.21%, 6.15% and 3.99%. Total variance accounted for by these five factors was 55.41%. The lower limit for a salient item loading was set at 0.30.²³

The rotated loadings of the MCQ-30 items for each of the extracted factors are presented in table 3. On a total of 30 items 26 loaded highly on their respective factors. A number of cross-loadings have been observed with item 3 loading on factors "cognitive self-consciousness" (0.40) and "uncontrollability and danger" (0.61), and item 6 loading on factors "uncontrollability and danger" (0.43) and "need to control thoughts" (0.33). Nevertheless, these cross-loadings do not pose a serious problem to the factorial solution presented here, as items load more highly on their respective factor. Finally, items 13 and 22 loaded closely on two factors, namely on factors "cognitive self-consciousness" (0.46) and "need to control thoughts" (0.45) and on factors "uncontrollability and danger" (0.37) and 'need to control thoughts' (0.33), respectively. In these cases, items can be permitted to contribute to the factor that it fits best, depending on what it means and what it measures.^{24,25} Therefore, both items remained under the factor "need to control thoughts" as in the original scale.

Table 3. Rotated loadings of the MCQ-30 items (structure matrix).

Item/Scale	Loadings on factors				
	1	2	3	4	5
<i>Factor 1: Cognitive confidence</i>					
I have little confidence in my memory for words and names (8)	0.78	0.08	-0.03	0.03	-0.05
My memory can mislead me at times (14)	0.66	-0.01	-0.08	0.07	0.10
I have a poor memory (17)	0.80	0.00	-0.11	0.13	0.01
I have little confidence in my memory for places (24)	0.60	-0.02	-0.04	0.14	0.19
I do not trust my memory (26)	0.83	-0.01	-0.06	0.18	0.02
I have little confidence in my memory for actions (29)	0.64	0.09	-0.01	0.12	0.02
<i>Factor 2: Positive beliefs</i>					
Worrying helps me to avoid problems in the future (1)	0.05	0.69	0.10	0.00	0.02
I need to worry in order to remain organized (7)	0.02	0.70	0.11	0.16	0.20
Worrying helps me to get things sorted out in my mind (10)	-0.01	0.74	0.18	0.14	0.03
Worrying helps me cope (19)	0.08	0.80	0.09	0.13	0.14
Worrying helps me to solve problems (23)	0.02	0.82	0.03	0.04	0.19
I need to worry, in order to work well (28)	0.00	0.76	0.04	0.10	0.17
<i>Factor 3: Cognitive self-consciousness</i>					
I think a lot about my thoughts (3)	0.10	0.20	0.40	0.61	0.04
I am aware of the way my mind works when I am thinking through a problem (5)	-0.21	0.00	0.63	-0.04	-0.04
I monitor my thoughts (12)	-0.09	0.16	0.72	0.02	0.07
I am constantly aware of my thinking (16)	-0.09	0.02	0.71	-0.10	0.13
I pay close attention to the way my mind works (18)	-0.03	0.09	0.68	0.15	0.16
I constantly examine my thoughts (30)	0.05	0.18	0.61	0.23	0.37
<i>Factor 4: Uncontrollability and danger</i>					
My worrying is dangerous for me (2)	0.11	-0.15	0.01	0.51	0.15
I could make myself sick with worrying (4)	0.07	0.00	-0.07	0.74	0.17
My worrying thoughts persist, no matter how I try to stop them (9)	0.18	0.23	0.11	0.75	0.03
I cannot ignore my worrying thoughts (11)	0.14	0.29	0.17	0.68	0.14
My worrying could make me go mad (15)	0.17	0.08	-0.08	0.73	0.26
When I start worrying, I cannot stop (21)	0.21	0.19	0.06	0.71	0.23
<i>Factor 5: Need to control thoughts</i>					
If I did not control a worrying thought, and then it happened, it would be my fault (6)	0.05	0.25	0.19	0.43	0.33
I should be in control of my thoughts all the time (13)	0.12	0.09	0.46	0.21	0.45
Not being able to control my thoughts is a sign of weakness (20)	0.05	0.10	0.36	0.12	0.69
I will be punished for not controlling certain thoughts (22)	0.20	0.25	-0.06	0.33	0.37
It is bad to think certain thoughts (25)	0.01	0.07	-0.10	0.15	0.67
If I could not control my thoughts, I would not be able to function (27)	0.00	0.14	0.32	0.02	0.67

Internal consistency and test-retest reliability

For the total MCQ-30 corrected item-total correlation coefficients ranged from 0.27 to 0.67 with the exception of item 5. For the individual subscales, the coefficients ranged from 0.49 to 0.74 for cognitive confidence, 0.56 to 0.74 for positive

beliefs, 0.36 to 0.60 for cognitive self-consciousness, 0.38 to 0.70 for uncontrollability and danger, and 0.34 to 0.59 for need to control thoughts, indicating that all items were associated with their respective subscales. Item 5, whose relationship with the total score was lower (0.17) than the con-

ventional level of 0.20, was not excluded from the MCQ-30 since it was correlated sufficiently with its corresponding subscale (0.40) and had a high loading on this subscale (0.63). In addition, examination of the alpha statistics demonstrated that deletion of this item would not make any significant contribution in terms of the reliability of the factor (Cronbach's alpha for cognitive self-consciousness subscale was initially 0.76 and 0.75 if item 5 deleted).

Cronbach's alpha coefficients for the full MCQ-30 and its factors indicated high internal consistency (see table 4). The Guttman split-half coefficient for the total MCQ-30 was also high, and Cronbach's alpha coefficients were 0.79 and 0.78 for the first and the second halves, each including 15 items, respectively. The Guttman split-half coefficients and the test-retest correlation coefficients of the MCQ-30 factors are displayed in table 4. Test-retest correlations for all the MCQ-30 factors and the total score were significant ($p < 0.01$).

Convergent validity

Since MCQ-30 is mainly a measure of positive and negative beliefs and judgments about worry, we used the AnTi-MW as convergent validator, which is a measure of concerns about worry and has been found to be associated with vulnerability to pathological worry.²⁰ As shown in table 5 significant positive correlations were found between MCQ-30 total and subscale scores and AnTi-MW. However, the correlations of AnTi-MW with "cognitive self-consciousness" and "cognitive confidence" subscales were weak ($r \leq 0.30$), whereas its correlations with all other factors ranged from medium ($0.30 < r \leq 0.50$) to strong ($r > 0.50$). The correlation between MCQ-30 total score and AnTi-MW was strong, indicating high level of convergent validity.

Table 5. Correlations of the MCQ-30 subscales with meta-worry and trait anxiety (n=157)

MCQ-30	AnTi-MW	STAI-T
Cognitive confidence	0.30*	0.14
Positive beliefs	0.38*	0.27*
Cognitive self-consciousness	0.22*	0.21*
Uncontrollability and danger	0.61*	0.39*
Need to control thoughts	0.47*	0.32*
Total scale	0.60*	0.40*

* $p < 0.01$

MCQ-30=Metacognitions Questionnaire-30.

AnTi-MW=Meta-worry subscale of the Anxious Thoughts Inventory.

STAI-T=State Trait Anxiety Inventory-Trait form.

Association between metacognitions and trait anxiety

The correlations between MCQ-30 total and subscale scores and STAI-T are displayed in table 5. All of these correlations were significant apart from the correlation between "cognitive confidence" and trait anxiety. However, "positive beliefs" and "cognitive self-consciousness" were weakly associated with trait anxiety.

Discussion

The results of the present study provide empirical evidence for the dimensionality of the Greek version of the MCQ-30. In accordance with the original scale, the Greek version has been found to be composed of five factors. Reliability analyses of the instrument and its subscales indicated high internal consistency and stability across time. In addition, the significant correlation between MCQ-30 and the related construct of meta-worry indicated high convergent validity. Our results are consistent with the findings of previous studies on the reliability and validity of the MCQ-30.^{14,16-19}

Table 4. Internal consistency and test-retest reliability of MCQ-30.

MCQ-30	Cronbach's Alpha	Guttman split-half coefficient	Test-retest correlations
Cognitive confidence	0.83	0.78	0.87
Positive beliefs	0.87	0.88	0.69
Cognitive self-consciousness	0.76	0.79	0.79
Uncontrollability and danger	0.84	0.86	0.72
Need to control thoughts	0.71	0.70	0.62
Total score	0.88	0.87	0.80

The factorial solution in the present study approaches the factor structure of the original sample.¹⁴ However, a few subtle differences have been observed in the Greek sample. For example, items "I think a lot about my thoughts" and "If I did not control a worrying thought, and then it happened, it would be my fault" seem to be more a component of uncontrollability and danger than of cognitive self-consciousness, a finding that could point to negative beliefs about thoughts being more closely linked to metacognitive monitoring and self-blame in this version of the scale/population. Cross-loading of a single variable may be due to that variable being ambiguous, or genuinely applicable to both factors.²⁶ A cross-loading that should be mentioned is that in the Greek sample "I should be in control of my thoughts all the time" is a component of both cognitive self-consciousness and need to control thoughts", whereas in the English sample it is only a matter of need for control, a finding that has been observed in a previous study conducted in Turkey.¹⁷

The Greek sample scored higher in the MCQ-30 and its subscales than the English sample in the original study.¹⁴ For example, the mean of the total MCQ-30 in the original version was 48.41 (± 13.31) and in the present study 61.27 (± 12.59). The same tendency has been found in a previous study with a Turkish non-clinical sample,¹⁶ whereas the means in the Korean study ranged between those in our study and in the original one.¹⁹ The question arising is whether these differences and similarities between the studies are chance findings or whether they reflect cultural differences, an issue that would be interesting to investigate further.

On the other hand, only in the present study women scored significantly higher than men in the overall MCQ-30 and the "uncontrollability and danger" and "need to control thoughts" subscales. Gender differences in MCQ-30 scores have been tested in two previous studies. In the original study, no significant difference between genders was found in the MCQ-30 total score and any of its subscales.¹⁴ In a more recent Turkish study, men scored significantly higher than women in all MCQ-30 subscales apart from "uncontrollability and danger" and "cognitive confidence".¹⁶ It would be of clinical interest to explore whether gender differences in metacognitions are associat-

ed with respective differences in the prevalence of emotional distress between men and women.

In the present study, worry-related metacognitive activity was significantly associated with trait anxiety. Specifically, negative beliefs about uncontrollability and danger of thoughts were more strongly correlated with trait anxiety than all the other metacognitive belief categories, consistent with the findings of two preceding studies.^{14,27} Moreover, positive beliefs about worry and cognitive self-consciousness were weakly associated with trait anxiety in our study, as was previously found.^{14,16,19} In contrast to previous studies, we found no significant correlation between cognitive confidence and trait anxiety. This could reflect cultural differences in the association between metacognitive beliefs and anxiety in non-clinical groups. Besides, previous studies in different countries also revealed partially inconsistent results regarding the associations between the MCQ-30 factors and trait anxiety.

The MCQ-30 has already proven useful in the research on the development of psychopathological symptoms and syndromes. It has been shown that worry-related metacognitions is a predictor of anxiety symptoms and depressive symptoms,^{15,28} and alcohol abuse²⁹ in non-clinical populations. These metacognitions might also be mediators between anxiety and other psychopathological condition, such as nicotine dependence³⁰ and obsessive-compulsive symptomatology.²⁷ Moreover, the role of metacognitions in the course and the prognosis of mental disorders warrants further investigation. Recent studies using MCQ-30 found specific associations between metacognitions and symptom severity in chronic fatigue syndrome,³¹ poor insight in OCD³² as well as the outcome of exposure therapy in OCD patients.³³

In conclusion, the findings of the present study indicate that the Greek version of the MCQ-30 is a comprehensible and psychometrically adequate instrument, as well as a reliable tool in assessing a range of dimensions of metacognitions in a Greek non-clinical population. The Greek version of this scale facilitates cross-cultural research in metacognition and wider testing of the metacognitive approach to emotional vulnerability, psychological disturbances and mental disorders.

Εκτίμηση των σχετιζόμενων με την ανησυχία μεταγνωσιών: Η ελληνική εκδοχή του Ερωτηματολογίου Μεταγνωσιών (MCQ-30)

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Το Ερωτηματολόγιο Μεταγνωσιών (Metacognitions Questionnaire-30, MCQ-30), που εκπονήθηκε από τους Wells και Cartwright-Hatton (2004), συνιστά ένα εργαλείο πολυδιαστασιακής εκτίμησης των μεταγνωσιακών παραγόντων που θεωρούνται σημαντικοί σύμφωνα με το μεταγνωσιακό μοντέλο των ψυχολογικών διαταραχών. Η παρούσα μελέτη είχε ως πρωταρχικό της στόχο να εξετάσει την εσωτερική συνοχή, την αξιοπιστία χορήγησης-επαναχορήγησης, τη συγκλίνουσα εγκυρότητα και την παραγοντική δομή της ελληνικής εκδοχής του ερωτηματολογίου MCQ-30. Επιπλέον, διερευνήσαμε τις συσχετίσεις των εξαγόμενων παραγόντων με το σταθερό άγχος σε ένα δείγμα του ελληνικού πληθυσμού. Το δείγμα της μελέτης ήταν μη-κλινικό, αποτελούμενο από 547 συμμετέχοντες (213 άνδρες και 334 γυναίκες), που συμπλήρωσαν την ελληνική εκδοχή του ερωτηματολογίου MCQ-30. Ένα μέρος του συνολικού δείγματος, αποτελούμενο από 157 συμμετέχοντες, συμπλήρωσε επίσης την υποκλίμακα Trait Anxiety του ερωτηματολογίου State-Trait Anxiety Inventory (STAI-T) και την υποκλίμακα Meta-worry του ερωτηματολογίου Anxious Thought Inventory (AnTi-MW). Σε τριάντα συμμετέχοντες επαναχορηγήθηκε το MCQ-30 εντός χρονικού διαστήματος τριών έως πέντε εβδομάδων. Από τα αποτελέσματα της μελέτης επιβεβαιώθηκε η διαστασιακότητα του MCQ-30 και οι πέντε παράγοντες που εξήχθησαν, ήταν συμβατοί με αυτούς της αρχικής, αγγλικής εκδοχής του ερωτηματολογίου: (1) θετικές πεποιθήσεις για την ανησυχία, (2) αρνητικές πεποιθήσεις για την ανησυχία, που αφορούν στην αδυναμία ελέγχου και τον συνεπαγόμενο κίνδυνο, (3) νοητική αυτοπεποίθηση, (4) πεποιθήσεις για την ανάγκη ελέγχου των σκέψεων και τις αρνητικές επιπτώσεις από τη μη άσκηση ελέγχου επ' αυτών και (5) νοητική αυτοσυνείδηση. Το ερωτηματολόγιο MCQ-30 επέδειξε υψηλό επίπεδο εσωτερικής συνοχής και αξιοπιστίας χορήγησης-επαναχορήγησης. Η ισχυρή συσχέτιση μεταξύ της συνολικής βαθμολογίας στο MCQ-30 και αυτής στο AnTi-MW αποτελεί ένδειξη υψηλού επιπέδου συγκλίνουσας εγκυρότητας. Επιπλέον, σημαντικές ήταν όλες οι συσχετίσεις μεταξύ της συνολικής βαθμολογίας στο MCQ-30 και στις υποκλίμακές του και του STAI-T, με μόνη εξαίρεση τη συσχέτιση μεταξύ «νοητικής αυτοπεποίθησης» και σταθερού άγχους. Το ελληνικό δείγμα παρουσίασε υψηλότερες μέσες βαθμολογίες στο συνολικό MCQ-30 και τις υποκλίμακές του σε σύγκριση με το αγγλικό δείγμα της αρχικής μελέτης. Επίσης βρέθηκε ότι οι γυναίκες είχαν σημαντικά υψηλότερες βαθμολογίες από τους άνδρες στο συνολικό ερωτηματολόγιο και στις υποκλίμακες «αδυναμία ελέγχου και κίνδυνο» και «ανάγκη ελέγχου των σκέψεων», ενώ στην αρχική μελέτη δεν παρατηρήθηκαν σημαντικές διαφορές μεταξύ των δύο φύλων. Πρέπει να διερευνηθεί περαιτέρω αν οι παρατηρούμενες διαφορές στα επίπεδα βαθμολογίας στο MCQ-30 και στην επίδραση του φύλου αντανακλούν πολιτισμικές διαφορές. Τα ευρήματα της παρούσας μελέτης δείχνουν ότι η ελληνική εκδοχή του MCQ-30 αποτελεί ένα εύχρηστο και ψυχομετρικά έγκυρο και αξιόπιστο εργαλείο για την εκτίμηση μεταγνωσιών σχετιζόμενων με την ανησυχία στον ελληνικό πληθυσμό.

Λέξεις ευρετηρίου: Ερωτηματολόγιο μεταγνωσιών, ψυχομετρικές ιδιότητες, μεταγνωσιακές πεποιθήσεις, ανησυχία, ψυχολογικές διαταραχές.

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