Validation of the Self-Regulation Eating Behavior Questionnaire Scale in the Greek Population

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Abstract

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Background: Dietary behavior has been linked to various health problems and its assessment is a crucial part of the pertinent research. In the Greek population, a tool for measuring dietary behavior is missing. Self-Regulation Eating Behavior Questionnaire (SREBQ) is a self-administered scale that assesses the ability of a person to change his/her eating behavior and food choices.
Aim: To validate the SREBQ in the Greek population.
Methods: Firstly, the SREBQ was forward and backward translated and was administered in a pilot sample of few individuals. Next, 89 obese participants (71.9% women, 46.3 ± 14 years old) answered SREBQ. The psychometric properties tested were construct validity, predictive validity and internal reliability.
Results: Principal component factor analyses confirmed the construct validity of SREBQ. The internal consistency was satisfactory (Cronbach's alpha = 0.745). The mean score for this sample was 16.24 ± 16 (range 6-25). Currently working participants showed significantly less restraint than unemployed (p = 0.042). No other significant correlations were found with the variables of the study. Overall, 78.3% and 88% of the sample declared that they were willing to avoid "tempting foods" and follow a healthier diet, respectively.
Conclusions: Our findings confirmed the good psychometric properties of the Greek SREBQ version. Future studies can safely incorporate this scale in their research protocol.

Introduction

Dietary behavior (DB) is a complex and elusive entity determined by many social-cognitive and environmental factors (e.g. political environment, shift work, habits, motivational regulation etc)(1). More importantly, DB has been linked to many health problems, such as cardiovascular diseases, cancer and increased mortality (2–4). Numerous interventions have been developed aiming at DB change in order to prevent disease occurrence and increase health-related quality of life (5). It is thus evident that DB assessment is crucial both for research and clinical or health promotion practice. The Self-Regulation and Eating Behavior Questionnaire (SREBQ) is a newly introduced tool validated for the first time in the UK, showing robust psychometric properties (6). The aim of this study was to validate SREBQ in a Greek sample of obese individuals.

Methods and Materials

A total of 89 obese individuals (71.9% women, 46.3 ± 14 years old) answered SREBQ. Participants were outpatients visiting regularly the Obesity Clinic of Laiko Hospital in Athens, Greece. Firstly, the SREBQ was forward and backward translated and was administered in a pilot sample of few individuals. Then, the psychometric properties (i.e. construct validity, predictive validity and internal reliability) were assessed in the total study sample of obese patients. Analysis was performed using SPSS 21.0 (Chicago IL).

Results

No linguistic problems of the Greek version of SREBQ (SREBQ-GR)were reported. Principal component factor analysis confirmed the one-factor solution, with three positive and two negative factor loadings, validating the construct validity of GR-SREBQ (Table 1). The internal consistency was found satisfactory (Cronbach's alpha = 0.745). The mean score for this sample was 16.24 ± 16 and the range was 6-25 which covers adequately the theoretical range of 5-25. Currently working participants showed significantly less dietary restraint than unemployed ones (p = 0.042)(Figure 1). No other significant correlations were found with the other variables of the study (i.e. gender, age, education, BMI, marital and working status). Overall, 78.3% and 88% of the sample declared that they were willing to avoid "tempting foods" and follow a healthier diet, respectively.

Table 1. Principal Component Analysis and Reliability Results for the Greek Version of Self-Regulation and Eating Behavior Questionnaire (SREBQ-GR).

Questions	Factor Loading
Item 1 Εγκαταλείπω πολύ εύκολα την «διατροφική πρόθεσή» μου.	0.874
Item 2 Αντιστέκομαι στα «δελεαστικά τρόφιμα».	-0.683
Item 3 Αποσπάται εύκολα η προσοχή μου από τον τρόπο που έχω αποφασίσει να τρέφομαι.	0.847
Item 4 Αν δεν τρέφομαι με τον τρόπο που έχω αποφασίσει, κάνω αλλαγές στη διατροφή μου.	-0.335
Item 5 Μου είναι δύσκολο να θυμάμαι τι έχω φάει καθ' όλη τη διάρκεια της ημέρας.	0.725
Eigenvalue	2.59
%Variance	51.7%
Cronbach's alpha	0.745
Kaiser-Meyer-Olkin = 0.752, Barlett's test: F(10)=127.14, p<0.0001	

Discussion

SREBQ-GR is a short and easily self-administered scale that assesses the ability of a person to change his/her DB. SREBQ has been previously validated in the UK showing excellent psychometric properties (6). In this study, the GR-SREBQ was validated in a small sample of obese patients. No linguistic problems were detected reflecting the simple nature of the questionnaire. Also, although the sample was small, factor analysis confirmed the construct validity of the tool. No association with BMI was detected, which could be explained by the relative decreased variance of BMI within the study's participants. However, about 80% of the obese people reported willingness to change into a healthier diet. Since these patients have been voluntarily visiting an Obesity Clinic using its prevention services, this could be an indirect verification of the predictive ability of the tool. Interestingly, employed participants reported significantly less dietary restraint than unemployed, as previously documented (1).

Figure 1. Employed Obese Participants Had Significantly Lower GR-SREBQ Scores than Unemployed Ones



Conclusions

Our findings confirmed the good psychometric properties of the SREBQ-GR. Future studies, especially in obese participants, can safely incorporate this scale in their research protocol.

Future Directions

Future validation studies should expand these results to other populations.

Contact Information

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