

---

## MÉTHODOLOGIE

---

# Étude de validation de la version française du Body Shape Questionnaire

A. ROUSSEAU<sup>(1)</sup>, A. KNOTTER<sup>(1)</sup>, P. BARBE<sup>(2)</sup>, RM. RAICH<sup>(3)</sup>, H. CHABROL<sup>(1)</sup>

**Résumé.** Le but de l'étude est l'adaptation, en langue française, d'un questionnaire anglo-saxon d'insatisfaction corporelle : Body Shape Questionnaire (BSQ, Cooper et al., 1987) et de tester sa fidélité et sa validité concourante sur un échantillon de 242 étudiantes. Les relations entre les catégories de poids et l'insatisfaction corporelle et les facteurs issus de l'analyse factorielle ont été explorées. Nous avons procédé au calcul des coefficients alpha, à un test de fiabilité test-retest et à une analyse factorielle. La validité concourante du BSQ a été évaluée à partir de la comparaison avec un autre test : l'Eating Disorder Inventory (EDI, Garner et Olmsted, 1984). Enfin, des analyses statistiques inférentielles (Anova) ont été réalisées. Les coefficients alpha relatifs au test/retest du BSQ sont élevés (0,95/0,94) ainsi que ceux pour le test/retest de l'EDI (0,85/0,84). Ces résultats mettent en évidence une très bonne consistance interne des 2 instruments. L'analyse factorielle en composantes principales suggère une solution à 4 facteurs : évitement et honte sociale de l'exposition du corps, insatisfaction corporelle par rapport aux parties inférieures du corps, usage de laxatifs et de vomissements pour réduire l'insatisfaction corporelle, cognitions et comportements inadaptés afin de contrôler le poids. Ces 4 facteurs expliquent 55,2 % de la variance totale. Les analyses statistiques inférentielles ont mis en évidence une relation significative entre la catégorie de poids et le score total au BSQ et entre la catégorie de poids et le score sous les facteurs 1, 2 et 4. La version française du BSQ se présente comme un instrument ayant de bonnes qualités métrologiques. Il permettrait d'explorer le rôle d'une préoccupation excessive de l'apparence du corps dans le développement, le maintien et le traitement des troubles du comportement alimentaire.

**Mots clés :** Fiabilité ; Indice de masse corporelle ; Insatisfaction corporelle ; Validité.

### **Validation of the french version of the Body Shape Questionnaire**

**Summary.** In today's societies, pressures from the idea of thinness are omnipresent and lead to a corporal dissatisfaction with an excessive preoccupation of the body's image. It seems important to have, in France, a device that can evaluate the corporal dissatisfaction degree, for the reason that the troubles of the body's image is a common diagnostical category to the anorexia and bulimia (DSM IV, 1994). Cooper et al. (1987) have developed one-dimensional questionnaire of 34 items in order to measure the worries towards the weight and the shape of the body, called the « Body Shape Questionnaire » (BSQ). Its concurrent validity has been shown with the using of the corporal dissatisfaction underscore of the Eating Disorders Inventory (EDI ; Garner et Olmsted, 1984) and the using of the diagnostic questionnaire : Eating Attitude Test (EAT ; Garner et Garfinkel, 1979). The BSQ gives us a way to explore the role of extreme worries towards the body's appearance in the development, the keeping and the treatment of eating disorders. From this point the BSQ is a tool widely used on an international level in researches on the eating disorders. It has been validated in Spain and in Germany whereas it has not been yet subject to a validation in France. For this reason, we proposed to use the BSQ on the french population. Methodology – The sample is made of 242 university girl students. The average age is 20.7 years old with a standard deviation of 2.26. The size and the weight helped us to calculate the Body Mass Index (BMI) which is in fact the weight divided by the size squared. The average BMI is  $21.06 \text{ kg/m}^2 \pm 2.87$ . Regarding the evaluating devices, the BSQ is presented as a scale of 34 items marked by 6 different points : 1 never, 2 barely, 3 sometimes, 4 often, 5 very often, 6 always. After getting the authorization from the authors to respect during these kinds of procedures, we have started validation. The corporal dissatisfaction

---

(1) Centre d'Études et de Recherches en Psychopathologie, Université de Toulouse-Le Mirail, 31058 Toulouse.

(2) Département de nutrition, CHU Rangueil, Toulouse.

(3) Université Autonome de Barcelone, 08193 Bellaterra, Espagne.

Travail reçu le 25 mars 2003 et accepté le 10 juin 2004.

Tirés à part : A. Rousseau (à l'adresse ci-dessus).

*under-scale of Eating Disorder Inventory (EDI, Garner et al., 1991) is made of 9 items and has a scale of 6 points going from « never » to « always ». In order to evaluate the accuracy of the Body Shape Questionnaire (BSQ) in France, we made a test/retest. The concurrent validity of the BSQ has been evaluated by the EDI. The 242 subjects have been asked to fill in both questionnaires during the test and the re-test (4 weeks after the test). We have evaluated the accuracy of the BSQ with the calculation of the constancy test/retest (Pearson's  $r$ ) and the measure of the internal consistency (Cronbach's alpha). Then, we tested the validity regarding an external criteria. The validation procedure is based here on an examination of the correlations between the tests results (BSQ) and another measure taken as criteria (EDI). The solutions proposed by the factorial exploratory analysis have been tested by confirmatory analysis using the 2 index of adjustment : the GFI (« Goodness of Fit Index ») and the CFI (Comparative Index of Bentler) which, greater than 0.85, shows a satisfying adjustment and the RMC (redidue) which has to be less than 0.10 for a satisfying adjustment. Finally, inferential statistical analysis have studied the relations between the weight's category and the total result at the BSQ and the results of the factors sprung from factorial analysis. Results – Correlations between the items of test/re-test BSQ are greater than 0.93. The alpha coefficient is high for the test (0.95) and also for the re-test (0.94). This shows a very good internal consistency between the 34 items of the BSQ. Concerning the EDI, the correlation between the test/re-test are greater than 0.98. The alpha coefficient of Cronbach is high : 0.85 for the test and 0.84 for the re-test. The Pearson's  $r$  of the BSQ/EDI test and the BSQ/EDI re-test greater than 0.7 point out the concomitant validity of the BSQ with the EDI. We made a factorial analysis of the BSQ (test) on the 242 subjects. We used the extraction of the main components method with the extraction's rule of the curve for the real values. The transformation method used here is the normalised Varimax. The factorial analysis shows four factors with their own value greater or equal to 1 (15.1 ; 1.77 ; 1.48 ; 1.08). This solution concerning these four factors explains 55.2 % of the total variance. The oblique rotations analysis of the four factors seems to point out a high correlation between these latters (from 0.54 to 0.77), this suggests a hierarchical pattern with a single factor which is confirmed with an Cronbach's alpha of 0.95. Then, we chose to gather around each selected factors the items presenting a substantial saturation, greater than or equal to 0.5 and which are saturated by only one factor. The first factor obtained by the factorial analysis of the BSQ has been called « social avoidance and shame of the exposure of the body ». The internal coherence of this factor is satisfactory (Cronbach's alpha = 0.87). The second factor obtained has been called « body dissatisfaction compared to the lower parts of the body (Cronbach's alpha = 0.90). The third factor has been called « using laxatives and vomiting in order to reduce body dissatisfaction » The fourth factor has been called « unsuited cognitions and behaviours in order to control the weight (Cronbach's alpha = 0.76). The solution with 1 and 4 factors has been tested by a confirmatory analysis. The adjustment parameters of the unifactorial pattern were not satisfactory ( $GFI = 0.76$ ,  $CFI = 0.83$ ,  $RMC = 0.5$ ). The 4 factors pattern adjusted better to the data ( $GFI = 0.86$ ,  $CFI = 0.90$ ,  $RMC$*

= 0.5). In order to determinate the differences between the weight/score categories to the BSQ score in comparison to the 4 factors (coming from the factorial analysis), several Anova have been released as well as post-hoc tests (test of Sheffé). There is a significant effect of the weight category on the corporal dissatisfaction (BSQ result),  $F(2.230) = 11.34$ ;  $p < 0.0001$ . Scheffe's test placed in a prominent position the fact that the subjects having an overweight ( $99.85 \pm 31.34$ ) have a corporal dissatisfaction significantly greater than the subjects having a normal weight ( $74.08 \pm 27.94$ ) and presenting a thinness ( $63.19 \pm 23.61$ ). We pointed out a significant effect of the weight category on factor one « social avoidance and shame of the exposure of the body » [ $F(2.232) = 20.18$ ;  $p < 0.001$ ], on factor 2 « body dissatisfaction compared to the lower parts of the body » [ $F(2.232) = 6.38$ ;  $p < 0.005$ ] and factor 4 « reduce body dissatisfaction and unsuited cognitions and behaviours in order to control the weight » [ $F(2.232) = 5.67$ ;  $p < 0.005$ ]. However, there is no effect in the weight category for factor 3 « using laxatives and cominting in order to reduce the corporal dissatisfaction » [ $F(2.232) = 5.67$ ;  $p > 0.05$ ]. Sheffe's test highlighted the fact that the subjects having overweight have a result more important than the ones having a normal weight and presenting a thinness for factor 1.2 and 4. Discussion – The BSQ « French version » seems in fact to present the same metrical qualities than its original Anglo-Saxon and Spanish versions. The concluding results invite us to continue our study of the BSQ including in our patients, the bulimic subjects and the ones who are worried about corporal aspect. Its implications on the clinical field could be really interesting especially on people suffering from the eating disorders. Then, the BSQ could provide us a way to explore the role of an extreme worry of the body's appearance in the developement, the maintenance and the treatment of the eating disorders.

**Key words :** Body dissatisfaction ; Body mass index ; Reliability ; Validity.

## INTRODUCTION

L'image corporelle est la manière dont chacun se perçoit, s'imagine, se sent par rapport à son propre corps (23). Dans nos sociétés actuelles, les pressions du culte de la minceur véhiculées notamment par les médias sont omniprésentes. Elles entraînent une insatisfaction corporelle qui est associée à une préoccupation excessive de l'image du corps. Les critères de beauté concernant le corps ont changé suivant les époques et les différentes cultures. Nous observons, par exemple, une « occidentalisation » des valeurs esthétiques, notamment dans les pays asiatiques où les critères esthétiques traditionnels (valorisation du surpoids car associé à la richesse et à la santé) ne sont plus valables dans la Chine moderne et entraînent une insatisfaction corporelle importante (5, 24). Aux États-Unis, le degré d'insatisfaction corporelle varie selon les ethnies ; Crago et al. (8) ont constaté que les femmes noires américaines ont beaucoup moins d'insatisfaction et moins de préoccupation par rapport au corps que les femmes blanches. Ces résultats sont en contradiction avec

Download English Version:

<https://daneshyari.com/en/article/9379530>

Download Persian Version:

<https://daneshyari.com/article/9379530>

[Daneshyari.com](https://daneshyari.com)