

Poster presentation

Spanish validation of Bad Sobernheim Scoliosis Questionnaire for adolescents wearing braces

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Objectives

Because of the present interest in health-related quality of life in the scientific community, the aim of our research is to demonstrate the cross-cultural reliability of the German Bad Sobernheim Scoliosis Questionnaire (BSSQ) applied to a Spanish population of adolescents with scoliosis undergoing bracing treatment.

Background

Adolescence is considered a critical phase, and adolescent idiopathic scoliosis (AIS) can have a considerably negative impact on a patient's quality of life (Payne, Ogilvie, Resnick, Kane, Transfeldt, Blum, 1997). AIS can also produce psychosocial problems through potentially detrimental effects on body image, and bracing can exacerbate this problem. There are currently two questionnaires designed to measure quality of life in adolescents with scoliosis who are undergoing bracing treatment: the German Bad Sobernheim Stress Questionnaire (BSSQ), and the Greek Brace Questionnaire (BrQ).

Methods and results

The method followed the trans-cultural adaptation of the questionnaire through a translation and back-translation, according to the use in the international literature. The translated questionnaire was administered to a Spanish sample consisting of 35 adolescents, aged between 10 and 16 years, with scoliosis being treated with the same bracing treatment (Rigo System Chêneau Brace). The SRS-22 and a socio-demographics data questionnaire were also

used. For the statistical analysis, reliability and validity were calculated on SPSS 16.0:

- reliability: - test-retest method with a Pearson correlation coefficient of 0.902 ($p < 0.01$); - internal consistency, with a Cronbach's alpha of 0.809
- validity: -criterion validity, using SRS-22 as criterion, Pearson correlation coefficient of 0.656 ($p < 0.01$); -construct validity, in an exploratory Factorial Analysis: two Main Components are found to explicate the variance at 60.8%

Conclusion

The BSSQ is reliable with a satisfactory internal consistency and temporal stability. It has sufficient criterion validity and a latent structure of two components according to the main components analysis. The questionnaire can be reliably used to assess quality of life among Spanish adolescents receiving bracing treatment for scoliosis. The good statistical features in the Spanish population are similar to those of the German population. In a future research, a hope is to increase the sample size, incorporate different types of braces, and clarify the structure of the questionnaire.