Cross-cultural adaptation and validation of the Child Perceptions Questionnaire (CPQ11-14) among children in Lebanon

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Abstract

Background: The aim of this study was to assess the reliability, reproducibility, convergent and discriminant validity of the Child Perceptions Questionnaire (CPQ)11-14 in a group of 11-14-year-old Lebanese children.

Methods: This was a cross-sectional study. Children aged between 11 and 14 years were recruited between March and June 2014 from five schools in Beirut and surroundings: a central public school and four private schools. Data were collected from self-administered questionnaires and a clinical intraoral examination was conducted. In addition to the CPQ11-14, the questionnaires included socio-demographic characteristics, questions about each child's perception of oral and general health status and of dental aesthetics, satisfaction with the dental conditions and the need for dental treatment. The oral examination included the number of teeth affected by caries (D3 level), fillings, the number of missing teeth and an orthodontic assessment of malocclusion using the Dental Aesthetic Index (DAI).

Results: The final number of included children was 693 and their mean age was 13.14±0.82 years; 54.4% were boys. The mean CPQ score was 15.60±14.55, range 0 to 110. Cronbach's alpha of the global CPQ score was 0.880 and varied from 0.897 to 0.908. The reproducibility of the overall CPQ score was important, as was the CPQ score for each of the four domain scores (ICC>0.682; p<0.001). Higher CPQ scores were found for children with self-perceived poor general health (p<0.001) or oral health (p<0.001), unsatisfactory oral health (p<0.001), needs for dental treatment (p<0.001) and perception of dental aesthetic problems (p<0.001). Multiple linear regression models show that the recruitment setting, the DMFT index and the DAI index were significantly associated with the CPQ global score (p=0.004).

Conclusion: The Lebanese version of the CPQ11-14 showed excellent psychometric properties and was able to distinguish children with different oral conditions. Additional longitudinal studies should be performed to test the properties of this questionnaire in clinical samples.

Keywords: Child Perceptions Questionnaire – Lebanon – Oral Health – Psychometric - Child