Reviewer’s report

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

Version: 0 Date: 15 Feb 2017

Reviewer: Ankur Singh

Reviewer’s report:

The cross validation of a tool in a new context is valuable and that makes this an important work. This reviewer has main concerns regarding the discussion of the findings. The paper will also benefit from a thorough editing for language. The reviewer has made some suggestions/comments across the text for the consideration of authors:-

Background:

1) The key rationale behind this research seems to be the contextual differences between Lebanon and other Arabian countries. The authors mention these differences as a free country without a generalised public health insurance system. The consequence of which is that the dental healthcare access is difficult for children with low incomes. However, these arguments are not supported by any reference nor they are elaborated enough to explain what consequences it may have on oral health related quality of life different to other countries where the Arabic version of the tool is validated. This elaboration is critical to prove the value in this work within the background apart from the overarching importance of measuring OHRQoL along with clinical measures. The discrepancies in health care systems, social and cultural aspects with other Arabic countries should be detailed rather than just mentioned. This is very important for an international audience.

2) The authors mention that the aim was to test the reliability, reproducibility and convergent validity of the tool - It will be helpful to explain in the background or methods what each of these aspect of validation means and how likely the 'discrepancies' may impact each of these.

Methods:

1) Sample size calculation should be a little more detailed. Is setting an arbitrary number at 600 based on previous study a standard method? The two referred studies are from Australia and Brunei and it will be helpful to justify the sampling procedure.

2) More clarification is also required regarding the sample selection and the choice of schools. In the discussion section authors have discussed at length regarding the socioeconomic differences according to school status (public vs private) while there is
little variability as there was only one public school. Additionally, what level of individual variation in socioeconomic position of individual children within these schools is possible?

3) There is little explanation regarding why dental caries and orthodontic treatment need were key clinical outcomes considered in the study? What about dental trauma?

4) It will be helpful to include references to justify the methods for testing reliability, reproducibility and concurrent validity in the section on statistical analysis.

5) It will be helpful to define each of the assessment criteria within the methods section or use references:- test-retest reliability, reproducibility, and concurrent and discriminant validity. The analysis aspect covers their operationalization without definitions except for concurrent validity.

Results

1) Where is the description of sample?

2) The authors have used adjective 'excellent' within the result section and there is no threshold to decide that. It is better to mention the findings and let readers interpret it within this section.

Discussion

1) Avoid repeating results in the discussion section - (ICC=0.71).

2) Provide justification for this statement: - 'Values greater than or equal to 0.6 are considered acceptable'.

3) Where is the reference for Canadian and Italian studies?

4) Nowhere in the discussion section have the authors re-visited the claim of contextual differences between Lebanon and other Arabic countries where the tool has been validated. How were the current findings different to those?

5) A large part of discussion section again tries to establish the rationale behind measuring OHRQoL in orthodontic children. This was not an aim of the study and not sure why it is discussed at this length.

6) Similar to the last point, investigating the role of socioeconomic status was never an objective of the study and has been discussed in much detail. A lot of statements are made that require careful examination. For instance: 'Many variables like parents' income and educational level, were used to evaluate socioeconomic level but this requires
substantial efforts and is difficult in our society. Thus, the use of type of school as an indicator of socioeconomic status can facilitate epidemiological surveys of oral health." How is this challenge related to the objective of this study? What do the authors mean by substantial effort? It is not clear what sociological dimensions does the type of school capture and why are the authors instructing all future epidemiological studies to use 'type of school' as an indicator of SES.

7) The authors have not presented the socio-economic characteristics of children and have neither described the sample. It is not clear why the shift in discussion from the findings on validation to the predictors of OHRQoL is made. This is a problem with the discussion section and needs to be resolved. This is also apparent from the limitation "The cross-sectional design makes it difficult to evaluate the risk indicators of OHRQoL". First, this is not a limitation of cross-sectional design. Second, this was never the aim of the study.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

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If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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