Author's response to reviews

Title: Reliability and validity of a questionnaire for self-assessment of complete dentures

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Dear Ms. Magdalena Morawska,

We are most grateful to you and reviewers for the helpful comments on the original version of our manuscripts. We have taken all these comments into account and submit a revised version of our paper.

We have addressed all the comments as indicated on the attached response letters.

We hope that the explanations and revisions of our work are satisfactory, and the revision of our paper is now suitable for publication in BMC Oral Health.

We are looking forward to hearing from you at your convenience.

Yours sincerely,

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We are grateful for the critical comments and useful suggestions, which have helped us to improve our paper considerably. As indicated in the responses that follow, we have taken all these comments and suggestions into account in the revise version of our paper. The line numbers provided with the following responses correspond to the number of lines from the top (1-24).

1. **Background:** Last sentence of Page 4 starting "However,..... needs rewording as does not make sense.
   
   **Response**
   
   We deleted the word, ‘However’ from the sentence of the revised Background. (page 4, lines 23).

2. **Addition of suggestions re PDA from Prof Robinson requires some revisions** beginning at "The conceptual of... to positive impacts. There are grammatical errors and poor sentence structure that make this paragraph difficult to comprehend. This needs addressing please.
   
   **Response**
   
   We revised the paragraph that Prof Robinson required some revisions in the forth paragraph of the revised Background (page 5, line 17 – page 6, line 1).

3. **Methods:** It would be beneficial to readers to include how we interpret cronbachs alpha as the value is meaningless otherwise and requires a reference. You include the interpretation of effect size in the discussion but this could also be reported in the methods section.
   
   **Response**
   
   We added the descriptions ‘Cronbach’s α for summary score of 0.70-0.80 are considered satisfactory for a reliable comparison between groups and more than 0.90 are required for clinical usefulness of the instrument [19].’ in the section of ‘Reliability and Validity’ of the revised Methods (pages 8). In addition, we added the descriptions ‘Effect size was used to investigate the ability to detect change to the treatment.’ and ‘To facilitate decisions regarding the clinical importance of the observed change in the measure, some benchmarks have been proposed; a value of 0.2 or less, 0.5 and 0.8 or greater has been proposed to represent low, moderate and high ability to detect change, respectively [23].’ in the section of ‘Ability to detect
change’ of the revised Methods (pages 9).

4. Statistical analysis, this tells us only what software was used and not what was undertaken, please report what tests etc were conducted in this study.
Response
We added the description ‘Internal consistency of the PDA was assessed by Cronbach’s α and average inter-item correlation and test-retest reliability was assessed by determining the interclass correlation coefficients (ICCs) and 95% confidence interval of the test-retest difference. Discriminant validity was assessed by difference between PDA scores before and after treatment using a paired t-test. Values of $p < 0.05$ were considered significant for the paired t-test. Ability to detect change to the questionnaire was investigated by effect size.’ in the section of ‘Statistical Analysis’ of the revised Methods (pages 9).

5. Results; It would be nice for the authors to report the findings of note from Table 4 as how they are reported now really adds nothing to this section.
Response
We added the descriptions ‘It’s notable that the some question items in the ‘importance’ subscale exhibited a ‘ceiling effect’. In addition, the ‘lower denture’ and ‘expectation’ subscales had lower means for the Before-1 PDA scores than that seen with the other subscales’ in the start of the revised Results (page 9, lines 21-24)

6. Discussion: It would be helpful for the authors to do a quick summary of the results to remind the readers of the important findings before interpreting in depth what these findings mean.
Response
We added the descriptions ‘In the present study, both the reliability assessed by internal consistency and test-retest reliability and the validity assessed by discriminant validity of the PDA were satisfactory. Therefore, the PDA is suitable for use in clinical settings.’ in the first paragraph of the revised Discussion (page10, lines 17-19).