Reviewer's report

Title: A Pilot Study to assess Oral Health Literacy by comparing a Word Recognition and Comprehension Tool

Version: 2 Date: 9 July 2014

Reviewer: kelly jones

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New work on oral health literacy is required. The paper shows potential merit in contributing to the debate and evidence surrounding comprehension and word recognition in OHL. I have not included minor editorial comments due to the more significant structural and presentation issues.

Major revisions.

1. Mismatch between stated goal in the abstract ‘..to compare methods to measure OHL…’ and line 134 pag6 ‘..objective was to test feasibility of REALD-30…’.. I think this conceptual difference drives the sense of some confusion throughout the whole paper. Additionally, the conclusion begins by stating that “we developed two oral health literacy comprehension tools” but development is not stated in the objectives. Resolving these inconsistencies throughout may resolve the tension.

2. The inclusion of hypothesis reads a little like a thesis. It is advised to rework into shorter objectives to allow greater clarity in the direction of the paper and help with problem stated above.

3. The Methods section does not include any discussion on standardization of assessing comprehension of REALD-30 meaning. This needs resolving. Was any testing between assessors performed? Was a check list for acceptable responses used by assessors?

4. SD are not presented for all variables as stated line 228. - only in the dry mouth comprehension table. The tables may benefit from inclusion of 95% CI. Additionally, the multivariate results are not included in a Table. Why not? What was the testing to show? This seems a more important table to present than table 1 which reports the bivariate responses and needs only limited referencing in the text. Paragraph beginning line 321 refers to multivariate analyses which are not presented in a Table yet used to provide evidence to support some stated hypotheses. This is problematic.

5. The results section jumps around, presenting results for table 1, then table 2 then jumps back to table 1. This is distracting and adds to confusion of the reader. Resolving point 1 above may help with this presentation difficulty. Table 1 gets a lot of attention in the text. Correlation testing is reported in the text but not presented/referred to in a table.

6. Table and column labelling needs improving
7. Results section includes paragraphs that should be in the discussion. Eg: paragraph beginning on line 255 which discusses limitations and paragraph beginning line 300.


9. The conclusion states that comprehension tests and word recognition tests enhance OHL testing but the data presented do not support this. In conflict with both the stated goal and objective.

10. Table 2 and 3 shows only percentages but hypothesis 2 refers to correlations.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests’