Author's response to reviews

Title: Additional psychometric data for the Spanish Modified Dental Anxiety Scale, and psychometric data for a Spanish version of the Revised Dental Beliefs Survey

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Author's response to reviews: see over
We are grateful to the reviewers for their detailed and thoughtful review of our manuscript. We have made almost all of the recommended changes in this revision. This cover letter discusses the recommendations and our responses to them.

While we agree with Anastasia (Psychological Testing) that repeated evidence of good psychometric data for a test tends to accrue to the point where researchers may say that the test “has” reliability and/or validity, we certainly agree with Reviewer 1 that psychometric data are specific to the samples in which they were studied (indeed, this is our main reason for studying these questionnaires in Spanish versions), and thus it is better to refer to validity and reliability results with reference to the samples used. We have modified the language in this revision to refer more explicitly to samples, which we hope will clarify this for the reader.

Reviewers 1 and 3 commented on the previously-reported test-retest statistic for the MDAS in the student sample. Reviewer 3 wondered if this might have been due to how the students responded (lacking commitment): this may have been so, but as we didn’t see this in the other two questionnaires the students completed, it is hard to know why we obtained the value that we did. We agree with Reviewer 1 that describing this as “anomalous” might be incorrect and have removed this from the revision. In addition, we thank the reviewer for the information about the strength of the ICCs in Fleiss’ model – according to which our previous finding would qualify as “fair to good”. (We were unable to locate the recommended text in our library, but we did find another publication by Fleiss which included the same “rules of thumb” for characterizing the values.)

Reviewers 1 and 2 commented on the material about national or regional representative data on Hispanics, but with opposite suggestions. We have opted to retain the material, but as we agree with Reviewer 2 that the data are somewhat dated, we have also included information from a more recent study (Wall and Brown, 44) to highlight the fact that oral health data on Hispanics are changing with time.

We agree with Reviewer 1 that confidence intervals should be included for the ICCs and Cronbach’s alphas, and have included them in this revision, as well as the CI for the previously-reported test-retest statistic.

We thank Reviewer 1 for pointing out that SPSS’ terminology for the intraclass correlation we chose (“two-way, mixed”) might not be understood by others. We have referenced the Shrout and Fleiss paper as suggested, and added a note that the option we chose is the same as the option used in our previous paper. We hope that this additional information will be helpful to the reader who is using other statistical software.
We agree with Reviewer 2’s comments about the title and have revised it.

In line with Reviewer 2’s suggestion, we have added a phrase stating when the study occurred.

Reviewers 2 and 3 requested additional information about the dental examiners (number and information about calibration), which we have included in this revision. Our training dentist had previously been calibrated as reported in Weinstein et al. [31]. This dentist trained the four examiners using an on-line program including rating instructions and series of photographs to be rated, followed by live examinations of participants from other studies, until he was satisfied that they were using the scoring system accurately. We did not use intra-rater reliability, although the examiners were free to review the on-line rating program as often as they wanted to (since we did not monitor this, we did not report on it in our manuscript).

As requested by Reviewer 2, we have added additional information about the conditions of questionnaire completion and monitoring to ensure that each participant completed his/her questionnaire individually. With regards to distractibility, because our monitoring prevented participants from talking with anyone other than study personnel while they completed their questionnaires, we believe that all participants completed the questionnaire under similar circumstances.

Reviewers 2 and 3 requested additional information (n, %, p-value) in the Tables and we have done so in this revision.

Reviewer 2 asked us to discuss the lack of gender difference found in our study, and we have added information in the Discussion about this. Briefly, the few other (non-representative) studies – including our own previous work – failed to find gender differences in similar dental fear measures in Spanish-speaking samples, while the single representative study we located did find that women scored significantly more fearful than men. It is unclear why most studies have found that Spanish-speaking men and women score equally fearful, since – as the reviewer pointed out – most other research with adults finds that women are more fearful than men.

We thank Reviewer 2 for pointing out our errors (.06%; references).

We are not sure we understand Reviewer 2’s question about “clinicians” at the beginning of the Background section. We have removed this phrase in the sentence, which we hope will reduce any confusion. We intend to say that anyone – dentist/dental professional, researcher, or other – can use paper and pencil measures of dental fear.

We appreciate Reviewer 2’s reminder that differences at the group level may not be applicable to individuals.

We agree with Reviewer 3 that it would be helpful to have the Spanish MDAS included in the Appendix/Additional file. Given that this is an electronic journal, there
may not be a reason to leave this out (i.e., there may not be any space limitations which might rule against printing the items again in this Additional file), and therefore we have included it in this revision. However, the Editor may disagree.

We considered Reviewer 3’s request for a new table showing the reliability and validity results, but as the validity results would be duplications of what is already included in Tables 2 and 3, we have decided not to do so.

Finally, all three reviewers commented on the number of decimal places used, but offered different suggestions. We have elected to use Reviewer 2’s suggestions.