Comment 1: Line 88 - “Inclusion criteria consisted of children age 6-18 years of age who presented to Oral and Maxillofacial Surgery (OMS) clinic for a non-TMJ related reason.” Please rewrite this phrase. Age is repeated and it is not clear if the children could have gone through any other type of surgery that interfere on the AEs.

Reply 1: Thank you for this comment, Reviewer. I have now adjusted the wording and explicitly states that children with prior surgery were excluded from the study.

Changes in the text: We have modified our text as advised (see page 5, line 101)

Comment 2: Materials and Methods: Was sample size calculation performed? Please detail the division of the sample groups and recordings. This data is better explained in the results than in the material and methods section.

Reply 2: Thank you for your comment. The goal of this paper was to determine if sounds could be recorded from the TMJ using the headset we designed, and if those recordings were repeatable for each subject. We did not present any group statistical analysis in this paper since we were not yet claiming these acoustic emissions were related between subjects. Rather, we plotted the individual features of every subjects recording as to display what the raw, recorded data showed. This is the subject of an ongoing investigation.

Changes in the text: n/a

Comment 3: Discussion “…Line 180 need for occasional sedation in children, length of time, need for specialized equipment (e.g. magnets), and potential contraindications.” remove e.g. magnets.

Reply 3: Thank you, we have made that change

Changes in the text: we have modified our text as advised (see page 8, line 188)

Comment 4: “The objective of this study is to present a novel instrument to assess temporomandibular joint (TMJ) sounds through a custom, wearable headset for recording acoustic emission of TMJ. Besides, the authors tested the repeatability and reliability of this new device on children. Some considerations are relevant to be addressed. All along the text, the authors use many personal and possessives pronouns. It will be interesting if they change the sentences removing these pronouns. For instance, in the line 80 the sentence “…present our custom, wearable headset…” could be changed to “…present a custom, wearable headset…”. Moreover, in the line 187 the sentence “Our headset is based on findings…” could be changed to “The headset used in this study is based on findings…” or something similar to this.”

Reply 4: Thank you reviewer for your comments. I have gone through the paper and changed the style from first person to third person as often as made sense. When the grammatical structure became too
convoluted with the change, I opted to maintain first person – this occurred only in stating the hypothesis for the study (line 88)

Changes in the text: The “our” and “we” usage was changed throughout the text.

Comment 5: “Title is ok. In the Abstract, in the line 24, the authors use the initials RMS without discriminating what it means. Please, insert this information.”

Reply 5: Thank you for pointing this out.

Changes in the text: This change was made in the Abstract, line 31.

Comment 6: Materials and methods … some questions rise after these information: why do you mixed gender if the quantity of children of each one is different? Furthermore, the range of the ages is too large when it comes to children. For example, a 16-years old girl is very different from a 7-years old boy. Do you agree?

Reply 6: Thank you for these comments. This project was an investigation of headset, rather than individual groups. Therefore, including both genders and various age group was beneficial. We were interested to observe headset captured sounds in all of those groups. In future projects, we may choose to divide the groups and analyze sounds by gender, age groups, diseases, etc.

Changes in the text: n/a