**Author’s response to Reviewer/Editor critique – round 2**

**Overview of changes**

I have uploaded the second revisions for my paper “The acoustic characteristics of Swedish vowels”. I again thank both the associate editor and the reviewers for the encouragement and helpful feedback on my work. I have revised the manuscript following reviewer 2’s suggestions.

All changes are unlined in the uploaded pdf and docx files.

**Response to reviewers’ comments**

I respond in blue below.

*Associate editor*

[…] You have addressed all of the reviewers feedback and made very careful revisions to your study which have improved the quality and clarity of your analyses. There are a handful of very minor editorial suggestions that Reviewer 2 has proposed and that I would like you to make ahead of the manuscript being ready for production.[…]

I thank the associate editor for the encouragement, and I respond to Reviewer 2’s suggestions below.

**Reviewer #1**

The paper has undergone substantial improvement and I am thankful to the author for providing a detailed response to points raised about the original submission. The methodological explanations are now more thorough and the discussion of results is more insightful and detailed. Given these enhancements, I find the manuscript to be much clearer and more robust. Therefore, I do not have any further comments or suggestions at this time, and I am satisfied with the current version of the paper.

I am pleased to hear that Reviewer 1 finds that the revised article has substantially improved.

**Reviewer #2**

It was a good suggestion by the editor to remove Study 2 from the paper. The analysis and discussion became more focussed and Study 2 can definitely be expanded into a separate paper with valuable results and discussions. Generally, the author has taken the comments and suggestions from editor and reviewers into account and made careful revisions according to these suggestions, which has further increased the quality of the paper.

I thank Reviewer 2 for the encouraging words and helpful feedback outlined below.

Minor comments:

- "I have adjusted the font size in all figures throughout the manuscript. Unfortunately, I was not able to increase the resolution for submission of revised manuscript due to file size limit."

* I sincerely hope that the file size limit will be removed so that the paper can be published with proper resolution of the images
* square brackets around phonetic symbols could be removed from the graphics for better readability I have now removed the square brackets for better readability.

- p. 11: "Vowel duration and F0 was extracted across the entire vowel segment."

* this sentence is hard to interpret, because duration and F0 are not comparable measures. F0 could theoretically be measured and accounted for at several time points, just like formants, whereas duration per definition is only one single value I agree. I have revised this sentence to clarify how these two cues were measured.

- p. 18: "Figure 3 from Persson and Jaeger (2023) updated to include data from the 21 male talkers."

* in the new version there should be 24 male talkers Thank you for catching this. To avoid confusion, I have now changed this to just “male talkers”; while the updated database contains 24 additional male talkers, the subset of the database used in the analyses has 21 male talkers (because of the exclusions made in section “Materials”).

- p. 36 "a difference in vowel height between female and male talkers."

* the direction of this difference could still be stated more explicitly I agree. This is now the case.

- p. 39 "Given the substantial lowering of [ε:] and its overlap with [æ]"

* length mark missing for the second vowel Thanks for catching this. Length mark is now added.

- p. 41: "[e:] - [i:] - [y:]"

* otherwise mostly referred to as a four way distinction including [ʉ:] Yes, [~~u~~:] is now included in the contrast.