Publication list

Christine Nussbaum (ORCID-ID: 0000-0003-2718-2898)

Peer-reviewed publications:

 Lehnen, J.M., Schweinberger, S. R. & Nussbaum, C. (2025) Vocal Emotion Perception and Musicality - Insights from EEG Decoding. Sensors, 25(6), 1669. https://doi.org/10.3390/s25061669 [Empirical Paper]

*2. **Nussbaum, C.,** Frühholz, S., & Schweinberger, S. R. (2025) Understanding Voice Naturalness. *Trends in Cognitive Sciences*, *29*(5), 467-480. https://doi.org/10.1016/j.tics.2025.01.010 [Review/Conceptual Paper]

This conceptual paper provides the theoretical framework for the project. It outlines the tremendous practical importance of voice naturalness perception, identifies important gaps/shortcoming in the current literature and offers practical recommendations to address them. Most importantly, we propose a taxonomy for the concise definition of voice naturalness and link it to exiting theories of voice perception. The proposed framework offers the necessary starting point for hypothesis-driven, well-motivated empirical research questions, like the ones in the proposed PRIME project. I am the first author and carried out the main work, including writing the original draft.

 Nussbaum, C., Schirmer, A., & Schweinberger, S. R.(2024). Musicality–tuned to the melody of vocal emotions. *British Journal of Psychology*, 115(2), 206-225. https://doi.org/10.1111/bjop.12684 [Empirical Paper]

 Nussbaum, C., Schirmer, A., & Schweinberger, S. R.(2023) Electrophysiological correlates of vocal emotional processing in musicians and nonmusicians. *Brain Sciences 2023, 13*, 1563. https://doi.org/10.3390/brainsci13111563 [Empirical Paper]

- Kachel, S., Pöhlmann, M., & Nussbaum, C. (2023) Queer Events, Relationships, and Sports: Does Topic Influence Speakers' Acoustic Expression of Sexual Orientation? Proc. INTERSPEECH 2023, 4269-4273, https://doi.org/10.21437/Interspeech.2023-2087 [Empirical Paper]
- *6. **Nussbaum, C.**, Pöhlmann, M., Kreysa, H., & Schweinberger, S. R. (2023). Perceived naturalness of emotional voice morphs. *Cognition & Emotion*, *37*(4), 731-747. https://doi.org/10.1080/02699931.2023.2200920 [Empirical Paper]

This is our first empirical paper on voice naturalness where I gained substantial practical experience with the topic and got important insights into the challenges associated with naturalness research, which I can now consider in my future empirical designs. I am the first

author and carried out the main work, including writing the original draft. For details, please refer to the credit author statement in the publication.

- Nussbaum, C., Schirmer, A., & Schweinberger, S. R. (2022). Contributions of Fundamental Frequency and Timbre to Vocal Emotion Perception and their Electrophysiological Correlates. Social Cognitive and Affective Neuroscience, 17(12), 1145-1154. https://doi.org/10.1093/scan/nsac033 [Empirical Paper]
- 8. von Eiff, C. I. von, Skuk, V. G., Zäske, R., **Nussbaum, C.**, Frühholz, S., Feuer, U., Guntinas-Lichius, O., & Schweinberger, S. R. (2022). Parameter-Specific Morphing Reveals Contributions of Timbre to the Perception of Vocal Emotions in Cochlear Implant Users. *Ear and Hearing*, *43*(4), 1178-1188, https://doi.org/10.1097/aud.00000000000001181 [Empirical Paper]
- *9. **Nussbaum, C.**, von Eiff, C. I. von, Skuk, V. G., & Schweinberger, S. R. (2022). Vocal emotion adaptation aftereffects within and across speaker genders: Roles of timbre and fundamental frequency. *Cognition, 219*, 104967. https://doi.org/10.1016/j.cognition.2021.104967 [Empirical Paper]

This is a publication on perceptual adaptation in emotional voices, where I successfully implemented the paradigm I am planning for Study 2 of the PRIME project. Adaptation paradigms can be methodically challenging for several reasons (balancing duration vs. statistical power, non-standard data modelling, voice morphing, etc.). Given my previous experience with this paradigm, I can handle all of these challenges, and I am very keen to transfer this design to my work on voice naturalness. I am the first author and carried out the main work, including writing the original draft.

- 10. **Nussbaum, C.**, & Schweinberger, S. R. (2021). Links Between Musicality and Vocal Emotion Perception. *Emotion Review*, *13*(3), 211–224. https://doi.org/10.1177/17540739211022803 [Review]
- Schweinberger, S. R., von Eiff, C. I., Kirchen, L., Oberhoffner, T., Guntinas-Lichius, O., Dobel, C., Nussbaum, C., Zäske, R., & Skuk, V. G. (2020). The Role of Stimulus Type and Social Signal for Voice Perception in Cochlear Implant Users: Response to the Letter by Meister et al. *Journal of Speech, Language, and Hearing Research, 63*(12), 4327–4328. https://doi.org/10.1044/2020_JSLHR-20-00595
 [Response Letter]

In preparation/submitted:

- 1. Kaminski, J., Capitain, S., Kühr, F., **Nussbaum, C.**, & Bräuer, J. (in revision in *Scientific Reports*). 'Genius' dogs: What makes a dog a label-learner?
- 2. **Nussbaum, C.**, Dethloff, S., Schirmer, A., & Schweinberger, S.R. (submitted to *iScience*). Vocal Emotion Perception: A Comparison of Singers and Instrumentalists, Amateurs and Professionals