To the editors of   
Emotion

Manuscript submission

Dear Prof Naomi I. Eisenberger,

attached please find a new manuscript entitled “Vocal Emotion Perception: A Comparison of Singers and Instrumentalists, Amateurs and Professionals” for possible publication as a research article in *Emotion*.This work has not been published previously, is not under consideration for publication elsewhere, and is approved by all authors. The preregistration, preprocessed data, analysis scripts, and supplemental materials are available at OSF (https://osf.io/ascqx/).

Musicians outperform non-musicians in vocal emotion recognition. However, the current literature is inconclusive regarding differential effects of specific types of musical activity. To address this gap, we compared emotion recognition performance of singers (N= 45) vs. instrumentalists (N=43) and professional musicians (N = 40) vs. amateurs (N = 88) vs. non-musicians (N = 38). Importantly, we predicted that vocal emotion recognition would be unaffected by the type or amount of musical activity. Using both frequentist and Bayesian inference, we found the predicted null effects for singers vs. instrumentalists, and for professionals vs. amateurs. Across groups, we replicated the link between vocal emotion perception and auditory sensitivity, suggesting that musicians’ advantage in recognizing vocal emotions is rooted in auditory sensitivity, rather than in the specific type or amount of musical activities.

We want to highlight two important aspects of this work: First, we specifically predicted and preregistered a null-effect of musical activity. Therefore, we used Bayesian inference alongside established frequentist approaches in our statistical analyses. Second, we recruited an original sample of 45 singers and 43 instrumentalists, which were all amateur musicians. To compare them to professionals and non-musicians, we used a previously recruited sample (Nussbaum et al. 2024, 10.1111/bjop.12684). This is made transparent throughout in the manuscript.

To the best of our knowledge, this is the first well-powered and preregistered study on vocal emotion capacities of different musical subgroups. Our findings extend current insights into the role of musicality for vocal emotion processing and will, therefore, be of relevance for emotion researchers as well as psychologists and musicians in applied fields. We expect this manuscript to be of great interest to the wide readership of *Emotion.*

Yours sincerely,

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