

Navigating interactions through vocal control: voluntary social trait expression in voices.

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Abstract (max 300 words)

The voice is a variable and dynamic social behaviour with functional relevance for conveying our identity, intentions and feelings to others. Inferences about personality traits of a speaker are drawn spontaneously (McAlear *et al.*, 2014) and reliably (Mahrholz *et al.*, 2018). These judgments can be influenced through intentional modulations of the voice (Hughes *et al.*, 2010), but it is unclear how specifically voice modulations evoke intended trait judgments, and whether voice modulations have implications in real-world social scenarios. In a series of three experiments, we investigated the mechanisms and efficacy of voluntary voice modulation. We recorded 40 healthy adult speakers during vocal expressions of six social traits (e.g. likeability, confidence) or while speaking in a neutral voice. In Study 1, we show that speakers' voice modulations evoke specific exaggerations of trait precepts in naïve-listeners relative to their neutral voice. The evoked trait ratings clustered on two principal components relating to perceived affiliation (likeability, hostility) and competence (confidence). Moreover, voluntary voice modulations were also clearly discriminable by naïve listeners, with high specificity and sensitivity (Study 2). Lastly, we tested whether voice modulations evoked implicit trait judgements that are relevant to real-world social scenarios. In Study 3, 40 naïve listeners were asked to choose a voice recording most suited for a given social scenario. Listeners were significantly more likely to match a relevant voice modulation to the social scenario over irrelevant voice modulations. That is, listeners matched the voices in line with the speaker's

originally intended trait expression (e.g. a confident voice modulation to negotiate a promotion). These findings imply that intended voice modulations can evoke recognizable and specific trait impressions in listeners and that these impressions can be advantageous in navigating social interactions.

[Abstract Word count: 282]

References

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