

## Our voices reveal relationship status and could be used to detect infidelity, study finds

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Think your partner is cheating? His or her voice may be a dead giveaway. New research by Albright College associate professor of psychology Susan Hughes, Ph.D., has found that men and women alter their voices when speaking to lovers versus friends and that such variations can potentially be used to detect infidelity.

"It's not just that we change the sound of our voice, but that others can easily perceive those changes," said Hughes, an expert in [evolutionary psychology](#) and voice perception.

The findings are included in a new article, "People Will Know We Are in Love: Evidence of Differences Between Vocal Samples Directed Toward Lovers and Friends," published this month in the *Journal of Nonverbal Behavior*. The study is co-authored by Jack LaFayette, director of institutional research at Albright, and Sally D. Farley, former assistant professor of psychology at Albright, who now teaches at the University of Baltimore.

The study looked at how individuals alter their voices, or engage in voice modulation, when speaking to romantic partners versus same-sex friends during brief telephone conversations. Researchers recruited 24 callers who were newly in love and still in the so-called honeymoon period. Callers were asked to phone their romantic partners, as well as a close same-sex friend, and in both cases engage in a conversation asking specifically "how are you?" and "what are you doing?"

Researchers then played the recordings to 80 independent raters who judged the samples for sexiness, pleasantness and degree of romantic interest. Raters were exposed to only one end of the conversation and, in some cases, for only 2 seconds. Still, raters were able to correctly identify, with greater than chance accuracy, whether the caller was speaking to a friend or lover, leading researchers to believe that people will alter their voice to communicate their relationship status.

"Vocal samples directed toward romantic partners were rated as sounding more pleasant, sexier and reflecting greater romantic interest than those directed toward same-sex friends," according to the article.

Researchers also performed a spectrogram analysis on the samples to examine pitch and found that both [men and women](#) tend to mimic or match the pitch of their [romantic partners](#). Women will use a lower pitch, while men will employ a higher one when speaking to their romantic partner. According to the article, this effect "represents desire for affiliation and intimacy" and is a "way to communicate affection and relational connection – 'I am one with you.'"

Researchers were, however, surprised by the results of the paralinguistic analysis. Paralinguistic samples are stripped of their content, while maintaining elements such as inflection and intonation. In these samples, raters could sense stress, nervousness and lack of confidence in the voices of callers speaking to their lovers, which could be attributed to the early stages of romantic love.

"There was vulnerability associated with the [voices](#) of those newly in love. Perhaps people don't want to be rejected," said Hughes.

Provided by Albright College

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