

The L Heard? F0 and perceptions of sexuality in women

The idea of a male “gay voice” has been more frequently researched both in production (Gaudio, 1994; Podesva and Van Hofwegen, 2016) and perception (Rogers and Smyth, 2003; Levon, 2006; Maegaard and Pharao, 2016). However, there has been far less research that considers a female “gay voice”. The scant evidence of a female gay voice (Moonwomon-Baird, 1997; Waksler, 2001; Van Borsel, Vandaele and Corthals, 2013; Saigusa, 2016) suggests there may be some cues based on F0 and /s/ realisations though the findings have been inconsistent. There is even less evidence for whether these cues are used in perception.

The question remains as to whether women simply do not index (gay) sexuality linguistically in the same way as men, or if we have been looking in the wrong places. This research contributes to this ongoing question through a study of pitch perception, and specifically it asks if listeners are able to make judgements about a woman’s sexuality based on sound clips alone.

This paper presents an experimental perceptual study. Participants took an online survey that presented the electronically manipulated voice of a native Yorkshire British English speaker. The stimuli were digitally altered to either increase or decrease the speaker’s average fundamental frequency, while keeping the speech rate constant relative to that of the original sample. Listeners were asked to respond to a series of sentences and make judgements about the speaker by rating traits on a 7-point Likert scale from “Strongly disagree” to “Strongly agree”. These traits included “friendly”, “intelligent”, “feminine”, “trustworthy”, “homosexual (i.e., lesbian)”, and “low pitch” and participants were also asked to rate how old the speaker was.

81 listeners completed the survey and each participant rated 40 different stimuli sentences, producing a total of 3,240 evaluations.

Results from this study are ambivalent – on the one hand, most people answered “neither agree nor disagree” to evaluations of sexuality (41 out of 81). On the other hand, those that do rate sexuality show a significant negative correlation between mean homosexual ratings and F0 alteration ($r = -0.768$, $p < 0.0001$). There were also significant correlations between F0 alteration and ratings of friendliness, intelligence, femininity, low pitch, and assumptions of age.

This shows that while pitch is a sociolinguistically relevant dimension for speakers’ ratings, perceptions of gayness are still unclear. While significant results were found that indicate lower pitch may be indexing gayness for some listeners, it is important to consider that over half the participants did not feel they could rate this quality at all. More broadly, these findings echo the research cited above which shows an inconsistency in results around a female gay voice.

References:

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