

The Power of Voice: How Vocal Changes Influence Perceptions of Older Adults

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Voice is more than a means of communication!

- Listeners sometimes use people’s voice to help them form opinions.
 - Example : Assuming how strong, credible, and confident someone is based on the way they sound.
- How is this impacted when people grow older and experience voice changes or have voice disorders?
- **This study researched that! Asking :**
How do age-related voice changes influence listeners’ perceptions of older adults?
- We hypothesized that voice samples recorded by deviant dysphonia voices would receive more negative attitude ratings than voice samples recorded by healthy voices.

Measuring listeners’ perceptions of voice

Study One

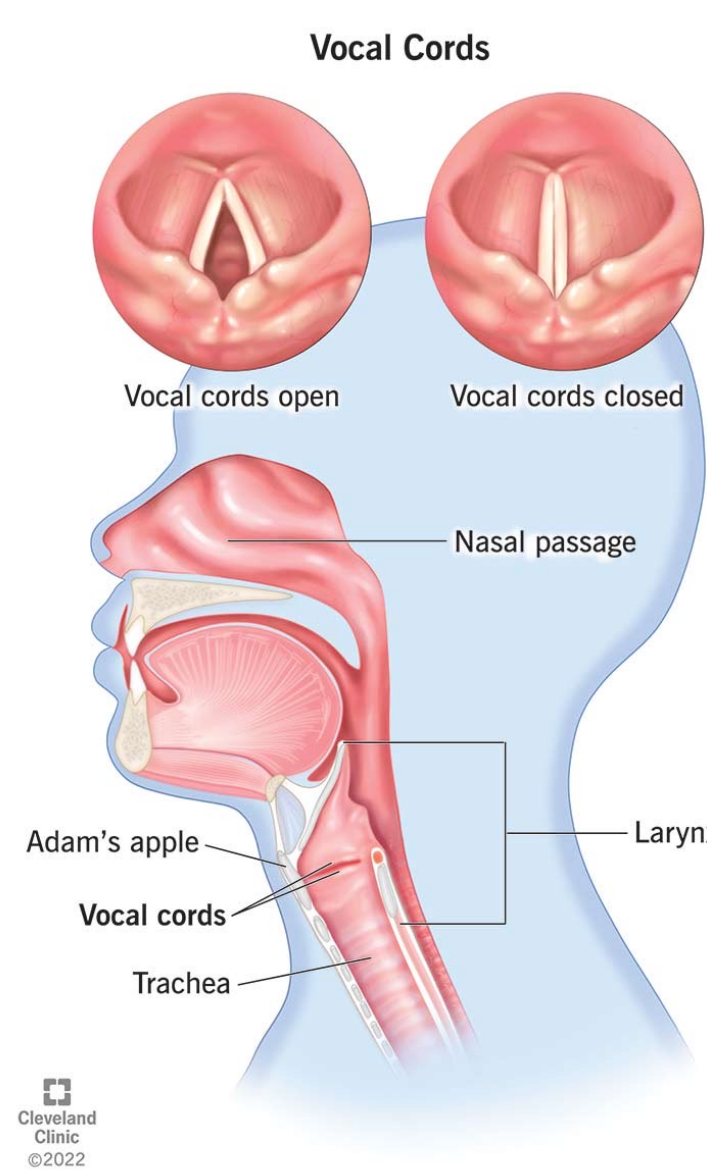
This was a mixed methods study that consisted of two studies. In study one, participants answered interview questions about voice, aging, voice disorders, and what effect all of this may have on social interactions.

Ten participants were recruited for the interviews and rating task, ages 18-25.

Study Two

Participants listened to different sounding voice samples of older adults and rated each one on a Visual Analog Scale (VAS), across 13 bipolar adjective pairs representing different attitudes toward the speaker.

Using samples from adults who were over 60 years old, we had a total of eight samples. There were three normal samples, three mild samples, and two moderate samples. The classifications were made by Professor Estella P.M. Ma and Kennedy Owens.



Voice influences social perception and communication

- Four themes emerged from study one’s interviews:
 - **1. Voice as a social cue** – “I can judge their age, their gender, even their character, based on their voice.”
 - **2. Voice as a facilitator or barrier to communication** – “You cannot communicate as effectively as you wish [...] So there might be confusion and a lot of misunderstandings.”
 - **3. Perceived Characteristics of Voice Disorders and Aging Voice** – “Their voice sounds very hoarse, and ... very breathy, and will take much effort to speak.”
 - **4. Psychological Impact of Voice Changes** – “They’ll have less confidence when they’re talking to other people because they feel different.”

Mean and standard deviations of attitude ratings by dysphonia severity

Perceived Characteristics	Normal M(SD)	Mild M(SD)	Moderate M(SD)
Healthy	2.47(1.17)	5.53 (1.63)	8.22 (0.75)
Energetic	2.93 (0.89)	5.67 (1.37)	8.43 (0.62)
Strong	3.16 (1.16)	5.05 (1.12)	7.73 (0.97)
Competent	2.87 (1.19)	4.58 (1.69)	6.63 (1.93)
Confident	2.93 (1.20)	5.17 (1.74)	6.30 (2.02)

Note : Higher VAS scores indicate more negative perceptions

Participants rated the moderate voice samples (samples with the most severe voice disorders) the most negatively across majority of these characteristics.



Young VC's

Old VC's

Voice changes may affect more than communication

- Study one revealed that listeners viewed voice as a social cue that can influence their judgements about the older adult speaker's personality, health, competence, and more.
- Generally, study two showed that **the more severe a voice condition was, the more of a negative perception listeners had about that person.**

Limitations :

1. Small sample size.
2. Only descriptive statistics were used for measurement.

Future Directions :

1. Recruit a larger and more diverse sample.
2. Include a comparison group to better distinguish perceptions related to voice severity.

Takeaway!

An older adults’ voice may influence how others perceive them, not just how well they communicate, effecting their social interactions and quality of life.

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