That Pitch Really Resonates With Me!

A Voice-Gender Modulation Study

Main Summary

Two groups trained using differing voice-gender modulation exercises

Masculine & Feminine voices differed significantly in *Pitch* and *Resonance*

More research needed to understand full effect of the different pedagogies

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1 Introduction

Masculine and feminine voice-genders have been shown to differ across prosodic and harmonic vocal factors

Prosodic Factors	Harmonic Factors
• Pitch [1]	• Resonance [3]
• Glottalization [2]	• Vocal Weight [4]

There are two main voice-gender modulation teaching pedagogies. Each respective method focuses on either prosodic [5] or harmonic [6] factors

The following hypotheses were given for each individual factor:

H_0 : There will be no difference in post-training results
H_1 : There will be a difference in post-training results

Additional hypotheses were given for the two groups:

H_0 : There will be no difference in factors not explicitly trained in a group
H_1 : There will be a difference in factors not explicitly trained in a group

2 Methods

Two groups (n_1=7; n_2=5; N_T=12)

Measurements were taken both pre- and post-training for each individual's best masculine and feminine voices

Participants attended three 50 minute-long, weekly training sessions

Prosodic Group

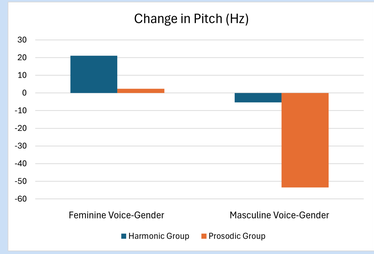
Harmonic Group

Different exercise sets were taught to the two groups

3 Results

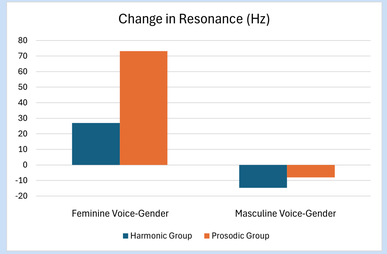
Pitch

Masculine voices had significantly lower pitches than feminine voices (p = .011)



Resonance

Feminine voices had significantly higher resonance than masculine voices (p = .031)



Glottalization

No significance found

Vocal Weight

No significance found

4 Discussion & Conclusion

There is a significant difference in post-training results for both pitch and resonance, so those null hypotheses are rejected

All other null hypotheses are accepted

When comparing specific voice-genders, the differences between prosodic and harmonic training groups were not found to be significant

It remains unclear based on these findings what role, if any, the type of training pedagogy an individual uses has on voice-gender modulation

Limitations on this study include:

- Small sample size
- Limited practice time
- No cisgender participants
- Several participants had prior training

Future research should therefore aim to address these limitations

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References

LINGUISTICS

University of Victoria