Functional Dysphonia During Mental Imagery: Exploring the Sources of Anxiety

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Summary

Paradigm Validation:
Self-Report Ratings
- Tensing & Tautness for aversive scripts
- Positive & anxious for positive scripts
- Vocal effort for neutral scripts

Physiological Data
- EMG activity for all scripts
- Heart rate for all scripts
- Autonomic activity for all scripts

Social Anxiety:
- Compared with Healthy Controls
  - Positive & anxious for positive scripts
  - Aversive > positive

Functional Dysphonia:
- Compared with Healthy Controls
  - LHA activity for all scripts except positive
  - Heart rate
  - Vocal effort for all scripts except neutral

Results

Physiological Data
Communication Condition
- EMG activity for all scripts
- Heart rate for all scripts
- Autonomic activity for all scripts

Psychometric Measures
Pre-Mood-Induction
- Functional Dysphonia
- Healthy Control
- Social Anxiety

Stimuli/Scripts:
20 scripts presented auditorily, 4 scripts each between participants

Methods

Participants:
Functional Dysphonia
Healthy Control
Social Anxiety

Measures:
Physiological
- Heart rate
- EMG - corrugator
- EMG - zygomaticus
- EMG - submental

Stimuli/Scripts:
20 scripts presented auditorily, 4 scripts each between participants

Introduction

Functional Dysphonia:
Voice disorder with no organic cause but marked muscle tension in voicing
Anxiety strongly implicated as a cause
Voice disorder with no organic cause but marked muscle tension in voicing

Anxiety:
Stimuli/Scripts:
Participants:
Functional Dysphonia:
Anxiety:

Physiological
- Heart Rate
- EMG - thyrohyoid

Anxiety strongly implicated as a cause
Voice disorder with no organic cause but marked muscle tension in voicing

20 scripts counterbalanced
Auditorily presented
Recorded
Prevalidated

purpose of study:
Determine nature of anxiety in Functional Dysphonia by employing mental imagery and psychophysiological measures

Nature and cause of anxiety remains unknown

Reference:

Journal of Speech and Hearing Disorders 31 (3), 205-217.

References

Cook et al., 1988; McNeil et al., 1993; Cuthbert, et al., 2003

Journal of Abnormal Psychology 102 (2), 212-225.
