Video-self modeling as an at-home intervention tool for individuals with voice disorders

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INTRODUCTION

Video self-modeling (VSM) is an observational learning technique in which an individual views themselves on video and focuses on a target behavior. VSM is based on principles of social-cognitive theory, specifically self-efficacy.

- Self-efficacy is defined as an individual’s belief that they can succeed.
- It is believed that VSM may be effective because it can increase self-efficacy for the target behavior.

METHODS

MULTIPLE BASELINE SINGLE SUBJECT DESIGN

<table>
<thead>
<tr>
<th>Participant 1</th>
<th>Baseline</th>
<th>Treatment</th>
<th>Maintenance</th>
<th>Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 2</td>
<td>Baseline</td>
<td>Treatment</td>
<td>Maintenance</td>
<td>Withdrawal</td>
</tr>
<tr>
<td>Participant 3</td>
<td>Baseline</td>
<td>Treatment</td>
<td>Maintenance</td>
<td>Withdrawal</td>
</tr>
</tbody>
</table>

CREATION OF VIDEOS

Baseline Daily voice recordings Therapy at CCD
Intervention Daily voice recordings Therapy at CCD
Maintenance Daily voice recordings Therapy at CCD
Withdrawal

RESULTS

DYSPHONIA SEVERITY INDEX (DSI)

PERCEPTUAL (CAPE-V)

VOICE-RELATED QUALITY OF LIFE

DATA ANALYSIS

Vocal Quality: Dysphonia Severity Index (DSI, Wuysts, et al., 2000)
- A lower index score indicates a poorer perceptual voice quality whereas a higher index score indicates better perceptual vocal quality.

Perceptual: Modified Consensus Auditory-Perceptual Evaluation (CAPE-V)

Self-Perception of Voice: Voice-Related Quality of Life Survey (V-RQOL).

DISCUSSION

- No distinct differences or trends across time for perceptual or acoustic measures
- Suggests there may not be a physical change in vocal quality with the use of VSM.
- Time frame may be too short to identify physical changes
- Reduced negative impact of the voice disorder on overall quality of life with the use of VSM
- VSM may be a powerful tool in helping increase self-efficacy through principles related to vicarious experience and using the self as a model (Bandura, 1977)

CLINICAL IMPLICATIONS

VSM may serve an important role in increasing self-perceived vocal quality and general awareness of vocal quality. This is clinically valuable as individuals may lack awareness of vocal quality outside of therapy contexts and may benefit from this increased awareness. Additionally, a desired outcome of speech-language therapy is typically to decrease negative feelings of voice disorders so individuals may continue participation in desired activities to the fullest extent possible.

LIMITATIONS & FUTURE DIRECTIONS

- Limited generalization with 3 participants
- Include repetition with more individuals
- Expand disorder types
- Short time frame
- Perceptual evaluations had limited reliability
- Consider alternative measures
- Training for listeners beyond academic work

REFERENCES


