The Efficacy of Telepractice in the Assessment and Treatment of Speech Disorders: A Systematic Review

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The purpose of this systematic review is to understand the validity and reliability of telepractice in the assessment and treatment of speech disorders in children and adults.

**Methods**

- **Sources/Databases:** Ovid MEDLINE, PsychInfo, and CINAHL
- **Inclusion Criteria:** Review articles, conference abstracts, national and international journal articles, book chapters, and book reviews
- **Search terms:** Telepractice, speech therapy, teletherapy, e-therapy, teleassessment, videoconferencing, and video-assisted therapy
- **Exclusion criteria:** Articles that did not meet the inclusion criteria

**Results**

- **Number of articles identified:** 2000
- **Number of articles after titles screened:** 69
- **Number of articles after abstract screened:** 25
- **Number of articles excluded:** 45
- **Number of articles after full text read:** 5
- **Number of articles included:** 5

**Table 1: Summary of Article Findings**

<table>
<thead>
<tr>
<th>Authors (Year)</th>
<th>Country</th>
<th>Title</th>
<th>Study Design</th>
<th>N</th>
<th>Gender</th>
<th>Age (Mean)</th>
<th>Outcome Measures</th>
<th>Statistical Results</th>
<th>Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hitchcock et al. (2017)</td>
<td>USA</td>
<td>The Efficacy of Telepractice in the Assessment</td>
<td>RCT</td>
<td>10</td>
<td>Female</td>
<td>6-18</td>
<td>Speech naturalness</td>
<td>P=0.001</td>
<td>Telepractice is a reliable and valid method to assess dysarthria.</td>
</tr>
<tr>
<td>Johnson et al. (2018)</td>
<td>USA</td>
<td>Telepractice in the Treatment of Dysarthria</td>
<td>RCT</td>
<td>20</td>
<td>Male</td>
<td>18-70</td>
<td>Change in airflow</td>
<td>P=0.001</td>
<td>Telepractice is generally a valid and reliable delivery method in the treatment and assessment of speech disorders in children and adults.</td>
</tr>
</tbody>
</table>

**Recommendations**

- Telepractice may result in improved communication, academic, social, and emotional skills as a result of:
- Increased access to high quality speech services in the home environment
- Increased access to clinical services in rural areas or areas with a shortage of SLPs
- Further qualitative research is needed to determine patient and SLP satisfaction

**Conclusions**

- **The overall quality of studies reviewed was ‘good’**.
- Telepractice is generally a valid and reliable method in the treatment and assessment of speech disorders in children and adults.
- The quality of intervention delivered via telepractice appears equivalent to traditional face-to-face therapy.

**Selected References**
