Introduction

- Specific language impairment (SLI) currently referred to as developmental language disorder, DLD affects 7-8% of children in kindergarten (NICHD, 2017). Various aspects of language may be impacted, including the timely acquisition of vocabulary.
- Typically developing bilingual children may similarly present with diminished vocabularies in either of their languages, an effect referred to as distributed knowledge (Oller, Pearson, & Cobo-Lewis, 2007).
- Bilingual children with SLI may consequently present with greater vocabulary deficits than either group alone. Lexical development is further inhibited by lack of exposure to rich language input in home and/or school environments (Simon-Cereijido, 2015). Intervention targeting lexical development in this population is critical, as vocabulary skills may functionally impact social communication, literacy, and future academic achievement (McGregor & Duff, 2014).
- This project seeks to evaluate the efficacy of vocabulary interventions implemented with bilingual children at risk for or diagnosed with SLI.

Method

Five databases (ERIC, PubMed, PsycINFO, Web of Science, Taylor & Francis Online) were searched using search terms "bilingual" AND "vocabulary intervention" at two time points. The following inclusionary criteria were used:

- Included bilingual children (of any language background) with or at risk for SLI.
- Included pre- and post-intervention measures of vocabulary.
- 309 articles screened by title and abstract, 9 selected.
- 7 peer-reviewed articles
- 2 doctoral dissertations

Results & Discussion

Articles were grouped by type of research questions asked to yield the most appropriate comparison.

- Two studies compared bilingual intervention vs. no intervention (Simon-Cereijido & Gutiérrez-Clellen, 2014; Tysbina & Eriks-Brophy, 2010).
- Intervention group showed vocabulary gains while control group did not.
- Four studies compared bilingual vs. monolingual intervention (Rau, 2014; Restrepo, Morgan, & Thompson, 2013; Thordardottir, Clouter, Ménard, Pelland-Blais, & Rvachew, 2015; Thordardottir, Weismer, & Smith, 1997).
- Bilingual intervention is as effective as monolingual intervention (Thordardottir et al., 2015; 1997), with added benefit of first language support (Restrepo et al., 2013).
- Whenever possible, clinicians should aim for bilingual intervention when working with clients who are developing skills in two languages.
- Although further evidence is needed, one study suggested that parents can be trained in delivering intervention in L1 (Thordardottir et al., 2015).
- Three studies compared order of languages within a bilingual intervention (Fierro, 2017; Lugo-Neris, Bedore, & Peña, 2015; Perozzi, 1985).
- It is unclear which order of languages is most effective.
- Studies with stronger methodology (e.g., increased sample size, reported intervention procedures for replication) are warranted.

<table>
<thead>
<tr>
<th>Language vs. control</th>
<th>Language of Intervention</th>
<th>Duration</th>
<th>Frequency</th>
<th>Targets</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tysbina &amp; Eriks-Brophy (2010)</td>
<td>BL</td>
<td>6 wks</td>
<td>10s/wk</td>
<td>10 per language</td>
<td>BL intervention &gt; no intervention</td>
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<tr>
<td>Simon-Cereijido &amp; Gutiérrez-Clellen (2014)</td>
<td>BL</td>
<td>9 wks</td>
<td>4x/wk</td>
<td>N/A (NDW)</td>
<td>BL intervention &gt; no intervention</td>
</tr>
<tr>
<td>BL vs. ML</td>
<td>Thordardottir et al. (1997)</td>
<td>BL vs. ML English</td>
<td>7 wks</td>
<td>2x/wk</td>
<td>16 total</td>
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<tr>
<td>Restrepo et al. (2013)</td>
<td>BL</td>
<td>12 wks</td>
<td>4x/wk</td>
<td>45 total</td>
<td>BL better than or equal to ML</td>
</tr>
<tr>
<td>Rau (2014)</td>
<td>ML</td>
<td>3 wks</td>
<td>5x/wk</td>
<td>24 total</td>
<td>ML Spanish &gt; BL English</td>
</tr>
<tr>
<td>Thordardottir et al. (2015)</td>
<td>BL</td>
<td>16 wks</td>
<td>1x/wk</td>
<td>10 per session</td>
<td>Equal performance across conditions</td>
</tr>
<tr>
<td>Language order (BL)</td>
<td>Perozzi (1985)</td>
<td>BL</td>
<td>1 session</td>
<td>N/A</td>
<td>12-16 total</td>
</tr>
<tr>
<td>Lugo-Neris et al. (2015)</td>
<td>BL</td>
<td>8 wks</td>
<td>3x/wk</td>
<td>48 total</td>
<td>L2 first demonstrated more gains across languages</td>
</tr>
<tr>
<td>Fierro (2017)</td>
<td>BL</td>
<td>6.5 wks</td>
<td>26 sessions</td>
<td>15 per language</td>
<td>Concurrent performance best, followed by L2 first; L1 first ineffective</td>
</tr>
</tbody>
</table>

References
