

Title: Practice-Based Research in Speech-Language Pathology

Research Questions: The knowledge-practice gap has existed for many years and is prevalent in most health care settings (Grol & Grimshaw, 2003; Green & Seifert, 2005). While a number of different frameworks and approaches exist, practice-based research (PBR) has the potential to minimize the gap between research and practice. PBR involves gathering information from practice, to answer questions arising from practice in order to inform future practice (Epstein, 2001). In the current presentation, I will describe three projects that have examined PBR in speech-language pathology (SLP). The first project is a scoping review that was completed to understand the utility of PBR in speech-language pathology. The PBR Co-Creation Model was created to categorize and demonstrate three diverse ways to engage in PBR. The subsequent two projects were completed in partnership with a school board in Southern Ontario using a PBR approach. The overall goal was to determine the validity of a kindergarten screening tool. The tool was created by the SLPs at the school board to meet the needs of the setting.

Project 1 Methods: Prior to a scoping review, the PBR Co-Creation model was created to identify different types of clinical-research partnerships. *Creating, capturing* and *changing* practice were identified as three diverse ways that partners could engage in PBR. From eight databases, twenty-five articles were read in full and 16 articles were deemed appropriate for the review. These articles were sorted according to the PBR Co-Creation Model.

Project 1 Results: A thematic analysis of the scoping review results revealed that most of the articles were classified as capturing current practice (56%), fewer articles were deemed to be changing current practice (38%), and very few articles were focused on creating practice (6%).

Project 2 Methods: Project 2 was a study focused on *capturing practice*. A PBR partnership was established with local school board SLPs to evaluate a tool created and employed by the

SLP group to assess phonological awareness and narrative language in kindergarten children.

Groups of kindergarten children who were either on the SLP caseload ($n = 108$) or not ($n = 121$) completed the kindergarten assessment tool in November and May of a school year.

Project 2 Results: Analyses comparing the two groups on the repeated assessments revealed significant differences on the assessment tool section focused on phonological awareness; significant differences were found across the school year and between the groups of children. The narrative language measure, however, did not show this sensitivity.

Project 3 Methods: Phase 2 of the PBR project focused on *changing* practice by implementing the needed modifications to the narrative portion of the tool identified in phase 1, and included an assessment of the tool's validity. The tool was modified to increase sensitivity collaboratively by the researchers and SLPs. Newly recruited children ($n = 37$) completed a series of standardized assessments for the validation analysis and the board designed assessment tool in April. Of these, 24 children completed the tool again in October (of the following school year) to determine the tool's sensitivity.

Project 3 Results: Significant differences across testing points were observed for both the phonological awareness and narrative language portions of the revised assessment tool. As well, the validation analysis revealed significant correlations between standardized measures of language and the school board's assessment tool.

Implications: PBR can address practice-based questions related to *capturing, changing, and creating practice* as described by the PBR Co-Creation Model. Across two PBR projects, capturing and changing practice, valuable results revealed limitations in current practice and facilitated rapid practice change. PBR can be an effective means to minimize and eliminate the gap between research and practice.