A Clinician-Researcher Partnership in a Low-Service Area in Northern Canada

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Introduction

Background & Motivation:

- Developmental need in the community served by the first author.
- Low kindergarten readiness; elevated risk of poor language and literacy outcomes; single S-LP serving a large, rural and remote, geographic area.
- Interest in implementing a home-school 'journaling' (drawing) program at the preschool population level, modeled on research showing efficacy of such an approach in improving oral language and emergent literacy[1].
- The previous research was conducted in a very different setting (i.e., an itinerant farming migrant community in the US) with resources not available in this context (e.g., SLP students proving regular intervention).

Objectives:

- Conduct a feasibility study of effects of a home-preschool journaling program, implemented using the resources available within the local community.
- Explore the progression of a clinician-researcher (C-R) partnership to support the research goals.

The Clinician-Researcher Partnership

Clinician Responsibilities

- Determine question and local considerations
- Liaise with own organization for in-kind support
- Liaise with local preschools
- Supporting research assistant
- Facilitate parent / teacher training
- Participant recruitment
- Data collection

Researcher Responsibilities

- Mentor of clinician
- Secure research ethics
- Supervision of MSc-SLP students to develop project materials and analyze data
- Data analysis
- Data storage and management

Joint Responsibilities

- Study design
- Development of training materials
- Interpretation of results
- Funding and dissemination of results

The Feasibility Study

Aims:

- To determine if weekly parent-child→ teacher-child interactions centered around a drawing activity leads to improvements in oral language and emergent literacy.
- To explore the feasibility of program implementation in the local community.

Participants and Procedures:

- Preschool-aged children (43-61 mos; $M = 54.7$; $SD = 5.6$). Intervention (n=13) and business-as-usual control (n=12) randomized by preschool (2 preschools).
- Children sent home with materials to draw a picture of a recent event in their life with their parents.
- Parents provided with strategies (via online video and writing instructions) to facilitate conversation during the activity.
- At preschool, teacher discussed the drawing with the child.
- Duration: 6 weeks

Child measures: Pre- and post-intervention

- Edmonton Narrative Norms Instrument
- Conversation sample (MLU, lexical diversity)
- Phonological awareness (CTOPP-2)
- Research measure of emergent spelling
- Receptive vocabulary (PPVT-4).

Parent and teacher measures:

- Post-intervention questionnaires re: experience

Fig1. *Sample child drawing*

Results:

- No significant effects of the intervention on language or emergent literacy scores.
- Positive perception of program from parents of intervention group (11/13): Ease of implementation, Enjoyment for parent and child
  - "*She loved the idea of having homework and it was fun for us*"
- Some challenges in implementing it at home
  - "*At times, it was a bit hard to concentrate on the project (late at night and we forgot)*".

Discussion:

- The pre-post language and literacy measures suggest that the drawing activity did not have a positive impact.
  - Anecdotally, however, the teacher reported functional communication improvement in the children that participated in the intervention.
- Limitations: very short time frame (6 weeks), small number of participants, issues of parent fidelity in carrying out the program (e.g., parents forgot).
- Future directions: Extend the timeline of the study, swap teacher and parent roles (i.e., teacher does the initial interaction with the child; child takes picture home).

Lessons Learned from the C-R Partnership

Benefits

- Enabled the clinician to conduct research grounded in her local community.
- Enhanced the clinician's research skills: capacity building for the future.
- Allowed for the sharing of the workload of the project.
- Opportunity for researchers to conduct research that reflected "real-world" problems.
- Increased opportunities for students to be engaged in research in rural and remote communities.

Challenges

- Being geographically apart from each other added logistical and communication challenges to the progress of the project.
- Schedules between partners may not align, affecting the progress of the study.
- Workload continues to remain high for both partners.

Implications

- Results emphasise the importance of conducting feasibility studies to determine if the intervention fits with the context that it is being delivered in, before launching costly, large-scale interventions[2].
- Creating a professional culture of clinical research is important for evidence-based practice. However, implementing research is challenging for many clinicians, especially in rural and remote locations. C-R partnerships can help enhance clinical research capacity and create evidence relevant to local clinical contexts.[3]
- Importance of ongoing support for C-R partnerships through grants and in-kind support from academic institutions and clinical sites.

References

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