Co-creating a writing group to build organizational capacity for scholarly practice in early intervention

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OTD Committee:
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Catherine Killian, OTD, MEd, OTR/L
Mary Khetani, ScD, OTR/L (chair)
Overview

Welcome and Introductions

Presentation

Committee Q & A

Public Q & A

Closed-door Discussion and Vote
Introduction
Building Research Culture in Early Intervention (EI)

- Gap between high-quality, evidence-based EI that should be provided and care actually provided\(^1\)
- Efficacy of EI was not demonstrated when examined by the OMB\(^1\)
- EI programs should engage in research\(^1\)
- Electronic data capture systems afford for more research opportunities\(^2,3\)
- EI workforce has unmet training needs for research engagement\(^4\)

\(^{1}\text{Bruder, 2010; }^{2}\text{Graham et al., 2018; }^{3}\text{Resnik & Johnson, 2006; }^{4}\text{Rigau et al., 2018}\)
Scholarship of Practice (SOP) and Organizational Principles to Sustain Research Culture in EI

• SOP$^{5,6}$ may help to bridge gap between research and practice in EI

• Relevant organizational principles to build practitioner capacity for SOP

  1) Organizational routines are a source of stability and change$^7$

  2) Organizational image and identity are important$^8$

  3) Implementation is a process$^9$

  4) Resistance to change is common and expected$^{9-11}$

$^5$Hammel et al., 2015; $^6$Taylor et al., 2005; $^7$Feldman & Pentland, 2003; $^8$Dutton & Dukerich, 1991; $^9$Bertram et al., 2015; $^{10}$Prosci Inc., 2017; $^{11}$University of Wisconsin-Milwaukee, 2018
Project Purpose
Bigger Picture Purpose
To contribute to an EI quality improvement initiative that improves practitioner engagement in health services research

Project Purpose
To co-design a professional development opportunity to build EI practitioner capacity for research engagement
Project Context

OTD Project

RMHS

Colorado University

UIC
Overview

**Part 1:** Learning modules
- 3 online modules
- Individually
- During paid time

**Part 2:** Writing group simulation
- Onsite
- Dyads and triads
- During paid time

**Part 3:** Writing group fellowship
- Onsite
- Meets 1+ times per month (e.g., poster prep)
- During paid time and renewed annually
Part 1: Learning Modules
Project Implementation
Participants

Inclusion Criteria:

1) employed at RMHS 01/2019 through project implementation

2) identified as service coordinator (expanded to include supervisor)

Target Sample Size:

• Learning modules: n = 10

• Writing group simulation and writing group fellowship: n = 6-10
Learning Modules

Introduction

Learning modules and post-module questions

Conclusion
Writing Group Simulation

1. Participants select availability
2. Schedule dyads/triads and notify participants and supervisor
3. Complete writing group simulation
Project Evaluation
# Learning Modules

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feasibility</td>
<td>• Number of participants through implementation</td>
</tr>
<tr>
<td></td>
<td>• Time spent</td>
</tr>
<tr>
<td></td>
<td>• Number of post-module question attempts</td>
</tr>
<tr>
<td>Learning</td>
<td>• Pre-post module questions</td>
</tr>
<tr>
<td></td>
<td>• Interactive questions</td>
</tr>
<tr>
<td>Engagement</td>
<td>• Interactive questions</td>
</tr>
<tr>
<td>Acceptability</td>
<td>• Survey</td>
</tr>
<tr>
<td>Suggestions for Improvement</td>
<td>• Interview</td>
</tr>
<tr>
<td>Outcome</td>
<td>Measure</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Feasibility</td>
<td>• Number of participants through implementation</td>
</tr>
<tr>
<td>Engagement</td>
<td>• Number of markups on manuscript (intro only)</td>
</tr>
<tr>
<td></td>
<td>• Number of comments made when discussing manuscript</td>
</tr>
<tr>
<td>Suggestions for Improvement</td>
<td>• Interview</td>
</tr>
</tbody>
</table>
Results
Participants

- n = 13

- = service coordinator
- = supervisor

Length of Time Employed at RMHS

- > 9
- 7.01-9
- 5.01-7
- 3.01-5
- 1.01-3
- ≤1

Number of Participants vs. Years
Participants

Level of Education

- Graduate Degree
- Some Graduate Level Coursework
- College Degree

Number of Participants

0 1 2 3 4 5 6 7
## Learning Modules

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Results</th>
</tr>
</thead>
</table>
| **Feasibility** | • Completion rate: 100%  
• Completion time (minutes): $M = 61.4$ (range = 36 - 102) |
| **Learning**   | • Average pre-module score: 4.62 (out of 6)  
• Average post-module scores: 2.60-2.78 (out of 3)  
• Average pre-post change:  
  • Module 1: 0.62  
  • Module 2: -0.08  
  • Module 3: 0.51 |
| **Engagement** | • Interactive question completion:  
  o Module 1: 84.6%  
  o Modules 2 and 3: 100% |
# Learning Modules

<table>
<thead>
<tr>
<th>Acceptability Element</th>
<th>Response</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>Helpful or very helpful</td>
<td>13 (100)</td>
</tr>
<tr>
<td>Interactive questions</td>
<td>Helpful or very helpful</td>
<td>13 (100)</td>
</tr>
<tr>
<td>Overall Satisfaction</td>
<td>Satisfied or very satisfied</td>
<td>13 (100)</td>
</tr>
<tr>
<td>Post-module questions</td>
<td>Helpful or very helpful</td>
<td>12 (92 )</td>
</tr>
<tr>
<td>Videos</td>
<td>Helpful or very helpful</td>
<td>12 (92 )</td>
</tr>
<tr>
<td>Audio clips</td>
<td>Helpful or very helpful</td>
<td>11 (85 )</td>
</tr>
<tr>
<td>Images</td>
<td>Appealing or very appealing</td>
<td>10 (77 )</td>
</tr>
<tr>
<td>Navigation</td>
<td>Easy or very easy</td>
<td>10 (77 )</td>
</tr>
</tbody>
</table>
Writing Group Simulation and Fellowship

- 9 participants completed in person
  - Service coordinators as dyads
  - Supervisors as a triad
  - Completion time = 75-90 minutes

- One participant completed remotely
  - Completion time = 115 minutes

n = 10

= service coordinator

= supervisor
Markups Made to Manuscript

Average = 2.67
Range = 0-5

Comments Made

Average = 22.8
Range = 20-27
Feasibility

Flexibility is key

• Participants benefit from flexibility inherent in online delivery of modules but may need more flexibility for simulation

• Simulation appears to be feasible with dyads and triads

• Simulation appears to be feasible in two contexts (on-site and video)
Learning

• Participants increased their knowledge in 2 of 3 modules – why?

  1. Participants had prior knowledge about why they should be involved in research

  2. Pre-post questions do not adequately measure learning
Acceptability

• Participants were each “satisfied” or “very satisfied” with learning modules

• Learning module content was always rated as “helpful” or “very helpful”

• Learning modules described as “informative” and “straightforward”

“…would be helpful for service coordinators who were new and more experienced”

“…good information to help service coordinators feel empowered in their role”
Engagement

Learning Modules

- Persistent participant engagement
- Module 1 interactive question = blank twice → lack of experience?
- Three participants missing one or more relevant PICO components

Writing Group Simulation

- Participants were engaged throughout
- 1 participant = no mark ups → unclear if disengaged or no feedback
Suggestions for Improvement

Most suggestions were incorporated:

1. Introductory instructions → navigation ease
2. Drag and drop post-module question → future users’ learning
3. Make a PICO question → clarity, future users’ learning and engagement
4. Combine shorter slides with longer slides → structure

One suggestion not incorporated: removing video #1
Recommendations for Learning Modules

1) Continue to host on Moodle

2) Continue to offer in a flexible, self-paced format

3) Determine if Module 2 pre-post questions adequately assess learning

4) Regularly update to keep up with advances at RMHS and in EI
1) Keep flexible to include in-person and virtual meeting options

2) Further explore costs and benefits for structuring

3) Establish an internal group name for the writing group fellowship

4) Establish a leader for the writing group fellowship
Strategies for Successful Implementation

1) Strong leadership engagement\textsuperscript{12-14}

2) Effective communication\textsuperscript{14,15}

3) Ongoing reflection and evaluation\textsuperscript{9,12,13}

4) Continue to co-design the professional development opportunity

\textsuperscript{9}Bertram et al., 2015; \textsuperscript{12}CFIR Research Team, 2018; \textsuperscript{13}Greenhalgh et al., 2004; \textsuperscript{14}Kimber et al., 2012; \textsuperscript{15}Wanner, 2014
### Scalability

<table>
<thead>
<tr>
<th>Component</th>
<th>Scalable in EI?</th>
<th>Scalable outside EI?</th>
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</thead>
<tbody>
<tr>
<td><strong>Learning modules</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Maybe</td>
<td>Maybe</td>
</tr>
<tr>
<td>3</td>
<td>Maybe</td>
<td>Maybe</td>
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<td><strong>Writing group</strong></td>
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</tr>
<tr>
<td><strong>fellowship</strong></td>
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<tr>
<td></td>
<td>Maybe</td>
<td>Maybe</td>
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</table>
Next Steps
Questions