Creating Effective and Efficient Research Teams

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The Problem

- Well-designed diagnostic and treatment studies are needed for evidence-based practice (EBP).
- “ASHA journals historically have published far fewer treatment studies relative to other types of research.” (Justice, 2008, p. 210)
- Bahr found this to be true when researching new parent book and article for Communication Disorders Quarterly (both, in press).
Group-Design Treatment Studies in ASHA Journals 1997-2006 (Justice et al., 2008)
Justice, Nye, Schwarz, McGinty, & Rivera (2008) found:

- Approximately 1 group-design treatment study per year in *AJSLP* (13) and *LSHSS* (12).
- Almost 3 group-design treatment studies per year in *JSLHR* (28).
- The treatment studies covered a wide range of topics and were not uniform in quality.
Research in *AJSLP* 2004-2007 (N=117) Compared to 2008 SLP Practice Patterns from ASHA (Bahr, 2008)

Need for Researchers in SLP Profession (Bahr, 2008)

**Source:** “A Topical Bibliography on Oral Motor Assessment and Treatment” (Bahr, 2008). Reprinted with permission from the Oral Motor Institute (www.oralmotorinstitute.org).
Trends and Implications

- *AJSLP* research did not match SLP practice patterns.
- ASHA (2006) membership data indicated only one percent of the membership considered themselves researchers.
- Doctoral level SLPs appeared to conduct most of the published, peer-reviewed SLP research literature.
- Master level SLPs appeared to be provide most of the clinical service.
- The discrepancy between the roles of academic researchers and clinicians may be a foundational problem in conducting and utilizing adequate and appropriate research for evidence-based practice.
There Appear to be Two Different Worlds/Spheres in the SLP Profession

- **Academic Researchers**: 1% of SLPs
- **Clinical Service Providers**: 81% of SLPs
The Solution
A New Research Paradigm/Model to:

- effectively and efficiently expand the number of academic and clinician researchers and subsequent studies in the field.
- better match research with areas of practice in which SLPs are engaged.
- promote group-design and other properly designed treatment studies to better meet the standards of evidence-based practice.
- ultimately create greater cohesion in the profession.
ASHA’s Strategic Pathway to Excellence Supports this Model and Includes:

- “advancing communication science” as a part of the mission;
- “scientifically based, professional practice” as a strategic theme;
- “increased research commitment” as part of its strategic objectives;
- members “actively engaged in generating research and using evidence in clinical decision-making.” (ASHA, n.d.)
Academic-Clinician Researcher Model Supports ASHA’s Mission:

- The researcher has access to an active caseload of clients for potential study participants, helping to ensure continued generation of research.
- The clinician becomes more involved and invested in the research process, helping to ensure use of study evidence in practice.
- The clinician learns about the research process and may become more interested in it, potentially leading to pursuit of further research training.
High research productivity is strongly associated with:

- 8 individual characteristics
- 15 institutional characteristics
- 4 leadership characteristics
Bland, Center, Finstad, Risbey, & Staples (2005)

- Testing of model via regression analysis of survey data from 2000
  - 465 faculty at University of Minnesota Medical School—Twin Cities
Bland, Center, Finstad, Risbey, & Staples (2005)

- Findings
  - Characteristics within model confirmed for high research productivity
    - Faculty productivity influenced by individual and institutional characteristics
    - Group (department) productivity influenced by institutional and leadership characteristics
    - Overall is an “...interplay of individual and institutional characteristics, supplemented by effective leadership....” (p. 225)
Closing the Gap to Support EBP (Creating Clinician Researchers)

Clinician Researcher

**Strengths:**
- Content area
- Overall process

*Background and training:*
- Content area
- Overall process

*Interests and Goals:*
- Content area
- Overall process
Closing the Gap to Support EBP (Academic Researcher/Mentor)

Background and training:
• Content area
• Overall process

Academic Researcher/Mentor

Strengths:
• Content area
• Overall process

Interests and Goals:
• Content area
• Overall process
The Worlds/Spheres Join Forces
Outcome: Improved Research in SLP

Academic and Clinician Researcher Collaboration
Examples Group-Design Treatment Studies Using Clinician-Academic Researcher Model


Other Examples of Clinician-Academic Researcher Collaboration


Examples of Group-Design Diagnostic Studies


ASDs and disfluencies: Helping SLPs in the schools with identification and treatment

- Step One: survey data regarding prevalence
  - Researcher role: oversee design, needs
  - Clinician role: administer surveys
- Step Two: analysis of speech patterns
  - Clinician role: collect samples
  - Researcher role: analyze samples
ASDs and disfluencies: Helping SLPs in the schools with identification and treatment

- Step Three: training of school SLPs for identification and treatment
  - Researcher and clinician
    - Development of training based upon data
Project Example from Scaler Scott and Reardon-Reeves

ASDs and disfluencies: Helping SLPs in the schools with identification and treatment

- Step Four: training of school SLPs for identification and treatment (new district)
  - Survey SLPs regarding identification and treatment
    - Researcher: develop surveys (pre and post training)
    - Clinician: administer pre-training survey
ASDs and disfluencies: Helping SLPs in the schools with identification and treatment

- Step Five: training of school SLPs for identification and treatment
  - Researcher and clinician: run training
- Step Six: gather and analyze post-training results
  - Clinician: re-administer surveys
  - Researcher: analyze results
Project Proposals from Bahr and Scaler Scott

- Comparison of feeding, vocal, and mouth development in typically developing breastfed vs. bottle fed infants (Bahr, et al.) **Potential Collaborators:** Suzanne Evans Morris, PhD, SLP, NDT; Catherine Watson Genna, BS, IBCLC; Debra Jervay-Pendergrass, PhD, CCC-SLP, NDT; Nina Ayd Johanson, MS, CCC-SLP; Peg Merrill, BS, IBCLC, RLC; Lisa M. Sandora, MA, CCC-SLP, IBCLC.

- The identification of childhood apraxia of speech (CAS) in young children with ASD (Scaler Scott, & Bahr)
Possible Roadblocks (based upon Bland et al. model, 2002, 2005)

- Individual
  - Gaps in knowledge and background between academic researchers and clinicians
  - Barriers to maintaining the relationship until study completion (e.g., job changes)

- Institutional/Leadership
  - Time Allocation for collaboration when both academic researchers and clinicians already have full schedules
  - Funding
Partnership, Training, and Coordination Can Decrease Roadblocks by:

- Individual--Institutional
  - Helping SLPs with active caseloads learn how to become involved in publishable, peer-reviewed, evidence-based research.
  - Matching academic researchers with SLPs who have active caseloads, corresponding with research interests.
  - Matching strengths in areas of promotion, administrative, follow through.
Partnership, Training, and Coordination Can Decrease Roadblocks by:

- Institutional/Leadership
  - Educating academic and clinician researchers re: funding opportunities.
  - Educating administrators re. value of diagnostic and treatment research to their specific programs.
Clinician Needs

- Academic researchers and appropriate others (e.g., ASHA) willing to train clinicians who want to participate in research projects
- Academic researchers willing to participate in projects with clinicians
- Academic researchers who have projects that are a “good fit” for the clinician and the clinician’s caseload
- Administrative support
- Funding
Academic Researcher Needs

- Clinicians who can commit to projects for a set period of time
- Clinicians interested in and willing to learn about peer-reviewed, evidence-based academic publication
- Clinicians (with caseloads) who are a “good fit” for the project
- Funding
Value of Model/Paradigm

- Improved relationships between clinicians and academic researchers
- Clinicians and academic researchers learning something new and interesting from one another
- The critical need for group-design and other well-designed research in the field of SLP can be fulfilled
- Improved cohesion in the field of SLP
Task Force for Academic-Clinician Research Collaboration

- Objective 1: To increase clinician-researcher partnerships leading to the production of well-designed research studies
- Objective 2: To decrease roadblocks to clinician-researcher partnerships
The Next Steps

- Leadership/Initiative
- Promotion/Facilitation
- Administration/Coordination
Could a website/study group be the answer? (e.g., International Cluttering Association, Oral Motor Institute)

- To conduct interviews/focus groups/surveys and investigate the roadblocks to coordinated clinician/academic researcher collaboration
- To gather a list of clinicians and academic researchers who have similar interests and are a “good fit” for needed research projects
- To provide information for clinicians who want to learn about doing effective, publishable, peer-reviewed, evidence-based research
- To increase the number of group-design treatment studies in SLP
- To investigate and provide information regarding funding opportunities
Thoughts

- “In the measurement world, you set a goal and strive for it. In the universe of possibility, you set the context and let life unfold” (Zander & Zander, 2002).

- If you always do what you’ve done, you’ll always get what you’ve got (Bahr, today).
References


- ASHA. (Year-end 2006). Annual Counts of the ASHA Membership and Affiliation. [ASHA’s Surveys and Information Team].
References


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