The Research-Practice Gap: Why it Exists & How to Bridge it

5 Themes from Researchers, Students, & Clinicians in Speech-Language Pathology

The research-practice gap is a widely recognized problem in many fields. The classic example is handwashing by health care providers. Despite the overwhelming evidence that handwashing decreases infections, this simple behavior doesn't always happen. Similarly, best practices in speech-language pathology aren't always, well, practiced! It's all too easy for researchers and clinicians to blame each other: "Researchers don't know what our day in the clinic is like," clinicians could grumble. "If they would only follow through with what we've shown works," researchers might lament.

When human behavior is involved, it's helpful to assume that everyone is doing their best and has good intentions. "What's going on with this *system*?" is often a better question to ask. In this spirit, eight stakeholders —3 clinicians, 3 researchers, and 2 current students—were interviewed to get their take on what's going on with the research-practice gap. Here are five themes that emerged from some truly fascinating conversations:

1) Communication

Even among professionals who specialize in communication disorders, communication breakdowns still occur. "Research works best when it's a conversation," shared Dr. JoAnn Silkes of the UW Aphasia Research Lab. But by all accounts, these conversations are often not happening, sometimes due to limited time, but often because clinicians and researchers are occupying different spaces.

Clinicians overwhelmingly reported using Twitter and Facebook for professional dialogue, while researchers tended to refer to the ASHA Community and conferences as where they interact with clinicians.

Vince Clark, past GSHA president and statewide FEES program administrator for Integra Rehab, reported using the ASHA Community forums to "hang out and watch," but "it's a lot more intimidating than the casual exchange on Facebook. On Facebook, even if it's not 100% accurate, we can have a conversation." He stated that Facebook SLP groups "have been more helpful to me than anything else to get answers" to clinical questions.

Vince's experience aligns with Dr. Natalie Douglas's research interest: "the literature shows that information is best spread through informal networks. It's relationship-based." This is why practitioners in many fields are more likely to use an approach recommended by a colleague than one written about in a paper.

Researchers' indicated that they were largely unaware of the more informal social media networks for SLPs, and described the time constraints of research productivity. The current tenure process rewards frequent publication, but doesn't account for whether those publications are ever adopted in clinical practice, or time spent collaborating with practicing clinicians.

Clinicians and students were in agreement that an academic presence is needed in social media. One clinician stated, "The reality is that if you want to know what the real-world clinician is doing, it's not going to be on formal professional forums. It's going to be on Facebook, Instagram, Twitter. That's where they are. I'm thankful for the researchers who engage with us there."

All interviewees expressed doubts that academic articles are actually written for clinicians rather than other researchers. "We need the bottom line! How we can actually carry the treatment out," voiced Sara Savaglio, a second-year master's student. "And once you get out of school, the research you have access to is so limited."

JoAnn acknowledged that articles classified as "Clinical Notes" and clinically-oriented journals fill some of the need for the "bottom line," but advocated for a more overview and summary papers. She pointed to projects such as the ANCDS Practice Guidelines as a great example of evidence 'boiled down' for busy clinicians. The guidelines are produced by a research committee that does the heavy lifting of combing through dozens of articles so clinicians don't have to.

2) Culture

Natalie worked in skilled nursing facilities for 10 years before obtaining her PhD. She ruefully reminisced about being driven to provide quality treatment, but sometimes found herself thwarted by the little things. One day, she searched the entire facility for a working dry erase marker for a patient's whiteboard, losing precious time. She finally walked to CVS and

bought markers. How could she use evidence-based treatments without the basic tools?

Many clinicians report similar obstacles to implementing new evidence they've learned: lack of access to instrumental swallow studies, limited funds to purchase materials, protocols that require more time per session than the clinician's caseload/work setting allows for, etc. Natalie validates such experiences: "What a researcher might see as 'cutting corners,' the clinicians are just trying to get through their day and do their best with what's available to them."

Yvette McCoy, BCS-S and clinical supervisor, sums up the added pressure of the SLP scope of practice: "We really are generalists trying to be specialists and mastering nothing." Pulled in many directions and practicing in settings that may differ from standard academic working conditions, some clinicians report a reluctance to tell researchers what routine practice actually looks like. This can only widen the gap.

Other clinicians are more comfortable interacting with researchers. These clinicians are in a unique role as cultural brokers of sorts. In the Facebook forum "Dysphagia Therapy Group –Professional Edition," Vince recently encouraged a clinician in his region to share observations about a successful experience using a controversial treatment technique with a dysphagia researcher. The clinician did, and a 135-comment conversation ensued, with an ongoing dialogue between practitioners and the researcher.

Vince shared that his comfort with both clinical and academic culture helped him serve as a back-channel mediator. For example, he could convey to the researcher that being peppered with questions made some clinicians uneasy, and also reassure clinicians that rapid-fire questions meant the researcher was *really* interested!

As bridges between social networks, clinical/research cultural brokers are in the unique position of being able to facilitate exchange of information and

help avoid miscommunication between cultures.

3) Learning Principles

Natalie points to the example of the iPad: "Why did it take off? Because it was easy to use, intuitive, and relatively cheap...If you want therapists to embrace a practice, it has to be easy, doable, and full of positive reinforcement for both the SLP and the client."

The literature on adult learning principles shows that "didactic teaching often does not lead to behavior change. On-site, in-the-moment coaching does." She hopes that continuing education moves more toward a blend of the two, for example, via academics making themselves available for consultation after a course is over.

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4) Research Direction

As Yvette puts it, "*We* are the experts on seeing patients! And we have access to patient populations" that researchers need. Dr. Lesley Olswang clarifies that researchers "aren't expecting the kind of data [from clinicians] that we collect in the lab. That would be ridiculous!" She points out that practice setting and population data, such as tracking the number of times SLPs see clients with a certain diagnosis, are a boon for researchers focusing on specific populations.

She further cautions that the research-practice gap "is never going to close unless clinicians are part of it." Jonathan Rogers, a first-year MA/PhD student agrees: "Input from clinicians can help frame the direction that research takes."

Yvette and fellow SLP Rinki Varindani Desai took these sentiments to heart when they discovered they shared concerns about graduate student dysphagia preparation. A Twitter conversation led to deciding to create a survey to gather the kind of data they had access to: SLPs' perceptions of their preparedness for dysphagia management, and how much of their caseload dysphagia cases accounted for.

@ASHAWeb sent the transcript of the Twitter conversation to the ASHA Academic Affairs Board, which requested the results of the survey. "I didn't mean for it to take on a life of its own!" laughed Yvette, before adopting a more serious tone. "We need to focus on changing the system…and we have the ability to effect change."

5) Optimism for Solutions

Natalie emphasizes that it's "important for clinicians to know that there's a really committed group [in academia] who recognize the gap" and "really recognize clinicians as equal stakeholders in the research process – their priorities are our priorities."

All interviewees believed that bridging the gap will require work from both sides, and Natalie encourages a welcoming and understanding mindset as a first step. "Just as we extend empathy to our clients and students, we need to extend that same empathy to whatever role you are not."

Common suggestions included the state associations and universities working to create more opportunities for researcher-clinician community at the local and state level, including practice based research networks. One interviewee mentioned ASHA's Clinicians and Researchers Collaborating program. Multiple interviewees pointed to the need for time for researcher-clinician interaction to be built into their jobs rather than count against productivity.

Students and clinicians voiced a need for greater access to research

evidence, and pointed to increasing resources for this (ASHA Practice Portal, SpeechBITE). Overwhelmingly, stakeholders agree that "we all have a responsibility" to bridge this gap. As one stated quite simply, "to help patients, we need each other."

Many thanks to the following speech-language pathologist researchers and current and future clinicians for the fascinating and productive conversations:

- *Edgar "Vince" Clark, MS, CCC-SLP: Clinician and FEES program administrator, pursuing BCS-S, The Integra Rehabilitation Agency, Glenwood, GA*
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- *Natalie Douglas, PhD, CCC-SLP: Assistant Professor, Central Michigan University, Mount Pleasant, MI*
- *Yvette McCoy, MS, CCC-SLP, BCS-S: Clinician and clinical supervisor, Speak Well Solutions LLC, Leonardtown, MD*
- *Lesley Olswang, PhD, CCC-SLP: Professor Emeritus, University of Washington, Seattle, WA*
- *Jonathan Rogers: 1st year SLP MS/PhD student, University of Memphis, Memphis, TN*
- *Sara Savaglio: 2nd year SLP MS student, University of Washington, Seattle, WA*
- *JoAnn Silkes, PhD, CCC-SLP: Research Assistant Professor, University of Washington, Seattle, WA*