A Preliminary Study of Evidence-Based Practice in Speech-Language Pathology

Margery M. Whites, Stephanie Gumiela, Amber Pitman, Naomi Janke, & Kelly Yaeger

Contact first author: mwhites@stcloudstate.edu

Department of Communication Sciences and Disorders
St. Cloud State University
St. Cloud, Minnesota

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Introduction

- In recent years there has been increasing awareness of the importance of using evidence-based practice (EBP) in the field of speech-language pathology. EBP guides professionals to perform clinical services that result in best practices for effective treatment of speech and language problems.

- Since the term is relatively new to the profession, what is not known is how much currently practicing experienced SLPs know about EBP and to what extent they are using EBP to help guide their everyday clinical work.
Purpose

- The purpose of this study was to find out about the knowledge and use of evidenced-based practice (EBP) by experienced speech-language pathologists.
Who can use this information?

- Students- For learning about perceptions in the field about evidence-based practice
- University Programs- For educating students in best practices
- Professionals- Understanding and using best practices
- The Profession- Credibility and accountability
What is Evidence-Based Practice?

- According to ASHA (2005) evidence-based practice is, “an approach in which current, high quality research evidence is integrated with practitioner expertise and client preferences and values into the process of making clinical decisions.”
ASHA created a trilateral model to illustrate the three aspects of EBP

- Evidence Based Practice
  - Current best evidence
  - Clinical Expertise
  - Client/patient values
Levels of Evidence

- Gillam and Gillam (2006) attempted to operationalize each aspect of the trilateral model in order to help SLPs make clinical decisions by weighing the evidence across all three areas.
Gillam and Gillam (2006)  
Levels of Evidence (1-highest to 5-lowest)

<table>
<thead>
<tr>
<th>External (research) Evidence</th>
<th>Student-parent factors</th>
<th>Clinician-agency factors</th>
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<tbody>
<tr>
<td>1. Randomized Clinical Trial and Systematic Reviews of the type of study at a given level</td>
<td>1. Cultural values</td>
<td></td>
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<tr>
<td>2. Nonrandomized studies, multiple baseline designs, and systematic reviews</td>
<td>2. Student-parent activities and participation</td>
<td>2. Education</td>
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<tr>
<td>3. Studies of multiple cases who receive the same treatment</td>
<td>3. Family financial resources</td>
<td>3. Agency policies and financial resources</td>
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<tr>
<td>5. Expert opinion</td>
<td>5. Opinions</td>
<td>5. Theoretical orientation and recommendation</td>
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Participants

- 36 speech-language pathologists
  - Experienced SLPs were targeted for this study

- Employment settings:
  - 10 medical/other (MSLP)
  - 26 education (ESLP)

- Experience:
  - 10.5 to 35 years
  - 22 years average

- Geographic region: Midwest

- All performed clinical services
Procedures

- Students developed open-ended interview questions and follow-up survey questions on EBP. In the survey, participants responded to statements on a 1 – 5 Likert-type scale ranging from “strongly disagree” to “strongly agree.”

- Students role-played with one another prior to conducting interviews in order to become familiar with the Observation-Interview technique.
Procedures

- **Interview:**
  - Interviews were conducted on-site or over the phone and contained open-ended questions.

- **Survey:**
  - Sent out via mail after the interview was conducted.

Questions were based on the SLPs’ use and knowledge of evidence-based practice and its relation to the field of speech-language pathology.
Interview Results

- When asked to define EBP, most participants replied with partially complete definitions as compared to the ASHA definition.
  - 4 participants responded with incorrect definitions of EBP.
Interview Results - Example definitions

- “Evidence-based practice is looking at what works for people and what does not. What works is what you do.”
- “I would say it is the relationship between goals and treatment that generates a functional outcome for discharge.”
- “I know it is something I have read on ASHA [website]. It is looking at IEP goals and as goals are not met, changing how goals are being worked on.” (When provided with the correct definition, this participant said she had not heard it before.)
Interview Results

- When asked how EBP is incorporated into their profession, the majority responded that they used their own data to modify goals. About half indicated they read journals, books, and/or websites.

- A few participants stated they did not use evidence-based practice at all. Interestingly, these participants indicated that they used their own treatment outcomes, websites, and journal articles, indicating a possible misunderstanding of what EBP entails.
Interview Results

- We examined the SLPs’ definitions and how they incorporated EBP into their own practices then compared this with the Gillam and Gillam model. Based on this comparison, most SLPs’ answers were at Level 4 (clinical data) in the “Clinician-Agency-Factors” leg of the trilateral model. For those who read journals, books, and websites, it was not clear if they were evaluating the quality of evidence from the “External Research Evidence” leg of the trilateral model.
Interesting Comments about EBP
From Open-Ended Interview Questions

- “I don’t think I do this very well. I kept doing a technique just because someone said I should do it. Whatever technique was mainly used at the time, that is what we all did, even if it wasn’t beneficial. I don’t use evidence-based practice because it isn’t there when I need it.”

- “I don’t use it. My therapy is based on my own experiences.”

- “Trial and error.”
"I use regular therapy that has always been used. I don’t think there is another way to do articulation therapy."

"Since the scope of practice in my hospital is so small, EBP is not really relevant."

"I think that most of the research we see has been done a long time ago and most of us know what works."
Follow-Up Survey Results

- Two-thirds (67%) of the SLPs agreed that they are knowledgeable about ASHA’s position on evidence-based practice.

- Only one-third of participants indicated that evidence-based practice is a part of their job performance evaluation.

- Most (81%) participants felt that they were comfortable incorporating evidence-based practice into the therapy techniques that they use with their clients.
Follow-Up Survey Results

- Overall, SLPs ranked researching new therapy techniques as fifth on a priority scale of 1 to 7 with paperwork, meetings, direct therapy, and assessments taking precedence.

- Most (83%) SLPs base their therapy decisions on treatment efficacy data.
Discussion

- Most participants reported that they were using EBP. When asked to define it, however, they gave incomplete or incorrect definitions of the term. When compared with the Asha definition, most SLPs mentioned their own practitioner expertise. About half of the SLPs indicated they consulted outside sources, but did not indicate that they evaluated the quality of those journal articles, books, and websites. Evaluation of outside sources is an essential feature of EBP.
It is possible that these experienced SLPs may have some misconceptions about EBP. If experienced SLPs have these misunderstandings, it may be that there is still confusion in the profession as a whole as to what evidence-based practice involves.
Discussion

- Only a minority of SLPs are being evaluated on their use of evidence-based practice at their workplaces.
  - This could be a contributing factor to its lack of correct use.
  - It is possible that since EBP is not part of their performance appraisal, it may be a lower priority than other clinical activities.
Discussion

- These results indicate a need for further education about evidence-based practice and its importance to professionals as well as students. Furthermore, training programs and the profession need to find ways to promote accurate information about EBP.
References


Acknowledgments

- We would like to thank all of the participants of this study who graciously took time out of their busy schedules to help us learn more about evidence-based practice.

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