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Successful Collaborations: Research in the Field

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Successful Collaborations

Research in the Field

by Brian Goldstein, Patricia Swasey Washington, Barbara W. Hodson & Judith H. Porter

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<u>References</u>

The four research teams highlighted below and in the March 5 article were eager to share their experiences in the hope of encouraging additional clinician-researcher partnerships. They found that the challenges were many, but all agreed that the successes far outweighed them.

The Phonology of Bilingual Children

Brian Goldstein, Temple University, and Patricia Swasey Washington, Camden (NJ) City School District

Brian and Patricia met through a bilingual graduate student at Temple University who was doing a practicum at the school where Patricia works. Given their mutual interest in Spanish phonology, the student suggested that they meet. Knowing that Patricia had an interest in Spanish phonology as well as previous research experience, Brian initiated a meeting to determine whether they could plan and carry out a research study. Patricia also was interested in the project because the majority of studies on Spanish phonology examined only monolingual, Spanish-speaking children. Thus, they decided to examine phonological skills in typically developing bilingual children to fill the gap in the literature.

After deciding on the general theme of the study, the research partners spent the next month reading the relevant phonology literature related to monolingual Spanish speakers, bilingual (Spanish-English) speakers, and bilingual children of other languages. During that time, they planned and refined the methodology for the study. The assessment protocol consisted of administering a single-word assessment in both English and Spanish, completing an oral-peripheral exam, conducting a hearing screening, and collecting demographic data on all the children. They then determined the areas of the study for which they would each take responsibility. In general, Patricia would make the majority of contacts with the various facilities, assess the children, and review the manuscript. Brian was responsible for completing the data analyses and writing the article.

The next step was to discuss the study with the principal of the school and the director of another facility where children would be tested. They both enthusiastically supported the project. Brian and Patricia then sought to obtain permission from the Camden School Board. Receiving the board's permission was the primary obstacle in completing the study; it took almost three months. During that time, Brian was writing the introduction and method sections of the manuscript. Over the next few months, Patricia tested children at three different sites (even testing children before and after

work, during lunch and prep times, and on her days off), met with the site directors, and juggled her regular clinical schedule. Meanwhile, they were meeting on a regular basis to discuss all aspects of the project.

When they planned the study, the research partners tried to identify areas that might not proceed as planned. To their surprise, however, the testing actually went quite smoothly. The students were eager to participate and were pleasant during the activities. There were times when the plan did not progress as scheduled (e.g., a child was taking a nap when Patricia wanted to test). The teachers were extremely responsive and were instrumental in making the students available and obtaining parental permissions and demographic data on the students. Ultimately, the two partners were able to test 12 bilingual children.

In analyzing the data, the next difficulty arose. The computer program they were using to complete the analyses did not automatically analyze the Spanish sounds. After working with the computer programmer who originally designed the program, the issue was resolved. The two also checked reliability of transcription, which was surprisingly good given the fact that they had not collaborated previously.

Despite the challenges, their collaboration was a tremendous experience and undoubtedly a success. Brian and Patricia were comfortable with each other from the initial meeting (a very important attribute when working with a research partner over an extended amount of time). From the first meeting, the two also agreed on the general topic for the study and the subsequent method and analyses. It was obvious too that they could trust each other to carry out the tasks for which they were responsible. Moreover, each of them believed the responsibilities were equally distributed. The difficulties encountered simply slowed up the process and caused them to feel the time pressure to complete the study. The challenges, however, did not deter either of them from forging on and seeing the project completed.

Collaborating to Collect Phonological Acquisition Data

Barbara W. Hodson, Wichita State University, and Judith H. Porter, Riverside County (CA) Schools

Barbara and Judith's collaboration was unique because the study was initiated by a group of schoolbased SLPs rather than a university faculty member. Twelve practitioners in Riverside County, CA, had been meeting regularly to discuss issues of mutual concern. The area that was particularly perplexing for these practitioners pertained to speech sound acquisition norms.

A common practice in the schools is to qualify a child for services if the individual demonstrates errors on a specified number of phonemes at least a year after the sounds are expected to be acquired (i.e., based on published normative data). Phoneme acquisition ages vary from study to study, however. In many school districts, a child qualifies or does not qualify for speech-language services depending on which norms are used. The practitioners decided they wanted to obtain phonological acquisition data for children in their own county.

Judith, the program specialist, obtained a small "innovative projects" incentive grant from the Superintendent of Schools' office to provide money for assessment materials, instruction, and data analysis. As the project began to evolve, the practitioners decided to invite a university faculty member, Barbara, who specialized in child phonology to serve as a research consultant and provide assistance during the planning and instruction stages and, ultimately, with the data analysis and dissemination of the results.

The school practitioners participated in six hours of instruction provided by the university consultant. Narrow phonetic transcription was reviewed and practiced. In addition, criteria for selecting participants were discussed. Methods for eliciting specific words also were explained. The 12 practitioners transcribed speech samples of 520 typically developing children between the ages of 2:6 and 8:0 (years:months). The responses were coded for syllable/word structures (i.e., omissions) and for phoneme class (e.g., velar) deficiencies.

The finding that was most salient was that omissions were rare in the utterances of typically developing children in this study, even in consonant clusters. The practitioners concluded that consistent speech sound omissions should be considered a critical indicator. For example, if two children have the same number of errors on an assessment instrument, but one child omits many sounds and the other child's errors consist of substitutions and distortions with few or no omissions, the child with extensive omissions should be considered to be a higher priority for speech-language services.

Their results also indicated that the 3-year-olds in this sample had acquired all major phoneme classes except liquids. The /l/ phoneme was acquired between the ages of 4 and 5 years, and /r/ between 5 and 6 years. The strident phoneme class (i.e., sibilants and /f/ and /v/) reached the criterion for acquisition by age 3. Strident phonemes were given credit if children incorporated stridency during productions of sibilants, even if distortions occurred. Sibilant lisps (i.e., stridency maintained, but lateralization or tongue protrusions occurred) were still common until the age of 7 years. The implication of this finding is that if two 4-year-olds have the same number of errors for productions of sibilants, but one has consistent substitutions or omissions and the other has a consistent lisp, the 4-year-old with the lisp would not meet the criteria for qualification, but the 4-year-old with consistent substitutions or omissions would. Of course, any other speech sound deviations would need to be considered in the final decision regarding eligibility.

All of the individuals who participated in this project, including the practitioners and the university consultant, felt that the collaboration was a positive experience. The biggest challenge for all was finding the extra time. Obtaining and testing typically developing 3-year-olds also was challenging. Nonetheless, the school practitioners reported that they enjoyed the research experience even though each contributed approximately 30 hours of her own time (i.e., none received "release" time) to test the children. They also indicated that they had expanded their knowledge base regarding factors that differentiate typically developing speech in contrast to impaired speech. The university clinical phonologist enjoyed the involvement with "front-line" clinical researchers and also the data analysis and interpretation.

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References

Apel, K., Hodson, B. W., Shulman, B. B., & Gordon-Brannan, M. (1994). **Severity ratings and eligibility criteria: A (confused?) state of the union.** Miniseminar presented at the ASHA Convention, New Orleans, LA.

Goldstein, B., & Washington, P. S. (2000). An initial investigation of phonological patterns in typically developing 4-year-old Spanish-English bilingual children. *Language, Speech, and Hearing Services in Schools*, 32, 153–164.

Porter, J. H., & Hodson, B. W. (2001). Collaborating to obtain phonological acquisition data for local schools. *Language, Speech, and Hearing Services in Schools*, 32, 165–171.

Smit, A. (1986). Ages of speech sound acquisition: Comparisons and critiques of several normative studies. *Language, Speech, and Hearing Services in Schools*, 17, 175–186.