

## Improving Speech and Language Services for Children with Visual Impairments

### **Purpose**

The speech-language pathology literature has not established the evidence-based knowledge and skills necessary for adapting clinical services to children with visual impairment (VI). House (2000) found that SLPs reported lesser training and competence related to working with children with VI. The purpose here is to report the results of two studies that explored speech-language services for children with VI. In the first study, speech-language pathologists (SLPs) with expertise providing services to children with VI were interviewed about how they adapt assessments and interventions to this specialized population. In the second study, a different group of SLPs with similar expertise answered detailed survey questions about the speech sound production of the children they have treated. Results, taken together, inform a new body of information related to how SLPs can provide effective assessments and interventions for children with VI.

### **Theoretical Framework**

A guiding principle for this study is that we (the researchers) desire to report evidence that is authentic and experiential. By using interview data, we can ascertain the strategies that the SLPs use. Via survey questions about speech sound development, we can quantify the information reported, thus introducing frequency of occurrence as a weight of evidence.

As Mills (1987) described, conceptual and methodological challenges make answering research questions about services for children with VI far from straightforward. Within this comparatively small population is great diversity. It is difficult to obtain the sample size for

statistical power. However, it is possible to obtain useful evidence. ASHA (2005) defines EBP as “...the integration of: (a) clinical expertise/expert opinion, (b) external scientific evidence, and (c) client/patient/caregiver perspectives.” Each of these three criteria have been herein.

### **Methods**

The researchers conducted approximately 20 hours of semi-structured interviews with 10 SLPs and online surveys of 16 other SLPs. Interviews elicited: 1) the SLPs’ clinical expertise in services for children with VI; 2) effective methods and adaptations. The survey focused on the speech sound production errors, and whether there are patterns or types of errors.

### **Results**

Two trained raters categorized interviewees’ remarks under inductively derived headings. Rigor was maintained via cross-checking the codings and by member checking. Survey data were compiled using descriptive statistics.

Interviewees described their specialized practices. Survey respondents revealed information on the number of speech sounds that their caseload children produce in error (usually about 22% of all sounds). About 59% of children produce errors that are unexpected for age in number and/or type. Most errors are on fricatives and affricates.

### **Significance**

The study represents a new area of inquiry that has practical significance and can spur future studies.

### **References**

American Speech-Language-Hearing Association (2005). *Evidence-based practice in communication disorders*.

House, S. S. (2000). *Articulation production: A comparative study of university attendees having visual impairment from early childhood and university attendees without visual impairment*. Doctoral Dissertation, Texas Tech University, Lubbock, TX.

Mills, A. (1987). The development of phonology in the blind child. *Hearing by Eye: The Psychology of Lip Reading*. Hillsdale, NJ: Lawrence Erlbaum.