



# COMMUNICATION CONSIDERATIONS A-Z™

## *Research*

by Marc Marschark, Ph.D.

### 1. What is research?

The Comprehensive Dictionary of Psychological and Psychoanalytic Terms defines research as “systematic, detailed, and relatively prolonged attempt to discover or confirm the facts that bear upon a certain problem or problems and the laws or principles that govern.” This definition includes historical research, literature reviews, and, most importantly for our purposes, experimental research aimed at discovering what is true and what is false - what works, for whom, and when. The scientific method, which is utilized in most experimental research, involves making hypotheses, developing methods to test them, conducting experiments, and evaluating the results.

People sometimes say that research can be made to prove anything you want. First, at least with regard to behavioral research (psychology, education, sociology, etc.) we do not speak of anything being proved. Rather, we obtained evidence that supports or contradicts hypotheses. Because individuals vary both with context and time, one can never be absolutely certain that a finding from behavioral research will apply to everyone in all situations (we have statistics to help us determine when we can be confident enough to make decisions). Second, certainly bad research can demonstrate almost anything. Good research, on the other hand, is undertaken to discover the facts, not to support one perspective or another often, an investigator has to accept findings that have been found to be “real” even if they do not match one’s desires or expectations. In my case, for example, in 1997, I was not a supporter of cochlear implants for deaf

children, because there was little evidence that they were a significant benefit, and least for children with prelingual hearing losses. A large amount of research published in 2000-2001, however, convinced me that a majority of deaf children would benefit from implants, whether or not they would allow for the development of fluid spoken language.

Research frequently is not easy (human behavior is complicated), is expensive (participants, and interpreters, materials, and equipment all cost money), is time consuming (I've conducted experiments that have taken three years), and proceeds only in "baby steps." Some of the most important questions (see below) simply do not have any simple answers that are as general as we would like. The question of why deaf children have so much trouble learning to read, for example, has been under investigation for more than 100 years, and we do not yet have any clear and simple answers.

## **2. What issues are at the forefront of research?**

In our field, the big questions traditionally have been "what is better, spoken language or sign language?" and "what is the best educational placement for deaf children?" Neither of these questions has a single answer, however, as spoken and sign language have different benefits for different children in different contexts. Different educational placements work for some children and not others. As much as people might want to declare that there are simple answers, research has demonstrated that they do not (and that is why there is research to support all of these alternatives). For example, there has never been any research demonstrating that a child's learning of sign language interferes with their learning of spoken language. Then again, there is no experiment that could be done to demonstrate that. Similarly, there has never been any research demonstrating that bilingual education (sign and print/speech) works better than monolingual education in either speech or sign. This is not to say that one of these alternatives might not be but there is no evidence that general statements can be made.

Researchers working in deafness today range from developmental researchers interested in children's language, social, and cognitive development; educational researchers interested in learning through sign language, reading, and the effects of alternative school placements and cochlear implants on academic achievement; psychological researchers interested in memory, brain functioning, and perception; and linguists studying the structure of American Sign Language (and, we wish, the spoken language used by deaf individuals). These are but a few of the kinds of research happening today, being led by deaf and hearing investigators from a variety of fields.

## **3. What should every parent or professional know about research?**

There is good research, and there is bad research. Bad research is not necessarily the fault of a sloppy investigator or a hidden agenda. People not trained in experimental methods conduct research that is flawed and hence has flawed conclusions. Things that might seem obvious to an investigator today might not have been recognized 50, 25, or even 5 years ago. It is important that one never accept a single study as conclusive evidence for a course of action with regard to any particular deaf child. Parents do not want to hear that "it's complicated," but it is. It therefore is essential to collect evidence from alternative perspectives and balance research evidence against opinion, anecdote, and beliefs.

#### 4. Where else can I find information about research in our field?

Unfortunately, most research in our field is published in scholarly journals and books which are not written for lay readers. I do not recommend websites, because they are neither peer-reviewed nor edited for accuracy. I have seen glaringly absurd claims on the web attributed to me (and others who I know would never say such things). There are some books that attempt to summarize research findings in a way that is accessible for diverse audiences including parents, teachers, and other professionals outside of the field of deafness. The first three to come to mind are:

Marschark, M. (2007). Raising and educating a deaf child, Second edition. New York: Oxford University Press.

Ogden, P. (1996). The silent garden, Second edition. Washington, DC: Gallaudet University Press.

Schirmer, B. (2001). Psychological, social, and educational dimensions of deafness. Boston: Allyn & Bacon.

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*Communication Considerations A to Z™ is a series from Hands & Voices that's designed to help families and the professionals working with them access information and further resources to assist them in raising and educating children who are deaf or hard of hearing. We've recruited some of the best in the business to share their insights on the many diverse considerations that play into communication modes & methods, and so many other variables that are part of informed decision making. We hope you find the time to read them all!*