



Deafness, an Introduction



There are very different kinds of deafness and hard-of-hearing: prelingual, postlingual and presbycusis.

Kinds of Deafness

- *Prelingual* deafness is deafness which occurs *before* learning the spoken language of one's environment vs. *postlingual*.
- The boundary between *deafness* and *hard-of-hearing* is often said to be $<$ or $>$ 70dB.
- *Presbycusis* is the onset of deafness in older life.

Kinds of Deafness

	Deafness	Hard-of-hearing
Prelingual	<70dB loss younger than learning language	>70dB loss younger than learning language
Postlingual	<70dB loss after learning language	>70dB loss after learning language
Presbycusis	<70dB loss in old age	>70dB loss in old age

Deafness

CHARACTERISTICS OF KINDS OF DEAFNESS

- Prelingual Deafness
- Prelingual Hard-of-Hearing
- Postlingual Deafness & Hard-of-Hearing
- Presbycusis

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Prelingual Deafness: a Definition

Prelingual Deafness, for the purposes of this discussion, means deafness in persons whose onset was before they learned the language of their environment. People generally learn their first language well before age five, i.e., persons who were either deaf at birth (congenital deafness) or who became deaf from disease or accident (adventitious deafness) prior to developing the basics of the grammar of the language of their environment.

Prelingual Deafness: Characteristics

People with normal hearing generally learn the language of their environment, be it English, German or Chinese. Many researchers believe that during the first several years of life, human brains are open to original language learning. Later, this open period ends. When this opportunity for learning is closed by deafness during this critical period, language learning does not occur in the usual way.

Prelingual Deafness: Characteristics

Thus, when a person is prelingually deaf, they learn a spoken language mainly through an artificial means, i.e., reading. Because print does not convey as much language information that sound conveys, prelingually deaf persons are deprived of auditory language input. The result is diminished reading and writing skills. A few examples follow to clarify this.

Prelingual Deafness:

Examples of Print Confusion

- *Ed and Joy read books.* Only context will tell the reader if the verb *read* or *reads* is past or present. Consider *bet*, *hit* and *put* which are past and present verbs and occasionally nouns.
- *Jo went to *church, Joe went to a church, Frances goes to an old church, and Francis goes to the First Presbyterian Church.* Without hearing there is confusion involving both **articles** (*a*, *an*, *the*, and **NULL*) and **names**.

Prelingual Deafness: Characteristics

Reading tests show that prelingually deaf persons achieve an average of grade-4 reading skills by age 19.¹

¹R. Trybus & M. Karchmer, "School Achievement Scores of Hearing Impaired Children," *American Annals of the Deaf*, 122:2, 62--69, Apr.1977.

Writing tests are more difficult to standardize than reading tests. The anomalous language shown by prelingually deaf students is well known to their teachers and parents.²

²K.E.Crandall, "An Investigation of Variables of Instruction ..."
American Annals of the Deaf, 125:3, 427--34, May 1980.

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Prelingual Hard-of-Hearing: a Definition

Prelingual Hard-of-Hearing, for the purposes of this discussion, means partial deafness in persons whose onset was before they learned the language of their environment. People generally learn their first language well before age five, i.e., persons who were either hard-of-hearing at birth (congenital hard-of-hearing) or who became hard-of-hearing from disease or accident prior to developing the basics of the grammar of the language of their environment.

Prelingual Hard-of-Hearing: Characteristics

Thus, when a person is prelingually hard-of-hearing, they learn a spoken language imperfectly. Because hard-of-hearing babies have partial hearing, their impairment is often goes undetected for some time. This is in contrast to deaf babies whose deafness is usually recognized quickly.

Prelingual Hard-of-Hearing: Characteristics

Thus, when a person is prelingually hard-of-hearing, they learn the spoken language of their environment imperfectly. They have the Herculean task of learning their first language by combining imperfectly heard sound with print and lip movements to assemble a knowledge of a language.

Prelingual Hard-of-Hearing: Characteristics

Because print does not convey as much of the language information that sound conveys, hard-of-hearing persons are deprived of normal language input. The result is diminished reading and writing skills.

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Prelingual Deafness: Characteristics

The language skills of the vast majority of prelingually deaf and hard-of-hearing persons generally preclude them from working as technical communicators.

When STC members write for the general public, they should be mindful of the reading limitations of all their readers including all those with impaired language owing to hearing loss.

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Postlingual Deafness

- Postlingually deaf persons have an aural/oral communication problem, not a language problem. Depending upon the age they lost their hearing, their reading and writing skills are similar hearing persons, but with a bit of a delay in new idioms of the language. Hearing aids and speech-reading instruction are often very beneficial.

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Presbycusis

- Many people develop hearing loss as they approach old age. The cause is often unknown, but it is often genetic or adventitious, i. e., deafness often runs in families, or can result from insult to the hearing system by environmental sound.
- Like postlingual deafness, presbycusis is a communication problem, not a language problem.

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