

How Speech Data Are Obtained

BBF (2009) pp. 75-82

- ✱ Diary studies
 - ◆ “Hildegard” by Leopold (1947)
 - ◆ a lot of detail, able to focus on specific aspect
- ✱ Large group, cross-sectional studies
 - ◆ Wellman et al. (1931), Poole (1934), Templin (1957), Smit et al. (1990)
 - ◆ Better normative info for SLP use and systematic, replicable
 - ◆ Procedures impact outcomes
- ✱ Longitudinal studies
 - ◆ Able to track developmental changes across time

Large Group Normative Studies

- ✱ Data collected via picture naming (i.e., single word, not connected speech)
- ✱ Imitated and spontaneous productions mixed
- ✱ Limited geographic regions
- ✱ Productions scored as correct/incorrect
- ✱ Number of positions assessed
- ✱ Criteria for mastery
 - Poole (1934) 100% of the children used the sound correctly = mastery
 - Templin (1957) and Prather et al. (1975) 75% of the children used sound correctly
- ◆ Customary production (Sander, 1972): 50% of children use sound in 2 of 3 positions

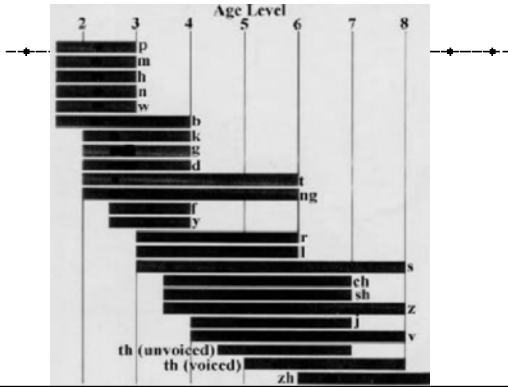
Intelligibility

- ✱ Practical measure or function measure of speech and communication competence
- ✱ Intelligibility Index (def) percentage of words in a sample that can be understood
 - ◆ By unfamiliar listener (rule of thumb):
 - Age 2 years = 50% or 2 out of 4 words
 - Age 3 years = 75% or 3 out of 4 words
 - Age 4 years = 100% or 4 out of 4 words
 - ◆ By a transcriber: 95% + 3-8 years (Flipsen, 2006)
- ✱ See p. 93 BBF (2009) Table 3.2

Normative Data

- ✱ Table 3.3, pp. 96-97, Acquisition for Consonants
- ✱ Table 3.4 p. 99 Acquisition of Clusters, and Box 3.3 p. 100 for acquisition guidelines for clusters
 - ◆ 2 year olds do produce some clusters
 - ◆ Final position clusters develop before initial position
 - ◆ 3 stages:
 - One-element realization (/ti/ for "tree")
 - Two-element realization (/twi/ for "tree")
 - Correct realization (/tri/ for "tree")
 - ◆ Complete mastery gradual, age 9 years
- ✱ Vowel Acquisition
 - ◆ By age 3, normal children have stable vowel system

Sander 1972 (from Templin, 1957 & Wellman et al., 1931)



Shriberg, 1993

A "Sequence" of Development

Early 8 m b j n w d p h

Middle 8 t k g ŋ f v tʃ dʒ

Late 8 ʃ θ ð s z l r ʒ

Appendix A pp. 385-405
