

Disorder vs. Difference vs. Delay?

- Language disorder - impaired ability to understand or use language as well as same-age peers of the same community
- Late talkers - young children whose language skills fall below 90% of age peers

Rate of comprehension

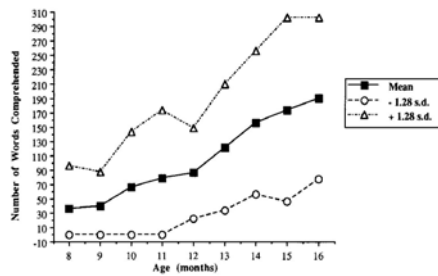


Figure 1. Word Comprehension on the MacArthur CDI Infant Scale Dale & Thal, 1995

Rate of production

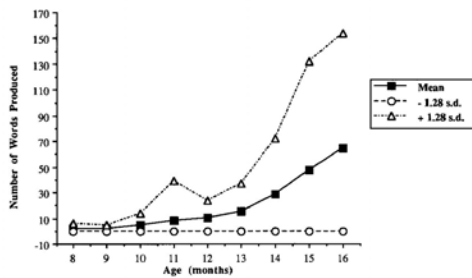


Figure 2. Word Production on the MacArthur CDI Infant Scale Bates, Dale & Thal, 1995

Rate of production, cont.

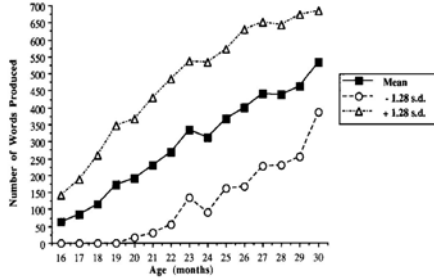


Figure 3. Word Production on the MacArthur CDI Toddler Scale
Bates, Dale & Thal, 1995

Grammatical complexity scores

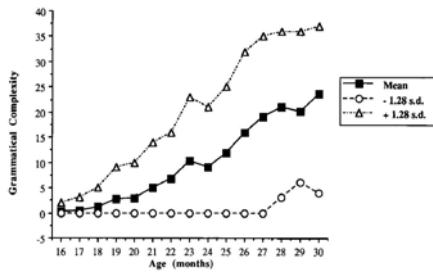


Figure 5. Grammatical Complexity Scores on the MacArthur CDI Toddler Scale
Bates, Dale & Thal, 1995

Estimated MLU

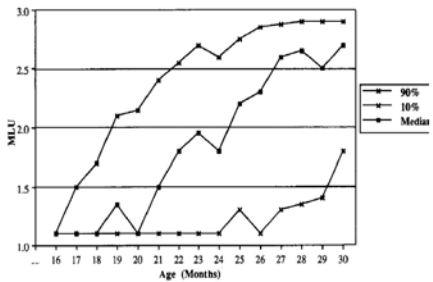


Figure 6. MacArthur CDI Toddler Form Estimated MLU (Observed)
Bates, Dale & Thal, 1995

Style differences

- Expressive/Holistic
 - Attention to the overall sound/rhythm of the language
- Referential/Analytic
 - Analyzes speech stream into individual phonetic elements and words
 - Tend to use isolated monosyllabic words
- Wait-and-see
 - Begin to speak late, but then have a large vocabulary and quickly acquire more words

Child 1

- | | |
|--------------------------------|-----------------------------|
| • Where cup went? | • Move it around. |
| • Where chair went? | • Clean e bottom. |
| • Teddy bear went? | • Put ne sofa. |
| • Baby doing? | • Put in eye. |
| • Wanna put it on. | • Mommy wear hat. |
| • Wanna go ride it. | • Mommy smell it. |
| • Want mom get off. | • Mommy read book. |
| • Daddy help her. [me] | • Find Becky. |
| • Can't get the teddy bear. | • See Becky in the morning. |
| • Teddy bear the bath. | • Becky is nice. |
| • Too much carrots on the dish | • Saw Becky and goats. |

Child 2

- | | |
|--------------|----------------|
| • Pretty. | • Baby crying. |
| • Cute. | • Hold. |
| • Big. | • Hold it. |
| • Round. | • Dropped it. |
| • Dry. | • Bring it. |
| • Hungry. | • Falling. |
| • Wet. | • Fell. |
| • Different. | • Talk. |
| • Enough. | • Talking. |
| • Else. | • Wash'em. |
| • More. | • Shirt on. |
| • Minute. | • Teddy up. |
| • Brushing. | • Mommy shoe. |
| • Hiding. | |

Other style differences

- Nominal vs. Pronominal
 - Nominal: “Mommy sock”
 - Pronominal: “I eat”, “Get it”
- Phonological rule consistency

Birth order influences

- First-born children get more individualized attention
- Parental speech in multi-child contexts tends to be more focused on activities and social exchanges
- Later-born children overhear speech to others more often, and are in noisier environments

Birth order results

- First-born children are more advanced in
 - Lexicons
 - Grammatical development
- Later-born children are more advanced in
 - Conversational skill
 - Turn-taking & social skills
 - Pronouns

Twins

- Early studies
 - Day (1932), Davis (1937)
 - Twins lag behind singletons in language development
 - Did not control for aspects such as birth order, birth weight, prematurity, disorders....
- Later studies attempted to explore reasons behind these differences - is it “twin-ness”, or the biological & environmental differences?

Twins, more facts

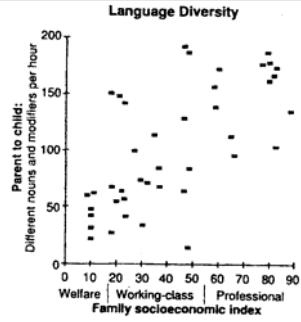
- Factors shown to predict language development:
 - Birth weight
 - Apgar scores
 - Time of gestation
 - Gender
 - Maternal speech to child

SES?

- SES: Socioeconomic status
 - Combination of factors including income, education, occupation.
- High-SES children have more advanced lexical development
 - Hoff-Ginsberg
- Discussion: Why might this be, and how could we test those theories?

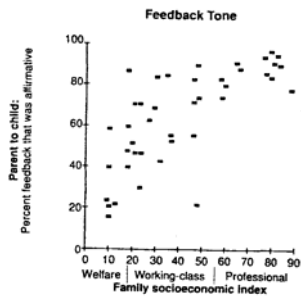
SES, cont.

- Nouns, adjectives, and adverbs addressed to the child per hour



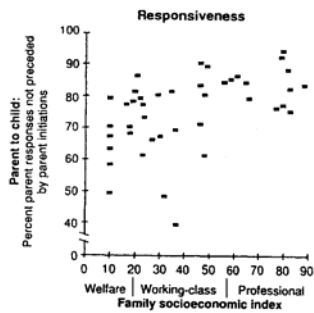
SES, cont.

- Percentage of feedback that was positive: repetitions, extensions, expansions, confirmations, praise, approval



SES, cont.

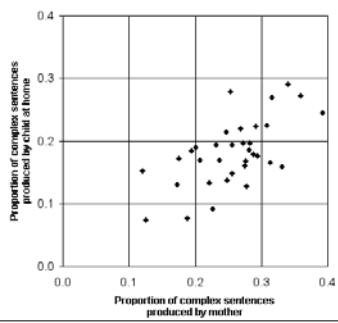
- % of responses not preceded by an initiation



Other cultural differences

- Expectation of a quiet child
- Child status
- Labeling vs. social interactions

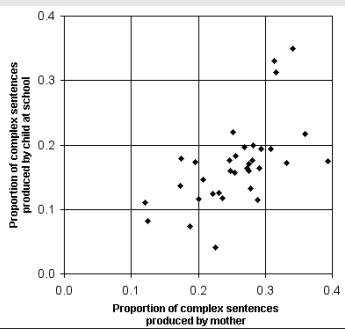
Input complexity



If parents use more complex sentences, so do children, both when they are at home...

<http://www-news.uchicago.edu/releases/02/021114.huttenlocher.sht.ml>

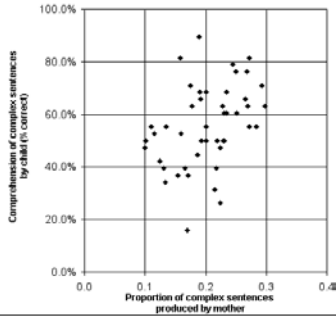
Input complexity, cont.



...and when they are at school.

<http://www-news.uchicago.edu/releases/02/021114.huttenlocher.sht.ml>

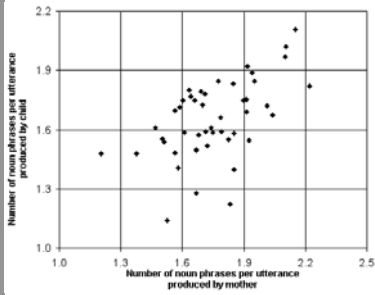
Input complexity, cont.



They also comprehend more complex sentences...

<http://www-news.uchicago.edu/releases/02/021114.huttenlocher.shtml>

Input complexity, cont.



And they have more noun phrases per utterance.

<http://www-news.uchicago.edu/releases/02/021114.huttenlocher.shtml>

Tests

The lamp broke because it fell off the table.



The boy is picking up the baby who is holding a block.



Tests

The boy is looking for the girl behind a chair, but she is sitting under the table.



The baby is holding the big ball and the small block.



Input complexity, cont.

