Signing for normally developing infant

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Baby signs

http://youtu.be/NEiMmSq6LFk?t=5s
Have you tried or do you plan on trying to use baby signs with your child?

Answered: 7  Skipped: 0

- Ritual Requests (10mo)
- Show objects
- Giving objects (12mo)
- Communicative pointing (13mo)

Gesture sequence

(Bates et al 1979)
Communication of the pre-verbal child

- Symbolic gestures by preverbal children is a natural process
- Children’s abstract gestures from experiences in real world
  - Examples: panting for dog, throwing motion for ball

Development of symbolic gestures

- Prior to first word children develop gestures to identify wants and needs
- Children must distance the symbol from the referent object
- Frustration develops among parents and children when they are unable to express needs
Theoretical advantages of signing

- Teaching specific signs instead of relying on infant to come up with these naturally
- Support of pre-speech development communication
- Thought to be easier for infants to master
- These skills can be transferred to oral modality once phonetic development is complete
- Signs may more closely represent the symbol of an object than a word

Parents want to know…

- Will my child learn to speak earlier?
- Will this decrease frustration with communication between 10 mo and verbal communication?
- Will signing improve their vocabulary? How about their IQ?
Tempering the Terrible Twos

- Infants are highly motivated to communicate
- Studies have shown that children acquire first signs before first verbal words
- May not have fine motor skills yet to verbalize
- Gestures naturally fill this gap, as do temper tantrums

Advancing language acquisition

- Early training of symbolic representation of an object
- Increased caregiver-infant interaction improving vocabulary growth
How did this start

- Hearing children of deaf parents
  - Research by Bovillian and Orlansky in the 1980s showed accelerated verbal milestone acquisition
- Began to look at children exposed to symbolic gestures with hearing parents
- Difference is that this was not a full language, but symbols

Products

- Sign with your baby: incorporate signs used among deaf community
- Baby Signs, Inc: combination of natural occurring symbolic gestures and ASL
- Both include classes, videos, books and cue cards
Product Claims

- Reduces tears, tantrums and frustration
- Makes learning to talk easier
- Boosts self-esteem and self-confidence
- Stimulate intellectual development
- Strengthens the parent-parent child bond

www.babysigns.com
Review of the literature

- 2005 review of the evidence: Teaching gestural signs to infants
- A total of 17 out of 1208 identified articles were included
- Evidence based on research 1980 through 2003 on normal developing children

Findings of 2005 review

- Research highlights
  - Studies among deaf parents in the 1980s showed accelerated language acquisition
  - Among hearing parents improved receptive lang at 19 and 24 months, and expressive at 15 and 24 (tested at 15,19,24,30 and 36)
  - Acredolo and Goodwyn in 2000 found that 8 year olds cognitive development was more advanced in children of parents who were sign-trained.
Conclusions of 2005 Review

Authors conclusions about the research

- The 17 studies suffered from methodological weakness
- No randomized-controlled trials
- In the 2 quasi-experimental research programs there was poor comparison groups, small sample sizes, and poor follow up
- Variation in the method of outcome measurement (parent report vs direct observation)

To sign or not to sign?

Randomized control trial of 40 typically developing infants age 8 to 20 months (Kirk, et al)

Findings:

- Infants exposed to gestures did not differ from controls on language outcomes
- Mothers with gesture training were more responsive to infants non-verbal cues
Confounding

- Incidence and duration of oral communication
- Eye-to-eye contact
- Singing
- Laughing
- Caressing

Baby signs and maternal anxiety

- 178 mother-infant dyads, divided into gesture (n=89) and non-gesture (n=89) groups
- Maternal stress measured by Parenting Stress Index
- Gesturing moms found to have higher stress scores
- This may be participation bias, with higher stress mom’s being attracted to these classes
So should parents teach signing?

**Pros:**
- Parents feel like they are doing something
- Possible increase time parents spend focusing on language development
- Possible improved language acquisition although not proven

**Cons:**
- Costs
- Pressure on parents to sign
- Possible delay verbal language
AAP opinion

These hands were made for talking
• www.healthychildren.org
• Suggests starting around 8-9 months
• Teach common necessities: eat, drink, sit, sleep, thank you, etc.

References