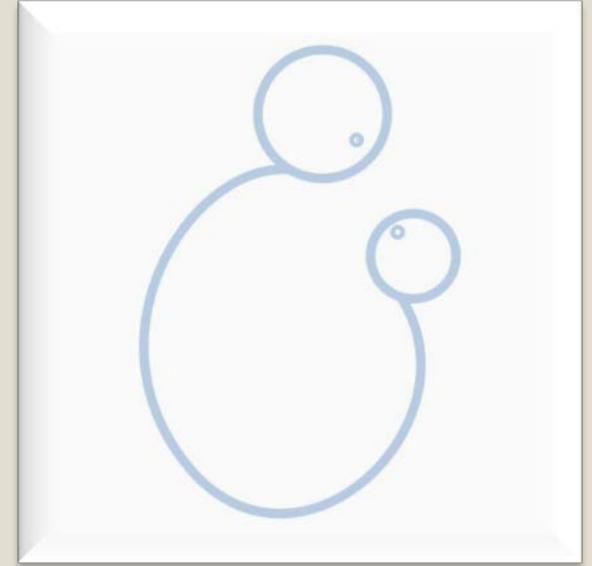


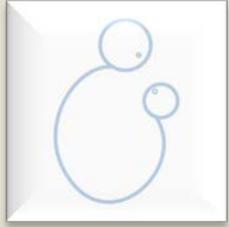
INFANT-DIRECTED AND CHILD-DIRECTED SPEECH: A NEGLECTED SKILL?

Prof. Alta Kritzinger 25 August 2018 CHRIB Seminar
Dept. of Speech-Language Pathology and Audiology, UP

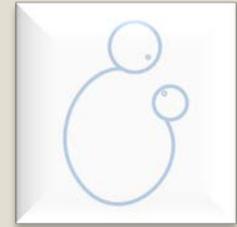
Outcomes

- Identify IDS and CDS
- Understand its importance
- Reflect on how to use IDS and CDS in your clinical practice in early communication intervention
- Discuss solutions to promote IDS and CDS in all parents and caregivers





Infant-directed speech



- Special speech register to talk to infants, differs distinctly from speech used by adults to talk to one another
- Found in most languages and cultures, Xhosa, research at Kalafong H
- Also in sign language
- In the past referred to as ‘baby talk’ or motherese
- Mothers do it unconsciously, do not need training
- Rooted in mother-infant attachment
- One of the many behaviours associated with attachment-interaction

What is Infant-Directed Speech?

- The mother simplifies her language to attract attention to her speech, to make her speech more accessible for infant
- Mothers do it from birth onwards, fathers, siblings and other caregivers use it too, but to a lesser extent
- Face-to-face talking with infant, with increased facial expressions and gestures, mother treats infant behaviours as meaningful
- Very enjoyable, lots of smiling, mother focussed on infant, very intimate, very sensitive towards infant
- IDS increases cerebral blood flow in infant

Child-Directed Speech

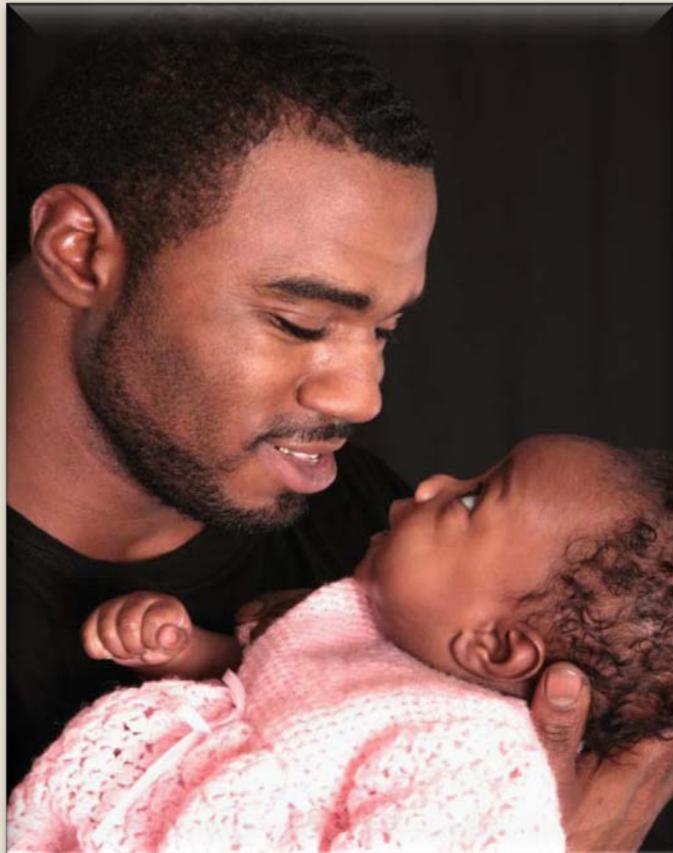
- Used with toddlers and preschool children
- More advanced language than IDS, adults use 50% questions, fewer dysfluencies than adult-to-adult speech
- Preschool child's main source of language is still the primary caregiver, often the mother, but also a grandmother, a father or a foster parent
- Key is an adult who is highly invested in the child
- Young children do not primarily learn language from overheard speech, peers, or from caregivers at a crèche, or their preschool teachers or from screens

IDS and CDS is embedded
the latest scientific evidence
on early brain development

CORE CONCEPTS IN THE SCIENCE OF EARLY CHILDHOOD DEVELOPMENT

(www.developingchild.harvard.edu)

Serve and Return Interaction Builds Healthy Brain



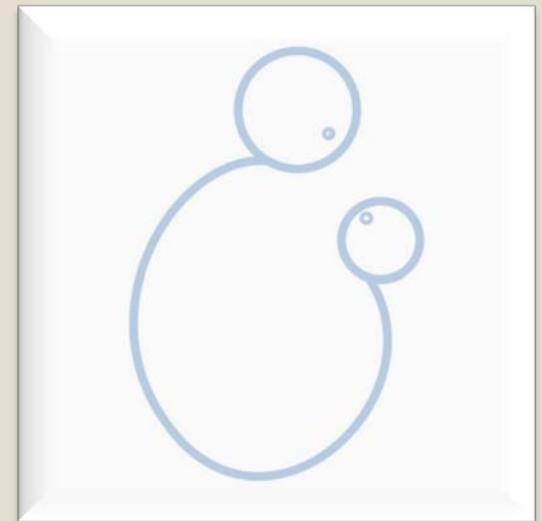
The interactive influences of genes and experience shape the developing brain. Scientists now know a major ingredient in this developmental process is the “serve and return” relationship between children and their parents or other caregivers in the family or community. Young children naturally reach out for interaction through babbling, facial expressions, and gestures, and adults respond with the same kind of vocalizing and gesturing back at them. In the absence of such responses—or if the responses are unreliable or inappropriate—the brain’s architecture does not form as expected, which can lead to disparities in learning and behaviour.

www.developingchild.harvard.edu

Applied by Hanen for children with LI

With parent coaching they learn:

- More about their child's communication
- To build interaction with their child
- How to add language
 - To interactions
 - While playing
 - During shared book reading



Differences between IDS and adult-to-adult talk

Prosody: Varied pitch and loudness, overall higher pitch, slower speech rate, lots of pauses, lengthening speech segments to mark clause boundaries for the infant

Structure: Short utterances, frequent questioning and greeting, episodes of maternal utterances, self repetitions, paraphrase, redundancy

Vocabulary: Talks about here and now, repeat words, use a small core vocabulary, frequent verbal rituals

Non-verbal: Gaze, facial expressions, gestures, head movements, proximity

Two main differences with adult-to-adult talk

1. Quantitative differences

- Either more or less

2. Differences in phonological properties of words, in particular more

- Highly iconic words (sound imitations)
- Diminutives (words end the same)
- Reduplications (aids memory
- 2m old: a few days)

Purpose of IDS and CDS

- Captures infant's attention, enhances recognition and discrimination
- Establishes emotional bonds
- Enables communication to occur at the earliest opportunity
- Reflects our evolutionary history – long period of offspring dependency in humans corresponds with protracted process of language learning
- Part of nurturing, imbedded in attachment

Evidence is growing

- Helps infant and child to learn language
- Diminutives and reduplication associated with vocabulary growth at 21m (Ota et al. 2018)
- Maybe the most efficient way for an infant and child to learn language

Importance of early language learning

- Language delay at 2 years predicts language impairment at 4 years, compromises school readiness and predicts academic failure
- Those who talk well before school are likely to learn well at school
- Poverty greatly affect brain development and language learning: On average, children from poverty homes hear 30 million words less than children from high-income homes, by 3 years of age (Hair et al. 2015)
- Developmental plasticity for language learning is peaking before age three. Early language exposure is critical

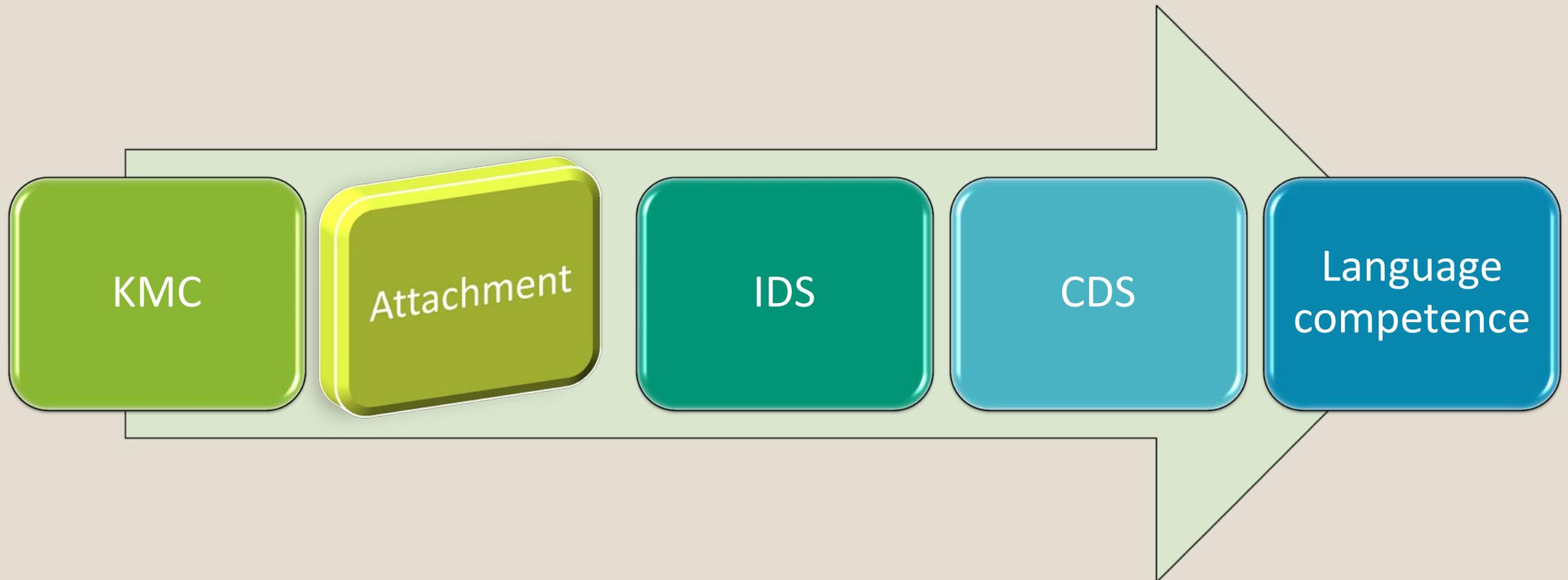
When is IDS not used?

- IDS and CDS not used by parents who have a very directive parenting style with their children
- Baby talk is often ridiculed
- IDS is disrupted by preterm birth
- Mothers who are under- and over responsive (intrusive)
- Mothers with postnatal depression, or experiencing toxic stress talk very little
- Parents of children with LI become more directive, put in an extra effort to help their children learn language

You don't have to teach a mother how to talk IDS, just convince her to do it

- A natural occurring maternal behaviour, just as Kangaroo Mother Care, IDS our evolutionary heritage, probably universal, with few differences across cultures
- (need research about IDS across languages in SA)
- Grandmothers may be a source to utilise
- Mothers of LBW/PTB infants need coaching
- Not difficult to teach a mother, she may have been doing it with previous children without language delay

Take-home message: The language learning continuum

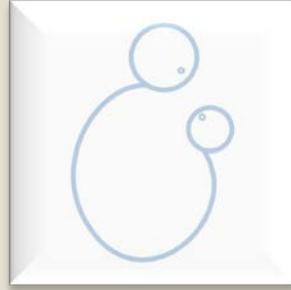


How to use IDS and
CDS in your clinical
practice?

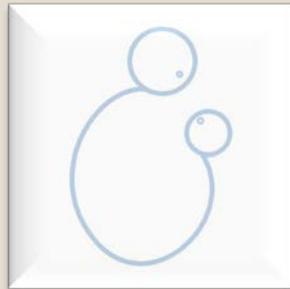
Strategies to
promote
IDS and CDS?

How to promote rich language learning environments for all children

- Make IDS and CDS popular (again?)
- Promote face-to-face interaction to learn language
- A child needs one competent caregiver
- Reduce background noise to enhance listening skills
- No screen time for infants, and limit it for toddlers and children (visual stimulation, at the cost of auditory input)



Early communication intervention
may be our most effective therapy



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