READING NOTES

DONNELLAN ET AL. 2019 | 19 MAY 2020

WHAT ASPECTS OF PRELINGUISTIC INFANT COMMUNICATION ARE MOST RELATED TO LATER LG (VOCAB) DEVELOPMENT?

MOTOR READINESS
INTENTIONAL READINESS
} Both prerequisites - work on motor dev has primarily looked @ vocal behavior while work on intent dev has primarily looked @ gesture ⇒ both considered here

GAZE COORDINATION w/ GESTURE/VOCALIZATION
Taken here as intentional:
Minimally evidence for intentional utility for interacting w/ others
Maximally evidence for doing so by influencing others' mental states (i.e. directing their attention)

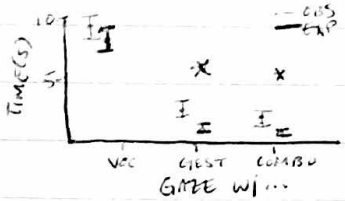
DEFINITION HERE: if infant looked to the caregiver within one second of producing the behavior (p. 4)

STUDY 1: Non-random coord. use of communicative signals

N = 134 infants at 9,11 from a larger (N=140) longitudinal study
10-15 min video recordings of an unstructured play session at home (SUBSET to 10 min for present)
- Expected (baseline) rate of cooccurrence = time spent vocalizing/gesturing * time spent gazing at caregiver
  - vs. Observed

SEE Bakeman & Gottman 1986: 131-132

RESULT?



Gestures and combinations cooccurred w/ caregiver gaze above chance, but not vocalizations alone
- in fact non-canonical babble did, just not canonical babble
- in fact gesture only w/ showing & giving — not pointing (index/open-hand) or conventional

⇒ More "sophisticated" productions not gaze-coord. + vocal play, draws gaze away are the explanations

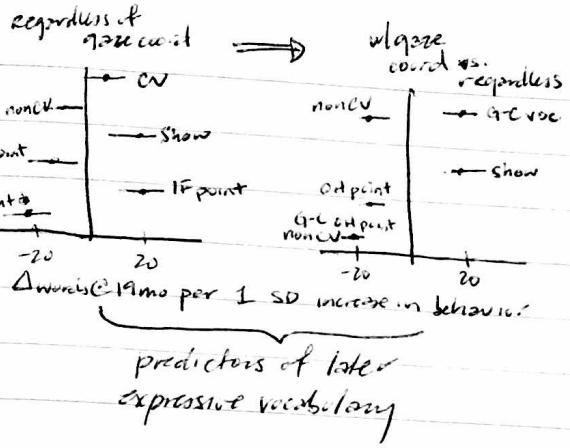
STUDY 2: Linking comm behavior to later vocab

Fancy bootstrap smoothing technique not going to summarize here but it's cool — follow up about scripts

Motoric readiness doesn't presume intentionality but communicative (gesture-centric) does — if gaze-coordinated behaviors in prelinguistic communication best predict vocab, it supports the communicative/intentional readiness idea

TEST:
Freq of vocalizations, gestures, & combos @ 11 & 12 mo —PREDICT→ expressive vocab @ 15, 18, & 24 mo
N = ~~58~~ (subset of those in Study 1 — the rest entered an intervention condition after 11,0)
- from 70 - 58 is the number w/ all the relevant data across ages

RESULTS?



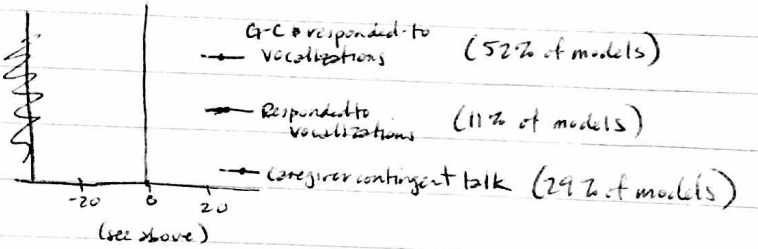
- gaze-coordinated vocalizations have the highest inclusion probability (>70% models)
- evidence for positive predictive value of GC voc (NC/C) & showing; negative predictive value of OH pointing etc.
- Index-finger pointing was not a strong predictor when GC behaviors are accounted for
  - ↳ intentionality story holds for vocalizations but not gestures

STUDY 3: NOW INCLUDING RESPONSES, WHAT PREDICTS VOCAB?

Added contingency codes to prev dataset: semantic content relating to infant's attentional state, & w/i 5 sec of infant's communicative signal

RESULTS?

- Gaze-coordination, gesture, & combo utterances were more likely to get a response
- Most valuable predictor of expressive vocabulary is frequency of gaze-coordinated vocalizations responded to by a caregiver
- Second is caregiver contingent talk frequency regardless of infant vocal/gesture



link w/ Study 2?

Intentional communication may be a good predictor b/c it powerfully elicits responses (as in Study 3)

⇒ the use of prelinguistic intentional communication facilitates the "leap" to symbol use via caregiver responsiveness

QUESTION / FOLLOW-UP:

- Intentional role as agent (i.e. kids actively eliciting certain responses) needs further exploration in this context
- "level" of intentionality still ambiguous (ie. first vs. second-order)
- room for individual variability in profile of dev. trajectory?