

SELF-FEEDING AND COMMUNICATIVE DEVELOPMENT DURING THE FIRST TWO YEARS OF LIFE: CONCURRENT AND LONGITUDINAL ASSOCIATIONS

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INTRODUCTION

- Advances in **motor skills** (e.g., object manipulation) can have cascading effects on infants' **language learning** and **caregivers' verbal input**¹
- Complementary feeding **encouraging self-feeding**, rather than spoon-feeding, seems to be **related to enhanced language development** in 8- to 24- month-olds²
- Self-feeding entails more **opportunities** to develop **fine-motor skills** and **child-directed speech**, which predict children's language development^{3,4,5}

We aimed to investigate:

- Concurrent relations between (i) **self-feeding** and (ii) **child-directed speech** with **gestural and vocal communication**
- Longitudinal relation between **self-feeding** and **language development**

METHOD

N=182 infants (48% females): 12 mos ($M=12.33$, $SD=.51$)

Measures at 12 months of age:

- Observation of a typical meal (self-feeding and communication)
- MacArthur-Bates Communicative Development Inventory (MCDI): Words and Gestures*⁶ (language)
- Developmental Profile 3*⁷ (fine-motor skill)
- Socio-demographic questionnaire

N=176 infants: 18 mos ($M=18.37$, $SD=.51$), 24 mos ($M=24.29$, $SD=.67$)

Measures at 18 and 24 months of age:

- MacArthur-Bates Communicative Development Inventory (MCDI): Words and Sentences*⁷ (language)

MEAL OBSERVATION

Coding scheme for infants' communicative abilities at 12 months^{4,8}:

- 31 gestures (6 deictic, 25 referential)
- 4 types of vocal acts (simple vocal., proto-word, word, word combination)



Variables from meal observations:

Dependent variables (DVs)

- Rates of infants' **deictic** and **referential gestures**
- Rates of infants' **vocalizations**

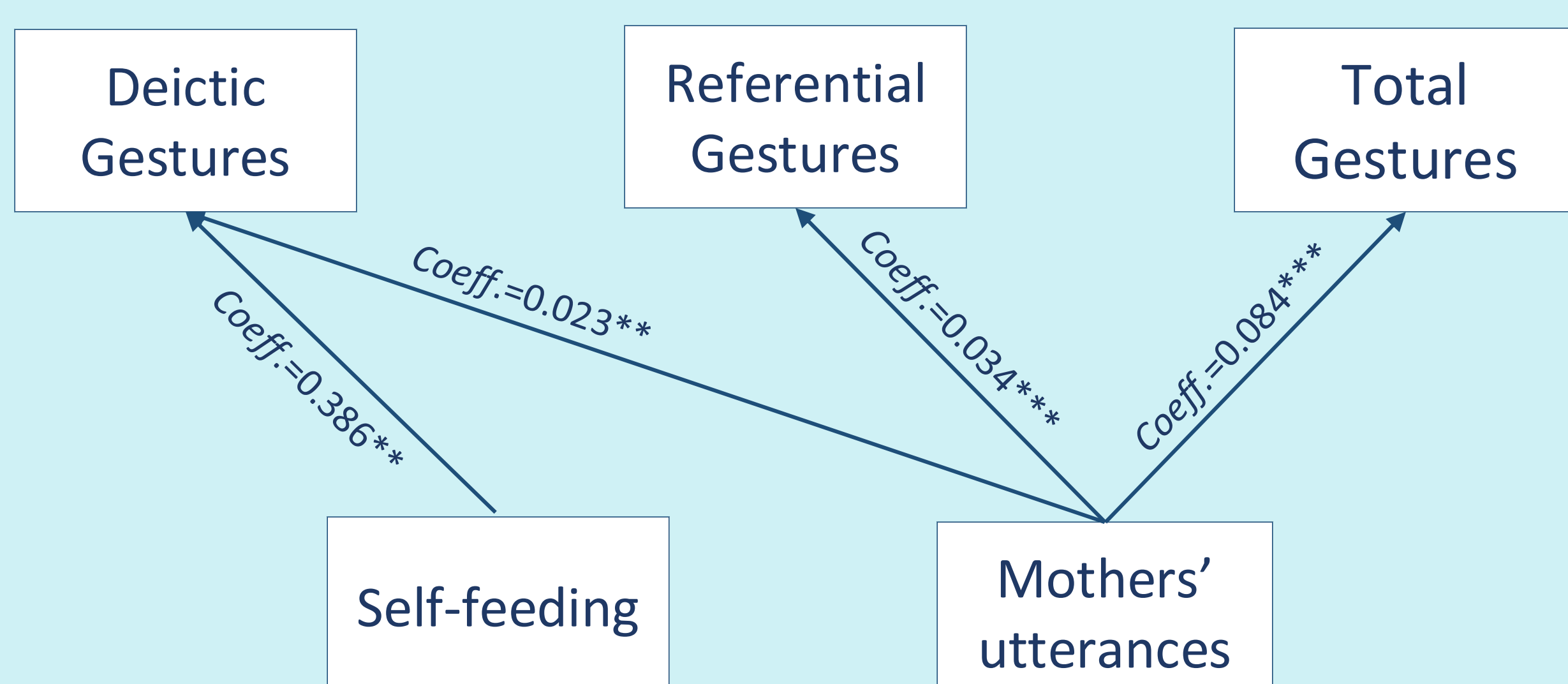
Independent variables (IVs):

- Rate of **mothers' child-directed utterances**
- Proportion of **self-feeding**



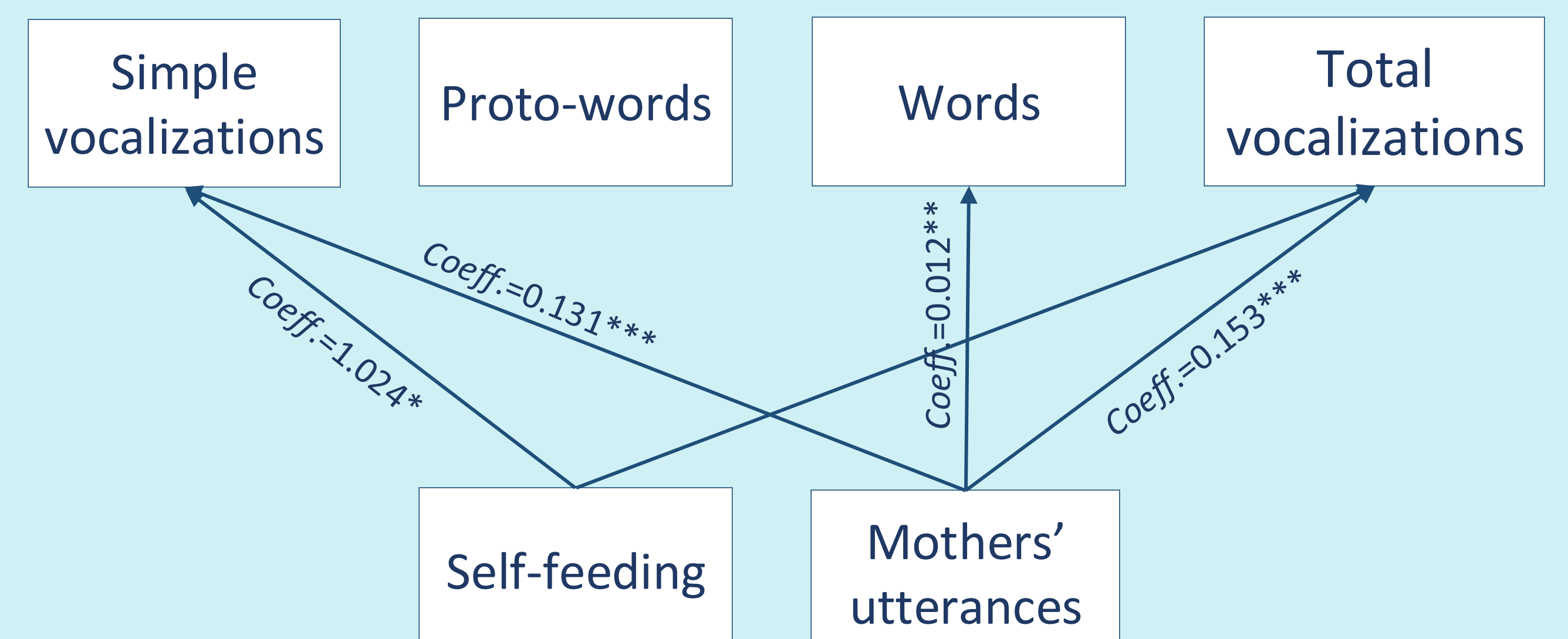
MAIN RESULTS FROM LINEAR REGRESSION ANALYSES

Concurrent associations with infants' gestures as DVs

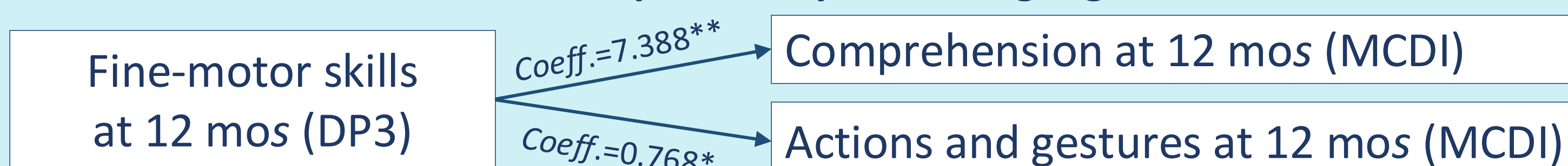


(* $p < .05$; ** $p < .01$; *** $p < .001$)

Concurrent associations with infants' vocalizations as DVs



Concurrent associations with parent-reported language at 12 months as DV



Longitudinal association with parent-reported language at 24 months as DV



DISCUSSION

- Infants who self-fed more frequently during meals exhibited **enhanced communicative skills** (self-feeding positively related to deictic gestures and simple/total vocalizations)
- This finding was further supported by **longitudinal data** (self-feeding positively linked to sentence production at 24 months), and concurrent relations between fine-motor skills and language at 12 months
- Child-directed speech** was related to infants' **communication** (maternal utterances positively associated with infants' gestures and vocal acts)

CONCLUSIONS

- Practicing fine-motor skills** involved in self-feeding and **exposure to language** directed at infants during mealtime can significantly influence their **gestural and vocal production**
- Investigating **early feeding practices** that promote fine-motor skills and child-directed speech is **crucial for understanding infants' communicative development**
- Relevant **implications** for promoting the dissemination of infant feeding practices alternative to parent-led spoon-feeding

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