

Can Expressive Language Features Indicate Whether Low-Verbal Children with ASD will Progress Linguistically?



Kaya J. LeGrand & Letitia Naigles
University of Connecticut

Background

- Definitions of "minimally verbal" and "low verbal" vary greatly but often involve reference to expressive vocabulary size^{1,2}
- But vocabulary is not sufficient for language development; children must also learn to *combine* words and morphemes (morphosyntactic development)
- Many autistic children learn words but do not progress to a stage of consistently combining them
- Many linguistic and cognitive factors predict language development in autism in general³⁻⁶
- What relates *specifically* to progress in morphosyntax?

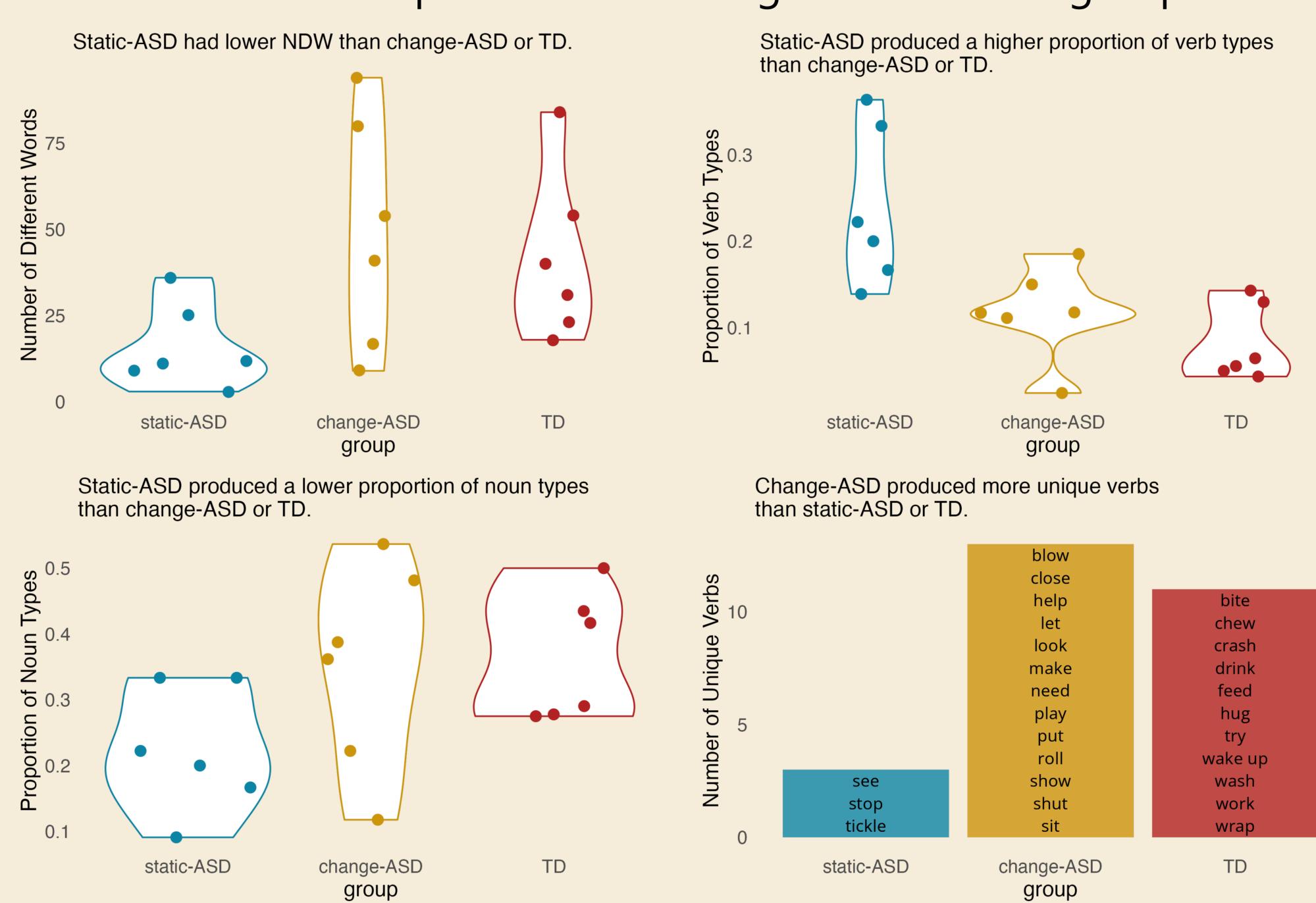
Among autistic and typically developing (TD) children who begin at the same level of morphosyntactic development, what distinguishes those who progress linguistically from those who remain stable?

Methods

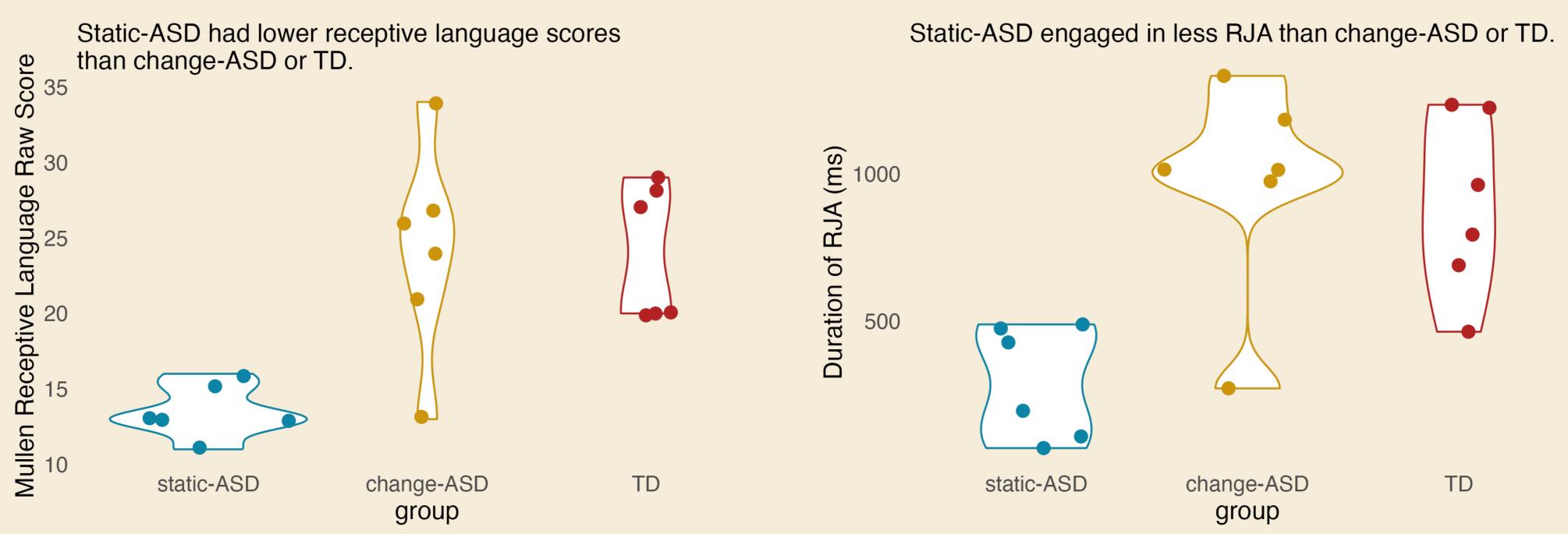
- Data from a larger longitudinal project⁷; ASD = 12, TD = 6
- Language samples from parent-child play sessions
- Time 1 (T1) mean age = 31.81 months
 - Groups matched on mean length of utterance (MLU) in morphemes; no children regularly combined words/morphemes (MLU < 2)
- Time 2 (T2) mean age = 51.70 months
 - Half of ASD group (n = 6) still did not regularly combine words ("static-ASD")
 - Other half of ASD group (n = 6) *did* regularly combine words ("change-ASD")
 - Entire TD group regularly combined words
- Qualitative analysis of T1 group differences in...
 - Expressive language features: number of different words (NDW), proportion of noun types (out of total word types), proportion of verb types, verb uniqueness (i.e., verbs produced by one group and not the others)
 - Non-expressive measures: receptive language scores, duration of response to joint attention (RJA)

Results

The static-ASD group differed on expressive language measures at T1 when compared to the change-ASD and TD groups.



The static-ASD group had lower receptive language scores and engaged in less RJA at T1 than the change-ASD and TD groups.



Discussion

- The static-ASD group demonstrated differences in overall vocabulary size, lexical composition, and number of unique verbs compared to the change-ASD and TD groups
- Smaller vocabulary size in the static-ASD group is consistent with previous findings that emphasize the link between lexical and grammatical development⁸
- Our results suggest that lexical composition may differ in children who remain at a low level of morphosyntactic development compared with those who progress
- The change-ASD and TD groups produced more unique verbs than the static-ASD group, likely reflecting their larger verb vocabulary overall
 - However, children in the static-ASD did produce some unique verbs
- Group differences were clearest in the non-expressive measures (receptive language, RJA duration)
 - Skills like language comprehension and ability to join social interactions might be more indicative of future linguistic progress, compared with more specific expressive language features

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This work is supported by NIHDCD R01 DC 07428 and R01 DC 01666.

Please direct correspondence to Kaya LeGrand at kaya.legrand@uconn.edu.