## Screening Two-Year-Olds for Language Issues through Comprehension:

## Convergent Validity of the Baby QUILS with the MCDI

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## INTRODUCTION

- Language delay is associated with difficulties in later academic achievement ${ }^{1}$
- Early intervention can help ameliorate these long lasting effects ${ }^{2}$
- Current parent-report assessments, like the MCDI, only assess vocabulary and syntax ${ }^{3}$
- The Baby QUILS, a downward extension of the Quick Interactive Language Screener (QUILSTM), in development with more items that the planned final version, directly screens toddlers for comprehension delays in three areas of language: vocabulary, syntax, and language learning process ${ }^{4}$
Is the Baby QUILS associated with established language measures like the MCDI?


## PARTICIPANTS

- 51 two-year-olds (26 males)
- $M_{\text {age }}=28.97$ months,$S D_{\text {age }}=3.12$
- $78 \%$ of children were white
- Majority of parents had a bachelor's degree or higher (82\%)


## PROCEDURE

- Children completed the language screener (4 blocks; 92 items) on a touchscreen tablet
- Parents completed the MCDI II short form

| Vocabulary | Syntax | Process |
| :---: | :---: | :---: |
| Nouns | Wh-questions | Noun Learning |
| Verbs | Negation | Verb Learning |
| Adjectives | Reversible Transitives | Adjective Learning |
| Prepositions | Reversible Prepositions |  |

PROCEDURE CONT.


- Multiple imputations used to account for missing data ${ }^{5}$
- Pearson correlations conducted using raw scores on the MCDI and Baby QUILS


Baby QUILS Vocabulary


## RESULTS CONT.



## DISCUSSION

- Two-year-olds will cooperate and can be tested via a touchscreen app to gain a representative sample of their language skill
- Total score, vocabulary, and syntax on the Baby QUILS are significantly correlated with MCDI scores suggesting convergent validity
- The weakest correlation, process, is an area of language that the MCDI may not be able to capture with parent report
- Item reduction is underway to create a quick tabletbased language screener for 2-year-olds
- Future directions include:
- Norming the Baby QUILS with 320+ toddlers across the US
- Test-retest reliability
- Further validity testing using MCDI and PPVT


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