



DEVELOPMENTAL MILESTONES IN JAMAICAN CHILDREN

Sydonnie Pellington

PRESENTATION

OUTLINE

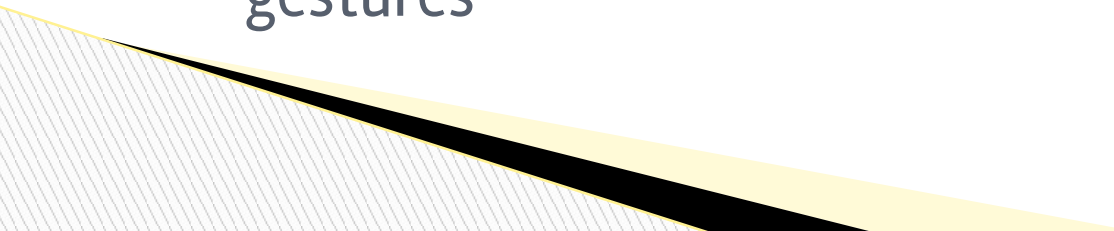
- ▶ Background on Developmental Milestones
- ▶ JA Kids Study Methods (Brief Overview)
- ▶ Detailed Methods
 - Developmental Milestones
 - Assessment
- ▶ Preliminary Results – 18 Months and 20 Months
- ▶ Early ‘Conclusions’



DEVELOPMENTAL MILESTONES

- ▶ These are abilities, skills and behaviours children attain as they grow.
 - Used by parents, doctors and other professionals.
 - Help to identify emerging developmental problems.
- ▶ Early identification of developmental problems leads to early intervention which puts the child on a trajectory for successful outcomes.

DEVELOPMENTAL MILESTONES

- ▶ Developmental milestones include:
 - Social – solving conflicts, making friends
 - Physical – gross and fine motor skills
 - Cognitive – ability to think learn and solve problems, knowledge of numbers and letters
 - Emotional – sharing, expressing and identifying emotions
 - Communication skills (language) – talking and using gestures
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DEVELOPMENTAL MILESTONES

- ▶ Developmental milestones are sometimes used in the development of screening tools
- ▶ There are no comprehensive milestones for Jamaican children, international standards are used.



DEVELOPMENTAL MILESTONES

▶ 18 months

Gross Motor

- Stand up alone
- Walks up and down stairs alone with railing

Fine Motor

- Inserts shapes
- Stacks two – three blocks
- Scribbles
- Turns several pages in a book

Communication

- Follow one step command
- uses 15 words, two – word phrases
- gestures
- Label objects
- Imitates
- Simple pretend play
- Understanding simple verbal input

HIGHLIGHTS FROM THE LITERATURE

- ▶ Early childhood developmental milestones predict childhood developmental outcomes – Brothers, Glascoe and Robertshaw, 2008
 - ▶ (Early) identification of delays
 - Allows referral for parent support and improved mother/child relationship – Bailey et al, 2005
 - Assists in establishing appropriate child care and therapy – Maulik and Darmstadt, 2007
 - ▶ Screening should be incorporated in regular medical surveillance – Oberklaid and Efron, 2005
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OBJECTIVES

- ▶ Evaluate Jamaican children's performance on selected milestones at 18–22 months
- ▶ Determine whether Jamaican parents' report of milestones is comparable with developmental assessment



METHODS – PHASE 1 AND 2

Contact period	Modality	Participant selection	Total
9 – 12 months (Phase 1)	Telephone interviews	Entire cohort	7600
18 – 22 months (Phase 1)	Telephone (25%)	Randomly selected	2450
	Face to face (10%)	Randomly selected	1035
4 – 5 years (Phase 2)	Face to face	Focus cohort	1300

ASSESSMENTS

- ▶ Parent report 9 – 12 months
 - Ages and Stages Questionnaire – third edition
 - Ten Question Screen
- ▶ 18 – 22 months
 - Ages and Stages Questionnaire – third edition
 - Ten Question Screen
 - Modified Checklist for Autism in Toddlers (MCHAT)
- ▶ Detailed developmental, behavioural assessments
- ▶ 18 – 22 months
 - Mullen Scales of Early Learning (18 – 22 months)
 - Child Behaviour Checklist (CBCL)
- ▶ 4 – 5 years old
 - Griffiths Mental Development Scales – Extended Revised
 - Wechsler Individual Achievement Test – third edition
 - Peabody Picture Vocabulary Test – fourth edition
 - Executive function tasks
 - Child Behaviour Checklist

Mullen Scales of Early Learning

- A comprehensive measure of cognitive ability and motor development.
- Age Range : birth – 68 months
- Modality : Individually administered
- Estimated Completion Time: 40 – 60 minutes
- Consists of five subscales:
 - Gross Motor
 - Visual Reception
 - Fine Motor
 - Expressive Language
 - Receptive language

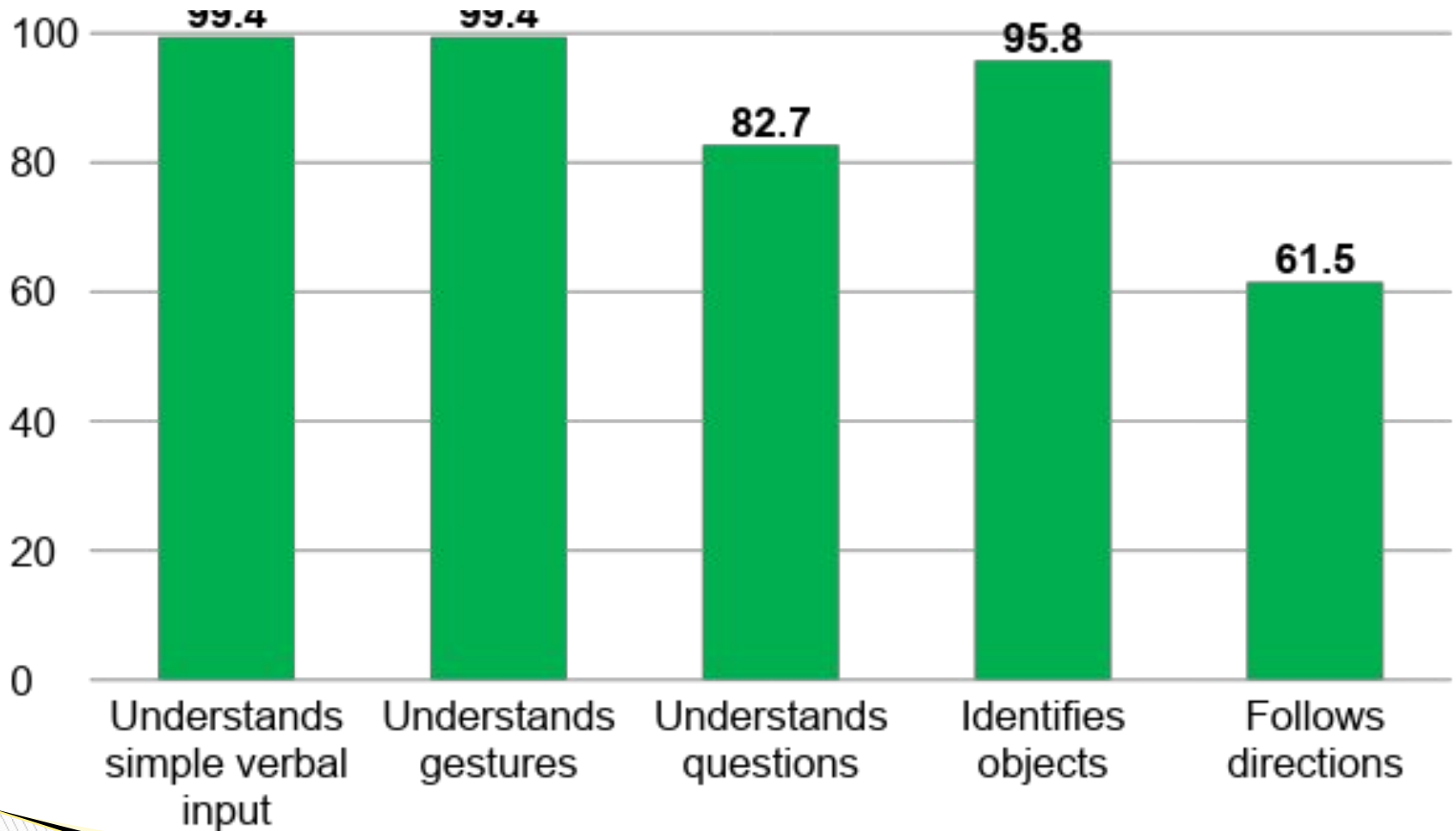
RESULTS



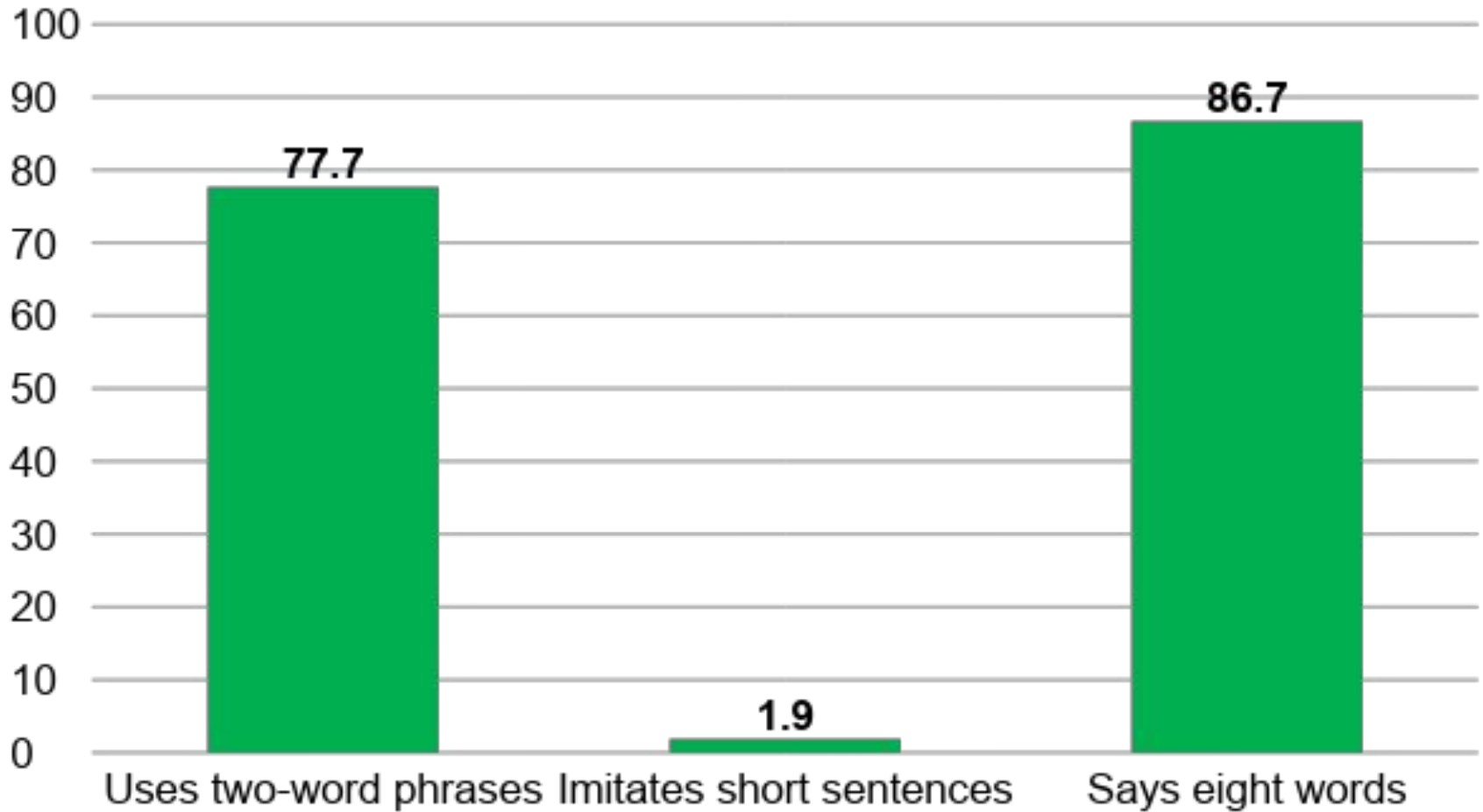
SELECT DEVELOPMENTAL MILESTONES

COMPARISON OF PARENTAL REPORT AND
DEVELOPMENTAL ASSESSMENT

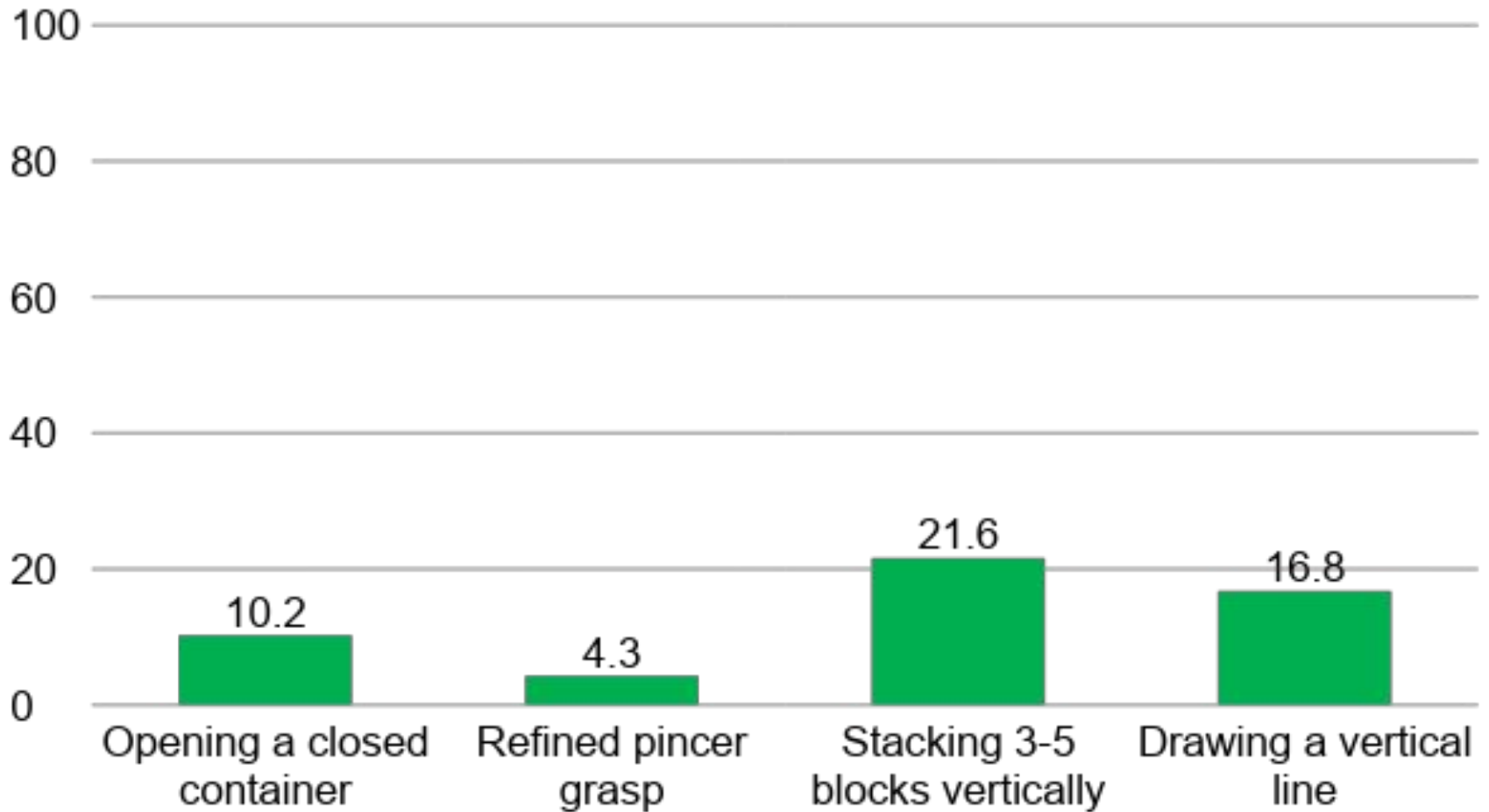
Receptive Language (18–22 mths)



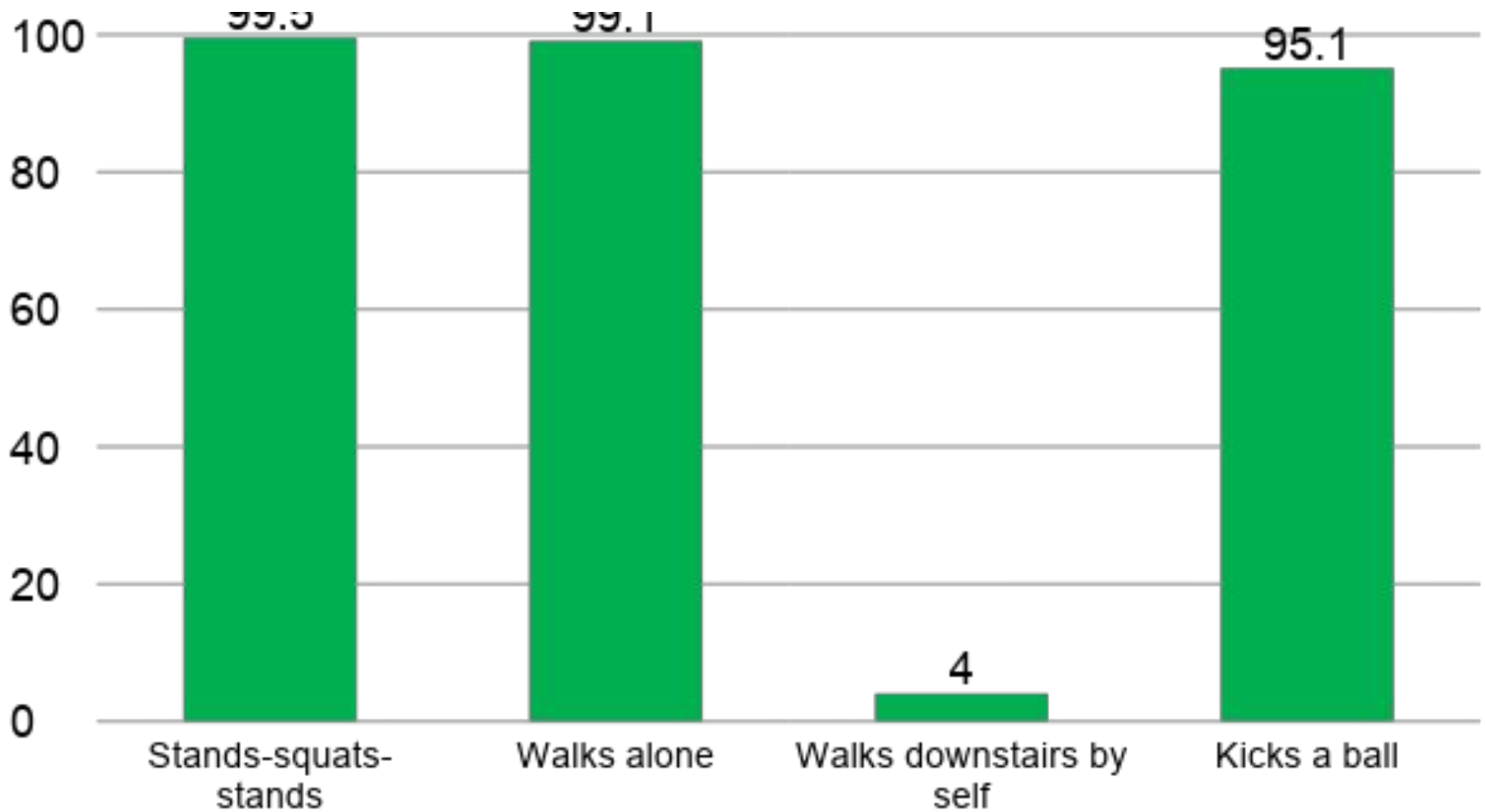
Expressive Language (18–22 mths)



Fine Motor (18–22 mths)

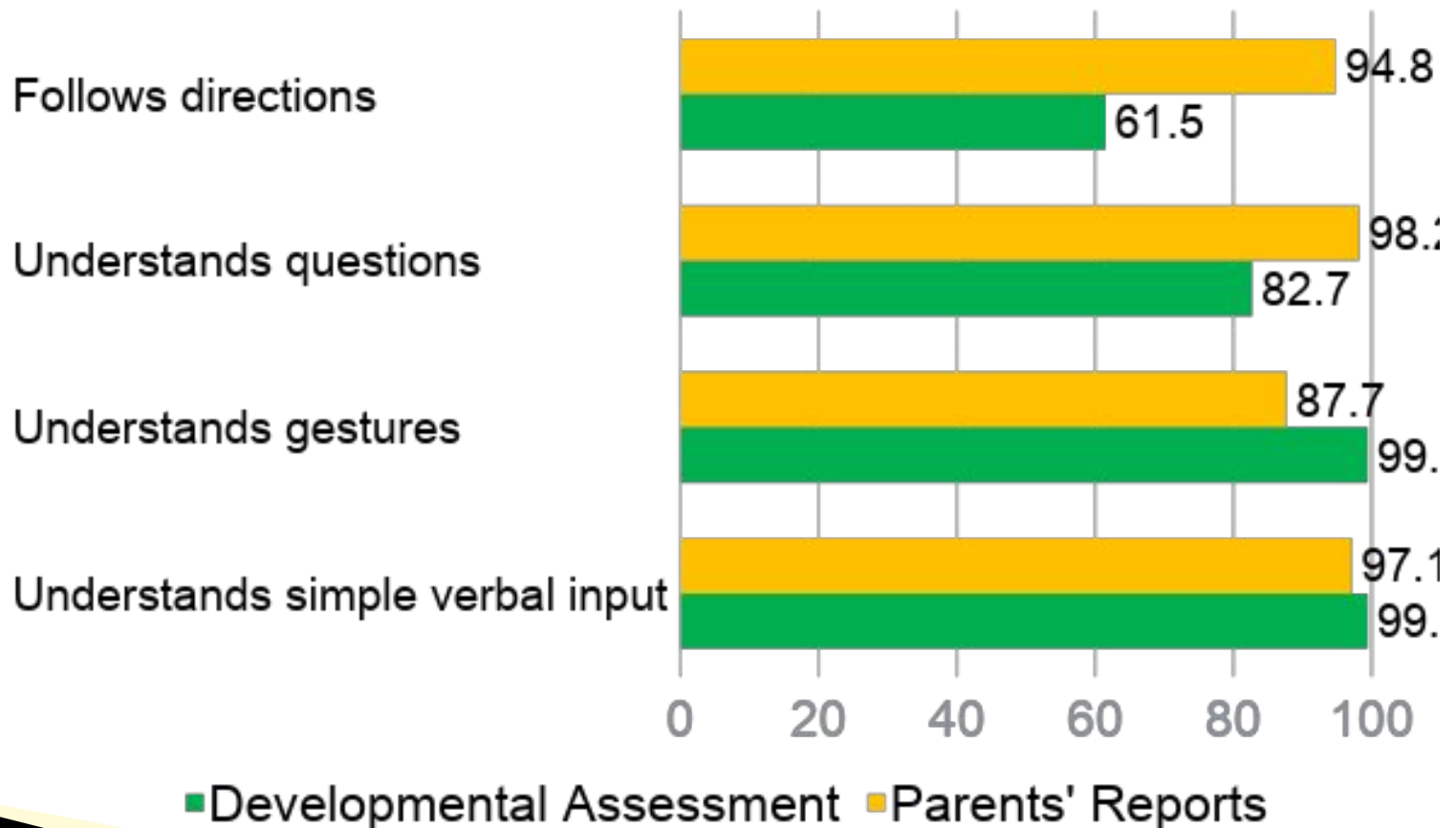


Gross Motor (18–22 mths)



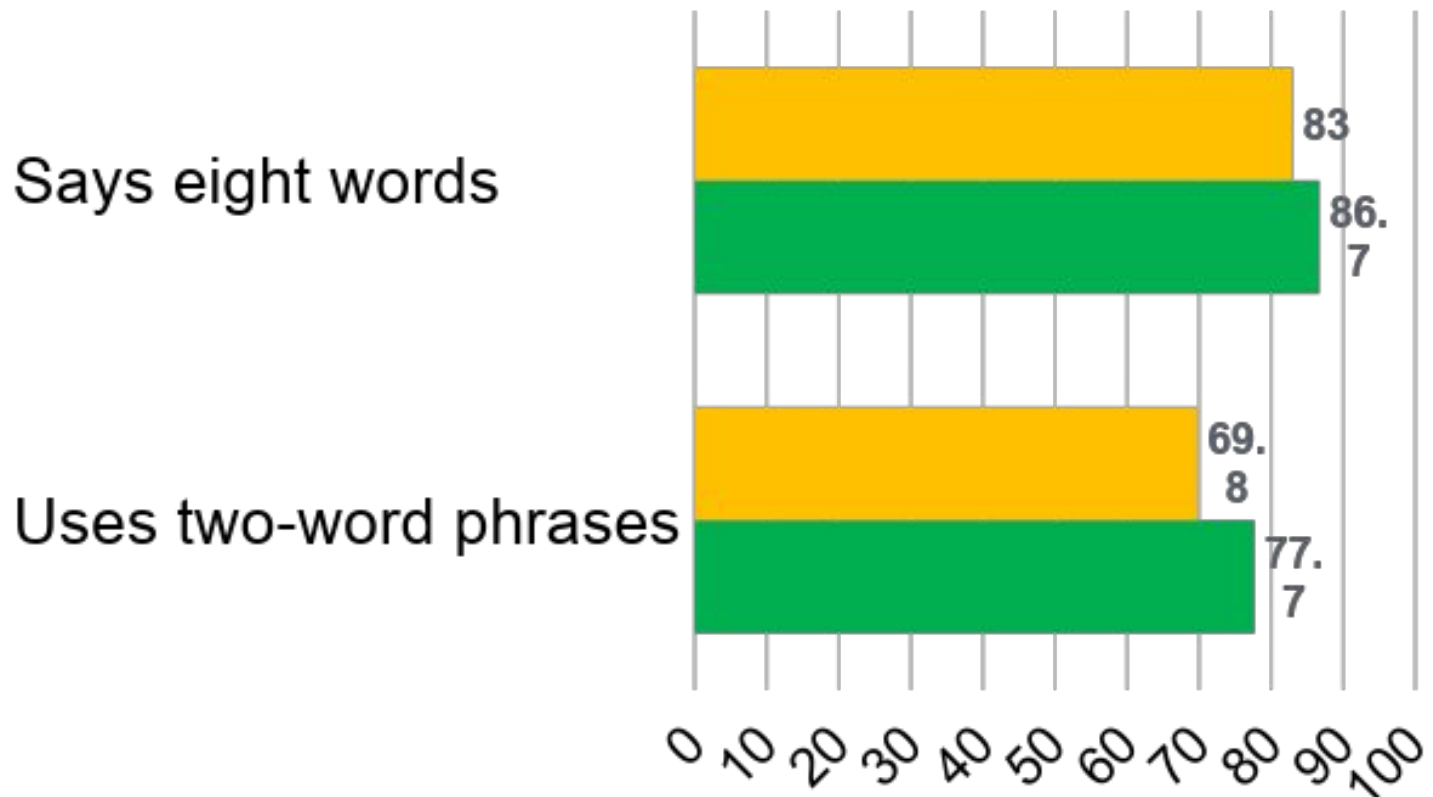
Comparing Developmental assessments with Parental Reports

► Receptive language



Comparing Developmental assessments with Parental Reports

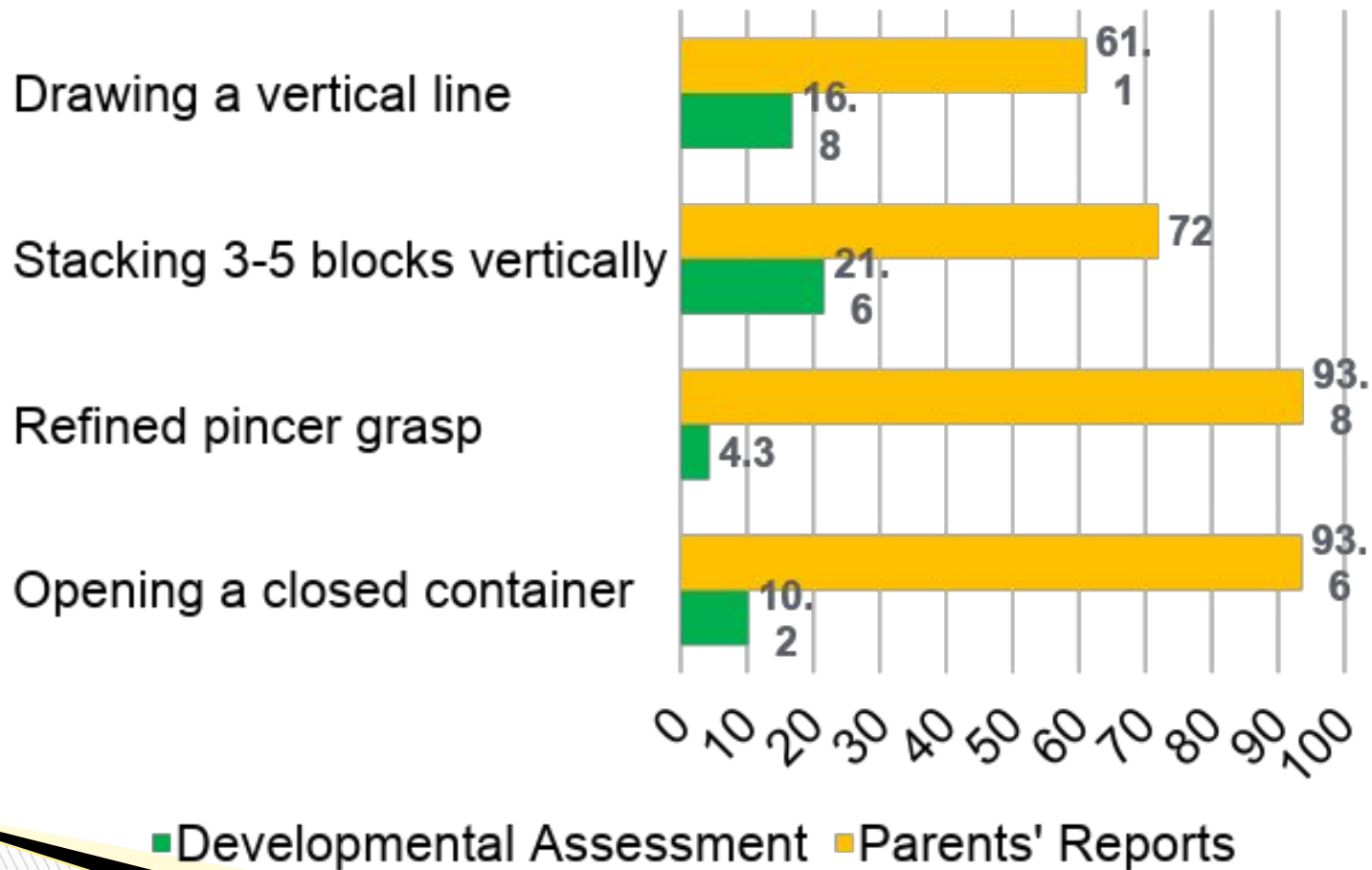
- ▶ Expressive language



■ Developmental Assessment ■ Parents' Reports

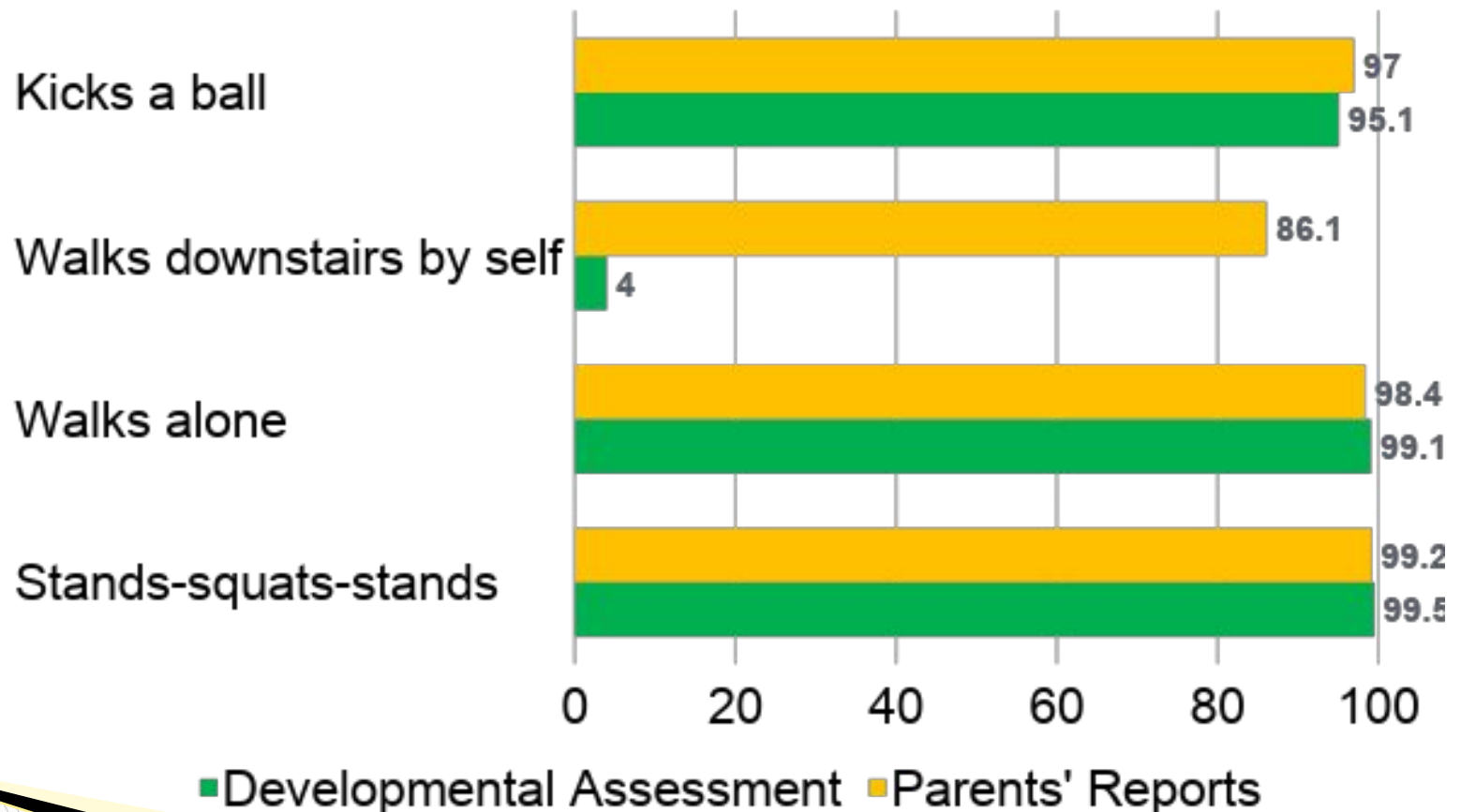
Comparing Developmental assessments with Parental Reports

► Fine Motor



Comparing Developmental assessments with Parental Reports

► Gross Motor



Further Analyses

- ▶ So far we've only scratched the surface
- ▶ Examine variation by:
 - Child's gender
 - Parents' sociodemographic characteristics
 - Health
 - Psychosocial variables



'Conclusions'

- Parent report is a reliable source for developmental milestones in domains of:
 - Expressive Language
 - Receptive Language
 - Gross Motor Skills
 - ▶ Less accurate for Fine Motor skills, probably because Fine Motor skills is not observed by parents as frequently as language and motor skills.
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