

A RCT comparing OT interventions  
that aim to improve

# **developmental outcomes**

for HIV+ children (aged 6 months – 5 years) on ART



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WFOT Congress 25 May 2018



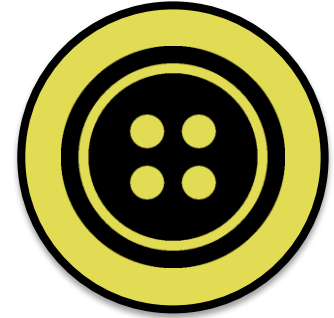
# Rationale

- HIV: neurodevelopmental impacts
  - Gross and fine motor
  - Cognitive
  - Behavioural
  - Emotional
  - Social
- Encephalopathy (HIVE)
- No data on OT interventions focusing on developmental delay within this population

# Objective



6 months – 5 years old  
Pre-formal school going



- Similar developmental outcome
- GMDS-ER
  - Locomotor
  - Personal-social
  - Language
  - Eye-hand coordination
  - Performance
  - Practical reasoning
- Similar functional independence outcome
- Paediatric Functional Independence Measure (WeeFIM)
  - Self-care
  - Mobility
  - Cognition

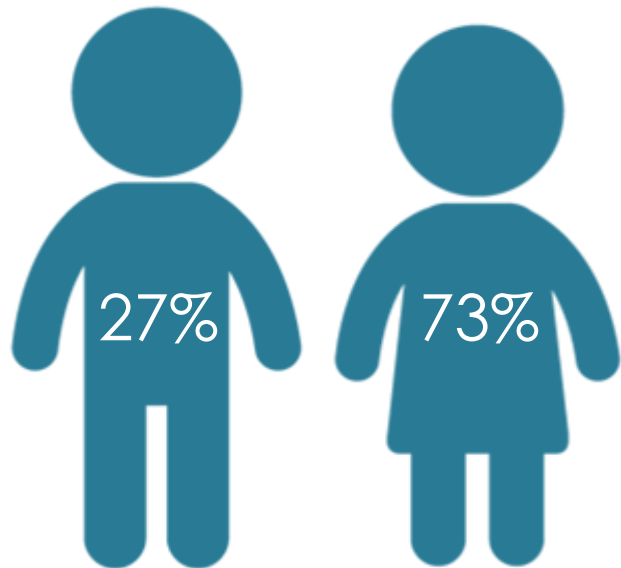


16 months

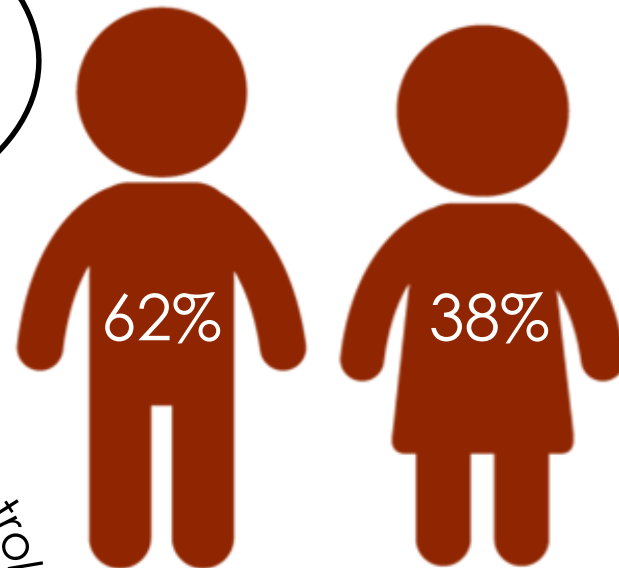
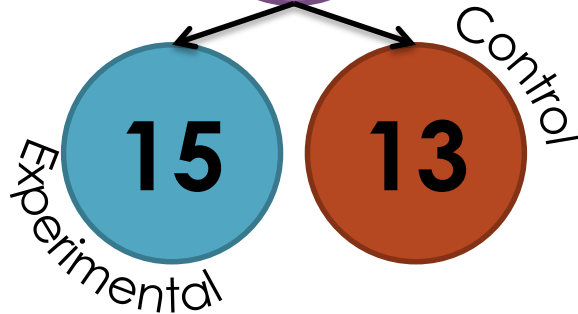
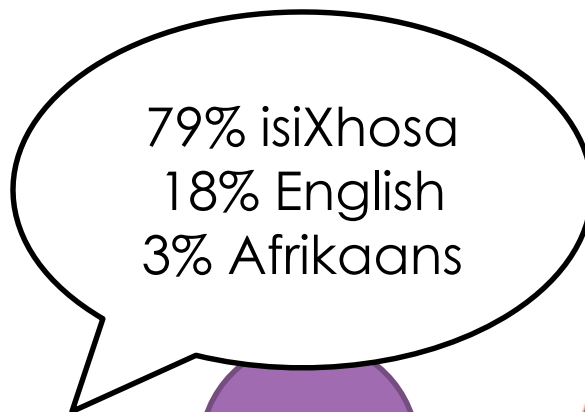
# Sample



61% crèche  
32% caregiver  
7% day mother



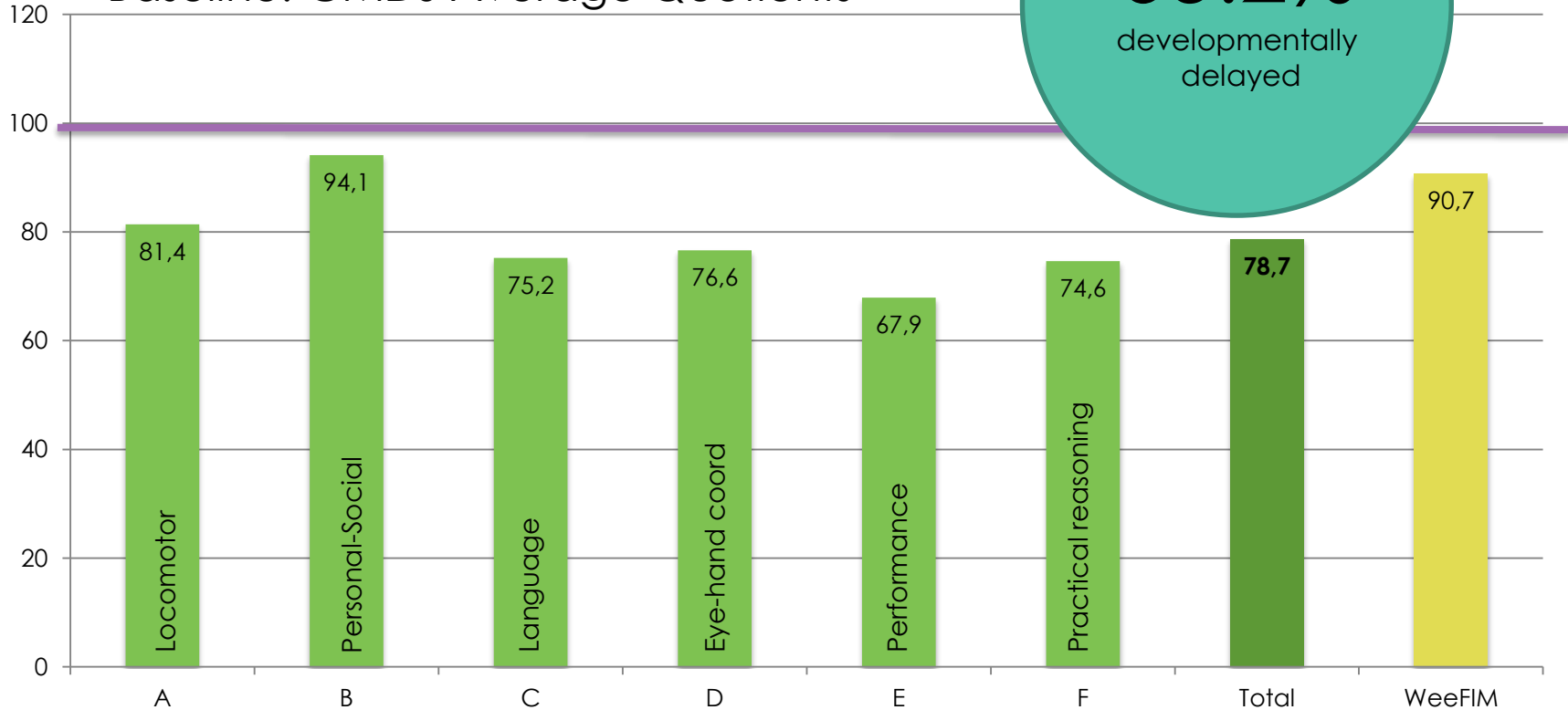
6-61 months



12-63 months

# Results

Baseline: GMDS Average Quotients



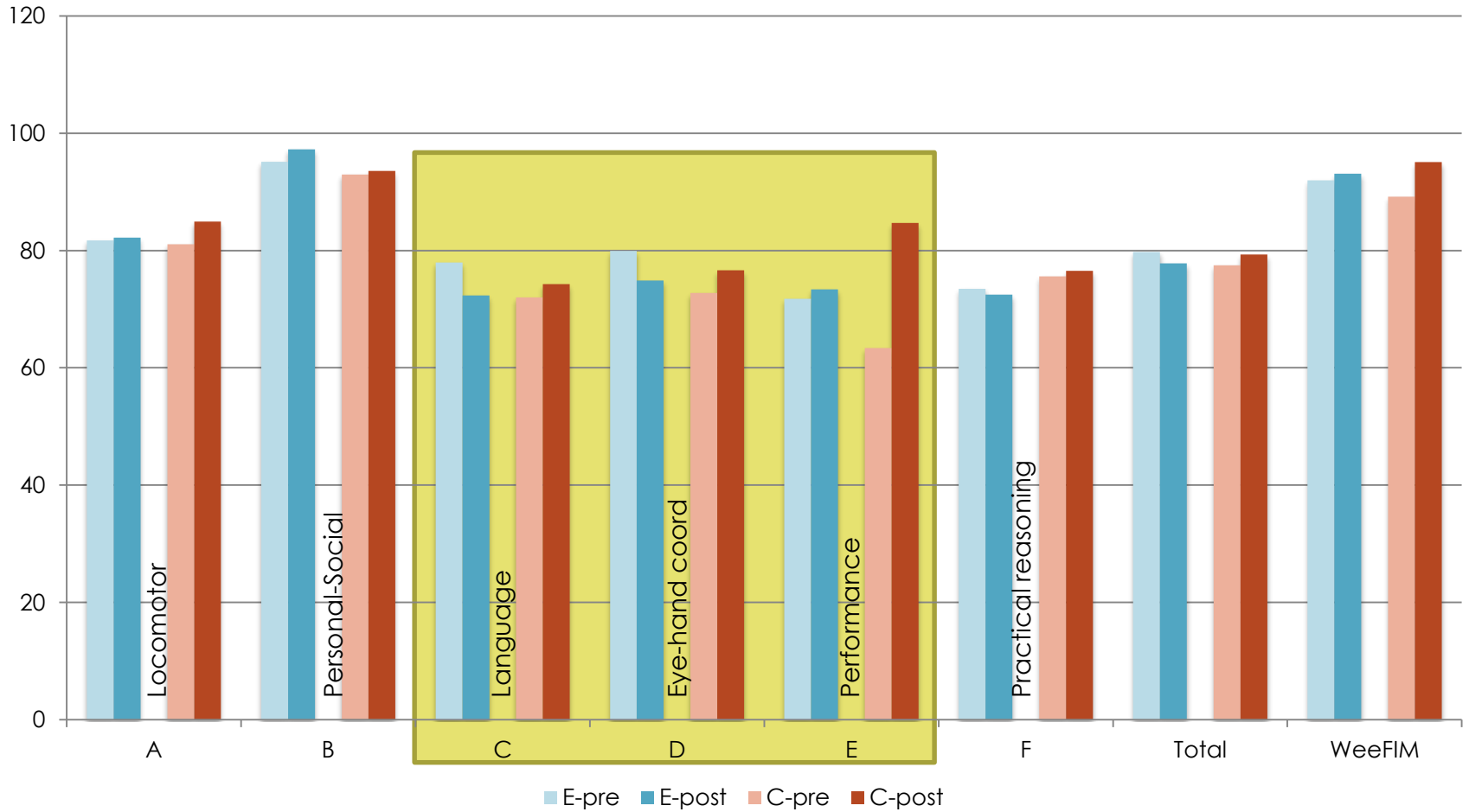
65.2%

developmentally  
delayed

# Results

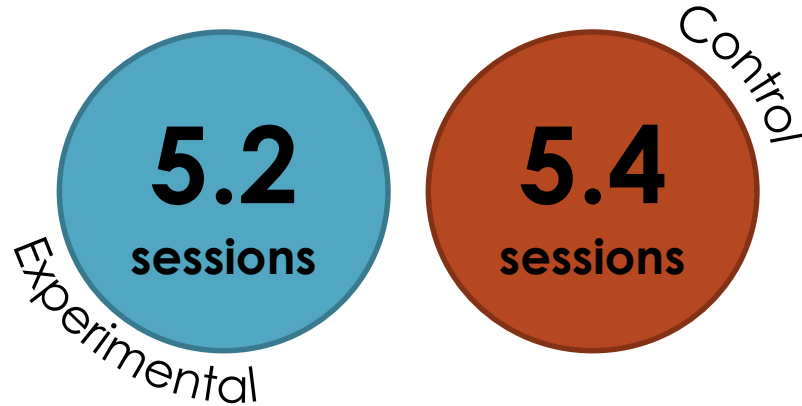
- Post
  - Similar quotient scores with no significant differences
    - Total GMDS
    - GMDS subscales
    - Total WeeFIM
  - Both groups had better quotient changes over the time period with intervention

# Pre-Post: Average Quotients



# Dosage

- Average attendance



- Clinic factors
- Caregiver motivation and priorities



# Conclusion

- Non-inferior results
- PICIHBI = Alternative intervention
  - With greater reach
  - Caregiver focused – future/longer lasting benefits for child?
- Conventional OT
  - One-on-one attention
  - logistically easier

# PICIHBI

For more information:

Robyn Jess Meissner, Jessica Ferguson, Caraleigh Otto, Pam Gretschel & Elelwani Ramugondo (2017): A play-informed, caregiver-implemented, home-based intervention for HIV-positive children and their families living in low-income conditions in South Africa, **World Federation of Occupational Therapists Bulletin**

