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## INTRODUCTION

### TOYBOX Manitoba:

provides free, playful, evidence-based, curriculum-based activities about **letters**, **numbers**, and **wellness** for children aged 2-8 years. We aim to build solid foundations for learning and life.

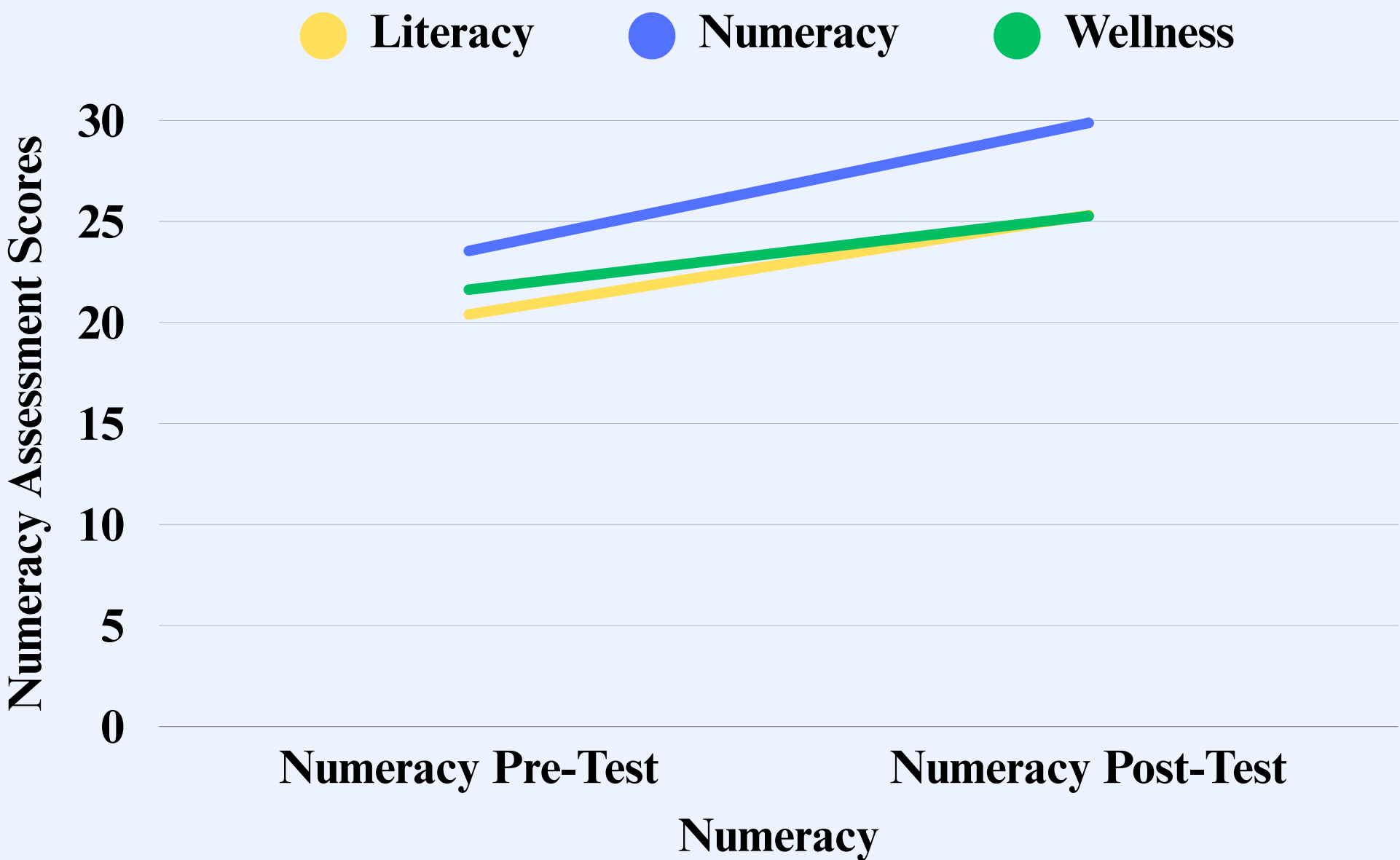
### Study Purpose:

Do children's scores improve when exposed to TOYBOX learning activities after 5 weeks?

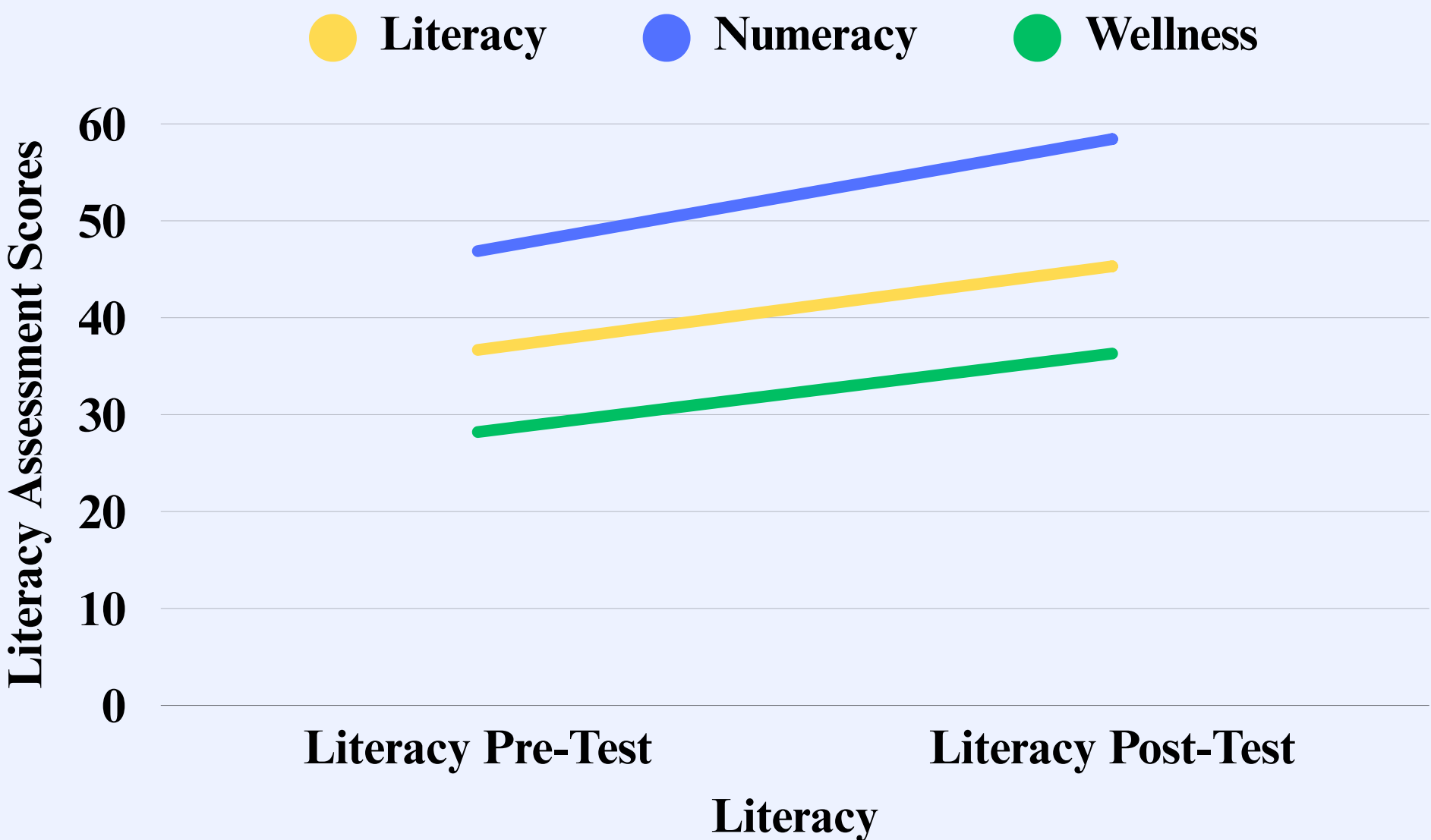
### Hypotheses:

1. Letters group will show improvement in literacy (but not numeracy)
2. Numbers group will show improvement in numeracy (but not literacy)
3. Wellness (control) group will show no academic improvement.

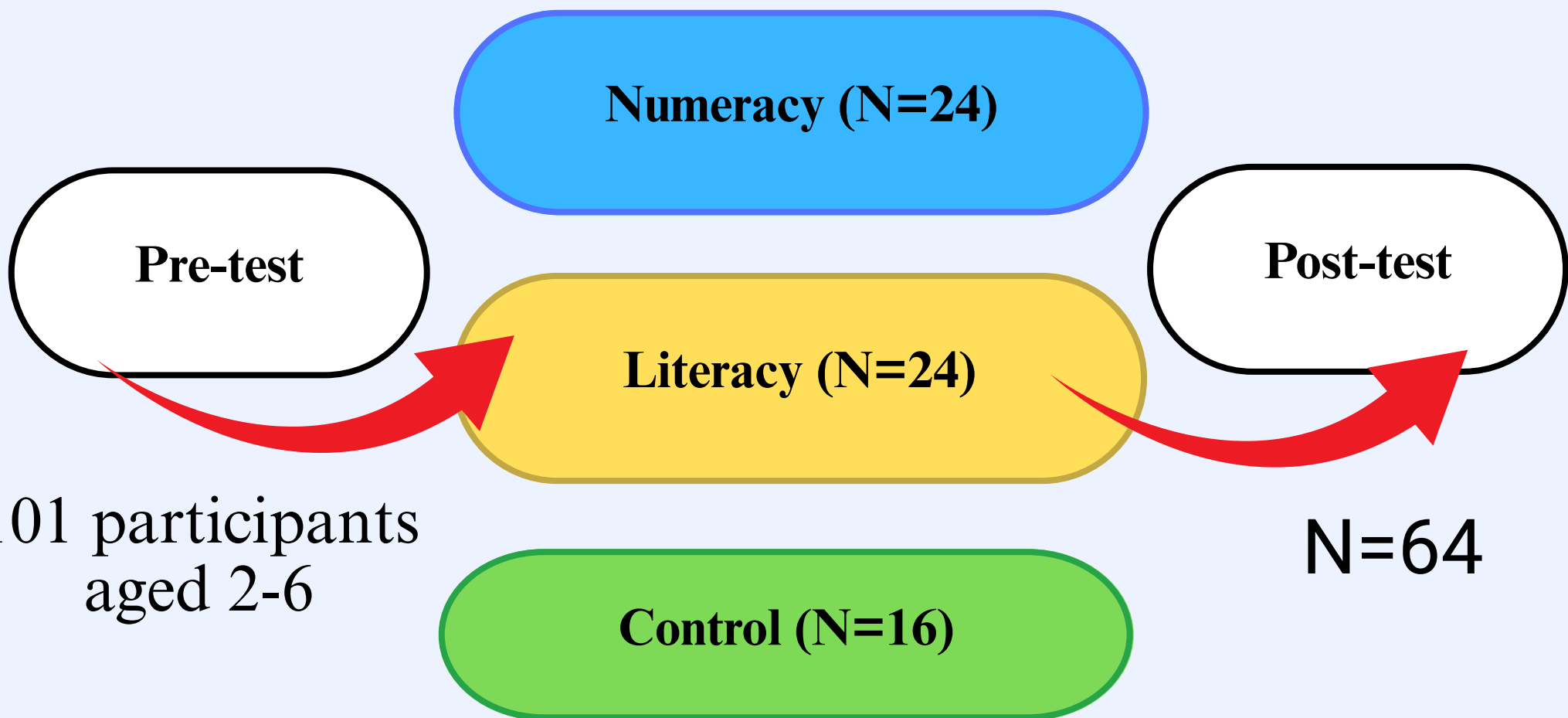
## NUMERACY RESULTS



## LITERACY RESULTS



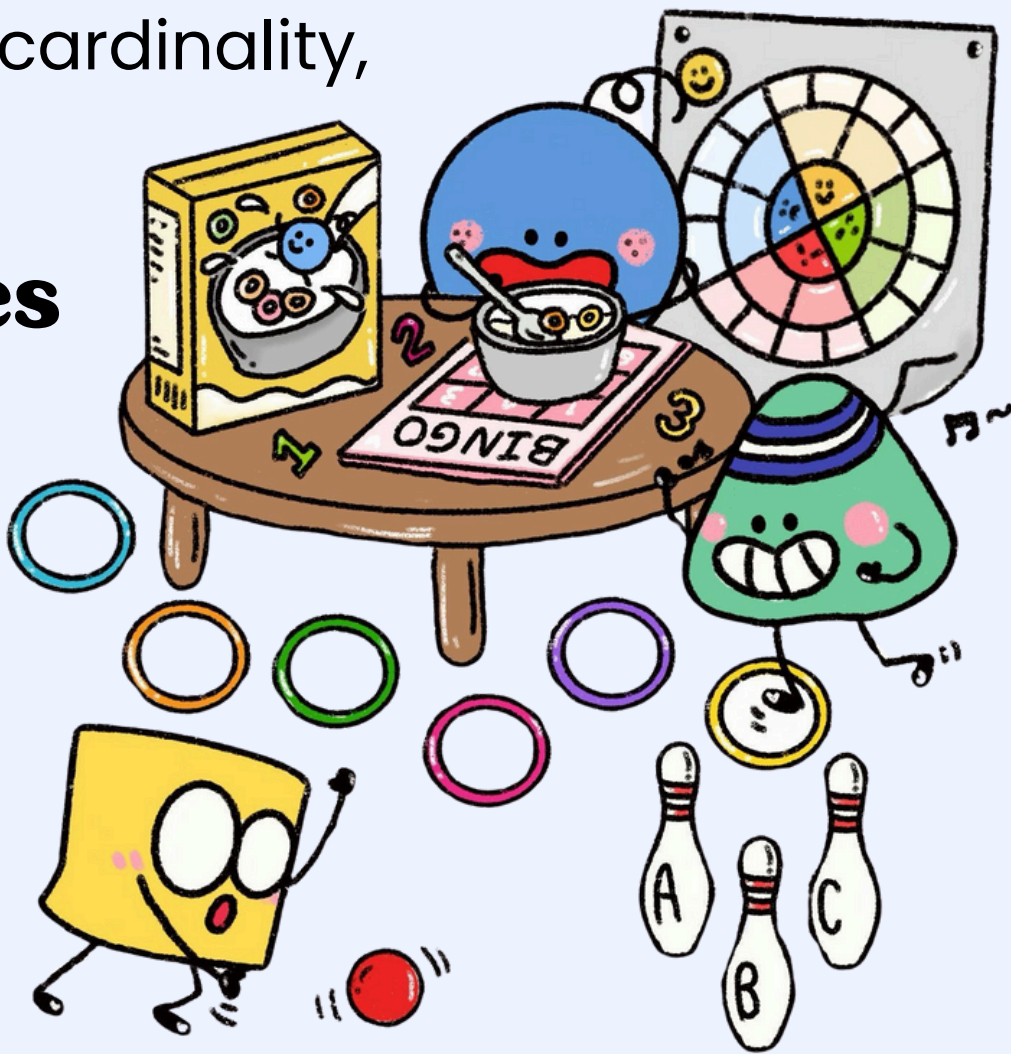
## METHOD



**Test Measures:** Upper and lower case letter and sound ID; counting, cardinality, number ID, PENNs.

### Intervention Activities

- Letter Bingo
- Letter Bowling
- Dice Bingo
- Number Hunt



## CONCLUSION

Preschool intervention work is difficult! Preschoolers benefitted, but not in predicted ways.

Two-year-olds were too young to 'show' learning.

Time in minutes spent on TOYBOX activities. predicted learning in all areas. No group effects.

Individual learning time likely affected children's confidence, improving post-test scores.

