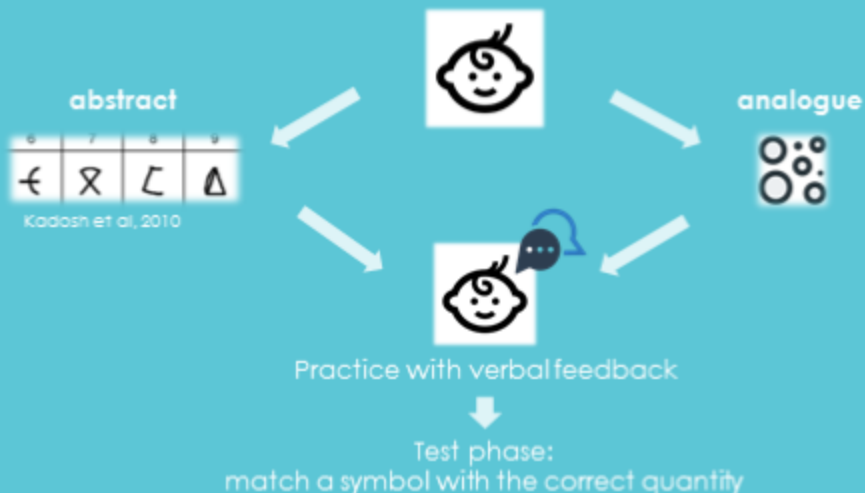


Symbolic Thinking:

Should You Go Abstract or Concrete with Your Child's Math?

April C. Lee

Q: are more concrete numerals better than abstract numerals when children learn the relationship between a symbol and a number?



What Can We Learn from The Experiment?

better performance in the analogue condition

better performance in the abstract condition
OR equivalent across condition

children are likely to harness whatever concrete features there are in a symbol

children perceive symbols as a whole

Contribute to the broader discussion around abstractness & concreteness in childhood cognition and symbol learning

Acknowledgement & References

This project proposal was developed during the course PSYC 413 Cognitive Development, taught by Dr. Onishi
For the full list of references, please contact me chaiwon.lee@mail.mcgill.ca

What is a symbol?
a thing that stands for
another thing!
This another thing = referent



Gap to be Addressed

Overall, there are few studies studying direct mapping from an exact number to a symbol, and the features of the symbols in such a task

Abstract vs Concrete

More perceptual cues that hint at the referent in a symbol -> more concrete



Inclusion Criteria for Participants

- children of min. age 3 by which symbolic thinking is well established (DeLoache et al, 1997).
- Verify counting ability