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## Theory of Mind (ToM) and Perspective-taking

- Understanding:
  - how someone else sees and thinks about something
  - may be different to how you think or see something
- Requires the ability to
  - think (represent) how someone else thinks about something

(Perner, 1991)

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## What's it got to do with reading (& listening)?

- *Direct* impact on reading comprehension (RC) in atypical development (ASD)  
(e.g. Ricketts et al 2013)
- *Indirect* impact on RC via language comprehension (LC) in typically-developing children ToM  
(e.g. Kim, 2015)
- But, this was a cross-sectional study with older (6-year old) children
  - cross-sectional study with older children may miss early developmental effects.

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## Previous findings

- Theory of Mind *indirectly* facilitates RC through promoting language ability  
(Kim, 2015,2017; Atkinson et al.,2017)
- Early theory of mind *directly* facilitates RC
  - promotes ability to think and reason about story characters and their actions
- Now identified as a potential key factor in reading  
(Doré et al, 2018)

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## Outstanding questions..

- How does early ToM contribute to reading comprehension?
- Is acquiring ToM early beneficial for later reading comprehension?
- **Is social specificity of ToM measures important?**

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## Jackson (2019)

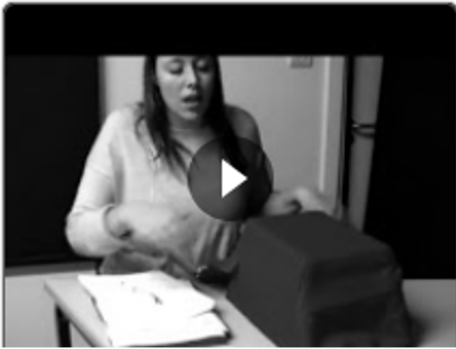
- 147 children, tested at 3 time points (2 cohorts; testing finished Jan 2020)
- Ages:
  - Time 1: 4;1
  - Time 2: 5; 1
  - Time 3: 6;1
- Broad range of cognitive, language, and executive function skills + ToM
- Outcome measures: listening comprehension at T<sub>1</sub>, T<sub>2</sub>, and additional reading comprehension at T<sub>3</sub>.

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## Additional measures: early metacognitive skills

- Source monitoring:  
how do you know something?
- Metamemory:  
how easy is it to remember something?
- Metalinguistic awareness:  
early awareness of two labels → one  
concept



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## Results

### Previous findings

- Direct effects of broad range of language measures on listening comprehension at T1 and T2 . ✓
- Direct effect of early ToM on later listening comprehension
  - when metacognitive measures included ✗

### Our findings:

- Metacognitive measures at T1 better predictors of T2 listening comprehension than ToM.
- ToM <-----> Reading comprehension potentially via broader representational skills.

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## Current & Further work..

- Analysis of existing data set  
(Jackson, Slade, Levy & McCormick, JECP, under review)  
+ .....
- Longitudinal follow-up of original cohort
- Developing measures that distinguish fiction / non-fiction both for listening and reading comprehension at young ages
- Exploring the nature of early metacognitive awareness in 3-6 year old and its interdependence with academic development

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**learn to**

**love to**

**read**



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