

Theory of Mind- Lifespan development 2

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Today

- Continue where we left off last week
- ToM in adults
- ToM in old age

Seminar:

- Class activity

RECAP!

- What is ToM?
- Name ways to measure it
- What are the cultural differences that might affect ToM development?



Differences between behavioural sensitivity and mentalising

(ADD VIDEO!!!!) <http://www.youtube.com/watch?v=nSwGe55dD70>

Behavioural sensitivities /
IMPLICIT (automatic
unconscious) ToM

Mentalising/ EXPLICIT –
(conscious, effortful) ToM

How would you test an infant?

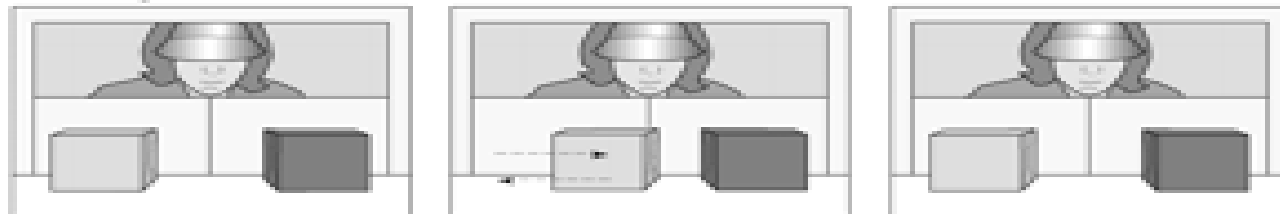
Eye tracking



<http://www.youtube.com/watch?v=FfOtEjZFaq4>

Belief-induction trial

A TB-green condition

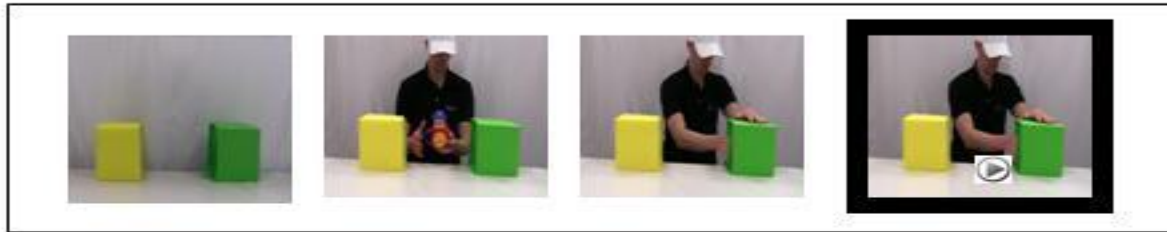


- Onishi & Baillargeon, 2005

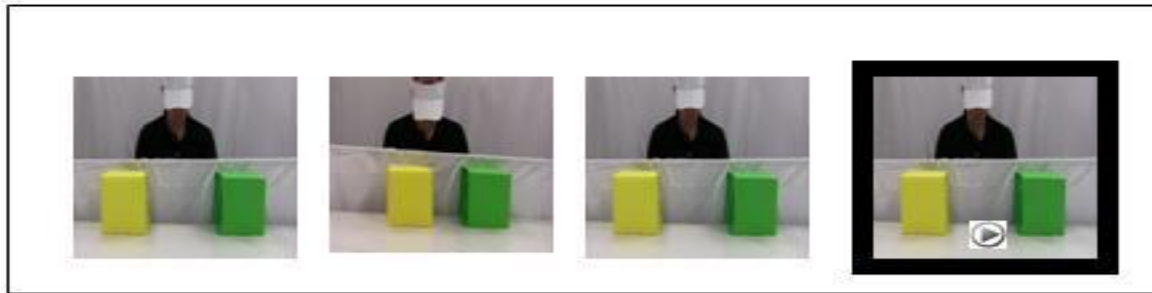
**“Violation of
Expectation” method**

Condition 1.1: TB GREEN, test GREEN

Familiarisation (8 sec and pause)



Belief Induction (8 sec and pause)

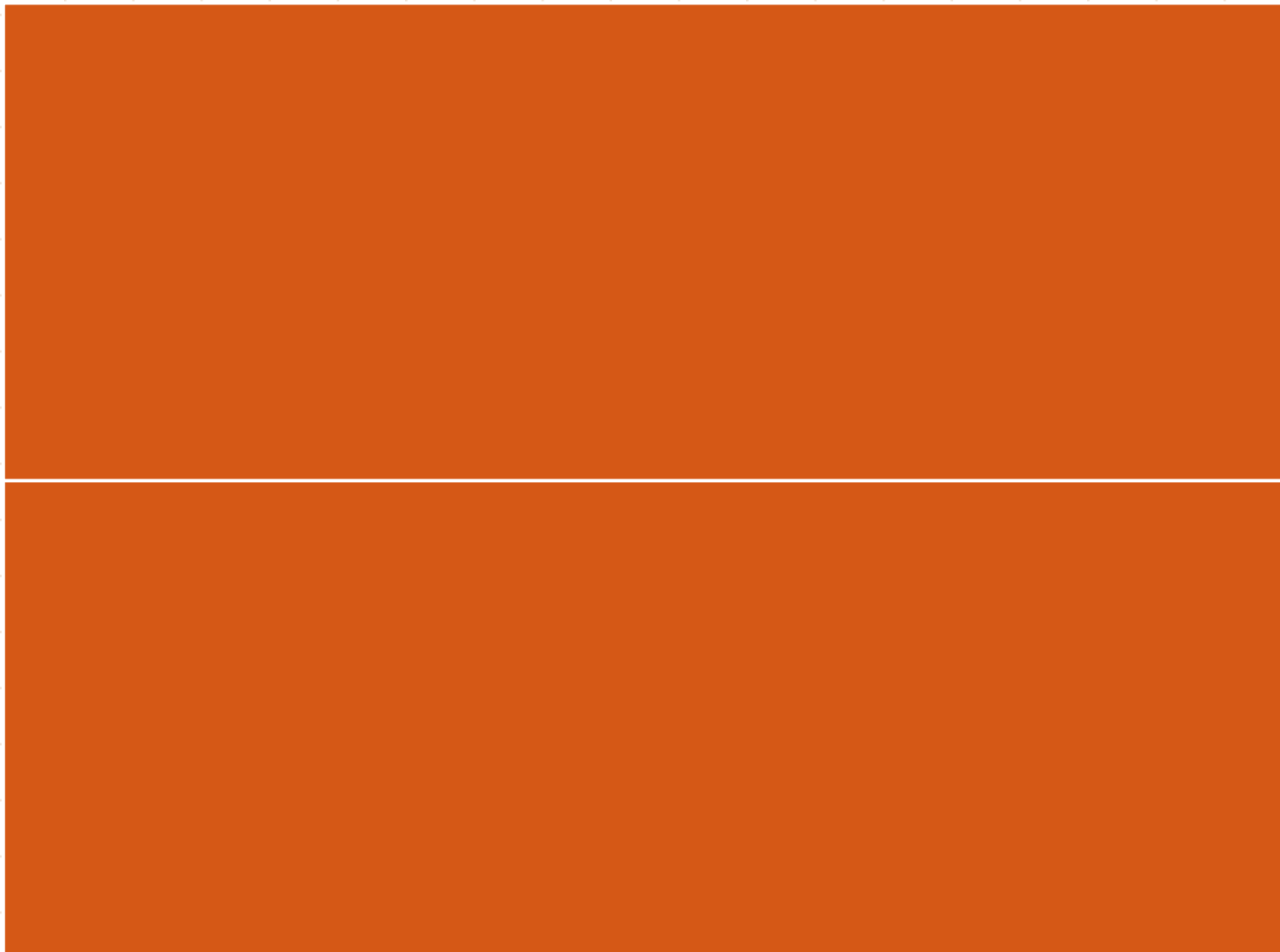


Test- Green



Action Anticipation- anticipatory looking

Southgate, Senju, Csibra, 2007



BUT...

(read: Perner, J., & Ruffman, T. (2005). Infants' Insight into the Mind : *Science*, 308(5719), 214-216)

- 3-way actor-object- location association
- behavioural rules- people look for an object where they last saw it
- Changes in latent activation in non-frontal regions

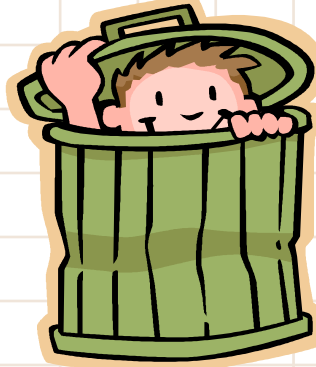
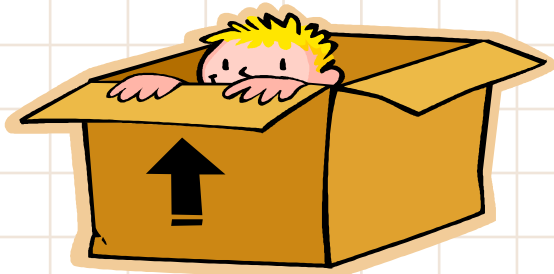
**Knowing about BEHAVIOUR versus knowing about
mental states MEDIATING BEHAVIOUR**

What can do to overcome these challenges?

- Range of belief tasks
- Testing predictions and explanations
- Longitudinal studies
- 'Pure' tests of false beliefs

Real life scenarios...

1. Hide and seek
2. Understanding fairy tales and stories
3. Pretend play: tea party
4. Protodeclarative pointing
5. Social referencing
6. Eye gaze: will follow eye gaze of adult IF joint attention was established prior to the adult looking away



What other skills are necessary?

Executive function- mental capacity

Language



Acquisition of false belief understanding coincides with significant changes in

EXECUTIVE FUNCTIONING



WHY?

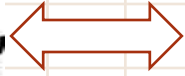


LANGUAGE





Executive functioning



Theory of Mind



Language



What are the social implications of ToM change across development?



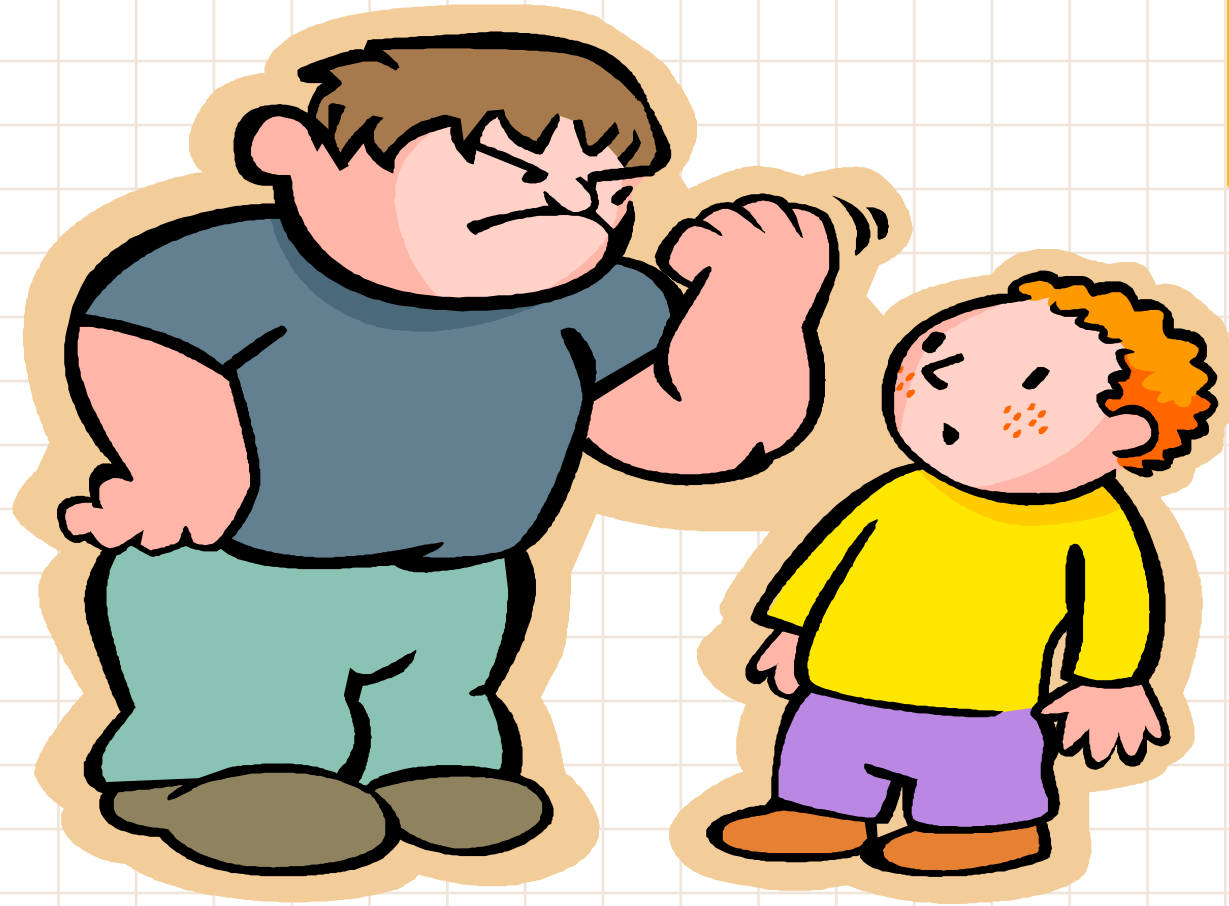
Consequences of ToM

- Social relationships: prosocial and anti-social



**Emotional
Regulation:**
links with problems in
peer relationships





**Ring leader bullies have been found
to have exceptional ToM!**

**Victims however have been found to
have poor ToM!**

Preschool development in ToM may increase sensitivity to criticism and lead to later:



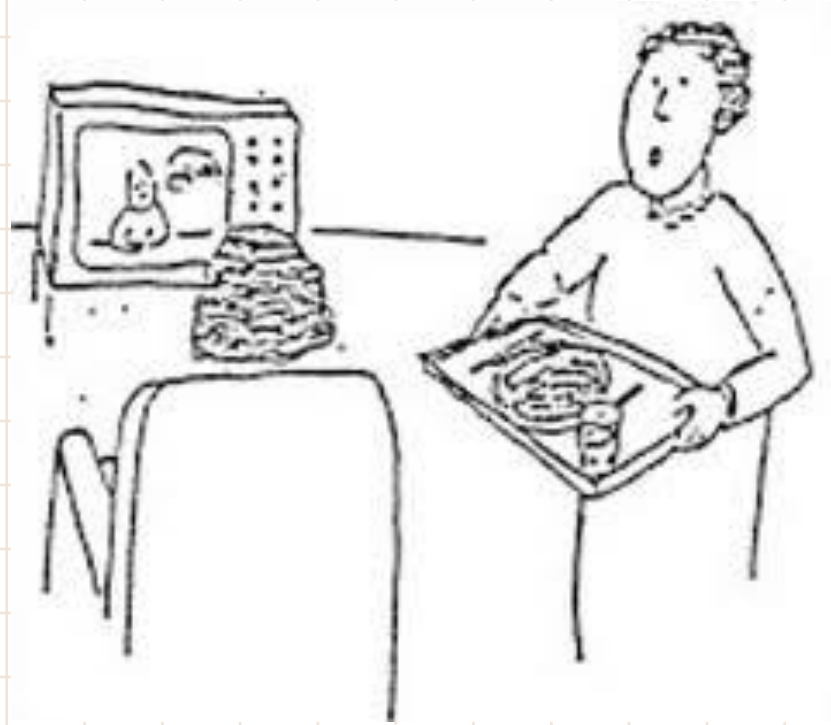
Anxiety

Low self esteem



Testing adults

- Advanced ToM tests:



Advanced ToM- Strange Stories
(Happe, 1994)

Discussion



Does ToM
increase, decrease
or stay the same
as we grow older?



ToM in old age

Crystallised
versus
fluid intelligence



Crystallised intelligence

“knowledge that comes from prior learning and past experiences.”

Fluid intelligence

Cattell:

"...the ability to perceive relationships independent of previous specific practice or instruction concerning those relationships."

Gender differences in ToM



HOMework FOR NEXT WEEK

MUST read Mechanisms of Social cognition:

Frith, C. D., & Frith, U. (2012). Mechanisms of social cognition. *Annual review of psychology*, 63, 287–313. doi:10.1146/annurev-psych-120710-100449

This reading will be included in your test in Week 5

Stone & Gerrans, 2006

