

**Perspective tracking** as  
a developmental precursor of  
perspective **taking**.  
Longitudinal  
research on **theory of mind**

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17th ECDP, Braga, 8-12 September 2015



JAGIELLONIAN UNIVERSITY  
IN KRAKOW



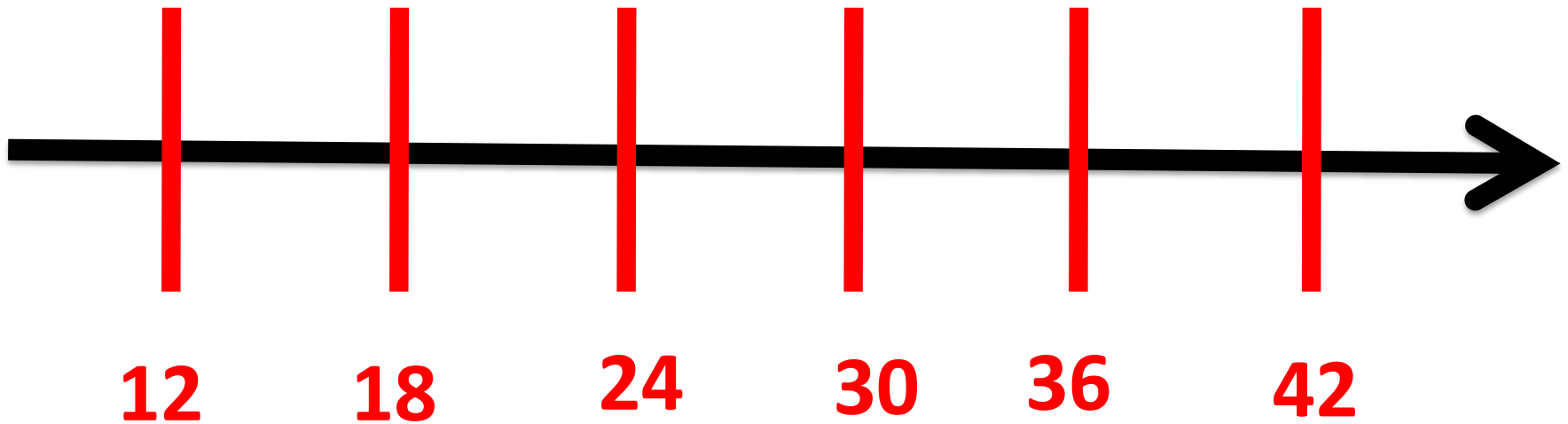
NATIONAL SCIENCE  
CENTRE, POLAND

# Three main controversies in research on Theory of Mind:

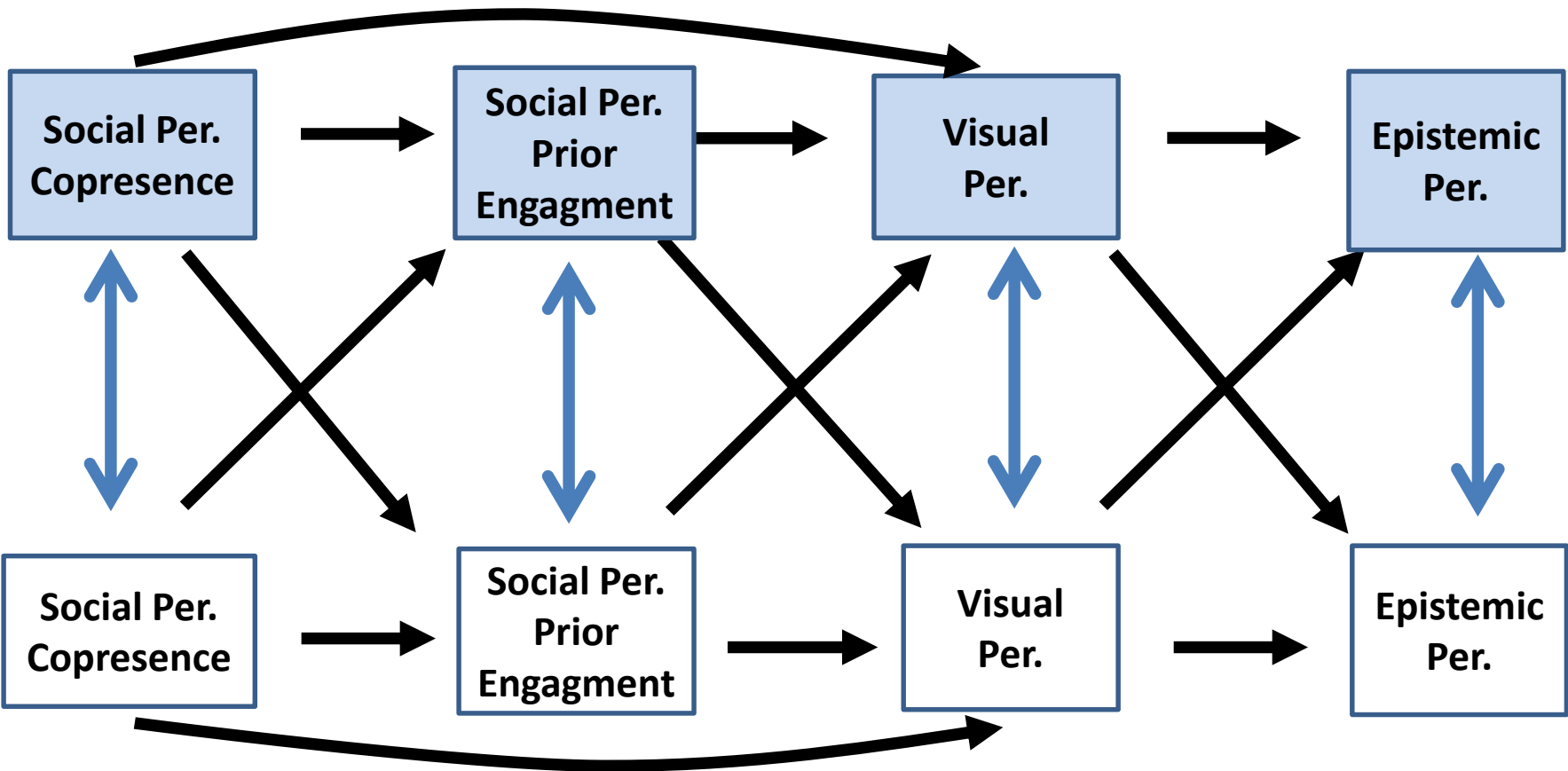
- parallel vs continuous development of ToM (e.g. Schneider, 2014)
- lean vs rich interpretation of implicit ToM abilities (Perner & Ruffman, 2005; Low & Perner, 2012; Ruffman, 2014)
- Tracking vs taking social/visual/epistemic perspective (based on: Moll et al., 2012; Moll & Kadipasaoglu, 2013, Moll et al., 2013)
- HOW CAN THESE BE SOLVED?

# Research project: The birth and development of mentalizing ability (2012-2015)

6 series,  $N=358$ , drop out (5-15%)

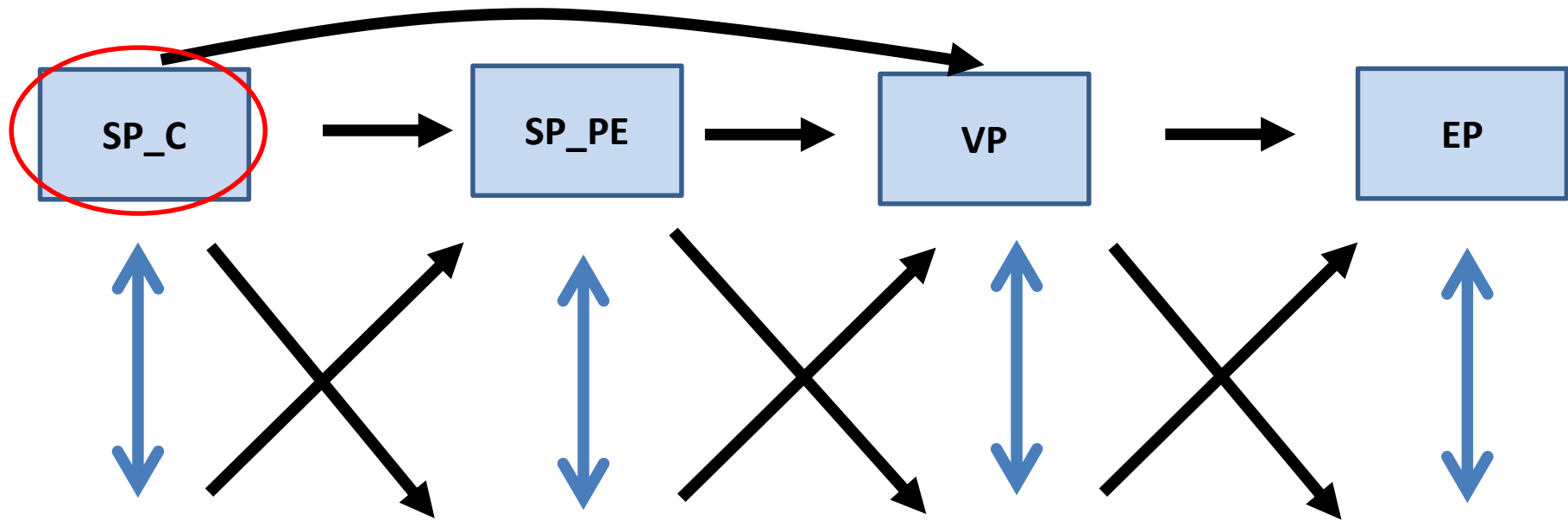


**PERSPECTIVE TRACKING**

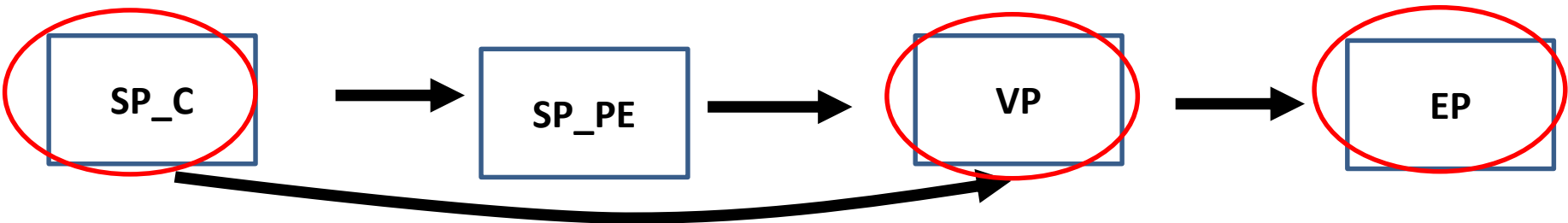


**PERSPECTIVE TAKING**

PERSPECTIVE TRACKING



PERSPECTIVE TAKING



# Social Perspective Tracking-Copresence

**12 /18 month olds**



**Responding to joint attention**

# Social Perspective Taking-Copresence :

## 12/18 month olds



## Protodeclarative pointing

# Visual Perspective Taking: 24/30 month olds



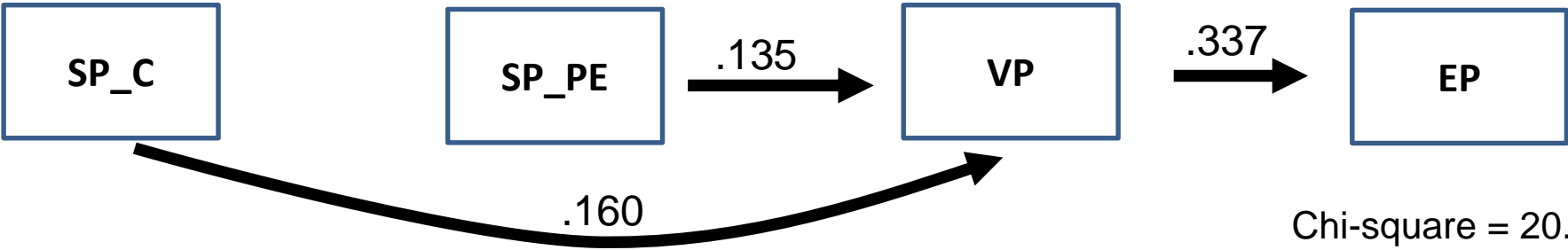
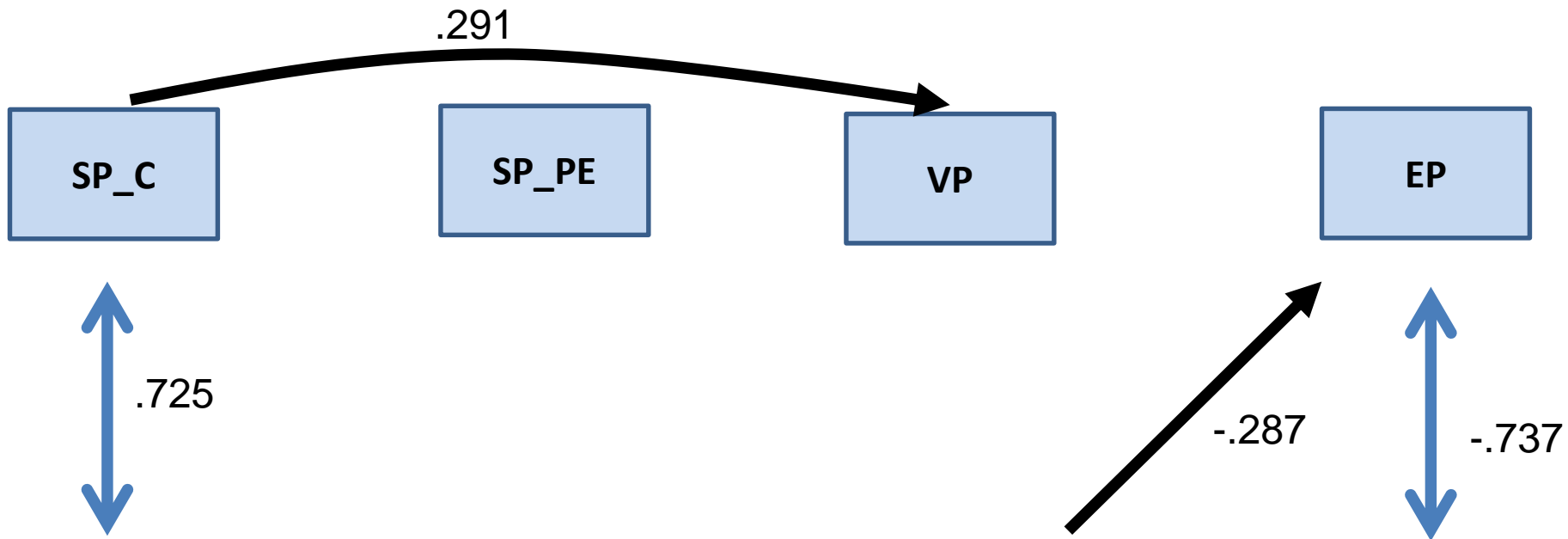


# Epistemic perspective taking: 36/42 month olds



## Explicit theory of mind tasks

**PERSPECTIVE TRACKING**



**PERSPECTIVE TAKING**

Chi-square = 20.871  
df = 10 p = .022  
RMSEA = .053  
CFI = .973  
TLI = .920

# Conclusions

- **Tracking and taking** the perspective of another person are related to each other differently in different kinds of perspectival abilities
- **Visual perspective** taking of 2 and 2.5-year-olds **positively** influences **epistemic taking**, but **negatively** influences the **perspective tracking** ability of 3 and 3.5-year-olds
- **Social** perspective taking in situation of copresence **via visual** perspective taking is an important factor of **ToM** development

The foundation for understanding the perspectival relativity of representation at the age of 3,5 is the **development of the skill of active sharing of social and visual experience with another person.**

Thank you to the children and their  
parents for participating in the research

Project financed by a Polish  
National Science Centre grant  
(DEC-2011/01/B/HS6/0045)