

Infants' Cooperative Competence is shaped by the Social Context.

INTRODUCTION

What underlies cooperation?

1. Initiating Joint Attention (IJA):
 - Understanding intentions
 - Sharing own and adopting others' goals (Tomasello & Carpenter, 2007; Wu, Pan, Su, & Gros-Louis, 2013)
2. Social Context:
 - Affiliative behaviour (Endedijk et al., 2015)
 - Antagonistic behaviour (Hart, DeWolf, Wozniak, & Burts, 1992; Williams, Ontai, & Mestergorge, 2010)

Hypotheses

1. IJA ∇ Cooperative Ability
2. IJA ∇ Affiliative behaviour
IJA ∇ Antagonistic behaviour
3. Affiliative ∇ Cooperative Ability
4. Antagonistic ∇ Cooperative Ability

METHODS

- 210 14-month-olds ($M = 14.30$, $SD = .63$)

Frequency of IJA ($n = 111$, $M = 5.02$, $SD = 3.61$, Range= 0-22; modified from Mundy et al., 2003)



Cooperative Ability ($n = 179$; modified from Warneken, Chen, & Tomasello, 2006)



Parallel roles (PR) Complementary roles (CR)

Averaged across 2 trials per task

	Parallel roles task <i>M (SD)</i>	Complementary roles task <i>M (SD)</i>
Cooperative Ability		
Spatial coordination	3.67 (0.76)	3.41 (0.82)
Did infants choose correct handle? (1-5)		
Success	1.20 (0.80)	1.68 (0.41)
Was the shared goal achieved? (0-2)		
Latency to success (toy retrieval) How fast was the goal achieved? (seconds)	18.81 (12.60)	5.97 (4.85)
Latency to success (end goal) How fast was the goal achieved-part 2? (seconds)		12.14 (10.83)
Social Context		
Affiliation How friendly was the infant? (1-7)	1.68 (0.85)	1.08 (0.24)
Antagonistic How hostile was the infant? (1-7)	1.28 (0.69)	1.04 (0.14)



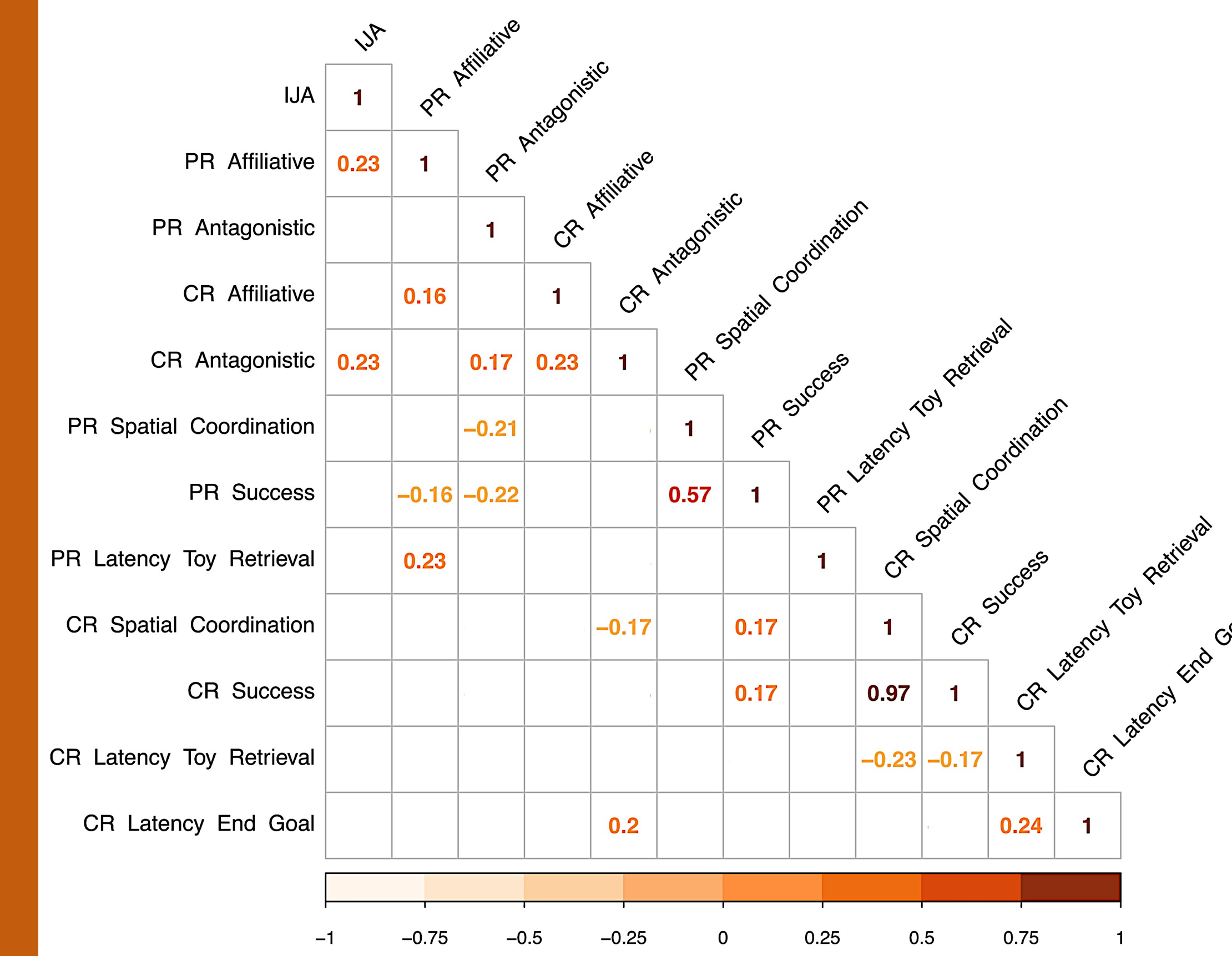
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Infants' joint attention abilities foster social connections with cooperative partners, but interfere with cooperative ability.

RESULTS



1. IJA \neq Cooperative ability
2. \uparrow IJA = \uparrow affiliative behaviour (PR task)
 \uparrow IJA = \uparrow antagonistic behaviour (CR task)
3. \uparrow affiliative = \downarrow success + \uparrow latency (PR task)
 \uparrow antagonistic = \downarrow spatial coordination + \downarrow success (PR task)
 \uparrow antagonistic = \downarrow spatial coordination + \uparrow latency (CR task)

DISCUSSION

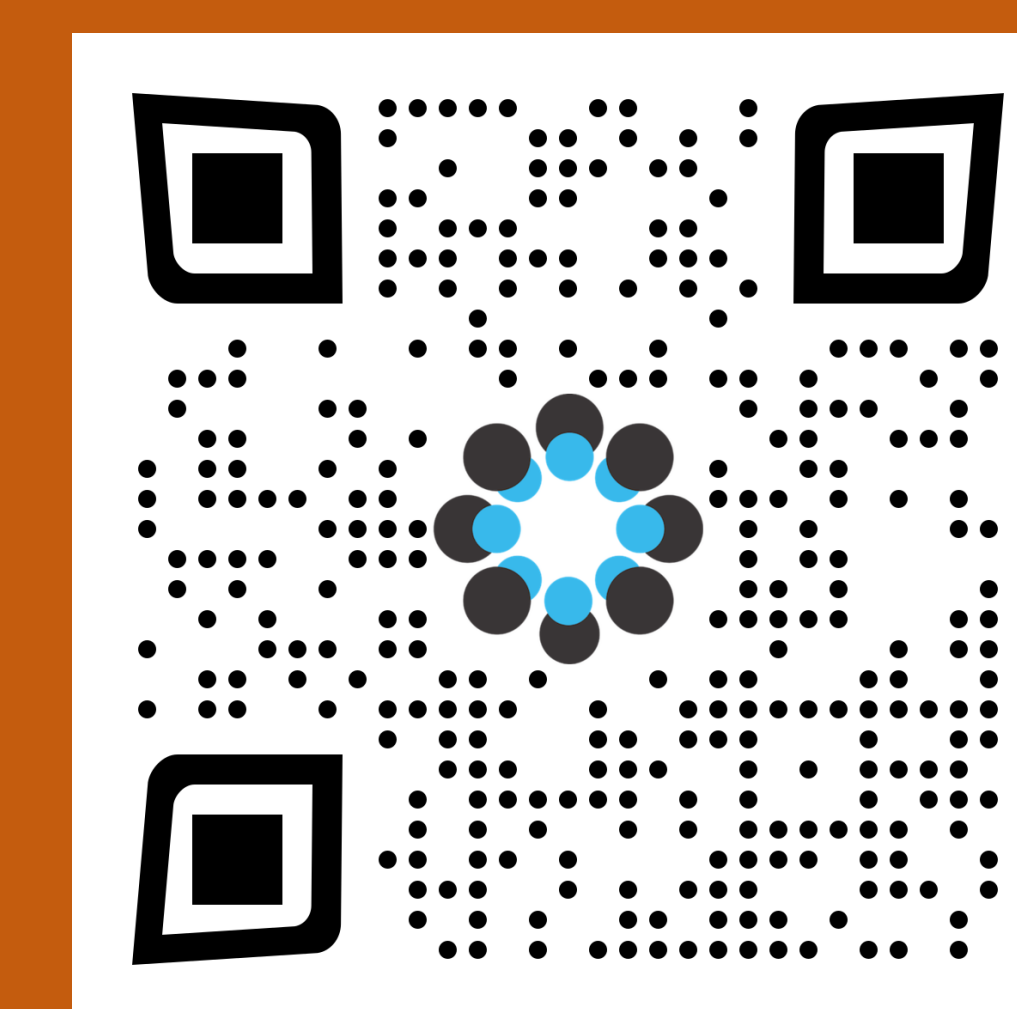
- IJA does not relate to 14-month-olds' cooperative ability, which conflicts with previous work among 17-25-month-olds (Wu et al., 2013)
- IJA positively relates to affiliative and antagonistic behaviour, which suggests it is a social communicative tool for positive and negative emotions.
- Affiliative and antagonistic behaviours hinder cooperative success, suggesting that 14-month-olds lack cognitive capacity to integrate social behaviour and cooperative actions.
- Possible bidirectional relationship between affiliative/antagonistic behaviours and cooperative ability.

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