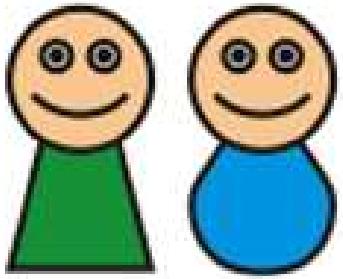
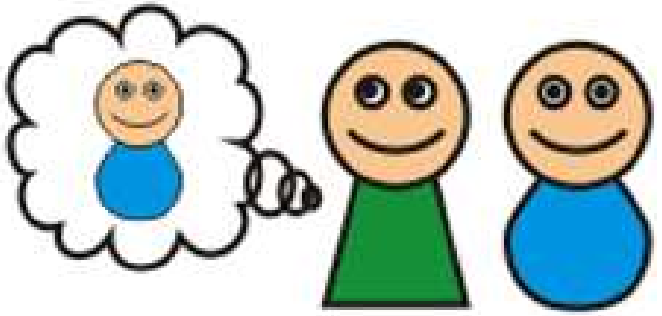
LA TEORIA DELLA MENTE NEGLI ANNI SCOLARI

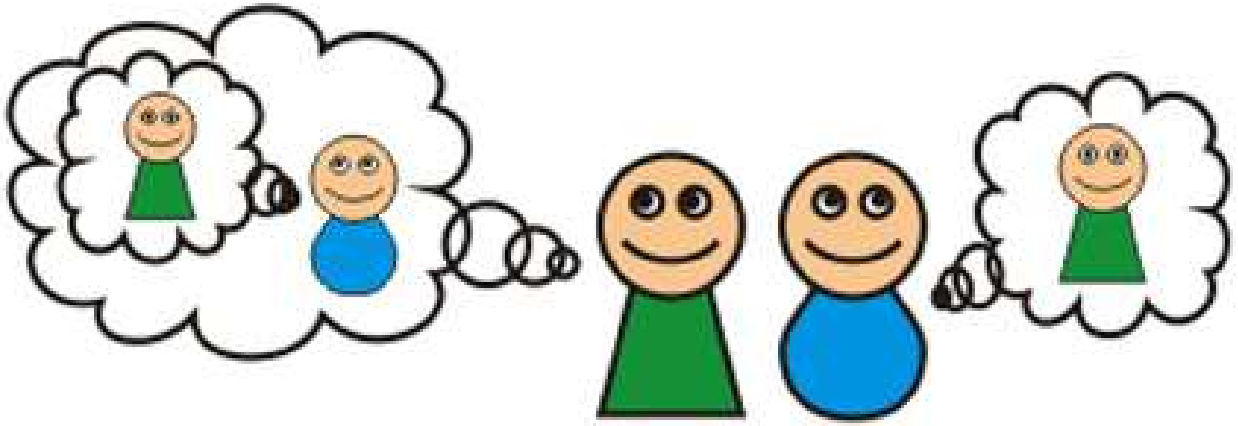
first-order



second-order

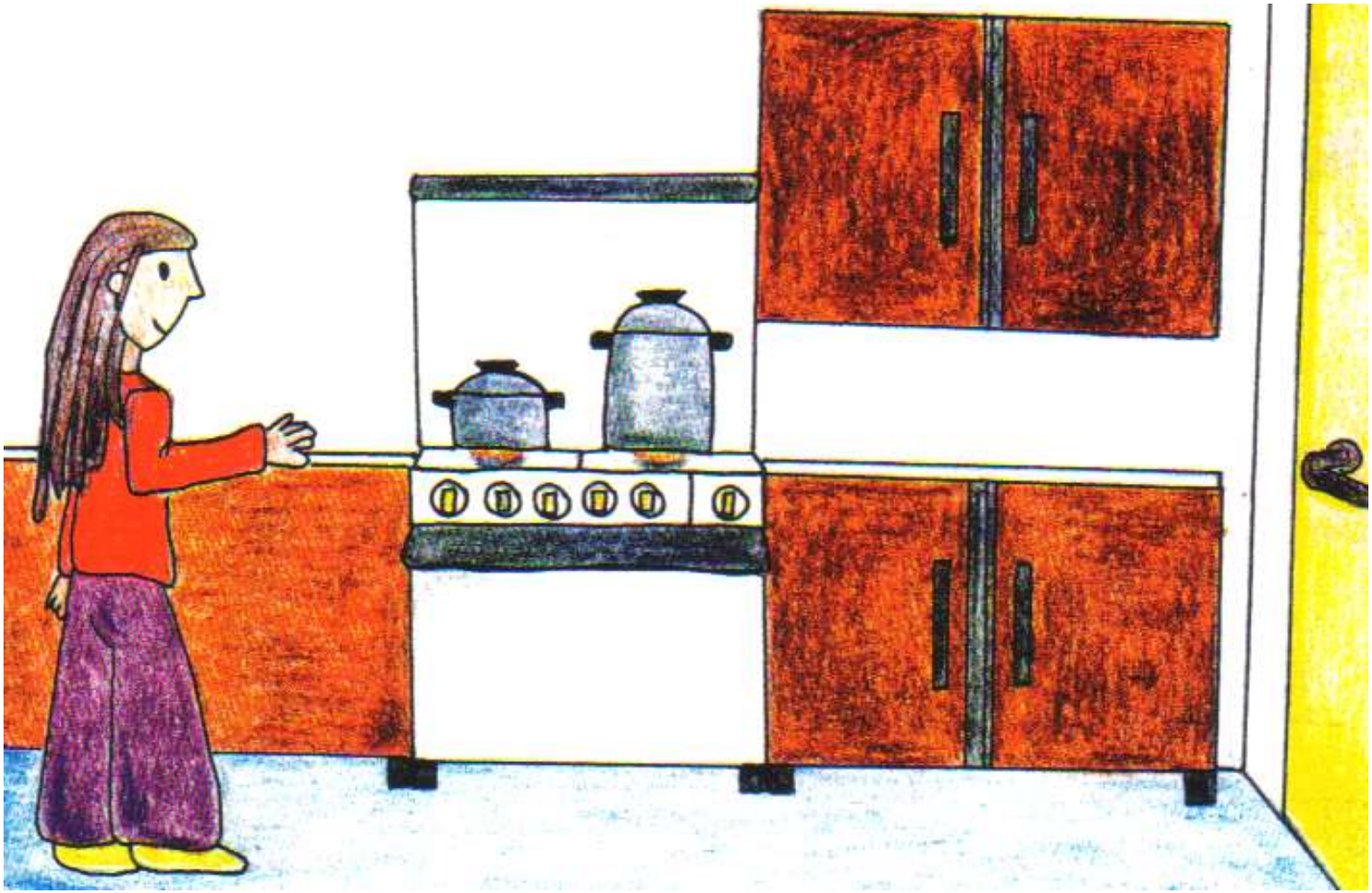


third-order



Il compito della falsa credenza di secondo ordine: look-prediction

Il compito della falsa credenza di secondo ordine: say-prediction



Belief-desire reasoning (Harris et al., 1989)

This is a story about two friends, Chris the Crocodile and Larry the Lion. Chris is a very naughty crocodile, and likes to play tricks on his friend Larry. Now, Larry really likes Coke, mmm. In fact it's his very favourite drink. Look! Here is Larry's can of Coke (Q1). Larry doesn't like any other drinks though and he really doesn't like milk, yuck, yuck. Look here's some milk. (Q2). One day, Larry went out for a walk, and naughty Chris decided to play a trick on his friend Larry. He poured out the coke “Pssshhh!” and instead he poured in some milk “Glug-glug-glug”. Then he put the milk away, and went outside to watch Larry through the window. Now when Larry comes back from his walk, he's really thirsty. He can see the can on the table, but he can't see what's inside the can. (Q3; Q4; Q5; Q6; Q7; Q8).

Strange Stories (Happè, 1994)

- 24 brevi storie con contenuto mentalistico in cui un personaggio dice qualcosa che in realtà non ritiene vero (12 tipologie: Bugia, Bugia Bianca, Scherzo, Finzione, Realtà/Apparenza, Errore, Persuasione, Figura Retorica, Dimenticanza, Doppio Bluff, Sarcasmo ed Emozioni Opposte).
- Il sistema di codifica del test si basa sulla distinzione tra risposte di tipo fisico e mentalistico alla domanda di giustificazione.

Prova del Completamento di Storie (Lecce et al., 2007)

- Luca fa una verifica e dice alla mamma di averla fatta bene. Il giorno dopo va a scuola e la maestra gli dice che la verifica non è sufficiente.

- Continua tu:

_____

_____

_____

_____

Children's faux pas

(Banerjee & Watling, 2005)

DETECTION – In the story, did someone say something they should not have said? (Yes or No)

IDENTIFICATION – What was said that should not have been said? ([insult by insulting character] or [neutral statement by insulted character])

FEELINGS – How does [insulted character] feel now? (Happy/Pleased or Sad/Upset)

INTENTION – Did [insulting character] want to make [insulted character] upset? (Yes or No)

COMPREHENSION – [question regarding target object] (Correct answer or Incorrect answer)

IGNORANCE – Did [insulting character] know [insulted character's relationship with the target object]? (Yes or No)

Children's understanding of faux pas: Associations with peer relations (Banerjee & Watling, 2005)

Table 1. **Pearson** correlations between faux pas scores and sociometric scores, by age group.

	Social preference	Social impact	Standardised positive nominations	Standardised negative nominations
Age 5-6 years	.08	-.04	.04	-.09
Age 8-9 years	.20**	-.13+	.09	-.23***
Total	.13*	-.07	.06	-.15**

Note: + p ≤ .10; * p ≤ .05; ** p ≤ .01; *** p ≤ .001.

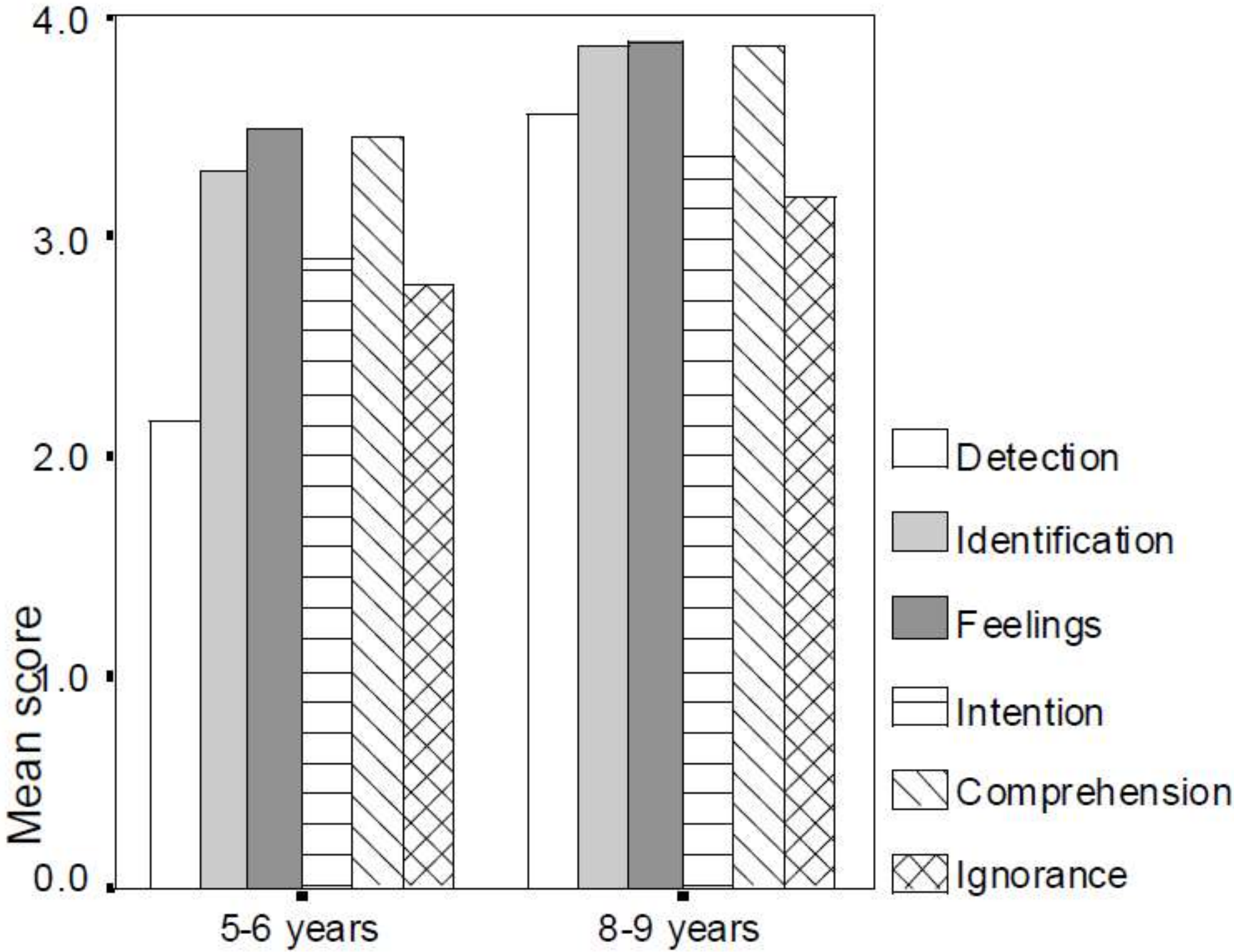

4.0
3.0
2.0
1.0
0.0
Mean score
5-6 years
8-9 years
Detection
Identification
Feelings
Intention
Comprehension
Ignorance

Table 2. Mean (SD) faux pas scores of younger and older children, by peer status classification.

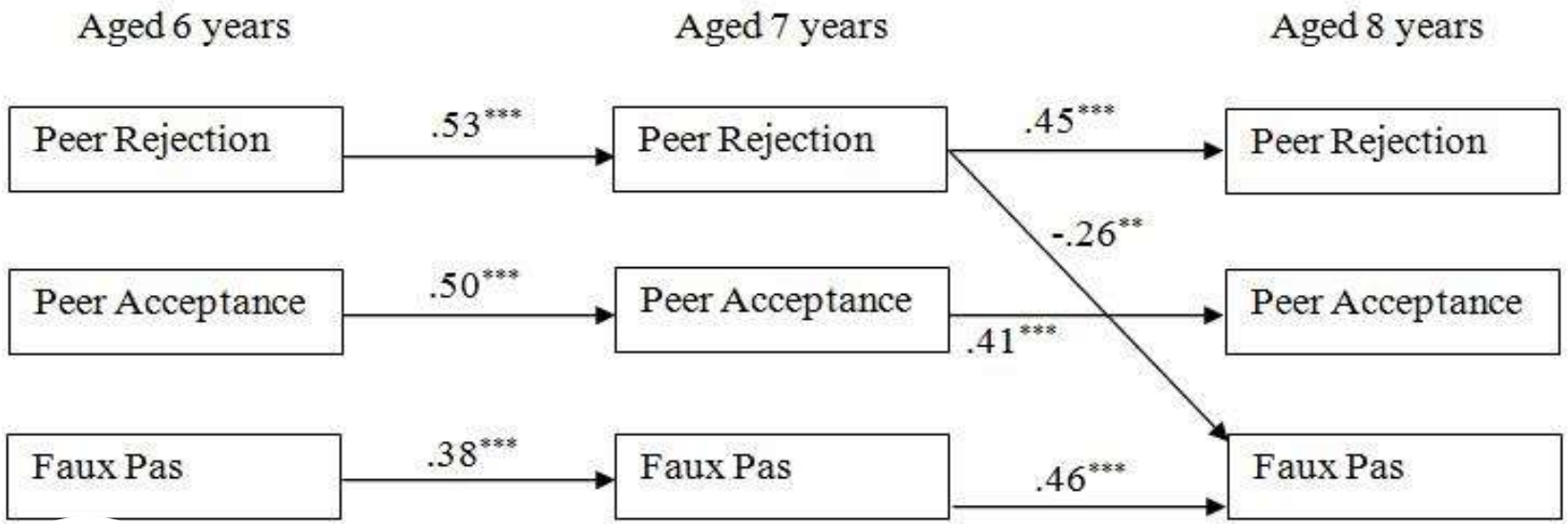
	Popular	Rejected	Controversial	Neglected	Average
Age 5-6 years	1.19 (1.28)	0.77 (0.83)	0.75 (1.49)	1.27 (1.53)	0.81 (1.26)
Age 8-9 years	2.46 (1.14)	1.85 (1.59)	1.50 (1.43)	2.58 (1.37)	2.63 (1.38)

Table 3. Mean (SD) sociometric scores of children scoring high and low on intention and ignorance questions (8-9 year age group only)

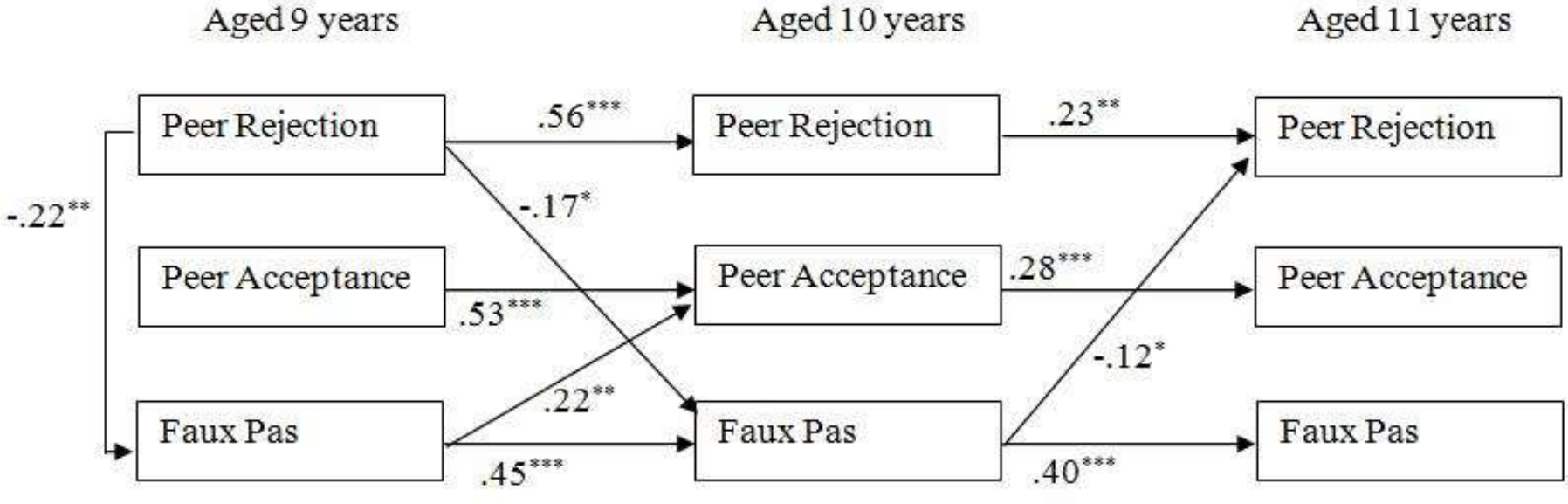
	Social preference	Standardised positive nominations	Standardised negative nominations
Faux pas – Intention			
Low (< 3 out of 4), n = 29	-.86 (1.74)	-.26 (.78)	.60 (1.33)
High (≥ 3 out of 4), n = 166	.15** (1.55)	.06 (1.01)	-.10** (.88)
Faux pas – Ignorance			
Low (< 3 out of 4), n = 40	-.58 (1.76)	-.19 (.97)	.38 (1.22)
High (≥ 3 out of 4), n = 155	.15** (1.54)	.06 (.99)	-.09* (.90)

Note: Asterisk(s) indicate high vs. low t-test significant at * $p \leq .05$ or ** $p \leq .01$

Peer relations and the understanding of faux pas: Longitudinal evidence for bidirectional associations (Banerjee, Watling & Caputi, 2011)



$^{*}p \leq .05, ^{**}p \leq .01, ^{***}p \leq .001$



$^{*}p \leq .05, ^{**}p \leq .01, ^{***}p \leq .001$

Bullying and 'Theory of Mind': A Critique of the 'Social Skills Deficit' View of Anti-Social Behaviour (Sutton et al., 1999)

Viene avanzata l'ipotesi secondo cui i bulli necessitino di un buon livello di social cognition e di abilità di ToM per manipolare gli altri, infliggere sofferenze in un modo sottile e dannoso ed evitare di essere scoperti.

Social cognition and moral cognition in bullying: What's wrong? (Gini, 2006)

Le vittime mostravano difficoltà nel compito di social cognition, i bulli no.

I bambini aggressivi erano più propensi ad utilizzare meccanismi di disimpegno morale.

I difensori mostravano livelli più alti di sensibilità morale.

ToM e METACOGNIZIONE

Lo sviluppo della ToM consente al bambino di riflettere sulle proprie intenzioni e credenze, il che facilita il monitoraggio delle proprie attività cognitive.

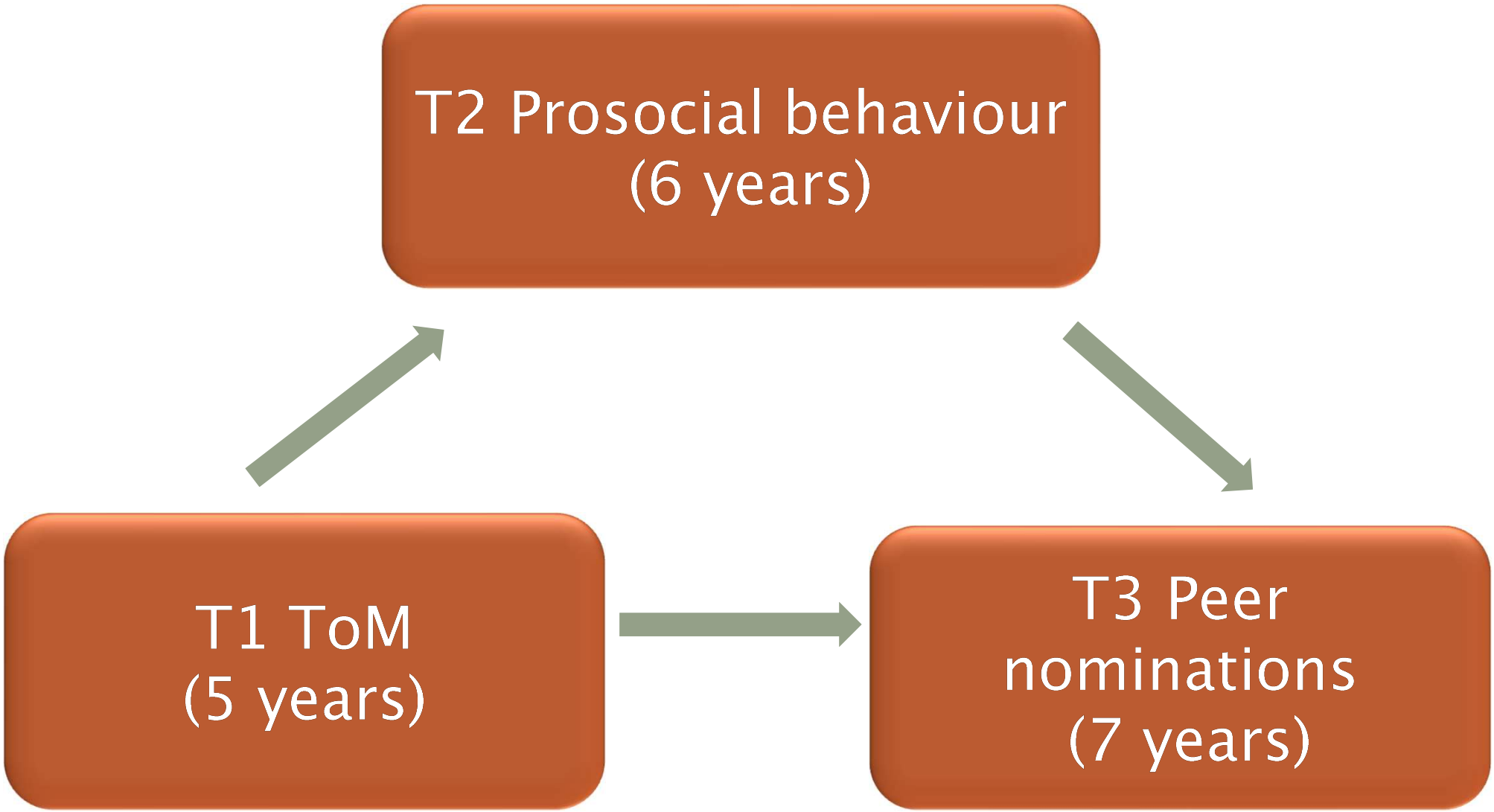
La ToM gioca un ruolo fondamentale anche nella comprensione narrativa (Astington, 1990), perché facilita l'abilità di seguire la trama della storia collegando le varie azioni ai pensieri e alle motivazioni dei personaggi.

Alcuni ricercatori hanno messo in luce anche un legame tra la ToM e lo sviluppo delle origini del ragionamento scientifico (Klein, 1998; Kuhn & Pearsall, 2000; Ruffman et al., 1993).

Longitudinal Effects of Theory of Mind on Later Peer Relations: The Role of Prosocial Behaviour

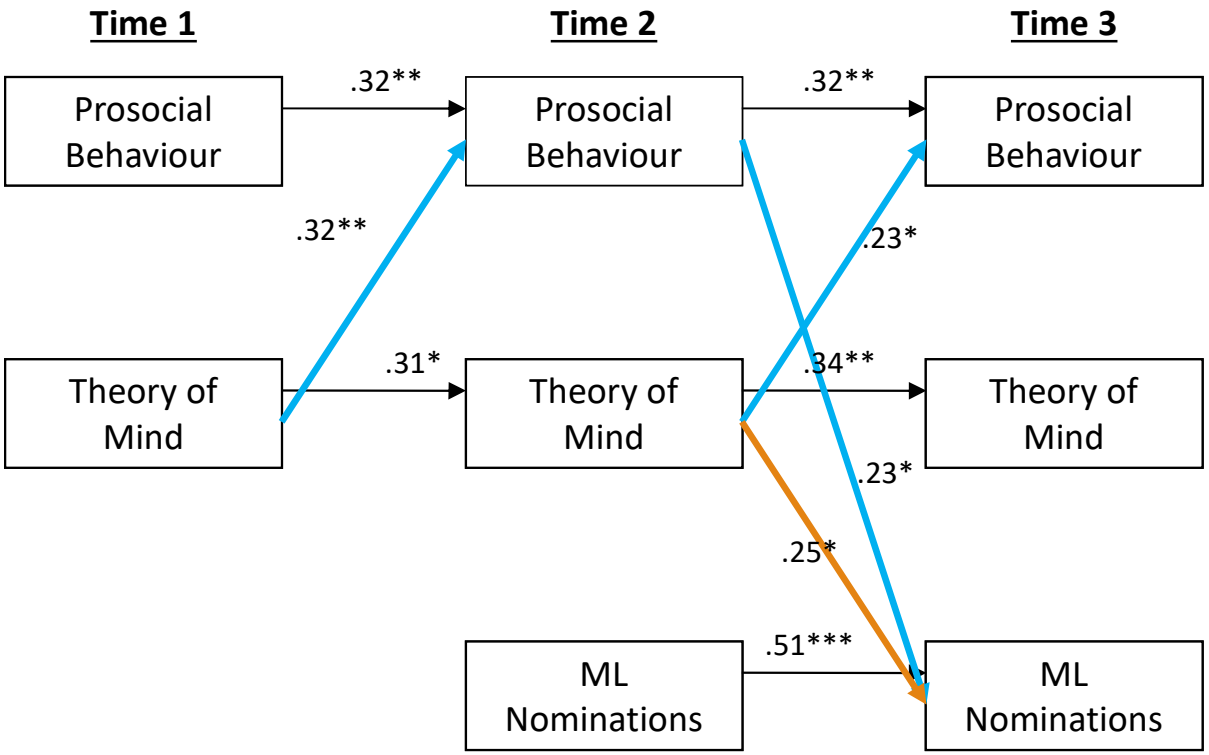
Caputi M., Lecce S., Pagnin A., & Banerjee R.
(2012)

HYPOTHESIS

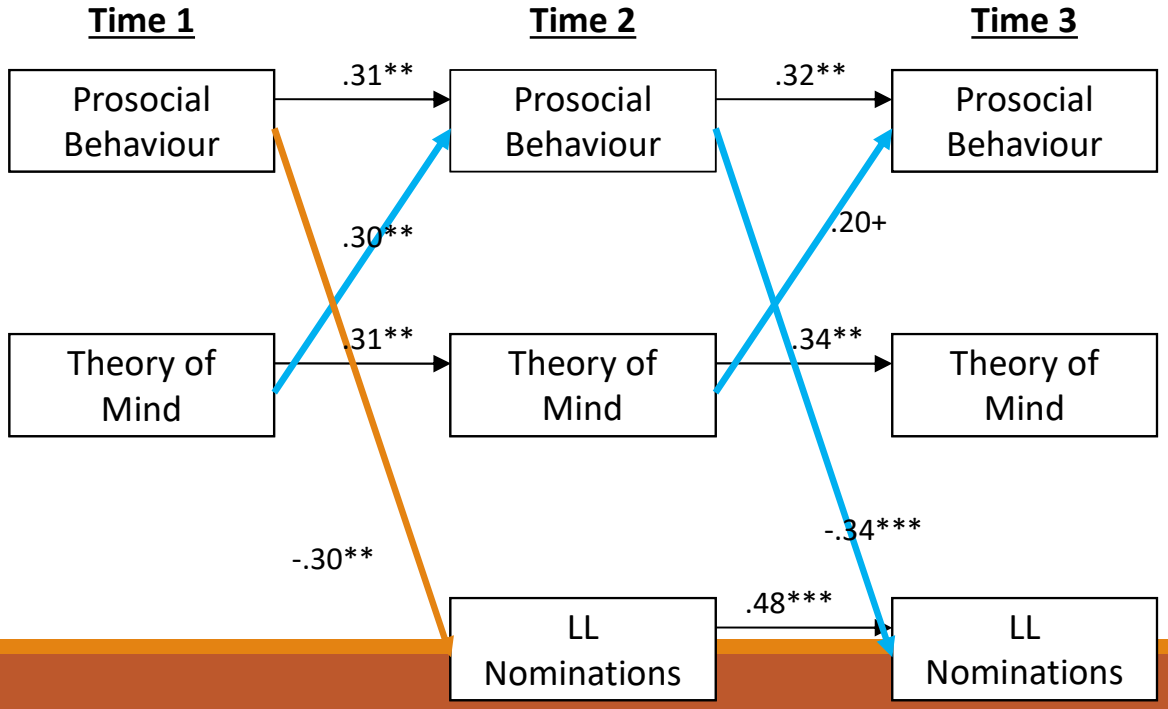

T2 Prosocial behaviour
(6 years)
T1 ToM
(5 years)
T3 Peer
nominations
(7 years)

N=70	T1 ToM	T2 VA	T2 ToM	T2 PB	T3 VA	T3 ToM	T3 ML	T3 LL
T1 VA	.35**	.70***	.13	.05	.28*	.20	.19	-.14
T1 ToM	-	.19	.34**	.34**	.29*	.27*	.37**	-.31*
T2 VA		-	.18	.22^{+}	.44***	.31**	.33**	-.20
T2 ToM			-	.15	.14	.36**	.30*	-.19
T2 PB				-	.13	.16	.29*	-.50***
T3 VA					-	.29*	.12	-.15
T3 ToM						-	.27*	-.14
T3 ML							-	-.37**

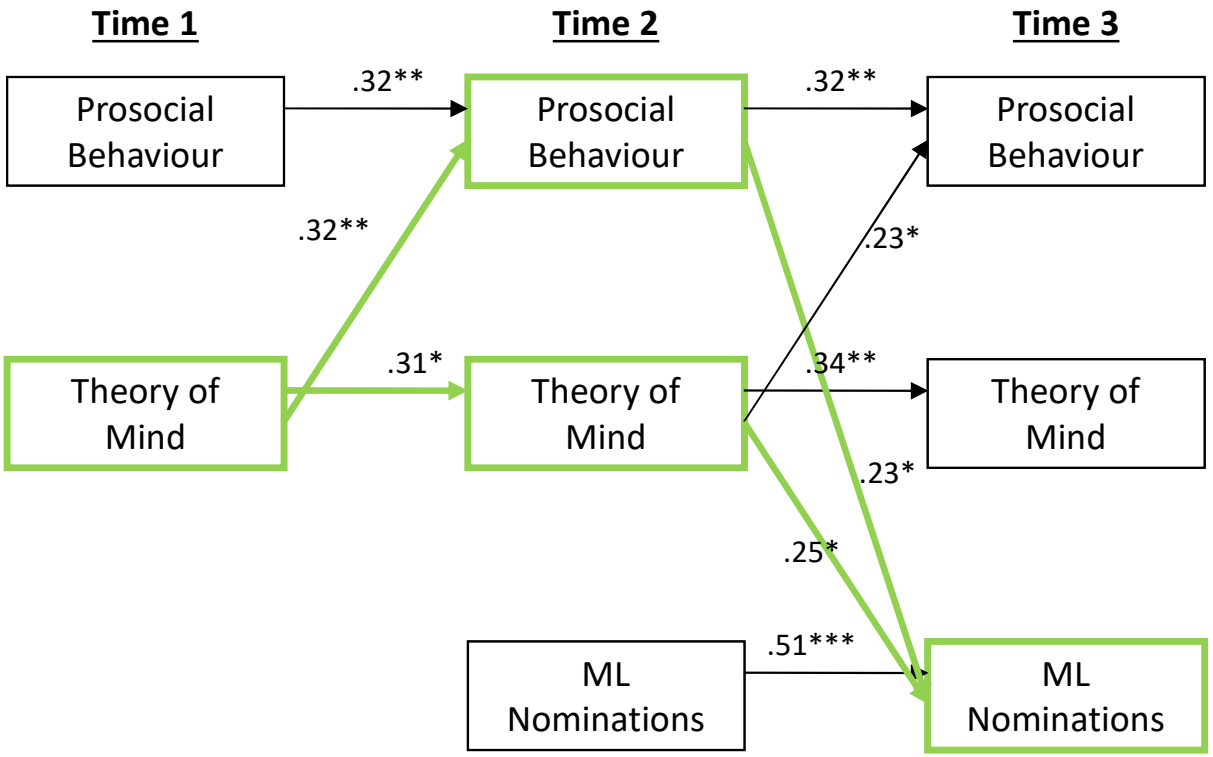
N=70	T1 ToM	T2 VA	T2 ToM	T2 PB	T3 VA	T3 ToM	T3 ML	T3 LL
T1 VA	.35**	.70***	.13	.05	.28*	.20	.19	-.14
T1 ToM	-	.19	.34**	.34**	.29*	.27*	.37**	-.31*
T2 VA		-	.18	.22^{+}	.44***	.31**	.33**	-.20
T2 ToM			-	.15	.14	.36**	.30*	-.19
T2 PB				-	.13	.16	.29*	-.50***
T3 VA					-	.29*	.12	-.15
T3 ToM						-	.27*	-.14
T3 ML							-	-.37**



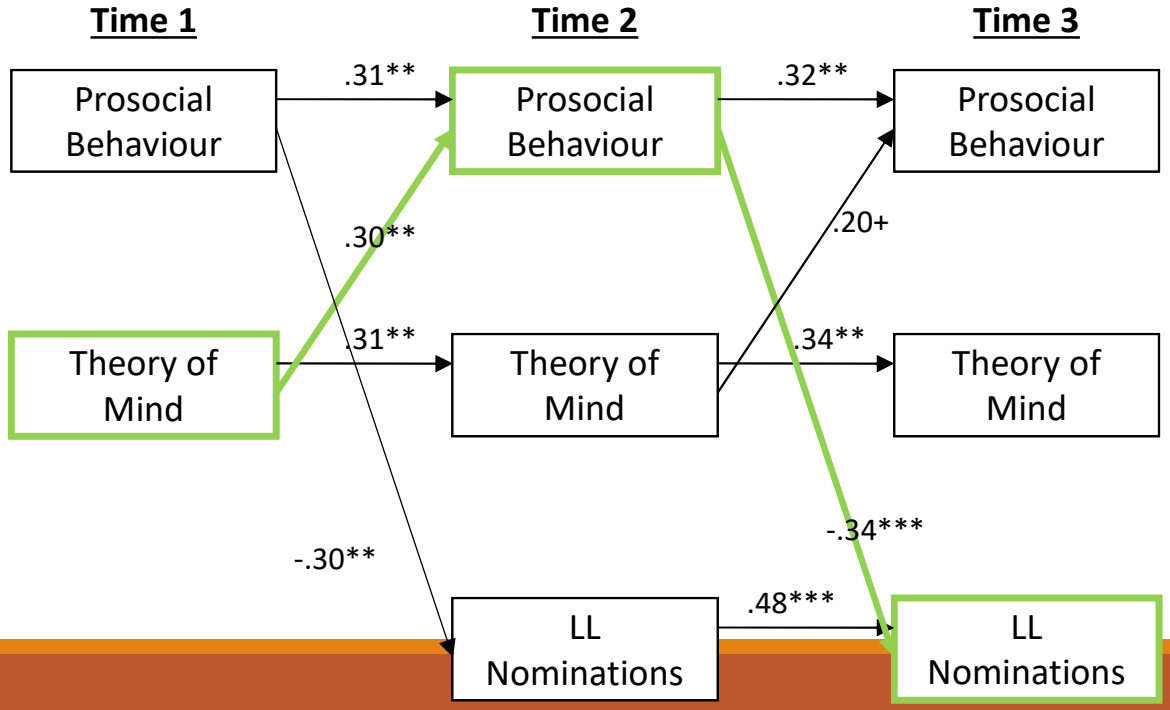
χ^2 (34) = 37.20
p = .324
CFI = .968
RMSEA = .037



χ^2 (34) = 36.72
p = .344
CFI = .982
RMSEA = .034



Standardized indirect effect
z = .094, p < .05.

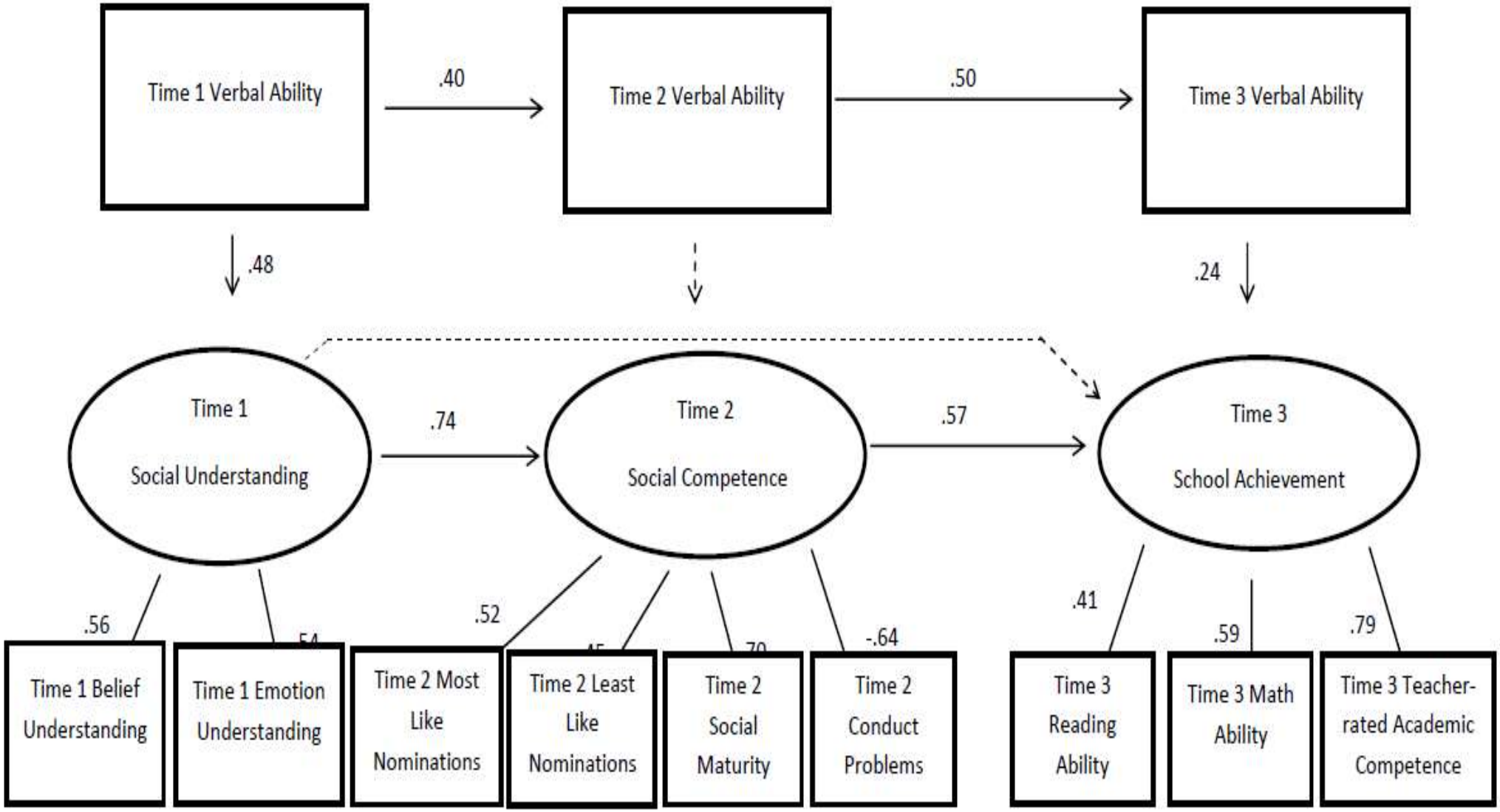


Standardized indirect effect
z = -.120, p < .01.

SOCIAL UNDERSTANDING AND SCHOOL ACHIEVEMENT: THE MEDIATING ROLE OF SOCIAL COMPETENCE

(LECCE, CAPUTI, PAGNIN, & BANERJEE, 2017)

Figure 1. Structural equation model of relationships between Social Understanding, Social Competence, and School Achievement over the three time points, controlling for verbal ability. Model fit statistics: $\chi^2(47, N = 73) = 64.42, p = .046$, root-mean-square error of approximation = .07. Displayed path coefficients are standardized estimates from Mplus, all significant with alpha set to .05. Dashed arrows indicate non-significant paths. Error terms are not displayed.



TEORIA DELLA MENTE E SENSIBILITÀ ALLE CRITICHE

La comprensione della falsa credenza (Cutting & Dunn, 2002; Dunn, 1995) e delle emozioni (Cutting & Dunn, 2002) predice sensibilità alle critiche dell'insegnante nei primi anni delle elementari, persistenza e interpretazione positiva delle critiche dell'insegnante (Mizokawa, 2013).

La sensibilità alle critiche dell'insegnante in prima elementare media il rapporto tra ToM alla scuola materna e rendimento scolastico in seconda elementare (Lecce, Caputi, & Hughes, 2011) e in quinta elementare (Lecce, Caputi, & Pagnin, 2014).

Silent Films and Strange Stories: Theory of Mind, Gender and Social Experiences in Middle Childhood (Devine & Hughes, 2013)

- Why another ‘advanced’ ToM task?

- Three distinguishing features:

1) the Silent Films task explicitly focuses on participants’ understanding of beliefs and desires rather than emotions;

2) the use of silent film clips broadens the task’s applicability for use with different language groups and with children of low verbal ability;

3) the clips included in this task were selected specifically for use with older children rather than adults.

Goals of the study:

1) examining whether items from the Strange Stories and Silent Films tasks would load onto a single latent ToM factor;

2) controlling for the potential influence of verbal ability and socio-economic status on ToM performance;

3) checking gender differences in ToM performance;

4) verifying if ToM and social competence are still related in older children and preadolescents.

Four key aims.

1) applying CFA in order to examine whether items from the Strange Stories and Silent Films tasks loaded onto a single latent factor for ToM;

2) establishing whether scores on this ToM latent factor increased with age, even when variation in verbal ability and socio-economic status were taken into account

3) applying a multiple groups CFA to test whether scores on this ToM latent factor were significantly higher in girls than in boys;

4) examining whether individual differences in scores on the ToM latent factor were related to variation in participants' self-reported social experiences.

CAMPIONE

The sample comprised 40 children (50% male) in each of five age-bands: 8-year-olds, 9-year-olds, 10-year-olds, 11-year-olds, 12-year-olds, and 30 13-year-olds.

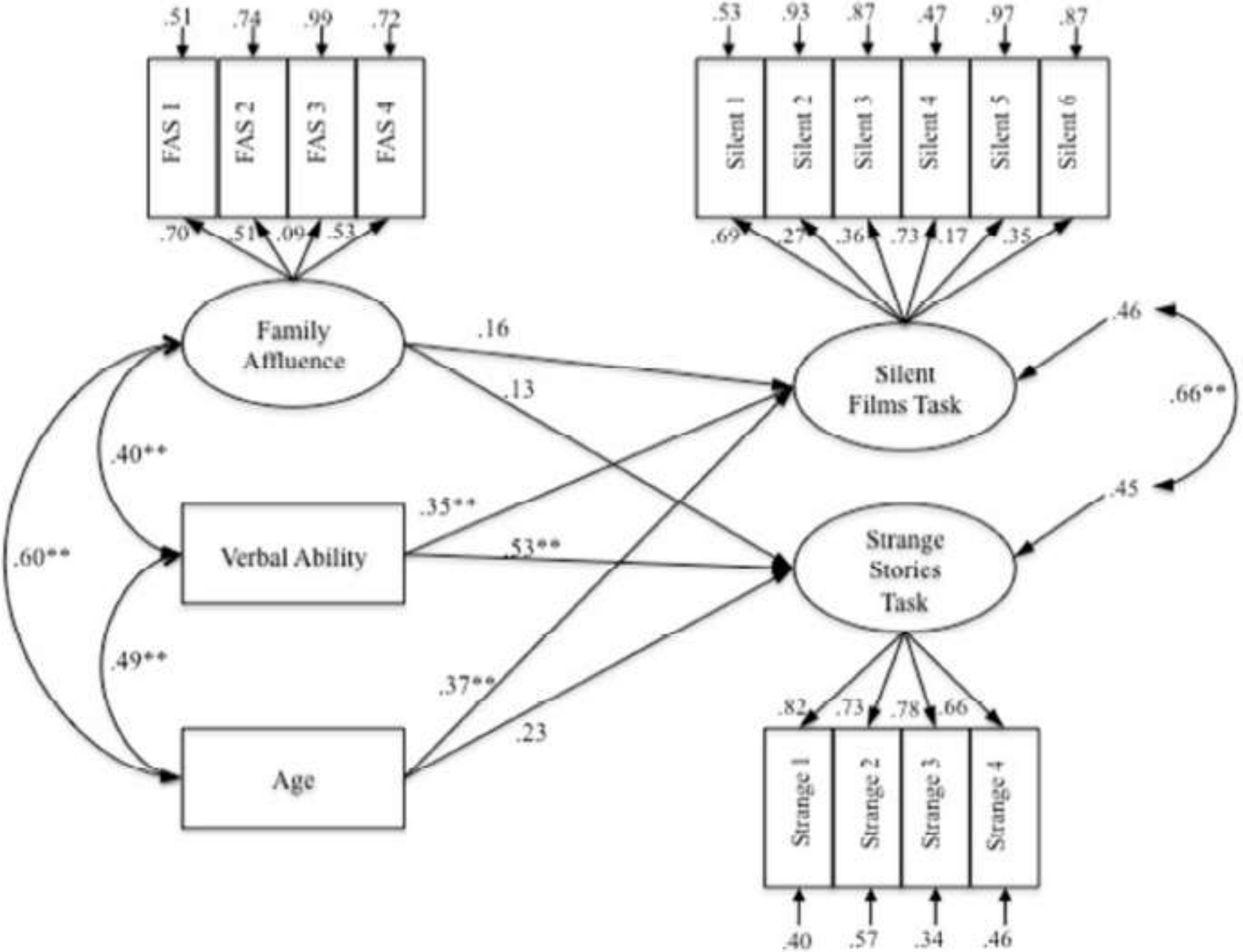
MISURE

Socio-Economic Status: Family Affluence Scale (FAS - Currie et al., 2008).

Verbal ability: Word Reasoning subtest of the WISC (Wechsler, 2004).

ToM: Strange Stories Task and Silent Films Task.

Self-Reported Social Experiences: Loneliness and Social Dissatisfaction Questionnaire (Cassidy & Asher, 1992).


.51
.74
.99
.72
FAS 1
FAS 2
FAS 3
FAS 4
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.53
.93
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Silent 1
Silent 2
Silent 3
Silent 4
Silent 5
Silent 6
.69
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Family Affluence
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Silent Films Task
.46
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.35**
.53**
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.60**
Verbal Ability
Strange Stories Task
.49**
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Age
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Strange 1
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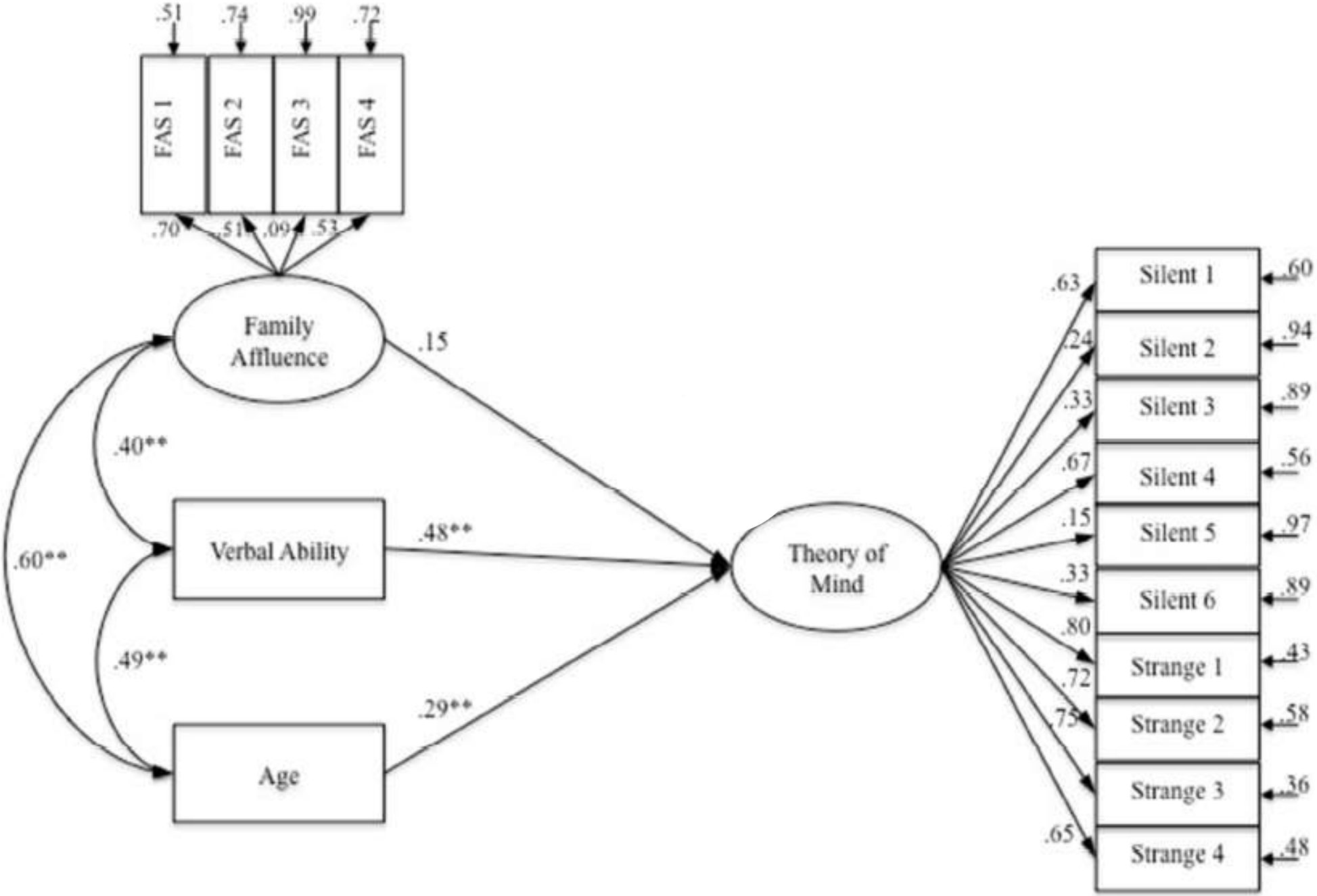
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Age
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Silent 3
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Silent 5
Silent 6
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Strange 3
Strange 4
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