# Incredible Years and School Service on Vulnerable Profiles

Angela Chan Supervisor: Dr. Garon-Carrier







# School readiness

- children's behavioural, cognitive and social development

Low school readiness: - poor self-regulation -> socioemotional problems -> low achievement at school

Sabol & Pianta (2012)

Parent engagement: - play -> children's independence and creativity - parental aggravation and strictness -> children's distractibility and hostility Parker et al. (1999)



(Parker et al., 1999)

### Incredible Years

### **Immediate Benefits**

• Reduced disruptive behaviours • More prosocial behaviours

Menting, de Castro & Matthys (2013)

### **Long-term Benefits**

• Reduced conduct problems (sustained for 2.5 years)

Overbeek et al. (2021)

### Processes of Persistance and Fadeout in Intervention

#### **SKILL BUILDING**

The earlier the intervention, the better the effects

#### SUSTAINING ENVIRONMENTS

Environments will sustain / fade out effects

### **FOOT-IN-THE-DOOR**

Providing intervention in transitional periods

#### Bailey et al. (2017)

# objectives Examine whether Incredible Years effects sustain Examine the effects of inside school emotional services

Examine interaction effect between Incredible Yeras and school services

2

3



### **RESEARCH DESIGN**

#### Pre-school

Screening of children with Lollipop, Évip, Celf, PSA

#### Pre-school

2

Parents whose children are <10 percentile on scales choose to participate in intervention programme or not

#### Pre-school

3

Intervention group parents participate in 14-week Incredible Years programme

Pre-school

4

Assessment of child at the last year of pre-school

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#### Kindergarten

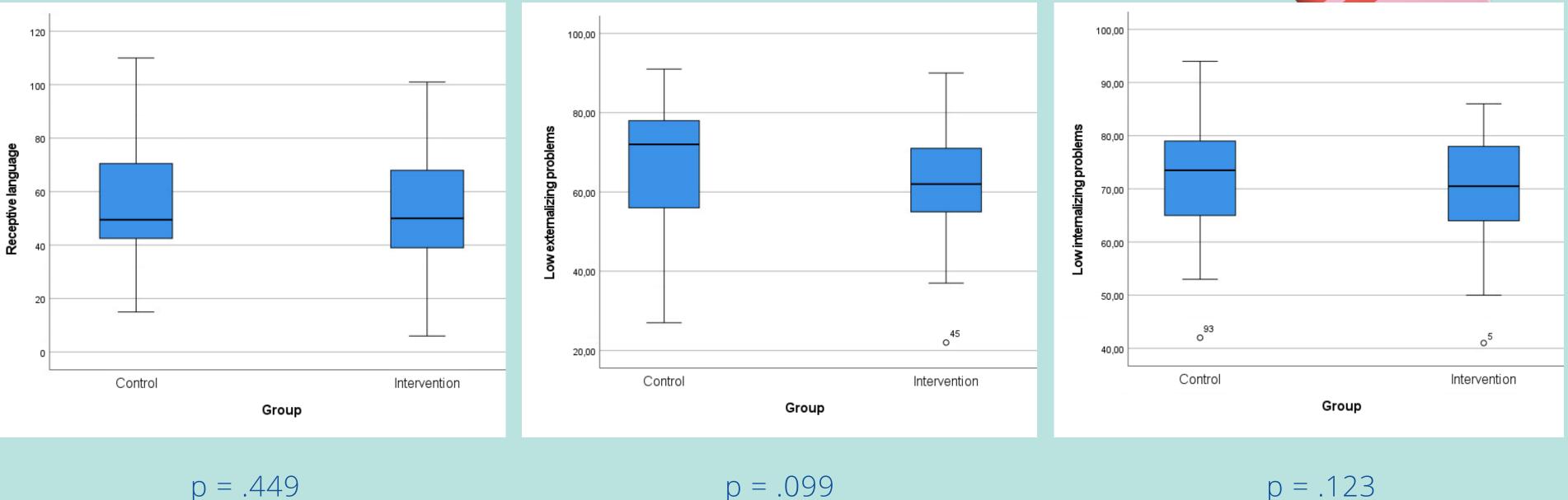
Assessment of child a year after the intervention programme

#### ELEMENTARY SCHOOL

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Assessment of child with BASC-3, and collect data about reception of services

# Participants' profiles

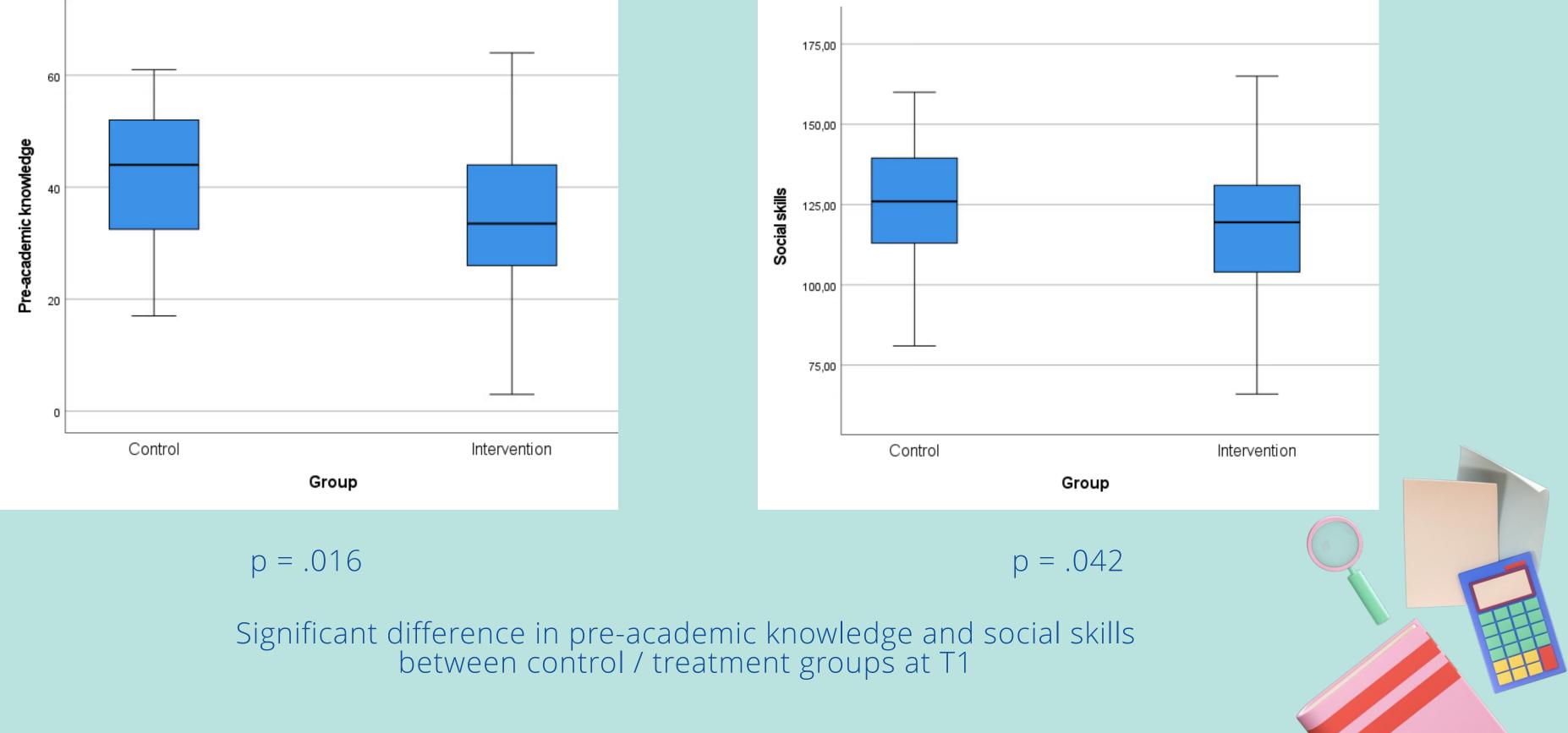


p = .099

No significant difference in Receptive language, Externalizing behaviour, Internalizing behaviours between control / treatment groups at T1



p = .123



### **PARTICIPANTS AT T4**

Intervention with services N = 25

Intervention without services N = 39



#### Control without services N = 33

Control with services N = 15

Predicting patterns of inside school emotional services reception, in comparison to children with no intervention or services ( $N = 33$ ; 29.5%)						
	Intervention without services		Control with services		Intervention with services	
	(N = 39, 34.8%)		(N = 15, 13.4%)		(N = 25, 22.3%)	
	OR	95% CI	OR	95% CI	OR	95% CI
Sociodemographic factors						
Sex of the child (ref= boys, $n=11$ )	.875	(.181, 4.224)	.650	(.097, 4.363)	1.150	(.177, 7.460)
Low income $< 30 \text{K}$ (n=15)	1.944	(.499, 7.584)	1.444	(.256, 8.161)	1.556	(.348, 6.962)
Maternal high school diploma or below (n= 35)	1.273	(.466, 3.477)	2.000	(.466, 8.591)	.889	(.298, 2.647)
Single-parent (n= 13)	3.304	(.596, 18.297)	2.500	(.266, 23.503)	.938	(.224, 3.923)
Child school readiness skills						
Pre-academic knowledge <sup>†</sup>	.975	(.940, 1.012)	.991	(.945, 1.040)	.940	(.900, .982)
Receptive vocabulary <sup>†</sup>	.996	(.972, 1.021)	1.010	(.978, 1.043)	.989	(.962, 1.016)
Low internalizing behaviors <sup>†</sup>	.963	(.918, 1.011)	.980	(.920, 1.044)	.956	(.906, 1.009)
Low externalizing behaviors <sup>†</sup>	.960	(.926, .996)	.944	(.902, .989)	.954	(.916, .993)
Social skills†	.972	(.945, .999)	.943	(.909, .978)	.931	(.900, .963)

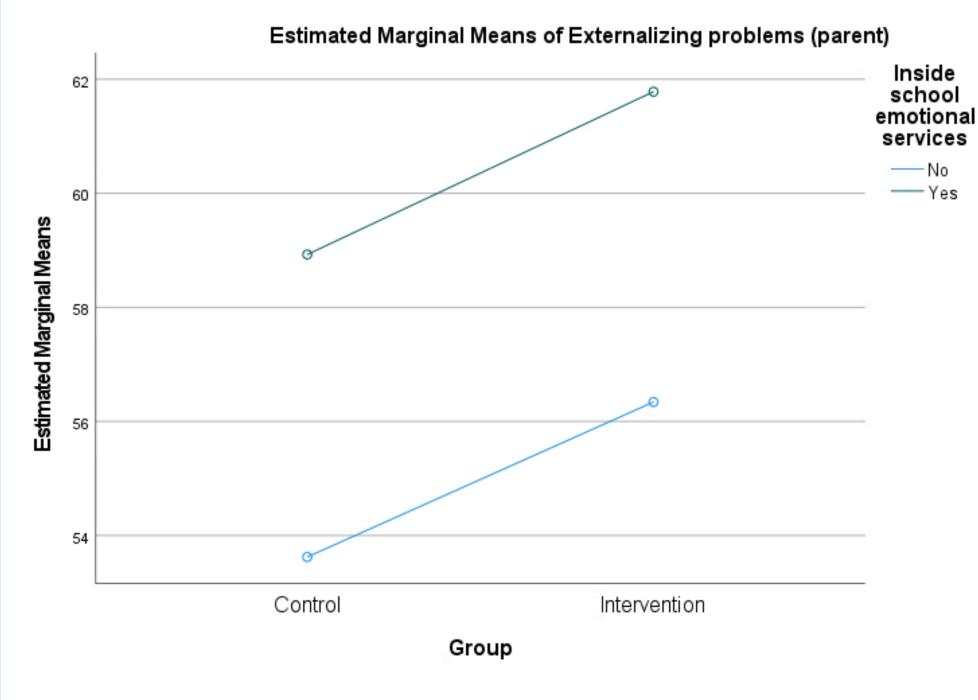
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OR, odds ratio; 95% CI, confidence intervals. Bolded coefficients indicate statistically significant values. † Continuous variables. Each predictor was tested in univariate model.

## **EXTERNALIZING BEHAVIOURS**

### **Parents' ratings**

- No main effect of IY
  - $\beta = .074, p = .386$
- No main effect of service  $\beta = .145, p = .090$
- No interaction effects between IY and service F(3, 106) = .001, p = .977



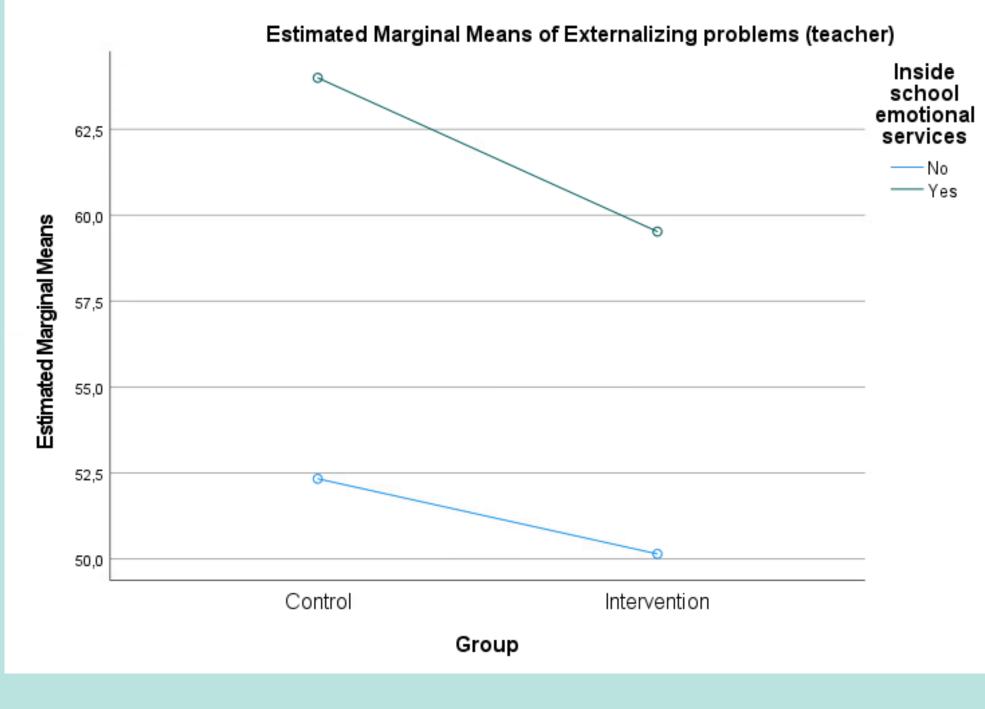
## **EXTERNALIZING BEHAVIOURS**

### **Teachers' ratings**

• Main effect of IY

 $\beta = -.112, p = .302$ 

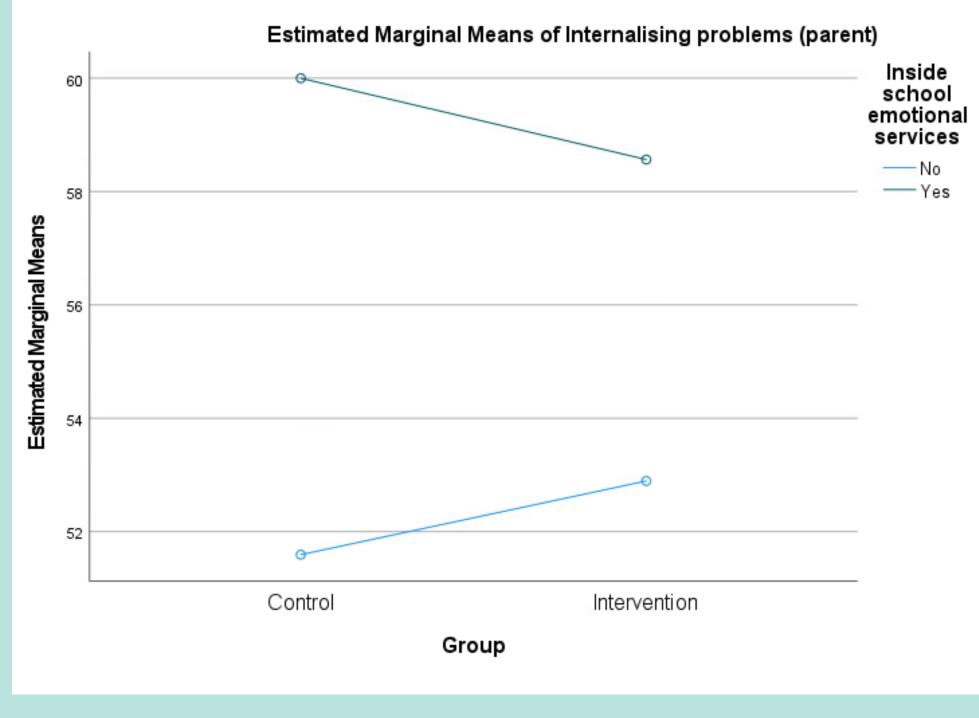
- Main effect of service  $\beta = .397, p = .000$
- No interaction effects between IY and service F(3, 82) = .206, p = .651



### **INTERNALIZING BEHAVIOURS**

### **Parents' ratings**

- No main effect of IY
  - $\beta = -.004, p = .962$
- Main effect of service  $\beta = .267, p = .003$
- No interaction effects between IY and service F(3, 106) = .383, p = .537

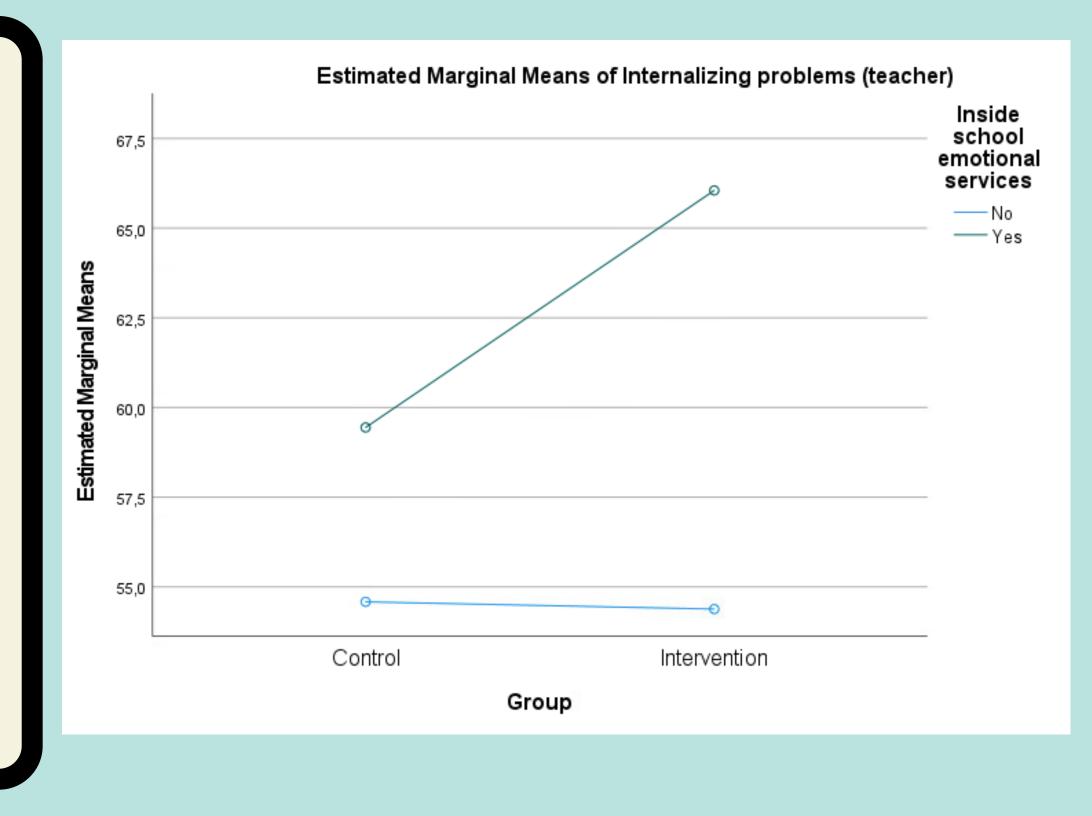




### **INTERNALIZING BEHAVIOURS**

### **Teachers' ratings**

- No main effect of IY  $\beta = .096, p = .382$
- Main effect of service  $\beta = .338, p = .002$
- No interaction effects between IY and service F(3, 82) = 1.254, p = .266

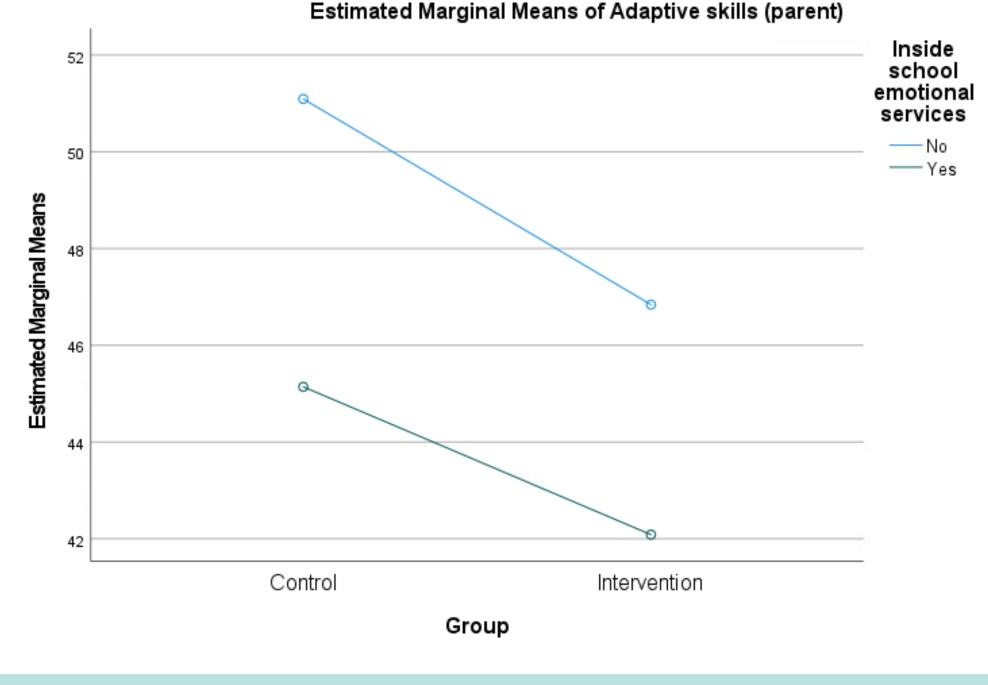




# **ADAPTIVE SKILLS**

### **Parents' ratings**

- No main effect of IY
  - $\beta = -3.068, p = .052$
- No main effect of service  $\beta = -2.704, p = .121$
- No interaction effects between IY and service F(3, 106) = .119, p = .730



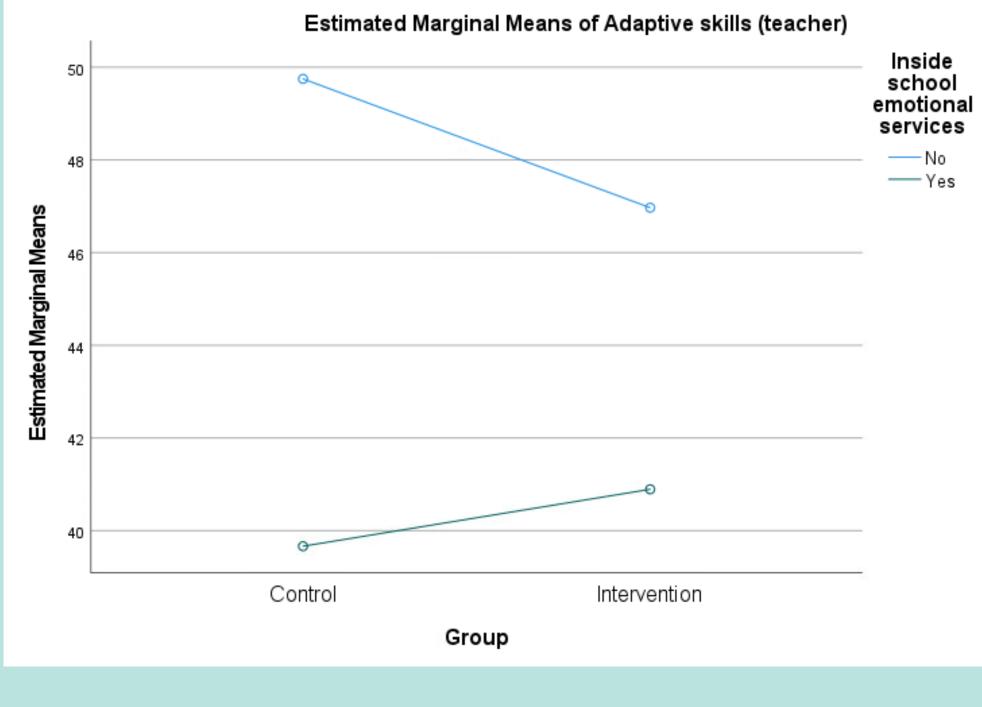


#### Estimated Marginal Means of Adaptive skills (parent)

# **ADAPTIVE SKILLS**

### **Teachers' ratings**

- No main effect of IY  $\beta = .124, p = .951$
- Main effect of service  $\beta = -4.310, p = .050$
- No interaction effects between IY and service F(3, 86) = .791, p = .377





### Incredible Years

### Effects do not sustain

### Discussion

#### Interaction effect

No interaction effect between IY and school service

### School service

No significant benefits, but more externalizing, internalizing behaviours and lower adaptive skills

### **FADE-OUT IY EFFECTS**

Contrary to:

Skill building model

The only other long-term study of Incredible Years (Overbeek et al., 2021) Studies targeting in neuroscience of early intervention effects (Wachs, Georgieff, Cusick & McEwen, 2014)

We found Incredible Years conducting in the early childhood does not sustain effects when the children enter elementary schools -> Not the earlier the better Early onset type problems are more likely to have neurobiological origins and less malleable

In line with:

Sustaining environment hypothesis

Coercive cycle (Patterson, 1982)

Short term effect: children's reduced problems -> increased parental competence and continued positive parenting strategies -> further reduced problems

Long term effect: absence of therapist support + fairly persistent child problems -> parents occasionally invest less in positive parenting strategies -> coercive cycle again

### **BACKFIRE SCHOOL SERVICE EFFECTS**

Contrary to:

- Expectation
- Other studies regarding school-based social, emotional and behavioural programs (Sklad et el., 2012)

We found immediate reverse effects in children participating in school emotional service

Possible explanation:

Peer contagion mechanisms (Dishion, McCord & Poulin, 1999) Dual failure model (Capaldi, 1992)

### REFRENCES

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# thank you!

### Any Question?

