



## Meta-analytic review & working with mothers being released from incarceration

Ankie Menting,  
Bram Orobio de Castro,  
Walter Matthys et al.

Universiteit Utrecht Funded by the Dutch Ministry of Security & Justice

## Aims meta-analytic review IYPT

- Widespread growth, applied in various settings
- Effectiveness of Incredible Years parent training (IYPT) regarding child behavior
- Characteristics which may explain variability in intervention outcomes (moderators):
  - Intervention
  - Child
  - Family
  - Method

Menting, de Castro, & Matthys (2013). *Clinical Psychology Review*, 33(8), 901-913

## Method: inclusion criteria

- Effects of the IYPT, as a stand-alone intervention or in a package with other components or interventions, were examined immediately after intervention
- The effectiveness was examined by comparing an intervention group to a comparison group
- The study reported at least one quantitative measure of disruptive or prosocial child behavior
- Sufficient empirical data was reported to enable the calculation of standardized mean difference effect sizes or these effect sizes were reported in text.

*No restrictions to the types of research designs or comparison groups to be included in the meta-analytic review.*

Menting, de Castro, & Matthys (2013). *Clinical Psychology Review*, 33(8), 901-913

## Method

- 50 studies (4745 participants; 39 manuscripts)
- 5 outcomes:
  - disruptive behavior
  - prosocial behavior
  - parental report
  - teacher report
  - observation
- Context: Treatment and prevention studies
- Standard Incredible Years and variants of Incredible Years

Menting, de Castro, & Matthys (2013). *Clinical Psychology Review*, 33(8), 901-913

## Method: coding moderators

- **Descriptive** Webster-Stratton, publication type, publication year, number of children, number of families, intention-to-treat
- **Intervention** components, number of IY sessions, total number of sessions, number of sessions attended
- **Child** age, gender, initial severity, problem, clinical range
- **Family** single parent, ethnic minority, education, at risk sample
- **Method** ECBI, assignment, nature of the comparison group

- Six independent coders
- 27 studies (54%) coded by two independent coders
- Inter-rater reliability sufficient

Menting, de Castro, & Matthys (2013). *Clinical Psychology Review*, 33(8), 901-913

## Results: stem-and-leaf plots

Disruptive behavior		Prosocial behavior		Parental report		Teacher report		Observation	
Stem	Leaf	Stem	Leaf	Stem	Leaf	Stem	Leaf	Stem	Leaf
				-.8	3				
				-.7					-.7 4
				-.6					-.6
				-.5					-.5
-.4	2		6	-.4		-.4	7	-.4	
-.3	5			-.3		-.3	1	-.3	4
-.2				-.2	3	-.2		-.2	6
-.1	9		29	-.1	0	-.1	9	-.1	
0	156	0	145	0	368	0	46	0	
0	79	0	356889	0	446	0	04467	0	9
.1	0335689	.1	448	.1	23568	.1	112244	.1	
.2	3335578889	.2	2289	.2	4445678	.2	007	.2	569
.3	11789	.3	146	.3	11478	.3	035	.3	01356
.4	013467789	.4	256	.4	124458	.4	7	.4	003344
.5	4578	.5		.5	1224678	.5	7	.5	5
.6	57	.6		.6	13459	.6		.6	145
.7	017	.7		.7	3	.7	2	.7	8
.8	2	.8		.8					
.9		.9		.9	2				
1.0	1			1.0	13				
				1.1					
				1.2	3				

Menting, de Castro, & Matthys (2013). *Clinical Psychology Review*, 33(8), 901-913

### Effectiveness of Incredible Years

- Disruptive behavior:  $d = .27$  (fail-safe number = 1351)
- Prosocial behavior:  $d = .23$  (fail-safe number = 300)
- Parental report:  $d = .30$  (fail-safe number = 1207)
- Teacher report:  $d = .13$  (fail-safe number = 71)
- Observation:  $d = .37$  (fail-safe number = 576)

Menting, de Castro, & Matthys (2013).  
Clinical Psychology Review, 33(8), 901-913

### Differential effectiveness (parental report)

	Standard IY		Variant IY		All studies	
	# studies	$d$	# studies	$d$	# studies	$d$
Selective prevention	10	.13	1	.39	11	.13
Indicated prevention	6	.21	5	.10	11	.20
Treatment	18	.50	4	.54	22	.50
Not classified	2	.21	3	.58	5	.25
All studies	36	.25	13	.35	49	.30

Menting, de Castro, & Matthys (2013).  
Clinical Psychology Review, 33(8), 901-913

### Final model of moderators


Predictor	$p$	$B$	$\beta$
Number of sessions attended	.11	.03	.36
Initial severity of child behavior	.01*	.02	.47
Assignment			
- Non-random <sup>a</sup>	.13	-.29	-.28
- Random after blocking or matching <sup>b</sup>	.14	-.17	-.28
Model	$Q(4) = 27.10, p < .001$		
Residual	$Q(19) = 12.89, p = .84$		
R-square	.68		

Menting, de Castro, & Matthys (2013).  
Clinical Psychology Review, 33(8), 901-913

### Conclusion meta-analytic review

Incredible Years parent training is effective in diminishing disruptive behavior and increasing prosocial behavior, according to parents, teachers, and observers, **but** study context seems to matter:

Small effects for selective prevention  
lower severity of problems, motivational issues, ...




Menting, de Castro, & Matthys (2013).  
Clinical Psychology Review, 33(8), 901-913

### Parent training for (formerly) incarcerated mothers....


*....seemed to be a good idea*

- Children of incarcerated mothers: at-risk
- Intergenerational transmission of antisocial behavior (e.g., Murray et al., 2012)
- Key role for parenting (?)
- More difficult to change antisocial behavior in adolescents and adults



Menting, de Castro, & Matthys (2013).  
Clinical Psychology Review, 33(8), 901-913


- Indeed, less optimal parenting behaviors (e.g., Menting et al., 2016), compared to disadvantaged mothers
- So, in need, but also hard-to-reach and a "difficult population":
  - mothers are skeptic against outsiders
  - sensitive topic
  - more urgent problems
  - children are "hidden"
  - contact information changes frequently



Menting, de Castro, & Matthys (2013).  
Clinical Psychology Review, 33(8), 901-913

### Risk factors accumulate


- High levels of parenting stress (e.g., Loper & Tuerk, 2006)
- Single parenthood (e.g., Menting et al., 2016)
- Maternal depressive symptoms (e.g., Menting et al., in press)
- Reduced family income (e.g., Murray et al., 2012)
- Unstable living arrangements (e.g., Poehlmann, 2008)
- Social stigma (e.g., Amlund-Hagen & Myers, 2003)
- Among other factors...



Universiteit Utrecht

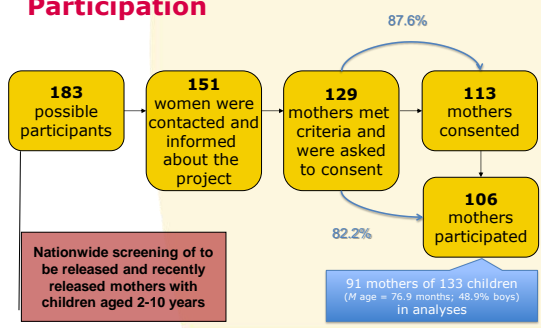
### Participants

- Nationwide screening in penitentiary institutions
- Incarcerated (release ≤ 3 months) or formerly incarcerated (released ≤ 6 months) + caregiver of children aged 2-10 years.



Menting, A. T. A., Orobio de Castro, B., Wijngaards-de Meij, L.D.N.V., & Matthys, W. (2014). A trial of parent training for mothers being released from incarceration and their children. *Journal of Clinical Child & Adolescent Psychology, 43*, 381-396.

### Participation



Nationwide screening of to be released and recently released mothers with children aged 2-10 years

91 mothers of 133 children (M age = 76.9 months; 48.9% boys) in analyses

Menting, A. T. A., Orobio de Castro, B., Wijngaards-de Meij, L.D.N.V., & Matthys, W. (2014). A trial of parent training for mothers being released from incarceration and their children. *Journal of Clinical Child & Adolescent Psychology, 43*, 381-396.

### Procedure RCT "Better Start"

Randomization


15 months

Intervention group: Incredible Years parent training (BASIC)

- 12 weekly group sessions
- 4 monthly home visits

Attendance: Group sessions: 7.7 (SD = 3.1), Home visits: 3.1 (SD = 1.4)

Intervention and control group: measurements



Menting, A. T. A., Orobio de Castro, B., Wijngaards-de Meij, L.D.N.V., & Matthys, W. (2014). A trial of parent training for mothers being released from incarceration and their children. *Journal of Clinical Child & Adolescent Psychology, 43*, 381-396.

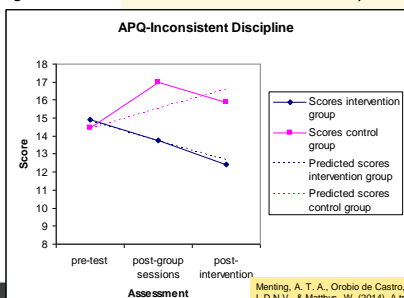
### Measures (ao)

- Parenting behaviors (APQ; 3x) 5 scales
- Disruptive child behavior according to mothers (ECBI; 4x) 2 scales
- Disruptive child behavior according to teachers (TRF/CTRF; 3x; blind to allocation status) 1 scale

Menting, A. T. A., Orobio de Castro, B., Wijngaards-de Meij, L.D.N.V., & Matthys, W. (2014). A trial of parent training for mothers being released from incarceration and their children. *Journal of Clinical Child & Adolescent Psychology, 43*, 381-396.

### Results per-protocol analyses (I)

Significant intervention effect on inconsistency of discipline



APQ-Inconsistent Discipline

Score

Assessment

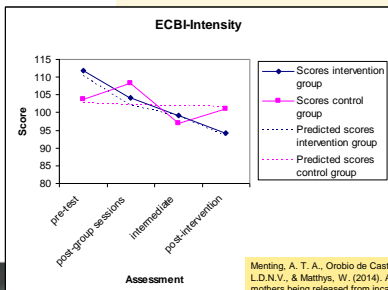
Legend: Scores intervention group, Scores control group, Predicted scores intervention group, Predicted scores control group

$d = .90$

Menting, A. T. A., Orobio de Castro, B., Wijngaards-de Meij, L.D.N.V., & Matthys, W. (2014). A trial of parent training for mothers being released from incarceration and their children. *Journal of Clinical Child & Adolescent Psychology, 43*, 381-396.

### Results per-protocol analyses (II)

Significant intervention effect on intensity of disruptive behavior according to mothers

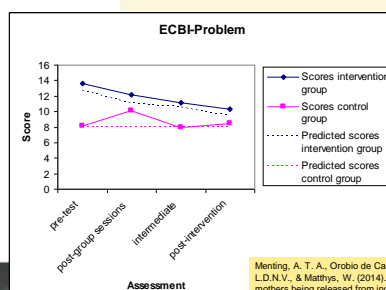


$d = .47$   
versus  
 $d = .13$   
for  
selective  
prevention

Menting, A. T. A., Orobio de Castro, B., Wijngaards-de Meij, L.D.N.V., & Matthys, W. (2014). A trial of parent training for mothers being released from incarceration and their children. *Journal of Clinical Child & Adolescent Psychology, 43*, 381-396

### Results per-protocol analyses (III)

Significant intervention effect on the extent to which child behavior is a problem for mothers

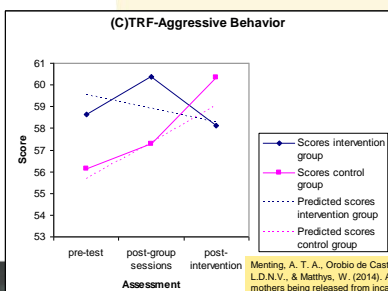


$d = .41$

Menting, A. T. A., Orobio de Castro, B., Wijngaards-de Meij, L.D.N.V., & Matthys, W. (2014). A trial of parent training for mothers being released from incarceration and their children. *Journal of Clinical Child & Adolescent Psychology, 43*, 381-396

### Results per-protocol analyses (IV)

Marginal intervention effect on disruptive child behavior according to teachers



$d = .62$

Menting, A. T. A., Orobio de Castro, B., Wijngaards-de Meij, L.D.N.V., & Matthys, W. (2014). A trial of parent training for mothers being released from incarceration and their children. *Journal of Clinical Child & Adolescent Psychology, 43*, 381-396

### Conclusion short-term effects

- Promising: significant intervention effects on inconsistency of discipline and child disruptive behavior & marginal significant for aggression according to teachers (blind to allocation status)
- "Normal" ECBI-scores
- Motivational issues? nationwide recruitment and nonattendance, vs willing to travel and "a new start"



### Strengths and limitations

- Large percentage of hard-to-reach population; only 2% dropped out after intervention
- Real data on opt-out mothers
- Mother-report
- 8 months after intervention => long-term



Any questions, comments, or suggestions?

Please feel free to contact me:  
[A.T.A.Menting@uu.nl](mailto:A.T.A.Menting@uu.nl)