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# Implementation of Stepping Stones Triple P (Positive Parenting Program) for parents of a child diagnosed with an Autism Spectrum Disorder



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# Introduction of present study

- \* Children with autism spectrum disorders (ASD) have three characteristic disorders, which are social disorder, imagination disorder and their related behavioral disorder, such as specific obsessiveness, temper tantrum, panic symptom and sleep problem, so their symptoms might develop to be hard-to-raise children for their parents.

# Introduction 2

- \* Triple P-Positive Parenting Program was developed by clinical psychologist Professor Matthew Sanders and colleagues from the School of Psychology at The University of Queensland, Australia.
- \* Triple P has been spreading over 20 countries because of evidence based effects to mother-and-child relationship. **Stepping Stones Triple P (SSTP) is one of the series of this program for the parents of children with some disabilities.**

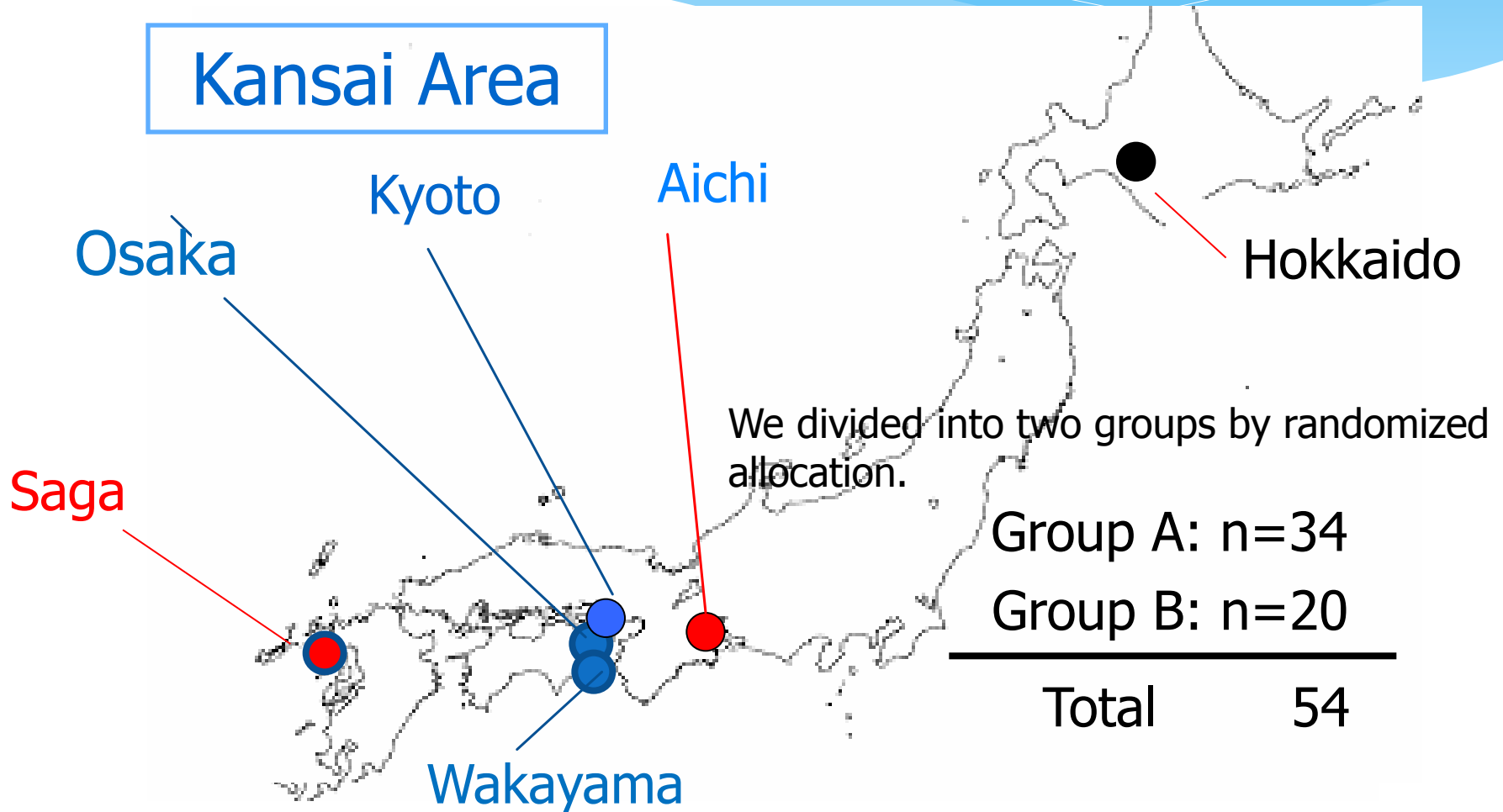
# Purpose

- \* The child abuse and neglect gives the trauma to not only the child but also the family, the recovery afterwards is not easy, therefore effective child rearing support for the prevention of the child abuse and neglect is expected.
- \* **The aim** of this study was to measure the effect of Group Stepping Stones Triple P for the parents of children with ASD. **Our hypothesis** was that Group SSTP should make parenting children with ASD easier.

# Participants

Mothers who have 2-to 10- year-old child diagnosed with autism spectrum disorder (ASD)

Kansai Area



# Demographic Variables for Group A and Group B

Group A: Intervention – Follow up Group, Group B; Waiting- Intervention Group

Variables	Group A n=34		Group B n=20	
	Mean	SD	Mean	SD
Child's age	4.80	1.89	4.60	1.35
Mother's age	37.50	3.78	36.00	5.12
No. of siblings	1.80	0.77	2.00	0.60
Position of Siblings	1.50	0.79	1.50	0.61
Child's gender (% boys)	85.30%		85.00%	

To examine whether there were any differences between 2 groups on demographic variables, child's age, mother's age, number/position of siblings, and child's gender, **no significant variables between two groups** were observed on the independent sample t test.

# Triple P (Positive Parenting Program)

Family support educational program based on the theory of cognitive-behavioral therapy

Levels of intervention

Level 1: Universal TP

Level 2: Selected TP

Level 3: Primary Care TP

**Level 4: Standard Triple P, Stepping Stones Triple P**

Level 5: Enhanced Triple P

# Procedure of Group Stepping Stones Triple P

## Group work

Principle, Instructions for behavior graph, Role-play for parenting skill (1st~5th week)

1st

2nd

3rd

4th

5th

1<sup>st</sup>: Positive Parenting

2<sup>nd</sup>: Promoting Children's Development

3<sup>rd</sup>: Teaching New Skills and Behavior

4<sup>th</sup>: Managing Misbehavior and Parenting Routines

5<sup>th</sup>: Planning Ahead

## Telephone session

Implementing of parenting routines (6th~8th week)

6th

7th

8th

6<sup>th</sup>-8<sup>th</sup>

Parenting Routines

1, 2 & 3

Program Summary (9th week)

9th

9<sup>th</sup>

Program close overview



# Promoting children's development (14 skills)

Intervention-Program contents 1

## **Developing positive relationships with children**

1. spend quality time with your children
2. communicate with your child
3. show affection

## **Encouraging desirable behavior**

4. praise your child
5. give your child attention
6. Provide other rewards
7. provide engaging activities
8. Set up activity schedules

## **Teaching new skills and behaviors**

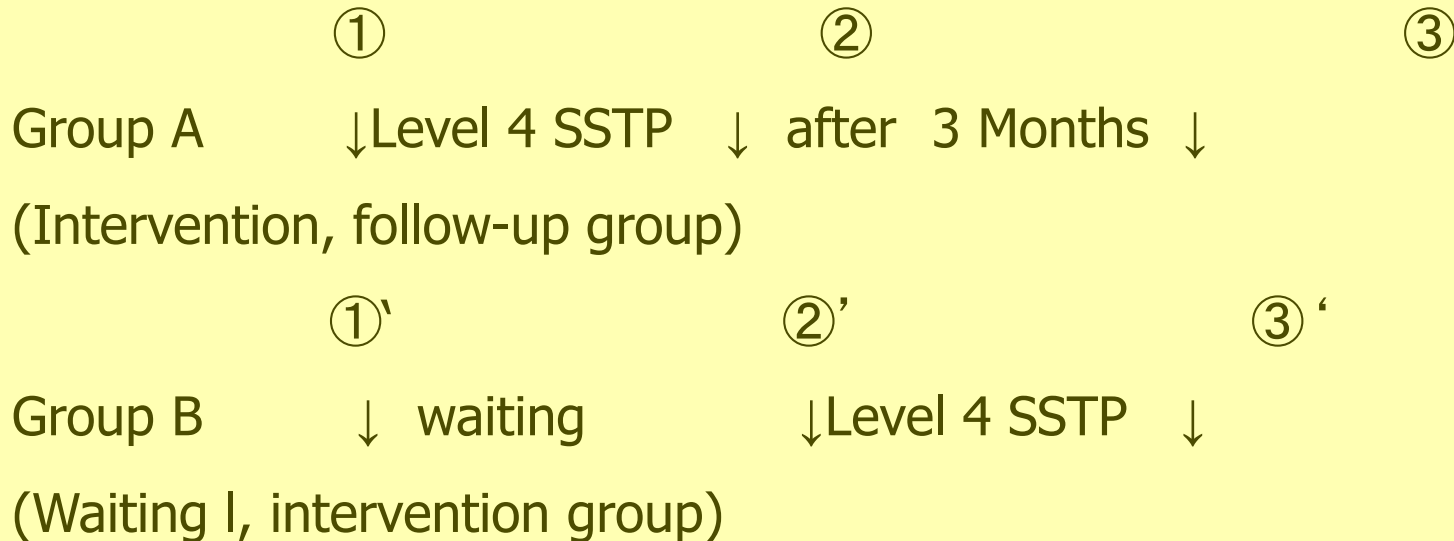
9. set a good example
10. use physical guidance
11. use incidental teaching
12. use ask, say, do
13. teach backwards
14. use behaviour charts

## Managing misbehavior (11 skills)

1. use diversion to another activity
2. establish clear ground rules
3. use directed discussion to deal with rule breaking
4. use planned ignoring for minor problem behaviour
5. give clear, calm instructions
6. teach children to communicate what they want
7. block your children to prevent a dangerous behavior
8. backup your instruction with logical consequences
9. use brief instruction
10. use quiet time to deal with misbehavior
11. use time-out to deal with serious misbehavior

# Research design1

Level 4 Group Stepping Stones Triple P were performed for mothers who have 2 to 10 year-old children with ASD.



Assessment ①, ②, ③ in Group A and ①', ②', ③' in Group B

# Research design2    Assessment

5 Questionnaires by self-report measures

Child Behaviour

1. Eyberg child behavior checklist
2. SDQ: Strength difficulty questionnaire

Parenting function

3. PS: Parenting scale
4. DASS: Depression anxiety and stress scale
5. PSBC: Problem Setting and Behavior Checklist

# Eyberg Child Behaviour Inventory (ECBI; Eyberg & Pincus, 1999)

The ECBI is a 36 item measure of parental perceptions of disruptive behaviour in children aged 2 to 16 years.

It incorporates a measure of frequency of disruptive behaviors (Intensity) rated on 7 point scales and a measure of the number of disruptive behaviors that are a problem for parents (Problem).

Clinical range	
Intensity score	$\geq 135$
Problem score	$\geq 41$

# Strength and Difficulty questionnaire (SDQ; Goodman, 1999)

This 25-item behavioural screening questionnaire measures parents' perception of prosocial and difficult behaviours in children aged 3 to 16 years.

Five scales are computed by summing the five items for each scale.

	Normal	Border	Clinical
Emotion	0-3	4	5-10
Conduct	0-2	3	4-10
I/H	0-5	6	7-10
Prosocial	0-2	3	4-10
Total of Problem	0-13	14-16	17-40
Peer	6-10	3	0-4

I/H: Inattention/Hyperactive

# Depression–Anxiety–Stress Scales (DASS; Lovibond & Lovibond, 1995)

The DASS is a 42-item questionnaire that assesses symptoms of depression, anxiety and stress in adults. Each item is rated on a 4-point scale from 0 (did not apply to me at all) to 3 (applied to me very much, or most of the time).

	Normal	mild	moderate	severe	ext. severe
Depression	0-9	10-13	14-20	21-27	$\geq 28$
Anxiety	0-7	8-9	10-14	15-19	$\geq 20$
Stress	0-14	15-18	19-25	26-33	$\geq 34$

# The Parenting Scale

(PS; Arnold, O'Leary, Wolff, & Acker, 1993)

This 30-item questionnaire measures dysfunctional discipline styles in parents.

It yields a total score based on three factors:

Laxness (permissive discipline)

Over-reactivity (authoritarian discipline, displays of anger, meanness and irritability)

Verbosity (overly long reprimands or reliance on talking)

as measured on a 7-point scale.

	Normal	Clinical
Laxness	2.4(0.8)	$\geq 3.2$
Over-react.	2.4(0.7)	$\geq 3.1$
Verbosity	3.1(1.0)	$\geq 4.1$
Total	2.6(0.6)	$\geq 3.2$



# Problem Setting and Behaviour Checklist (PSBC; Sanders & Woolley, 2003)

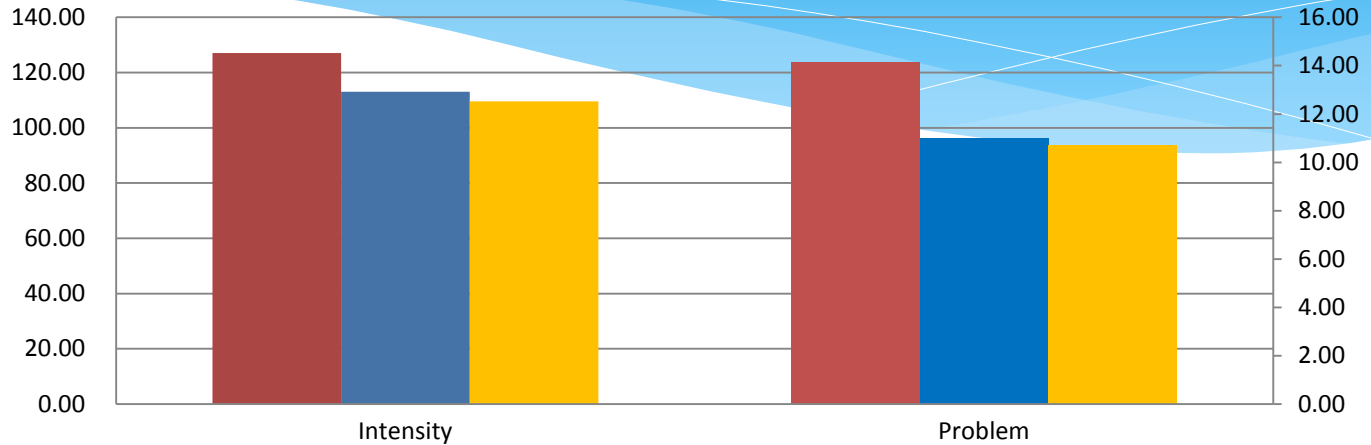
The PSBC is a 28-item rating scale that describes how confident parents are at successfully dealing with their child when the child is displaying a variety of difficult behaviours in various settings.

It uses a scale from 0 (certain I cannot do it) to 100 (certain I can do it) with intervals of 10.

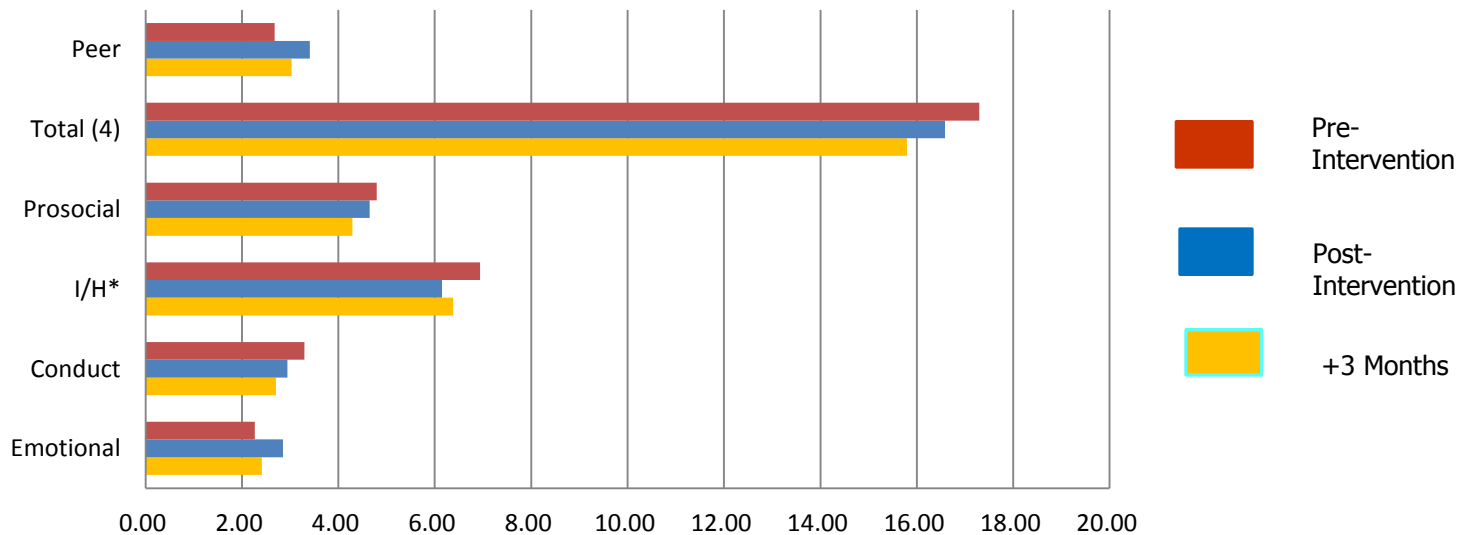
The scale contains 14 items related to specific problem behaviours and 14 items related to specific settings.

# Result Group-A(1) Child

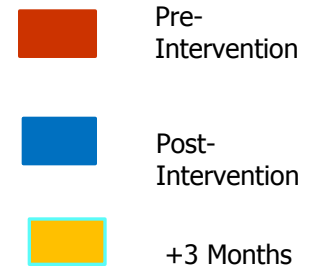
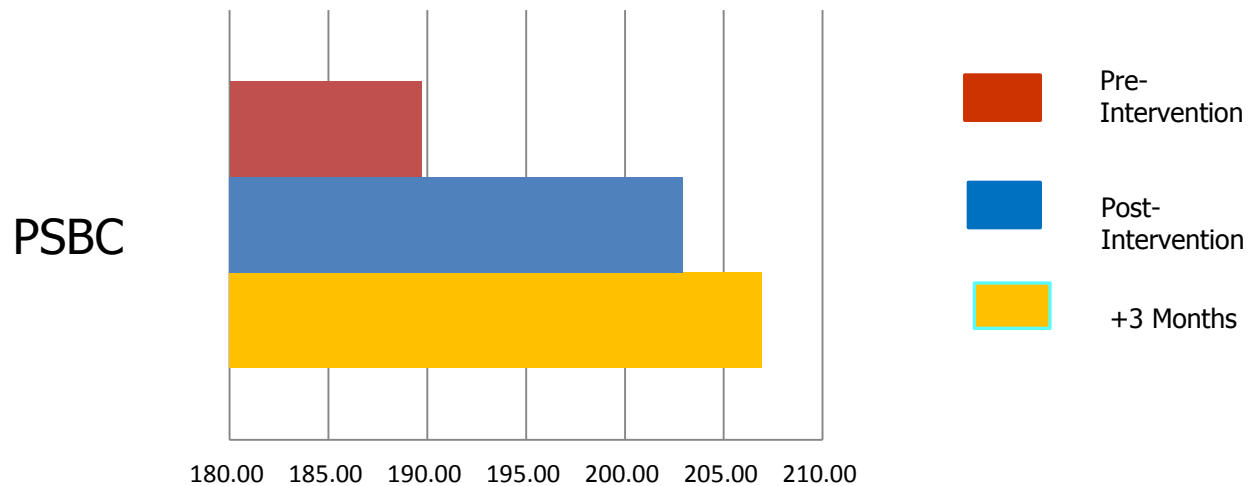
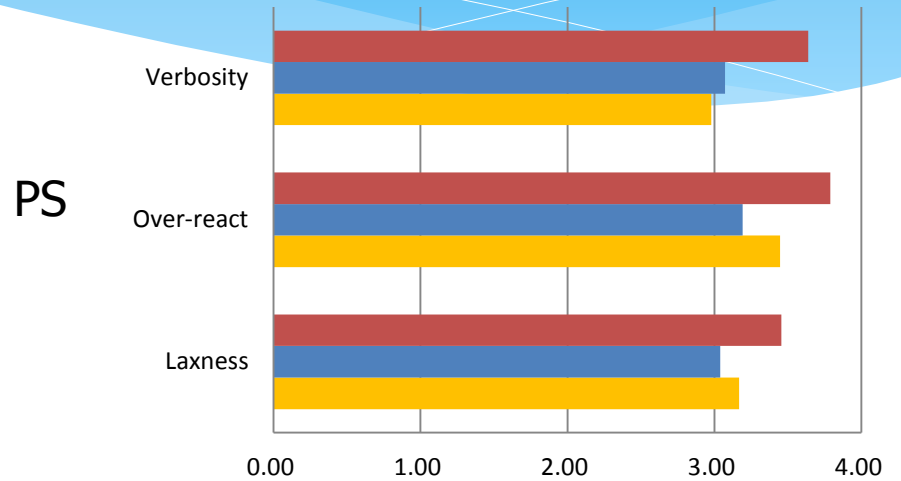
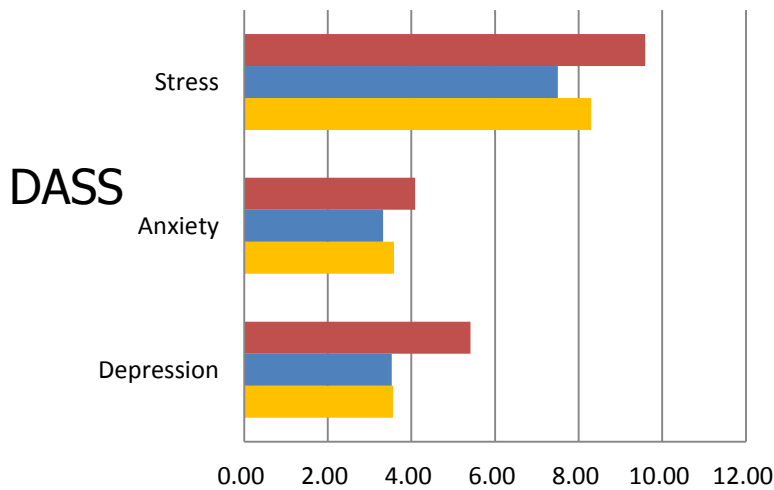
Eyberg



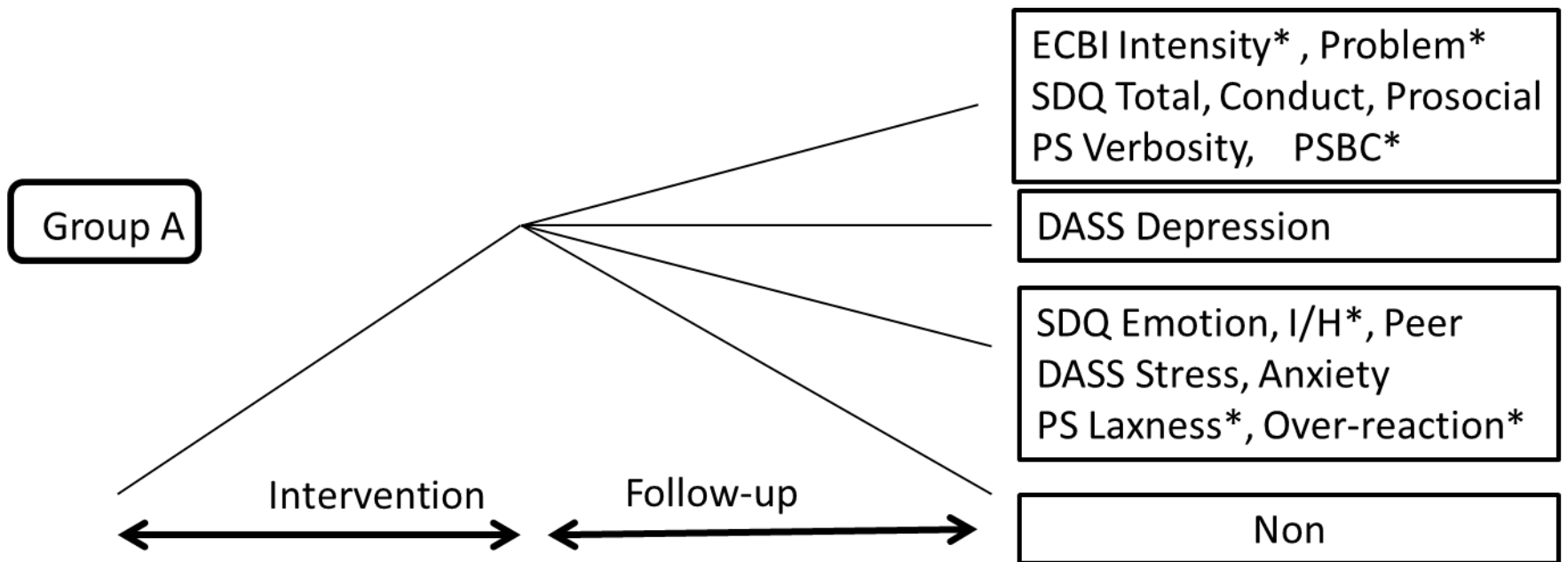
SDQ



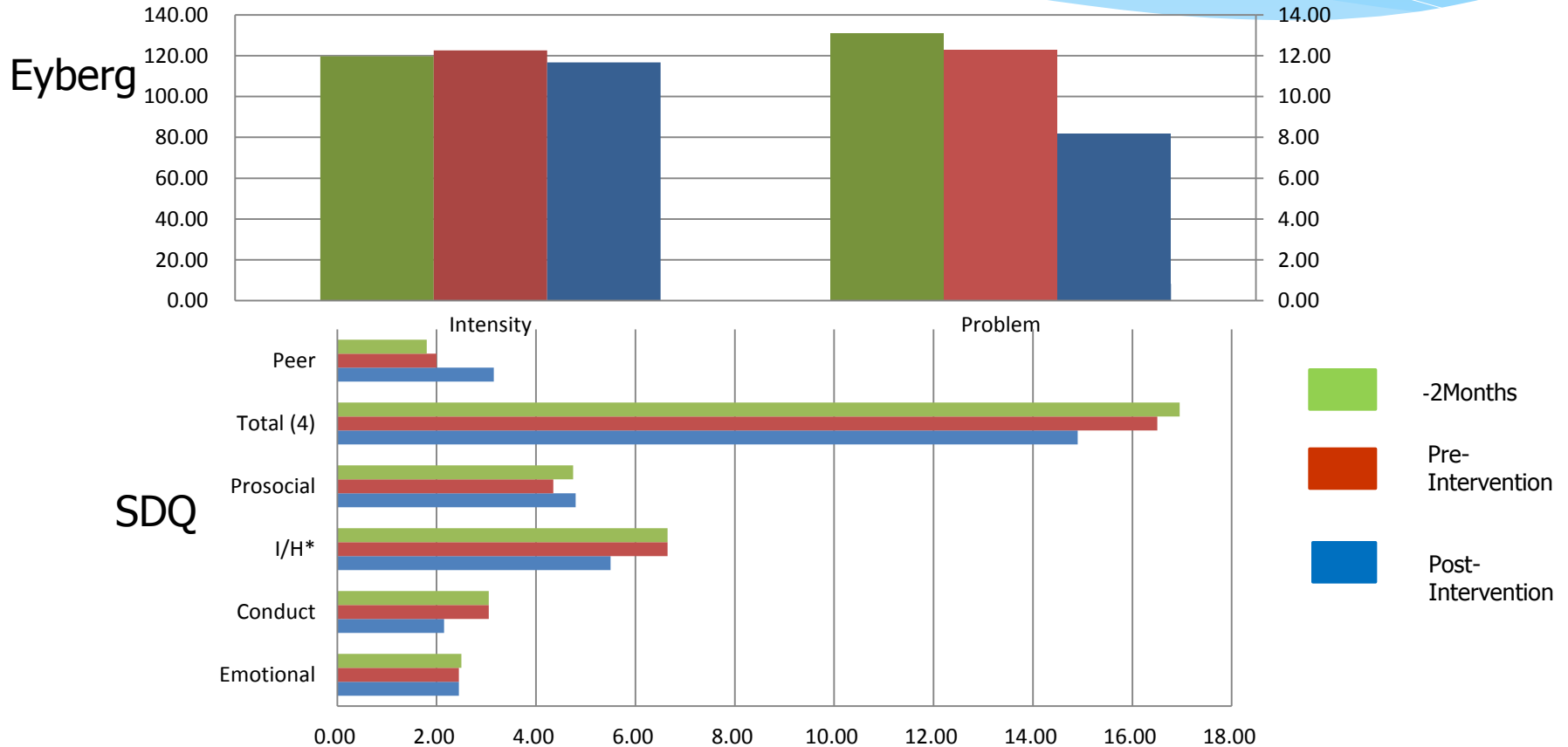
# Result Group-A(2) Mother



# Summary of Group A

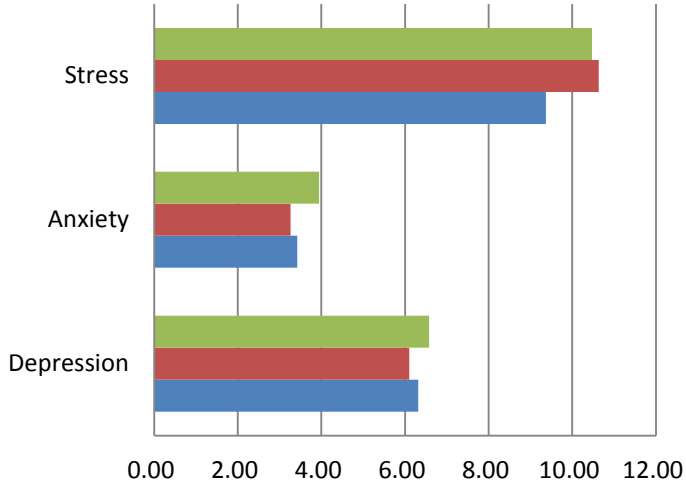


# Result Group-B(1) Child

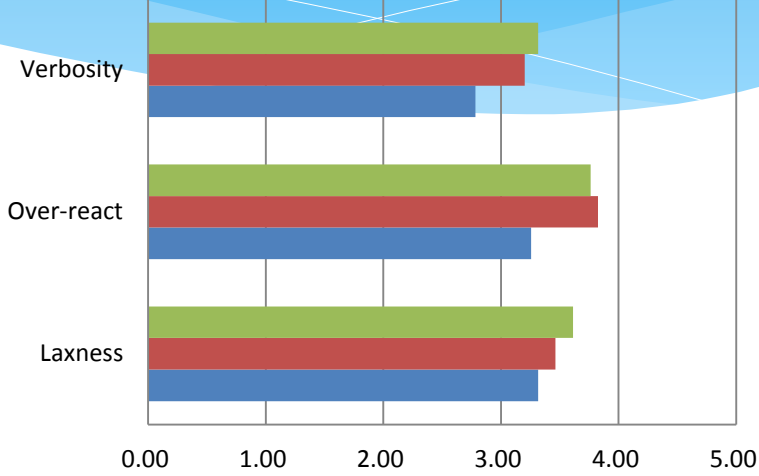


# Result Group-B(2) Mother

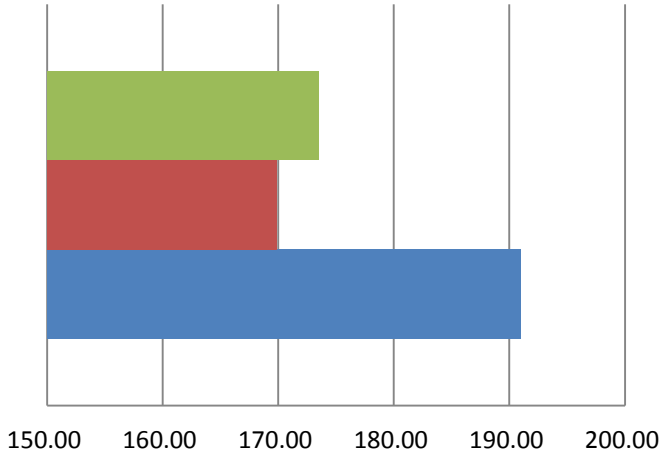
DASS



PS



PSBC



- 2Months
- Pre-Intervention
- Post-Intervention

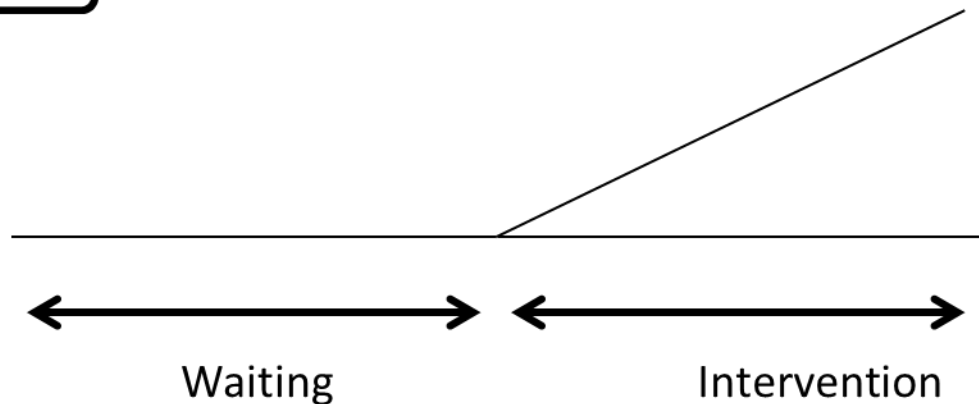
# Result Waiting; Group B

Comparison between before 2 months and pre-intervention (=the eve of the program)

	Dependent Variables	GroupB (n=20)				ns :not significant
		-2 Months		Pre		
		Mean	SD	Mean	SD	
Eyberg	Intensity	119.76	17.36	122.59	17.69	ns
	Problem	13.12	4.87	12.29	4.65	ns
SDQ	Total(4)	16.95	4.90	16.50	4.22	ns
	Emotional	2.50	2.09	2.45	1.93	ns
	Conduct	3.05	1.39	3.05	1.23	ns
	I/H *	6.65	2.43	6.65	2.35	ns
	Prosocial	4.75	2.05	4.35	1.76	ns
	Peer	1.80	1.94	2.00	1.92	ns
DASS	Total	21.00	13.32	20.00	11.76	ns
	Depression	6.58	5.61	6.11	5.66	ns
	Anxiety	3.95	3.15	3.26	2.00	ns
	Stress	10.47	6.19	10.63	5.51	ns
PS	Total	3.55	0.51	3.49	0.49	ns
	Laxness	3.61	0.80	3.46	0.57	ns
	Over-react	3.76	0.96	3.83	0.83	ns
	Verbosity	3.32	1.11	3.20	1.04	ns
PSBC		173.45	37.73	169.90	38.96	ns

# Summary of Group B

Group B



ECBI Problem\*  
SDQ Total, Conduct\*,  
I/H, Peer\*  
DASS Anxiety, Stress  
PS Over-react\*, Verbosity\*  
PSBC\*

ECBI Intensity  
SDQ Emotion, Prosocial  
DASS Depression



# Comparison Group A and B

		Starting Point A① Vs B①'	Comparison A①-②Vs B①'-②'
ECBI	Intensity	ns	*
	Problem	ns	ns
SDQ	Total of Difficulty	ns	ns
	Emotional	ns	ns
	Conduct	ns	ns
	Inattentive/Hyperactive	ns	ns
	Prosocial	ns	ns
	Peer	ns	ns
DASS	Total	ns	ns
	Supression	ns	ns
	Anxiety	ns	ns
	Stress	ns	ns
PS	Total	ns	**
	Luxness	ns	**
	Over-eaction	ns	**
	Vervosity	ns	*
PSBC	Total score	ns	*

# Result Short-term: Group A+ GroupB

ns :not significant, \* $p < 0.05$ , \*\* $p < 0.01$

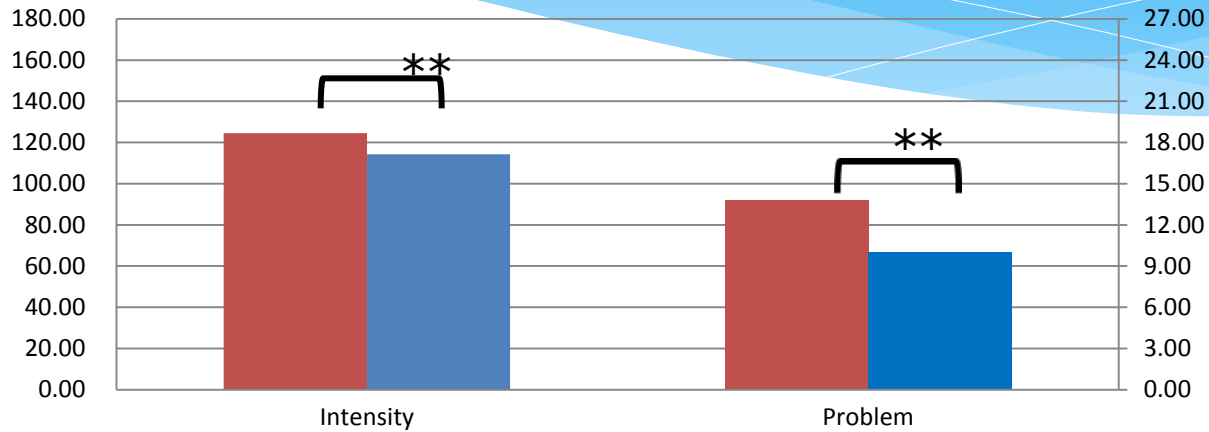
	Group A+B (n=54)					
	Dependent Variables	Pre(*-2M+Pre)		Post		
		Mean	SD	Mean	SD	
Eyberg	Intensity	124.55	26.58	114.31	25.47	**
	Problem	13.78	6.52	10.02	7.33	**
SDQ	Total(4)	17.17	4.54	15.96	5.22	*
	Emotional	2.35	1.78	2.70	2.42	ns
	Conduct	3.20	1.78	2.65	1.66	*
	I/H*	6.83	2.11	5.91	2.07	**
	Prosocial	4.78	2.04	4.70	2.35	ns
	Peer	2.35	2.50	3.31	3.34	**
DASS	Total	19.77	16.70	16.06	16.30	ns
	Depression	5.83	7.00	4.53	6.31	ns
	Anxiety	4.04	3.63	3.36	3.70	ns
	Stress	9.91	7.37	8.17	7.59	ns
PS	Total	3.55	0.54	3.1921	0.7283	**
	Laxness	3.51	0.69	3.42	1.05	**
	Over-react	3.78	1.07	3.12	1.01	**
	Verbosity	3.52	1.03	3.22	0.65	*
PSBC		183.69	45.39	198.52	49.69	**

We identified short-term improvement on 4 questionnaires (Eyberg, SDQ, PS and PSBC ) in intervention group

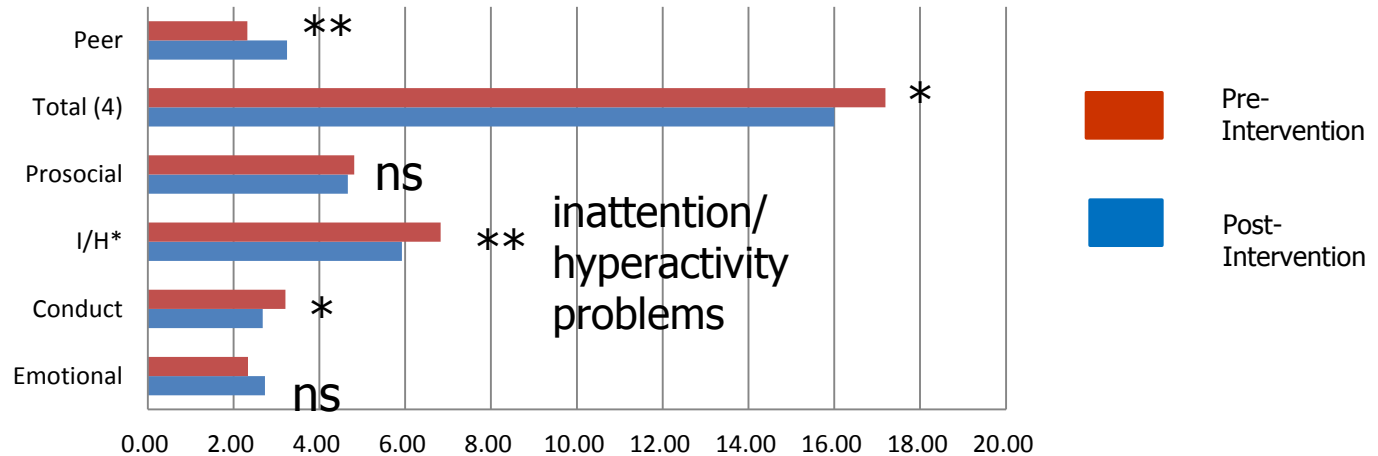
# Result Group-A+B(1) Child

ns :not significant, \* $p < 0.05$ , \*\* $p < 0.01$

Eyberg

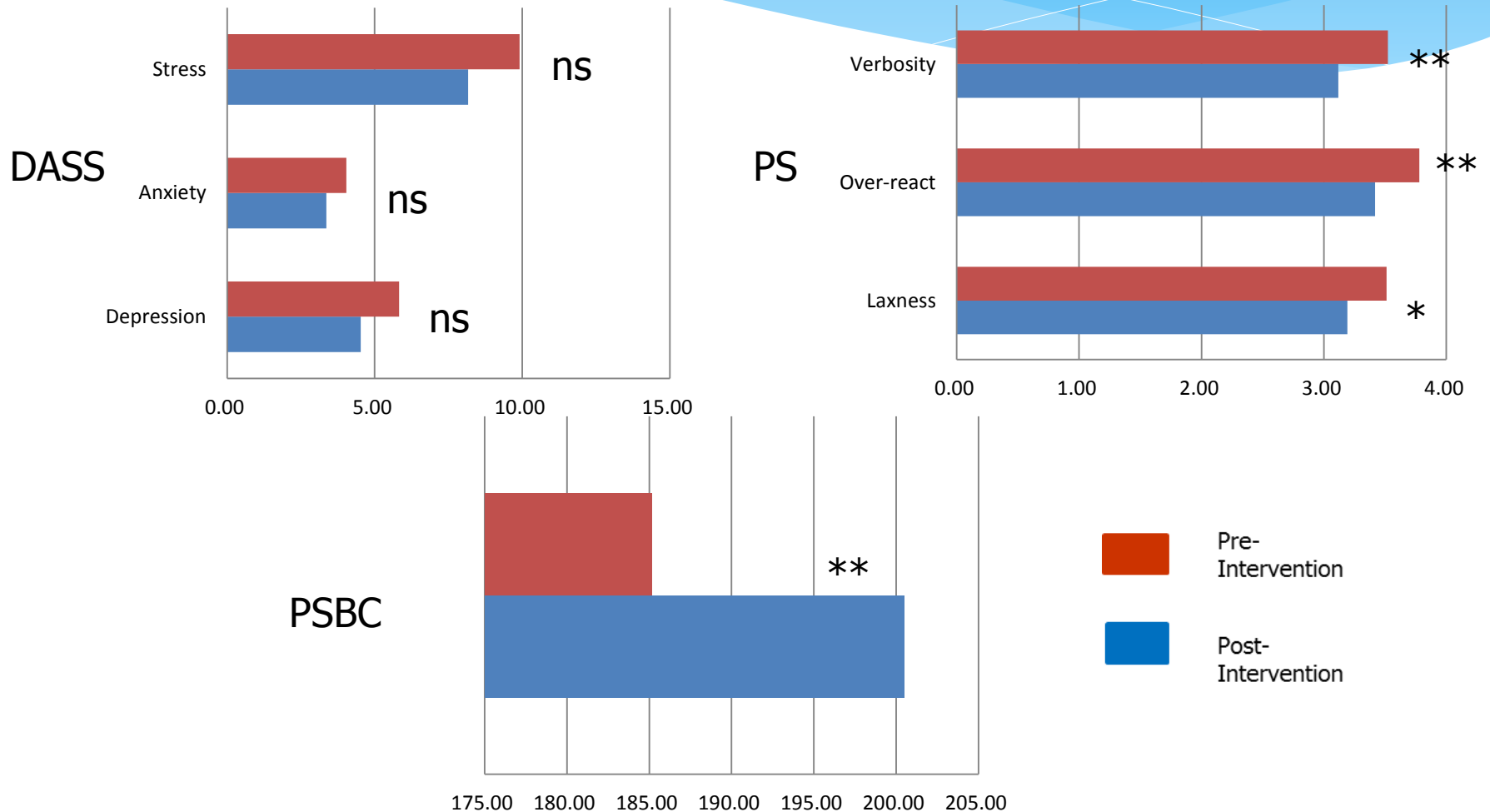


SDQ



# Result Group-A+B(2) Mother

ns :not significant, \* $p < 0.05$ , \*\* $p < 0.01$



# Result Long-term; GroupA

ns :not significant, \*p<0.05, \*\*p<0.01

	Dependent Variables	Group A (n=34)				
		Pre		+3 Month		
		Mean	SD	Mean	SD	
Eyberg	Intensity	127.09	30.69	109.59	23.49	**
	Problem	14.13	7.38	10.69	6.97	**
SDQ	Total(4)	17.30	4.45	15.80	5.03	ns
	Emotional	2.30	1.62	2.40	2.09	ns
	Conduct	3.30	2.01	2.70	1.55	ns
	I/H*	6.90	1.97	6.40	2.15	ns
	Prosocial	4.80	2.10	4.30	2.32	ns
	Peer	2.70	2.79	3.00	2.97	ns
DASS	Total	19.09	18.70	15.44	15.05	*
	Depression	5.41	7.81	3.56	5.59	ns
	Anxiety	4.09	3.97	3.59	3.92	ns
	Stress	9.59	8.13	8.29	7.15	ns
PS	Total	3.60	0.56	3.2	0.72	**
	Laxness	3.50	0.64	3.20	0.95	*
	Over-react	3.80	1.16	3.40	1.15	*
	Verbosity	3.60	1.00	3.00	0.89	**
PSBC		189.71	49.50	206.94	Eyberg52.42	**

At long term follow-up after 3 months, 3 questionnaires (Eyberg, PS, PSBC) showed positive continuing, despite of lower levels of value compared with short term conditions.

# Summary of results

- \* We identified short-term improvement on 4 questionnaires (Eyberg, SDQ, PS, PSBC) in intervention group.
- \* At long term follow-up after 3 months, 3 questionnaires (Eyberg, PS, PSBC) showed positive continuing effects in follow-up group.

# Summary of results 2

Group A > Group B on ECBI, PS, PSBC

Group A

Group B



ECBI Intensity\* , Problem\*  
SDQ Total, Conduct, Prosocial  
PS Verbosity, PSBC\*

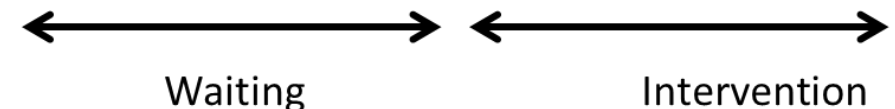
DASS Depression

SDQ Emotion, I/H\*, Peer  
DASS Stress, Anxiety  
PS Laxness\*, Over-reaction\*

Non

ECBI Problem\*  
SDQ Total, Conduct\*,  
I/H, Peer\*  
DASS Anxiety, Stress  
PS Over-react\*, Verbosity\*  
PSBC\*

ECBI Intensity  
SDQ Emotion, Prosocial  
DASS Depression



Waiting

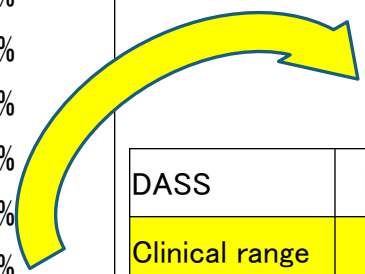
Intervention

# Clinical rate of Participants(A+B=54) at pre-intervention

		Clinical rate
ECBI	Intensity	40.8%
	Problem	42.9%
SDQ	Total of difficulty	81.5%
	Emotional	22.2%
	Conduct	64.8%
	Inattentive/Hyperactive	72.2%
	Prosocial	85.2%
DASS	Peer	87.0%
	Depression	28.3%
	Anxiety	11.3%
PS	Stress	28.3%
	Total of difficulty	75.5%
	Laxness	67.9%
	Over-reaction	75.5%
	Verbosity	30.2%

After  
Intervention

DASS	Depression	Anxiety	Stress
Clinical range	28.3%	7.5%	24.5%
Improvement	80.0%	50.0%	76.9%
Normalize	60.0%	50.0%	61.5%





# Conclusion

Stepping Stones Triple P was useful for the child with ASD and for the parents.

We hope this program can be the secondary prevention of child maltreatment and will be popularized in community.