

Psychomotor therapy targeting sexual abuse in adults with mild intellectual disabilities or borderline intellectual functioning

Outcomes from a multiple baseline across subjects study

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Introduction

Adults with mild intellectual disability or borderline intellectual functioning (MID-BIF, IQ 50-85) are more at risk of being a victim of sexual abuse than adults with average IQ or above. The prevalence of sexual abuse is between 24-33% in adults with MID-BIF (Tomsa et al., 2021).

The consequences of sexual abuse in adults with MID-BIF are expressed in a broad range of psychological, behavioural, social and physical problems (Smit et al., 2019). Sexual abuse also has a negative effect on body experience in adults with average IQ or above (Scheffers et al., 2017).

Methods

A multiple-baseline repeated single-case study with an AB-design

- Five participants
- Weekly reporting personal problems and goals by using Visual Analogue Scales (VAS, scores 0-100)
- A randomized baseline period of 5-8 weeks
- An intervention period of 28-45 sessions.
- Reporting five times on:
 - Trauma related symptoms (TSQ)
 - Body experience (BEQ-mb)
 - Psychopathology (BSI-18)
 - Adaptive coping skills (CISS-21)

Participant	A	B	C	D	E
Age	30	34	23	27	23
Gender	Female	Male	Female	Female	Female
Psychiatric Diagnosis	PTSD, ADHD, borderline	ADHD	ASS	-	PTSD, reactive attachment disorder
Other problems	Domestic violence		Limited social-emotional development	Aggression, self-harm, limited emotional development, psychosomatic symptoms	Emotion regulation problems, symptoms of threatened personality development
Total IQ	n.a. (MID-BIF)	58	86	55	66
Frequency sexual abuse ¹	Long-term	Long-term	Multiple	Multiple	Long-term
Sexual abuse before 18 years	yes	yes	no	yes	yes
Previous treatment for sexual abuse	EMDR	EMDR, stopped prematurely Sleep medication	EMDR Medication	EMDR Medication	EMDR, stopped prematurely PMT stopped prematurely

¹ Multiple is defined as more than one single sexual abuse situation. Long-term is defined as a sexual abuse situation for a longer period. Single is defined as one sexual abuse situation.

Aim

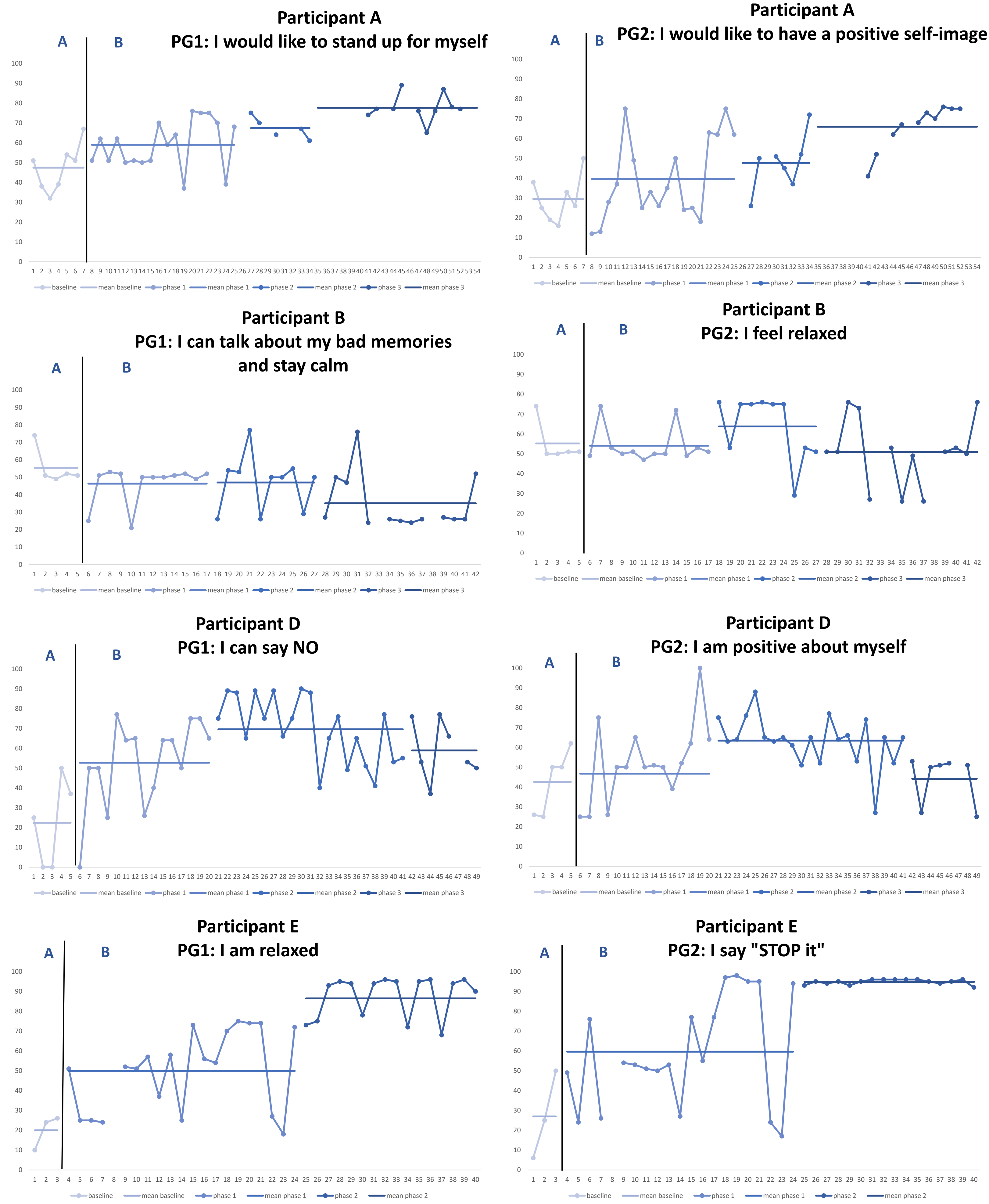
The psychomotor intervention *Safe and Strong* is developed with the help of focus groups consisting of psychomotor therapists. *Safe and Strong* aims improvement of body experience, regulation of arousal and emotions and development of setting boundaries.

The aim of this N=1 pilot study is to evaluate the effect and quality of the psychomotor intervention *Safe and Strong*.

Research questions

1. Does *Safe and Strong* lead to change in the personal problems and goals of adults with MID-BIF who have experienced sexual abuse?
2. Does *Safe and Strong* lead to a positive effects on trauma related symptoms, general psychopathology, adaptive coping skills and body experience in adults with MID-BIF who have experienced sexual abuse?

Phase	Sessions	Theme
1 Safety	10-20 sessions	Safe context Body Awareness Arousal
2 Setting Boundaries	5-10 sessions	Strength Wishes Boundaries
3 Acceptance	5-6 sessions	Emotions/Feelings Positive body experience Positive self-image Confidence



Results

Five participants, one man and four women, completed at least the first two phases of *Safe and Strong*. Four out of five are sexually abused before the age of 18.

Figure 1 shows the visual representation of the weekly VAS scores over time of the goals of the participants during baseline (A) and intervention (B). The straight lines represent the mean of the scores in baseline and the three intervention phases.

Figure 2 shows the within and between condition analysis of graphed data guidelines according to Lane and Gast (2014) and the Tau-U index between A and B and between A and the last phase of B (Parker et al., 2011).

- Participant B shows no improvements.
- Three participants (A, D, E) show a significant improvement on their goal about setting boundaries.
- Two participants (A and C) show a significant improvement on their goal about self-confidence. Initially participant D shows an improvement on this goal but due to an incident on the group at the end of the second phase the scores decline.
- Two participants (B and E) report about feeling relaxed in their body, one of them improves significantly.

Conclusions

Safe and Strong is a promising psychomotor intervention for adults with MID-BIF who experienced sexual abuse. This PMT intervention targets positive body experience and resilience.

This multiple single-case study demonstrates that weekly collecting data is feasible and adds value to the clinical practice of psychomotor therapy.

This N=1 study illustrates a reduction of problems and achievement of personal goals. The improvement in personal goals is significant in four out of five participants. For most of the participants the change emerged gradually, sometimes not before the second phase of the intervention. There is no change on the cognitive oriented goals, which can be explained by the focus of the PMT intervention on body experience. There is a positive change in goals about self-confidence and setting boundaries. This confirms *Safe and Strong* specially intervene on re-establishing contact with and control over the body to regain a feeling of safety. When feeling safer and more confident in their body, it is possible to enhance contact with others and set boundaries.

Participant	Measurements (N)	Mean		Median		Min-max (range)		Mean level change ¹		Median level change ¹		Tau-U	
		A	B	A	B	A	B	A-B	A-B	A-B	A-B fase 3		
A PG1	7 33	47.43	65.88	51	68	32-67(35)	37-89(52)	18.45	17	0.6277**	0.8286**		
A PG2	7 35	29.57	48.69	26	50	16-50(34)	12-76(64)	19.12	24	0.5265*	0.9286**		
A PP1	7 35	67.71	58.83	75	63	50-81(31)	25-86(61)	-8.88	-12	-0.3878	-0.8857*		
A PP2	7 35	67.57	66.43	72	64	50-89(39)	37-90(53)	-1.14	-8	-0.0204	-0.2571		
B PG1	5 35	55.40	42.35	51	50	49-74(25)	21-77(56)	-13.05	-1	-0.3943	-0.6615*		
B PG2	5 35	55.20	55.69	51	51	50-74(24)	26-76(50)	0.49	0	0.1257	-0.0154		
B PP1	5 35	39.20	57.22	48	53	22-52(30)	5-95(90)	18.02	5	0.5543*	0.6154*		
B PP2	5 35	55.60	53.41	52	52	25-78(53)	5-92(87)	-2.19	0	-0.0857	-0.1077		
C PG1	5 28	33.40	65.97	28	69.50	10-72(62)	15-100(85)	32.57	41.50	0.6500*	0.7778*		
C PP1	5 28	64.40	33.79	60	26.50	33-95(62)	4-62(58)	-30.61	-33.50	-0.6214*	-0.6000		
C PP2	5 28	75.20	41.75	83	39	4-94(50)	11-76(65)	-33.45	-44	-0.7143*	-0.7333*		
C PP3	5 28	49	41.83	48	33.50	4-92(88)	10-89(79)	-7.17	-14.50	-0.2357	-0.4667		
D PG1	5 43	22.40	61.93	25	65	0-50(50)	0-90(90)	39.53	40	0.8372**	0.8000*		
D PG2	5 43	42.60	56.37	50	53	25-62(37)	25-100(75)	13.77	3	0.5256	0.0286		
D PP1	5 43	48.60	42.09	50	36	0-100(100)	0-100(100)	-6.51	-14	-0.0930	0		
D PP2	5 43	73.20	68.67	75	75	50-87(37)	0-100(100)	-4.53	0	-0.0047	0.1429		
E PG1	3 36	20	68.43	24	74	10-26(16)	18-100(82)	48.43	50	0.8519*			
E PG2	3 36	27	77.11	25	96	6-50(44)	17-100(83)	50.11	71	0.7963*			
E PP1	3 36	86.67	43.99	83	54.50	81-96(15)	1-95(94)	-42.68	-28.50	-0.8981*			
E PP2	3 36	93	49.45	91	55	89-99(10)	0-100(100)	-43.55	-36	-0.8889*			

¹ A positive level change is an improvement of personal goals and an increase of personal problems, a negative level change is a decline of personal goals and decrease of personal problems *with significance of <0.05 **with significance of <0.01

Figure 2

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