

Mentalization-Based Treatment in Adolescent Inpatients: A Naturalistic Multi-Informant Study of Outcomes

SUPPLEMENTAL MATERIALS

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Table 1. Treatment Outcome of MBT-A: General Psychiatric Symptoms at Admission, 6 Months After Admission and Discharge According to Self- and Parent-Report										
	Self-Report (YSR/ASR)					Parent-Report (CBCL/ABCL)				
	<i>M</i>	<i>SD</i>	<i>B</i> (SE)	95% CI	<i>p</i>	<i>M</i>	<i>SD</i>	<i>B</i> (SE)	95% CI	<i>p</i>
Anxious/Depressed										
T0	76.5	13.2				75.6	11.0			
T1	75.8	13.0	-1.12 (1.21)	-3.50 – 1.25	.354	73.0	11.1	-2.55 (1.17)	-4.84 – -0.26	.029
T2	67.7	14.0	-9.48 (1.46)	-12.35 – -6.62	.000	66.9	11.1	-9.11 (1.40)	-11.86 – -6.36	.000
Effect Size	0.67					0.79				
Withdrawn/Depressed										
T0	70.8	11.4				74.0	11.2			
T1	68.8	11.0	-2.25 (1.16)	-4.51 – 0.02	.052	70.4	10.1	-3.47 (1.05)	-5.53 – -1.41	.001
T2	62.4	11.3	-8.43 (1.32)	-11.02 – -5.84	.000	64.9	10.3	-9.29 (1.20)	-11.65 – -6.94	.000
Effect Size	0.73					0.81				
Somatic Complaints										
T0	63.7	9.4				68.3	9.1			
T1	63.7	9.9	0.08 (0.87)	-1.63 – 1.78	.930	65.4	9.5	-2.88 (0.96)	-4.76 – -1.00	.003
T2	61.7	10.1	-1.68 (1.03)	-3.69 – 0.34	.103	62.2	9.7	-6.10 (1.04)	-8.14 – -4.06	.000
Effect Size	0.21					0.67				
Thought Problems										
T0	64.2	9.5				70.2	8.5			
T1	65.6	10.7	1.03 (0.92)	-0.77 – 2.82	.262	67.1	9.5	-2.91 (0.91)	-4.69 – -1.13	.001
T2	61.6	11.4	-2.93 (1.07)	-5.03 – -0.83	.006	62.8	9.4	-7.73 (1.17)	-10.03 – -5.44	.000
Effect Size	0.27					0.87				
Attention Problems										
T0	67.6	10.2				67.5	8.7			
T1	67.6	10.8	-0.26 (0.96)	-2.13 – 1.62	.788	64.8	8.4	-2.62 (0.79)	-4.16 – -1.08	.001
T2	62.5	11.4	-5.15 (1.29)	-7.68 – -2.61	.000	62.3	9.0	-4.99 (0.90)	-6.76 – -3.22	.000
Effect Size	0.49					0.60				
Rule-Breaking Behavior										
T0	60.6	7.7				63.1	8.1			
T1	61.4	8.7	0.93 (0.70)	-0.44 – 2.30	.184	60.6	7.3	-2.49 (0.65)	-3.76 – -1.23	.000
T2	58.7	7.8	-1.23 (0.82)	-2.84 – 0.38	.133	59.1	6.7	-3.97 (0.73)	-5.40 – -2.54	.000
Effect Size	0.24					0.50				

Aggressive Behavior										
T0	57.8	7.8				61.4	8.2			
T1	58.4	7.8	0.57 (0.67)	-0.74 – 1.89	.393	58.3	7.1	-2.96 (0.77)	-4.46 – -1.46	.000
T2	55.6	6.7	-1.82 (0.73)	-3.25 – -0.40	.012	56.3	6.6	-5.22 (0.77)	-6.73 – -3.72	.000
Effect Size	0.28					0.64				
Internalizing Problems										
T0	72.7	10.0				74.3	7.6			
T1	71.8	10.7	-0.98 (0.96)	-2.86 – 0.90	.305	71.6	8.0	-2.43 (0.85)	-4.10 – -0.76	.004
T2	65.0	13.2	-7.97 (1.33)	-10.57 – -5.37	.000	66.6	10.9	-7.82 (1.20)	-10.16 – -5.47	.000
Effect Size	0.78					1.01				
Externalizing Problems										
T0	58.4	9.8				61.6	9.4			
T1	59.2	10.7	0.84 (0.80)	-0.74 – 2.42	.296	58.4	8.9	-2.99 (0.80)	-4.56 – -1.43	.000
T2	54.8	10.3	-3.01 (1.01)	-5.00 – -1.03	.003	55.5	9.4	-5.97 (0.96)	-7.84 – -4.09	.000
Effect Size	0.37					0.65				
Total Problems										
T0	67.1	8.7				69.3	6.5			
T1	67.2	9.9	-0.06 (0.81)	-1.65 – 1.52	.936	66.1	7.6	-3.06 (0.74)	-4.51 – -1.61	.000
T2	60.9	11.7	-6.19 (1.12)	-8.38 – -4.00	.000	61.3	9.5	-8.14 (1.00)	-10.10 – -6.17	.000
Effect Size	0.72					1.24				
<i>Notes.</i> Analyses controlled for gender. B = regression coefficient indicating change compared to T0. Effect sizes are based on the difference between T0 and T2, with standard deviation of the mean score at T0 as denominator. T0 = before admission, T1 = 6 months after admission, T2 = at discharge.										

Scale	Self-Report (YSR/ASR)				Parent-Report (CBCL/ABCL)			
	Criterion A (%)		Criterion B (%)		Criterion A (%)		Criterion B (%)	
	admission	discharge	admission	discharge	admission	discharge	admission	discharge
Anxious/Depressed	0.0	8.3	23.3	39.3	3.7	11.1	20.4	43.1
Withdrawn/Depressed	0.0	0.0	39.7	66.7	1.9	8.3	35.2	70.8
Somatic Complaints	0.0	0.0	55.2	57.1	1.9	8.3	41.7	61.1
Thought Problems	0.0	0.0	53.4	72.6	4.6	22.2	33.3	69.4
Attention Problems	0.0	0.0	60.3	69.0	0.0	5.6	45.4	55.6
Rule-Breaking Behavior	0.0	0.0	75.9	82.1	0.0	0.0	58.3	80.6
Aggressive Behavior	0.0	0.0	75.9	88.1	0.0	0.0	64.8	86.1
Internalizing Problems	4.3	16.7	25.0	47.6	2.8	26.4	14.8	44.4
Externalizing Problems	2.6	6.0	75.9	79.8	2.8	11.1	57.4	79.2
Total Problems	2.6	20.2	35.3	57.1	2.8	27.8	21.3	59.7

Note. Criterion A constitutes a score (at admission and discharge respectively) ≥ 2 SD below the mean score at admission. Criterion B constitutes a score (at admission and discharge respectively) within 2 SD from the mean in a non-clinical population.

Table 3. Treatment Outcome of MBT-A: Personality Pathology at Admission, 6 Months After Admission and Discharge According to Self- and Parent-Report										
	Self-Report (DAPP-SF-A)					Parent-Report (DAPP-SF-P)				
	<i>M</i>	<i>SD</i>	<i>B</i> (SE)	95% CI	<i>p</i>	<i>M</i>	<i>SD</i>	<i>B</i> (SE)	95% CI	<i>p</i>
Submissiveness										
T0	3.09	0.94				2.89	.82			
T1	2.97	0.86	-.123 (.074)	-.268 – .022	.097	2.73	.71	-.127 (.071)	-.266 – .012	.074
T2	2.64	0.85	-.495 (.092)	-.676 – -.314	.000	2.57	.64	-.267 (.094)	-.451 – -.082	.005
Effect Size	0.48					0.39				
Cognitive Distortion										
T0	2.62	0.99				2.73	.91			
T1	2.86	1.13	.269 (.083)	.107 – .432	.001	2.61	.92	-.098 (.083)	-.260 – .065	.238
T2	2.38	1.10	-.193 (.105)	-.400 – .013	.067	2.37	.83	-.389 (.102)	-.590 – -.189	.000
Effect Size	0.24					0.39				
Identity Problems										
T0	3.37	0.79				3.42	.70			
T1	3.25	0.86	-.093 (.081)	-.250 – .065	.251	3.21	.68	-.217 (.068)	-.351 – -.084	.001
T2	2.72	0.97	-.634 (.099)	-.829 – -.439	.000	2.76	.74	-.674 (.091)	-.852 – -.495	.000
Effect Size	0.83					0.95				
Affective Instability										
T0	3.41	0.96				3.78	.86			
T1	3.41	0.93	.020 (.069)	-.116 – .156	.768	3.54	.80	-.217 (.071)	-.357 – -.078	.002
T2	2.84	0.98	-.516 (.100)	-.711 – -.321	.000	3.19	.80	-.563 (.102)	-.762 – -.364	.000
Effect Size	0.59					0.68				
Oppositionality										
T0	2.95	0.77				3.69	.80			
T1	2.94	0.80	.005 (.071)	-.135 – .145	.943	3.33	.80	-.296 (.063)	-.420 – -.171	.000
T2	2.65	0.88	-.264 (.085)	-.429 – -.098	.002	3.28	.93	-.507 (.087)	-.678 – -.335	.000
Effect Size	0.39					0.52				
Anxiety										
T0	3.68	0.98				3.49	.88			
T1	3.66	0.89	-.008 (.076)	-.157 – .142	.920	3.38	.76	-.094 (.082)	-.255 – .066	.249
T2	3.16	1.06	-.523 (.105)	-.729 – -.317	.000	3.03	.68	-.426 (.112)	-.646 – -.207	.000
Effect Size	0.53					0.52				

Social Avoidance										
T0	3.41	1.01				3.23	.96			
T1	3.42	0.92	.033 (.075)	-.115 – .180	.663	3.31	.92	.043 (.065)	-.085 – .171	.507
T2	2.99	1.04	-.457 (.102)	-.657 – -.258	.000	2.95	.87	-.299 (.101)	-.496 – -.101	.003
Effect Size	0.42					0.29				
Suspiciousness										
T0	2.74	1.05				2.48	.93			
T1	2.81	1.13	.087 (.083)	-.076 – .250	.297	2.46	.90	-.025 (.077)	-.176 – .125	.740
T2	2.32	1.10	-.434 (.104)	-.638 – -.229	.000	2.17	.87	-.290 (.099)	-.483 – -.097	.003
Effect Size	0.40					0.33				
Insecure Attachment										
T0	2.84	1.09				3.05	.97			
T1	2.99	1.09	.185 (.092)	.005 – .364	.044	2.93	.93	-.105 (.105)	-.310 – .100	.316
T2	2.51	1.07	-.258 (.113)	-.479 – -.037	.022	2.67	.94	-.395 (.127)	-.643 – -.147	.002
Effect Size	0.31					0.39				
Narcissism										
T0	2.31	0.84				2.80	.83			
T1	2.60	0.86	.277 (.065)	.150 – .405	.000	2.57	.72	-.193 (.063)	-.317 – -.068	.002
T2	2.50	0.77	.202 (.070)	.064 – .340	.004	2.56	.78	-.265 (.072)	-.407 – -.123	.000
Effect Size	-0.22					0.29				
Self Harm										
T0	2.82	1.29				2.93	1.17			
T1	2.77	1.28	-.010 (.099)	-.204 – .185	.923	2.66	1.19	-.285 (.094)	-.469 – -.101	.002
T2	2.12	1.28	-.659 (.131)	-.915 – -.403	.000	2.26	1.11	-.724 (.122)	-.963 – -.486	.000
Effect Size	0.55					0.58				
Stimulus seeking										
T0	2.50	0.98				2.40	1.02			
T1	2.70	1.03	.232 (.070)	.095 – .370	.001	2.16	.81	-.152 (.077)	-.303 – .000	.049
T2	2.48	0.89	.085 (.079)	-.070 – .240	.281	2.17	.89	-.207 (.081)	-.366 – -.049	.010
Effect Size	0.02					0.22				
Callousness										
T0	1.77	0.60				2.29	.86			
T1	1.95	0.74	.185 (.049)	.089 – .281	.000	2.08	.71	-.158 (.070)	-.295 – -.021	.024
T2	1.79	0.53	.084 (.052)	-.017 – .185	.101	2.04	.77	-.275 (.077)	-.427 – -.124	.000
Effect Size	-0.03					0.29				

Rejection										
T0	2.17	0.83				2.67	.95			
T1	2.55	0.87	.389 (.063)	.265 – .513	.000	2.57	.90	-.052 (.075)	-.199 – .095	.487
T2	2.56	0.75	.442 (.066)	.313 – .571	.000	2.60	.84	-.093 (.077)	-.244 – .058	.227
Effect Size	-0.46					0.08				
Conduct Problems										
T0	1.76	0.69				1.67	.70			
T1	1.91	0.81	.174 (.053)	.070 – .277	.001	1.53	.56	-.099 (.051)	-.199 – .001	.053
T2	1.76	0.71	.090 (.054)	-.017 – .196	.099	1.56	.64	-.136 (.061)	-.256 – -.015	.027
Effect Size	0.01					0.15				
Restricted Expression										
T0	3.36	0.79				3.51	.81			
T1	3.29	0.73	-.045 (.075)	-.191 – .101	.545	3.44	.70	-.084 (.071)	-.223 – .055	.237
T2	2.78	0.84	-.593 (.095)	-.780 – -.406	.000	3.14	.77	-.383 (.093)	-.566 – -.201	.000
Effect Size	0.73					0.45				
Intimacy Problems										
T0	3.04	0.90				2.94	.79			
T1	3.06	0.87	.007 (.083)	-.155 – .170	.931	2.94	.79	-.009 (.075)	-.155 – .137	.906
T2	2.99	0.87	-.082 (.100)	-.278 – .113	.409	2.99	.72	.059 (.081)	-.101 – .218	.469
Effect Size	0.05					-0.06				
Compulsivity										
T0	2.60	0.98				2.26	.86			
T1	2.69	0.95	.075 (.070)	-.063 – .212	.286	2.33	.81	.149 (.072)	.008 – .290	.039
T2	2.52	0.85	-.125 (.083)	-.288 – .037	.131	2.28	.66	.099 (.073)	-.044 – .242	.175
Effect Size	0.07					-0.02				
<i>Notes.</i> Analyses controlled for gender. B = regression coefficient indicating change compared to T0. Effect sizes are based on the difference between T0 and T2, with standard deviation of the mean score at T0 as denominator. T0 = before admission, T1 = 6 months after admission, T2 = at discharge.										

Table 4. Clinical Importance of Statistical Significance on Personality Pathology Dimensions						
Dimension	Self-Report (DAPP-SF-A)				Parent-Report (DAPP-SF-P)	
	Criterion A (%)		Criterion B (%)		Criterion A (%)	
	admission	discharge	admission	discharge	admission	discharge
Submissiveness	2.7	2.4	52.7	74.4	2.9	1.6
Cognitive Distortion	0.0	0.0	76.8	76.8	0.0	0.0
Identity Problems	1.8	23.2	42.0	65.9	3.8	19.7
Affective Instability	2.7	2.4	65.2	79.3	1.9	8.2
Oppositionality	3.6	6.1	90.2	92.7	3.8	6.6
Anxiety	3.6	7.3	42.0	64.6	1.9	6.6
Social Avoidance	3.6	4.9	46.4	63.4	1.9	1.6
Suspiciousness	0.0	0.0	58.9	72.0	0.0	0.0
Insecure Attachment	0.0	0.0	75.9	86.6	1.0	4.9
Narcissism	0.0	0.0	92.9	92.7	0.0	0.0
Self Harm	0.0	0.0	40.2	68.3	0.0	0.0
Stimulus Seeking	0.0	0.0	92.9	95.1	0.0	0.0
Callousness	0.0	0.0	98.2	100.0	0.0	0.0
Rejection	0.0	0.0	97.3	97.6	0.0	0.0
Conduct Problems	0.0	0.0	94.6	96.3	0.0	0.0
Restricted Expression	0.9	17.1	63.4	80.5	3.8	4.9
Intimacy Problems	1.8	2.4	70.5	72.0	1.9	0.0
Compulsivity	0.0	0.0	85.7	89.0	0.0	0.0

Note. Criterion A constitutes a score (at admission and discharge respectively) ≥ 2 SD below the mean score at admission. Criterion B constitutes a score (at admission and discharge respectively) within 2 SD from the mean in a non-clinical population.

Table 5. Treatment Outcome of MBT-A: Quality of Life at Admission, 6 Months After Admission and Discharge According to Self- and Parent-Report										
	Self-Report (KIDscreen-27-A)					Parent-Report (KIDscreen-27-P)				
	<i>M</i>	<i>SD</i>	<i>B</i> (SE)	95% CI	<i>p</i>	<i>M</i>	<i>SD</i>	<i>B</i> (SE)	95% CI	<i>p</i>
Physical Well-Being										
T0	34.41	7.87				31.90	7.35			
T1	36.08	8.84	1.90 (0.89)	0.14 – 3.65	.034	33.55	6.84	1.76 (0.80)	0.20 – 3.32	.027
T2	38.73	7.40	4.55 (0.92)	2.76 – 6.35	.000	36.40	6.99	4.49 (0.91)	2.70 – 6.28	.000
Effect Size	0.55					0.61				
Psychological Well-Being										
T0	32.01	8.26				30.33	5.90			
T1	34.51	6.96	2.61 (0.93)	0.79 – 4.42	.005	32.23	5.38	2.01 (0.76)	0.53 – 3.49	.008
T2	38.53	8.11	6.71 (1.07)	4.62 – 8.80	.000	37.76	7.10	7.23 (1.21)	4.85 – 9.60	.000
Effect Size	0.79					1.26				
Autonomy & Parent Relation										
T0	45.20	6.48				44.71	6.30			
T1	44.11	8.29	-1.24 (0.86)	-2.92 – 0.44	.149	43.46	4.39	-1.50 (0.58)	-2.65 – -0.36	.010
T2	45.30	7.17	0.25 (0.79)	-1.30 – 1.79	.755	45.10	5.46	0.40 (0.61)	-1.16 – 1.24	.948
Effect Size	0.02					0.06				
Social Support & Peers										
T0	38.70	12.80				38.92	8.86			
T1	41.09	10.39	2.25 (1.43)	-0.54 – 5.05	.114	40.54	7.14	1.59 (1.00)	-0.37 – 3.56	.112
T2	45.33	8.83	6.42 (1.42)	3.64 – 9.20	.000	43.88	5.59	4.36 (0.88)	2.63 – 6.09	.000
Effect Size	0.52					0.56				
School Environment										
T0	35.46	11.59				33.22	10.26			
T1	39.37	9.17	4.31 (1.32)	1.73 – 6.89	.001	40.03	7.15	6.59 (1.15)	4.34 – 8.84	.000
T2	42.58	9.72	6.80 (1.30)	4.26 – 9.35	.000	37.63	8.55	4.12 (1.56)	1.06 – 7.17	.008
Effect Size	0.61					0.43				
	Self-Report (EQ-5D)									
	<i>M</i>	<i>SD</i>	<i>B</i> (SE)	95% CI	<i>p</i>					
Single Summary Index										
T0	0.45	0.28								
T2	0.65	0.27	0.03 (0.006)	0.02 – 0.05	0.000					
Effect Size	0.70									

Notes. Analyses controlled for gender. B = regression coefficient indicating change compared to T0. Effect sizes are based on the difference between T0 and T2, with standard deviation of the mean score at T0 as denominator. T0 = before admission, T1 = 6 months after admission, T2 = at discharge.

Table 6. Clinical Importance of Statistical Significance on Quality of Life									
Dimension	Self-Report (KIDscreen-27-A)				Parent-Report (KIDscreen-27-P)				
	Criterion A (%)		Criterion B (%)		Criterion A (%)		Criterion B (%)		
	admission	discharge	admission	discharge	admission	discharge	admission	discharge	discharge
Physical Well-Being	1.7	5.3	72.0	89.3	2.8	5.8	70.4	76.8	
Psychological Well-Being	2.5	8.0	55.9	78.7	1.9	13.0	49.1	66.7	
Autonomy & Parent Relation	5.1	5.3	94.9	94.7	3.7	1.4	94.4	88.4	
Social Support & Peers	0.8	0.0	78.8	93.3	0.0	1.4	81.5	85.5	
School Environment	0.8	2.7	67.8	85.3	0.9	1.4	59.3	66.7	
	Self-Report (EQ-5D)								
	Criterion A (%)		Criterion B (%)						
	admission	discharge	admission	discharge					
Single Summary Index	4.5	9.9	40.5	77.8					
<p><i>Note.</i> Criterion A constitutes a score (at admission and discharge respectively) ≥ 2 SD above the mean score at admission. Criterion B constitutes a score (at admission and discharge respectively) within 2 SD from the mean in a non-clinical population.</p>									