



EMDR in the psychiatric context: evidence and clinical experience

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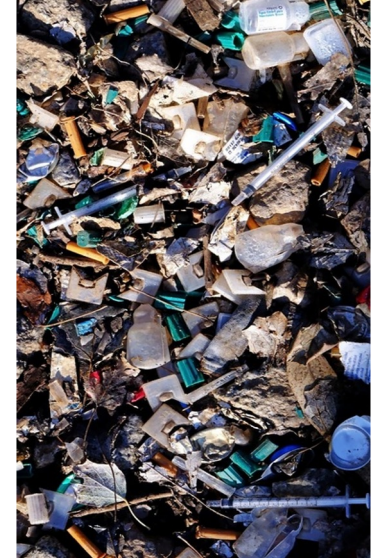
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Index

- Psychological trauma and aetiology of mental illness
- Comorbid trauma in mental disorders and its impact
- What is EMDR and what is its evidence in mental disorders?
- Practical clinical issues of EMDR in psychiatric services



Hospital del Mar: 40% Coverage of psychiatric services in Barcelona



Centro Forum Mental Health Institute Hospital del Mar



Subacute Unit (20 beds)
Long-stay(12 beds)



Day Hospital (11 beds)



Research Unit Centro
Fórum (2016-)

Furthermore: Outpatient Unit, Acute Unit, Dual Disorder Unit and Geriatric Units

Two principal lines of the Centro Forum Research Unit Research Institute Hospital del Mar



Mental health in the community (3 European projects):

- a. MENTUPP: Mental Health in SMEs <https://www.mentuppproject.eu/>
- b. MENTBEST: Mental health in the community and 5 vulnerable groups <https://mentbest.com/>
- c. PROSPERH: Mental and physical health at the workplace

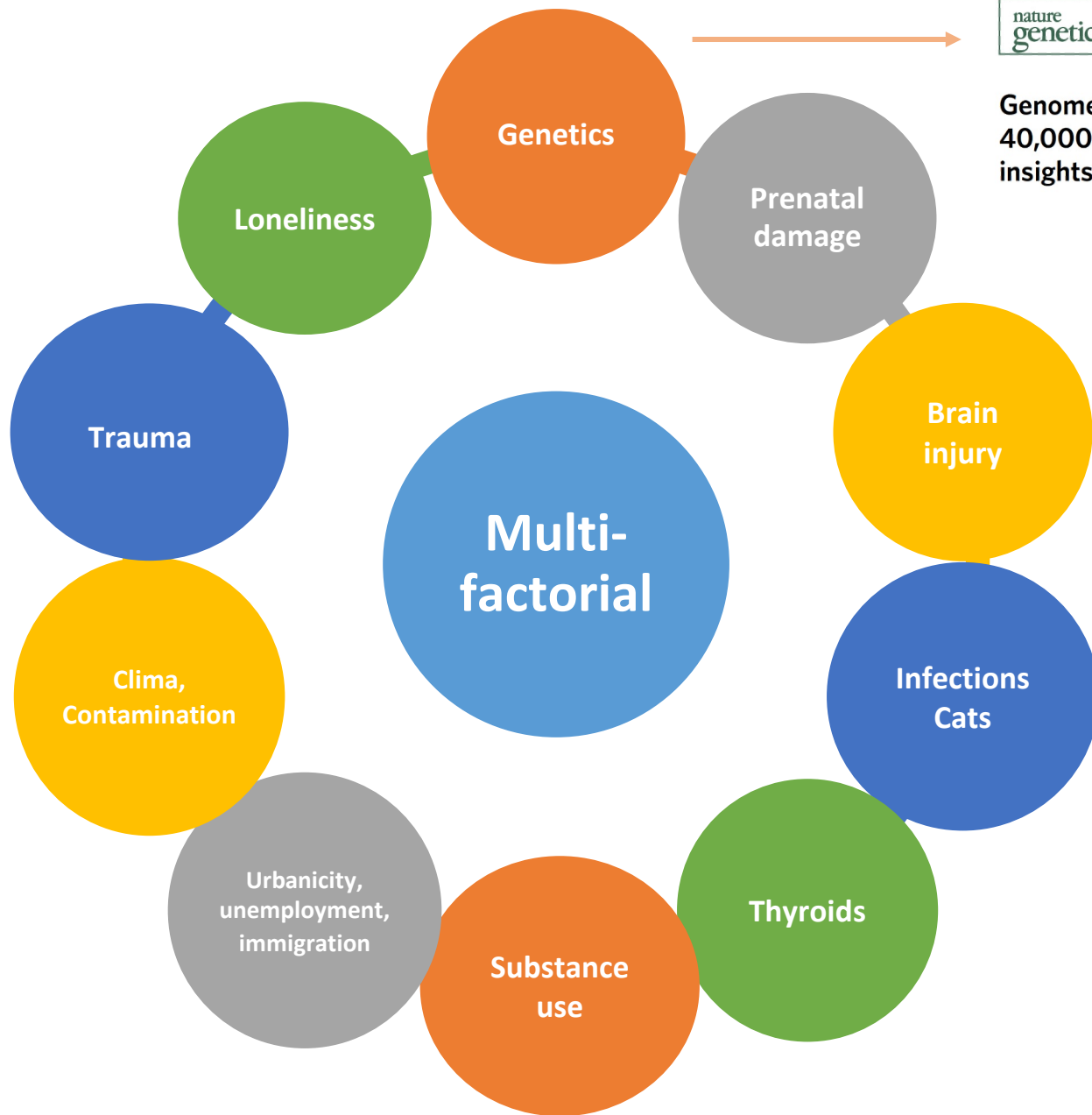


Psychological trauma

- a. Prevalence of psychological trauma in psychiatric and somatic disorders
- b. Psychological trauma as etiological risk factor for mental and somatic disorders
- c. EMDR in psychiatric or somatic disorders plus psychological trauma
- c. Trauma in transcultural context

Why do we suffer from mental disorders?

Is psychological trauma an etiological risk factor?



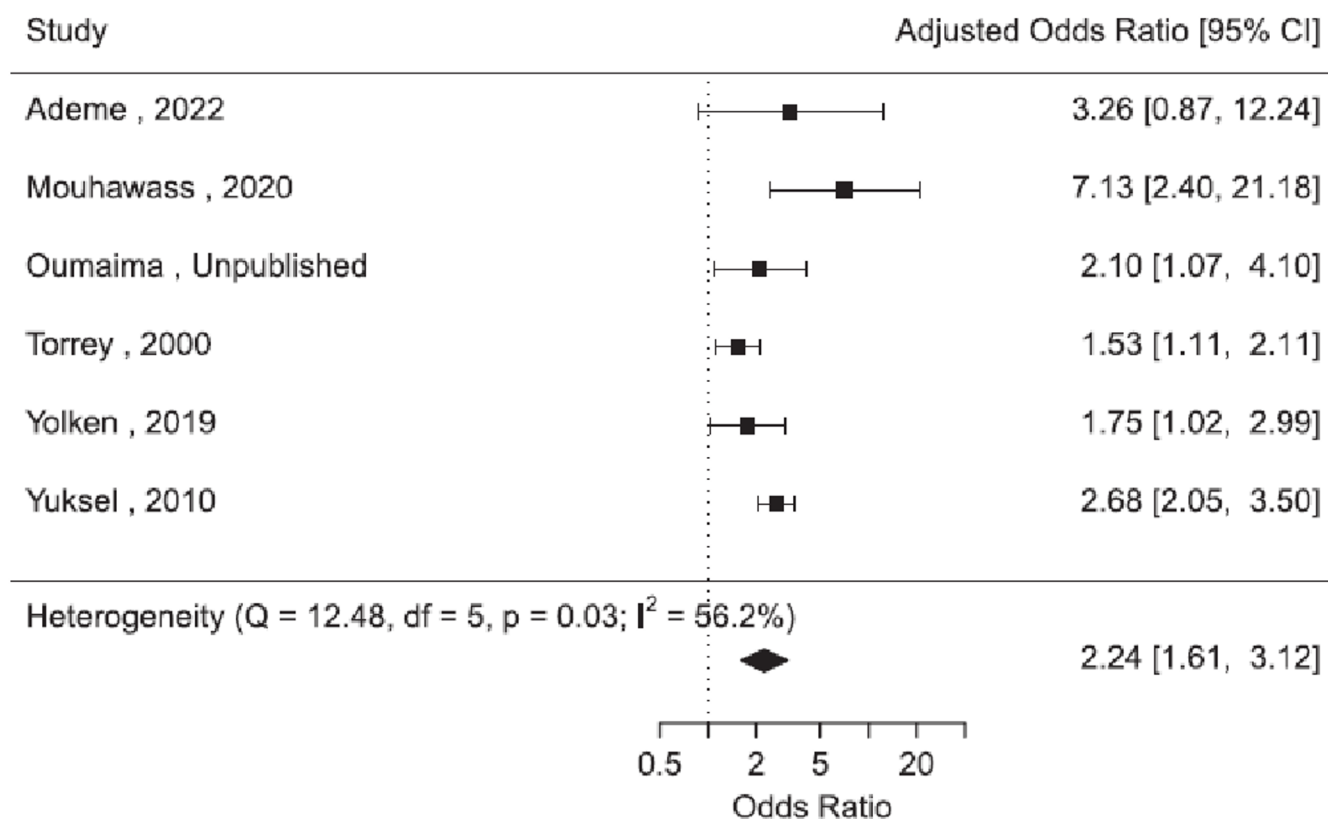
Genome-wide association study of more than 40,000 bipolar disorder cases provides new insights into the underlying biology

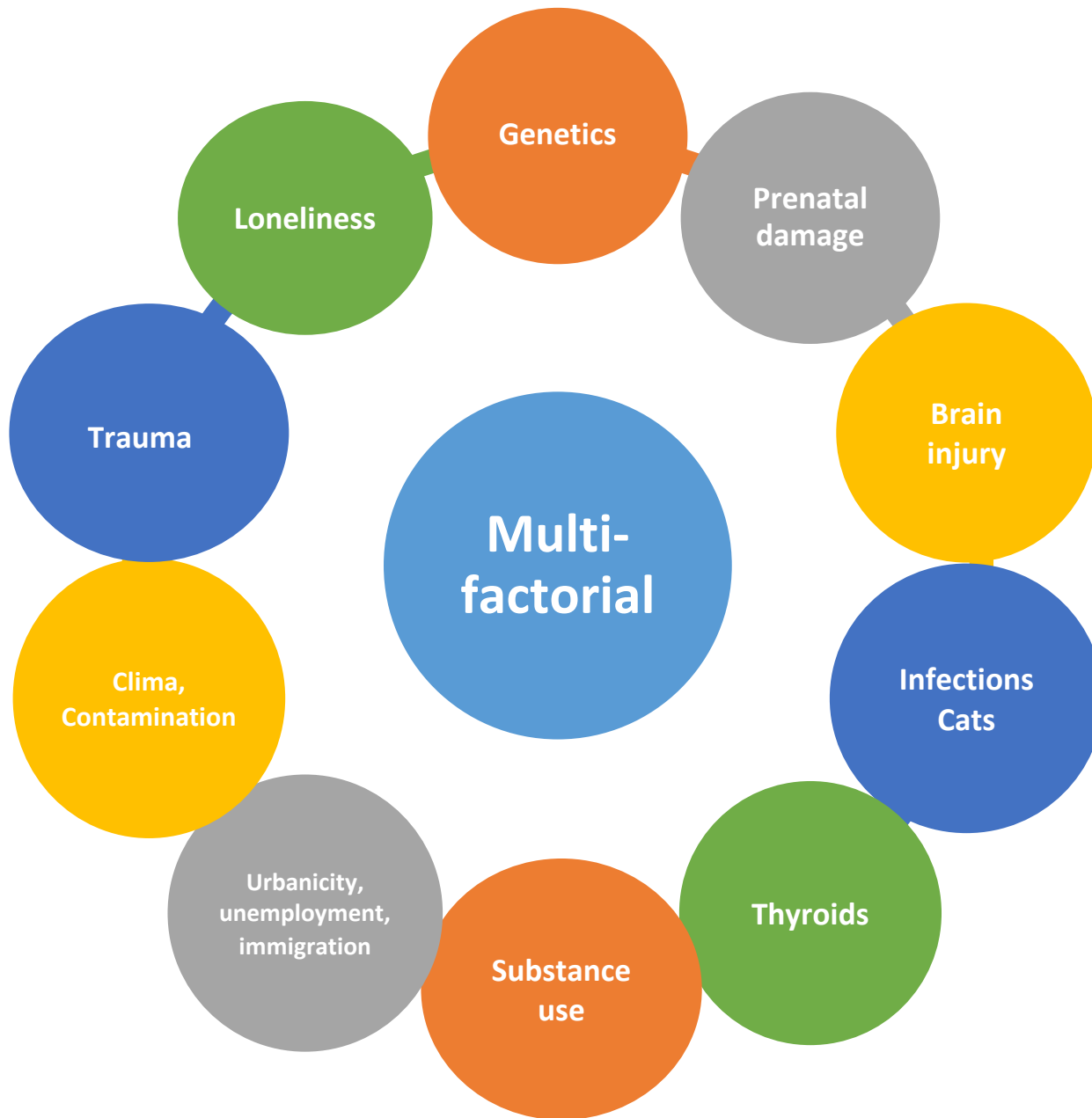
Cat Ownership and Schizophrenia-Related Disorders and Psychotic-Like Experiences: A Systematic Review and Meta-Analysis

John J. McGrath^{*1,2,3}, Carmen C. W. Lim², and Sukanta Saha²



Fig. 2. Forest plot of the random-effects meta-analysis between cat exposure and schizophrenia-related disorders, unadjusted analyses.









Gene x Environment, Stress,
& Psychopathology

EXPERT REVIEW




Recognizing the importance of childhood maltreatment as a critical factor in psychiatric diagnoses, treatment, research, prevention, and education

Martin H. Teicher ^{1,2}, Jeffrey B. Gordon ³ and Charles B. Nemeroff ^{4,5,6} 

“Childhood maltreatment is the most important preventable risk factor for psychiatric disorders.”



Psychological trauma as a transdiagnostic risk factor for mental disorder: an umbrella meta-analysis

Bridget Hogg^{1,2,3,4} · Itxaso Gardoki-Souto^{1,2,3} · Alicia Valiente-Gómez^{1,2,4} · Adriane Ribeiro Rosa^{5,6,7} · Lydia Fortea^{4,8,9} · Joaquim Radua^{4,8,10,11} · Benedikt L. Amann^{1,2,4,12,13}  · Ana Moreno-Alcázar^{1,2,4}

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Umbrella review: synthesis of existing evidence from SR and MA
106 individual studies
16.277 cases and 77.596 controls
7 different mental disorders
10 types of psychological trauma

Main result

Psychological trauma in childhood is a transdiagnostic risk factor for mental disorder across diagnoses and spectra (OR = 2.92; 95% CI 2.60, 3.28)

Diagnoses	Anxiety Disorders (diagnostic group comprising Generalised Anxiety Disorder, Panic Disorder and Social Anxiety Disorder)	Bipolar Disorder	Major Depressive Disorder	Obsessive-Compulsive Disorder	Borderline Personality Disorder	Psychosis (diagnostic group comprising Psychotic Disorder, Schizophrenia and Schizoaffective Disorder)	Post-traumatic Stress Disorder
	Anxiety Disorders	Bipolar Disorders	Depressive Disorders	Obsessive-Compulsive Related Disorders	Personality Disorders	Schizophrenia Spectrum Disorders	Trauma- and Stressor-Related Disorders

Further finding: Emotional abuse for anxiety disorders

Is psychological trauma clinically relevant as a comorbid condition?



If you think you had a bad day, just remember that Sam Bartram, the goalkeeper from Charlton Athletic, spent 1937 15' in his goal not knowing that the match has been suspended due to fog.

Trauma, PTSD and cPTSD comorbidities

	Depression	Bipolar Disorder	Psychosis	Personality disorders	Substance use disorders	Fibromyalgia	General population
PTSD	30-50%	55%	30%	25-30%	20%	70%	3-4%
cPTSD	75%	?	40-50 %	40%	?	?	0.5-7%

Of note:

cTEPT is understudied so far in the psychiatric field (ver presentation by T. Karatsias)

Developmental trauma disorder is a further relevant concept as it includes affective/somatic, cognitive/behavioral and relational/identity dysregulation and disorganized attachment working models and rejection sensitivity and severe self-devaluation and self-ideal discrepancy.

But the concept is based within child/adolescents psychiatry only and we would need a diagnostic interview tool for adults as well

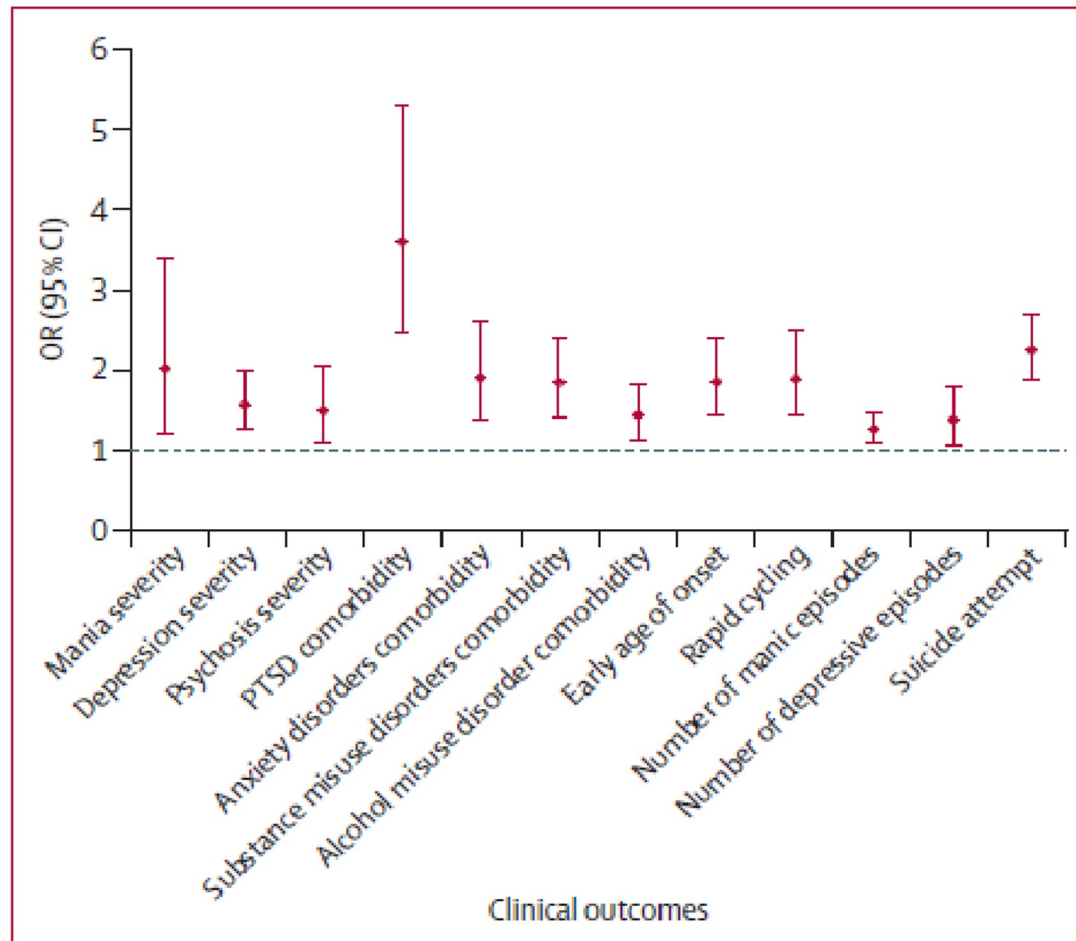
Curran et al, 2021; Ritwinski et al, 2013; Kessler et al, 2005; Quassem et al, 2021; Hernandez et al, 2013; Blanco et al, 2020; Frias et al, 2015; Van Diejke et al, 2018; Maercker et al, 2022; Mason et al, 2023 ; Knefel et al, 2023

Childhood maltreatment and unfavourable clinical outcomes in bipolar disorder: a systematic review and meta-analysis



Jessica Agnew-Blais, Andrea Danese

www.thelancet.com/psychiatry Published online February 9, 2016 [http://dx.doi.org/10.1016/S2215-0366\(15\)00544-1](http://dx.doi.org/10.1016/S2215-0366(15)00544-1)



Also:

- worse QoI
- lower cognitive performance
- lower functioning

Figure 2: Combined effect sizes and 95% CIs from 12 independent meta-analyses testing the association of childhood maltreatment with course of illness and clinical features in bipolar disorder

Error bars show 95% CIs. OR=odds ratio. PTSD=post-traumatic stress disorder.

Trauma-focused interventions in mental disorders





Oprah Winfrey

Turn your wounds
into wisdom.

“I had never gone to a therapist, ever. But I had so many therapists sitting in the chair across from me that I just sort of took it in. *The Oprah Winfrey Show* was my greatest therapy.”

Trauma-focused psychotherapies

- **Marylène Cloitre** Skills Training in Affective and Interpersonal Regulation (STAIR) Narrative Therapy
- **Anke Ehlers** Cognitive Therapy for PTSD
- **Thomas Elbert** Narrative Exposure Therapy (NET)
- **Edna Foa** Prolonged Exposure Therapy (PE)
- **Berthold Gersons** Brief Eclectic Psychotherapy for PTSD (BEPP)
- **Patricia Resick** Cognitive Processing Therapy (CPT)
- **Francine Shapiro** Eye Movement Desensitization and Reprocessing Therapy (EMDR)

Basis: Social support, coping ability, resilience, mental flexibility, security for children with care taker



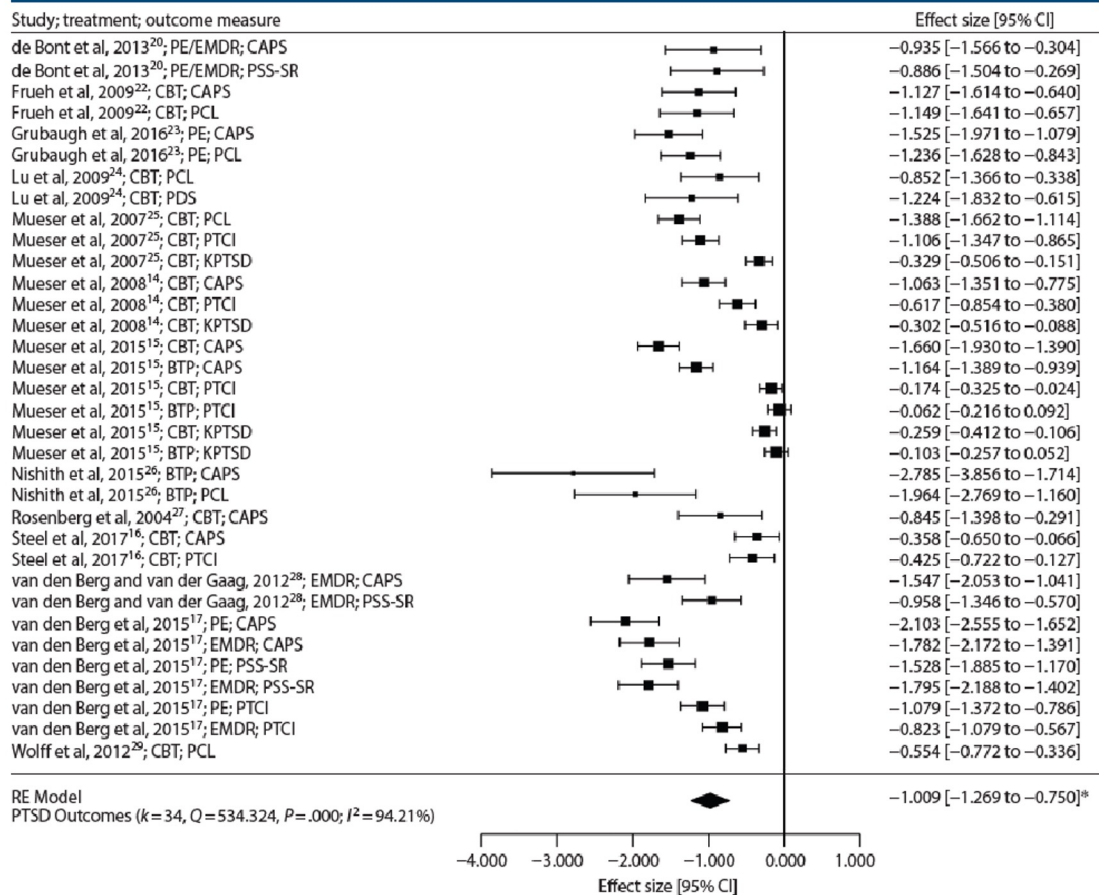
Meta-Analysis of the Treatment of Posttraumatic Stress Disorder in Adults With Comorbid Severe Mental Illness

Anouk L. Grubaugh, PhD^{a,*}; Wilson J. Brown, PhD^b;
 Jessica A. Wojtalik, PhD^c; Ursula S. Myers, PhD^a;
 and Shaun M. Eack, PhD^d

To cite: Grubaugh AL, Brown WJ, Wojtalik JA, et al. Meta-analysis of the treatment of posttraumatic stress disorder in adults with comorbid severe mental illness. *J Clin Psychiatry*. 2021;82(3):20r13584.

Focus on psychosis

Figure 2. Pre- to Immediate Post-Treatment Effect Sizes on PTSD Outcomes

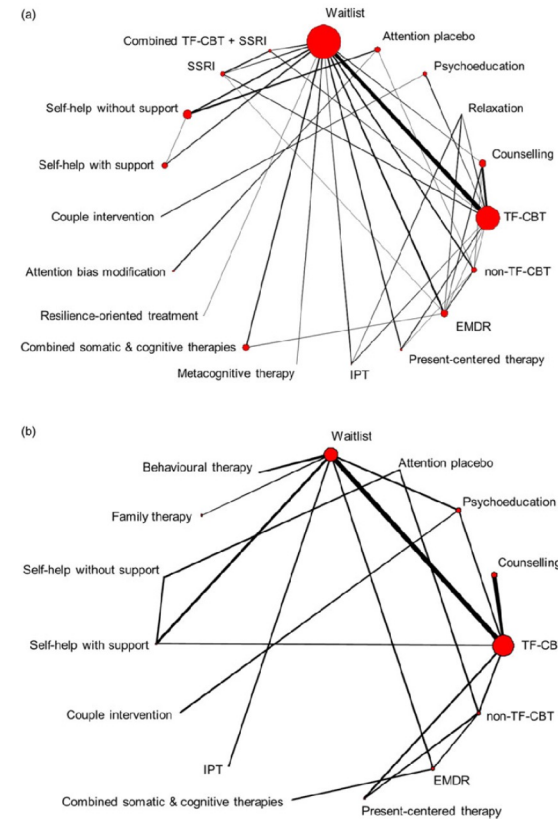
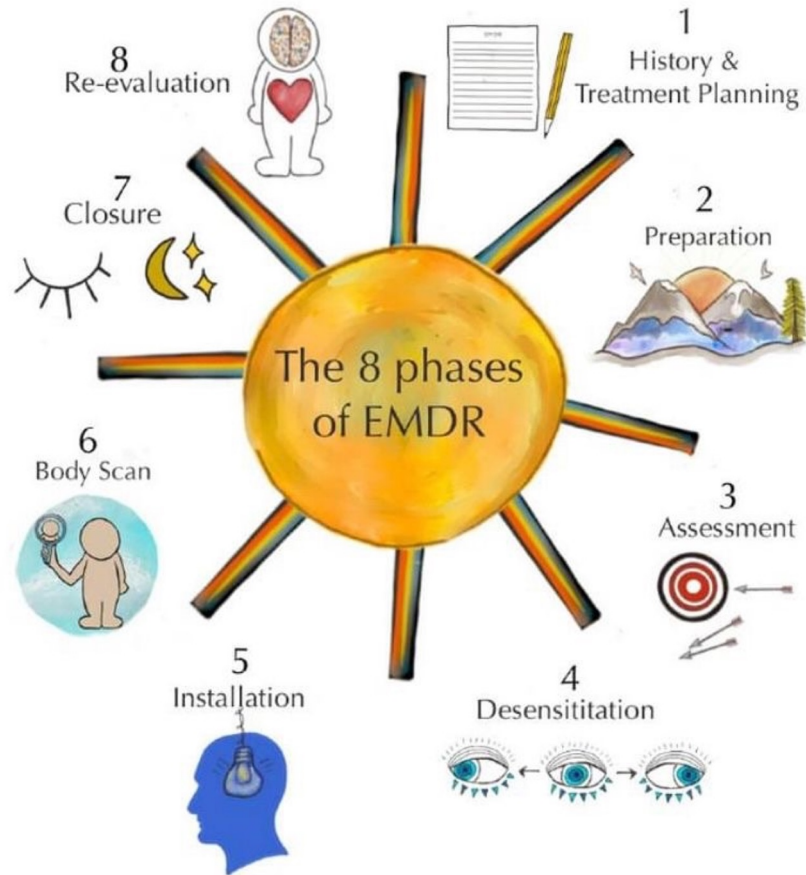


*P < .001.

Abbreviations: BTP = brief treatment program, CAPS = Clinician-Administered PTSD Scale,³¹ CBT = cognitive behavioral therapy, EMDR = eye movement desensitization and reprocessing, KPTSD = Knowledge of PTSD Test,³³ PCL = PTSD Checklist,³⁵ PDS = Posttraumatic Diagnostic Scale,³⁶ PE = prolonged exposure, PSS-SR = PTSD Symptom Scale-Self Report,³⁷ PTCI = Posttraumatic Cognitions Inventory,³⁸ PTSD = posttraumatic stress disorder, RE = random effects.

Cite this article: Mavranezouli I et al (2020). Psychological treatments for post-traumatic stress disorder in adults: a network meta-analysis. *Psychological Medicine* 50, 542–555. <https://doi.org/10.1017/S0033291720000070>

Standardprotokoll EMDR

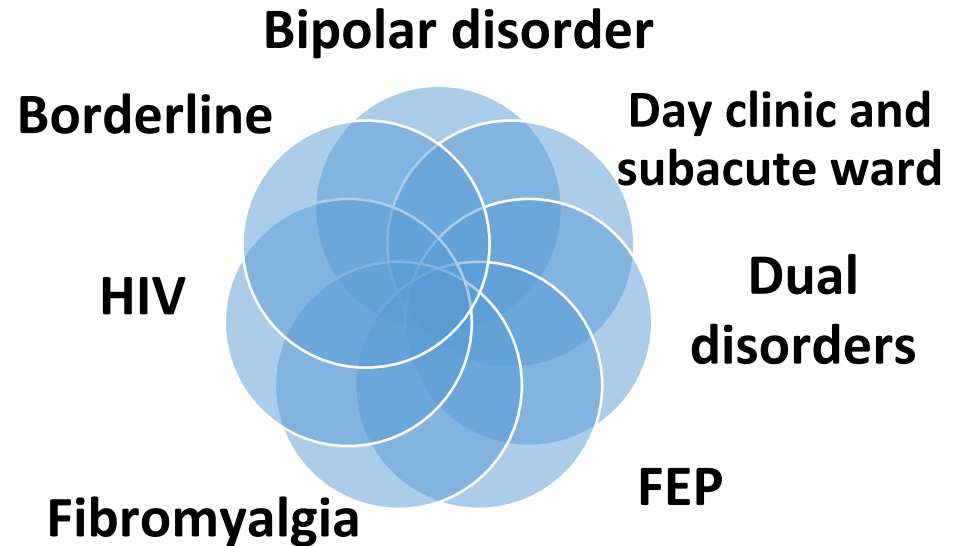


Conclusion

EMDR and TF-CBT appear to be most effective at reducing symptoms and improving remission rates in adults with PTSD.



EMDR Projects Research Unit Centro Fórum



Many thanks to EMDR Spain and Europe for the longstanding support and interest in our research!!!



EMDR beyond PTSD: A Systematic Literature Review

Alicia Valiente-Gómez^{1,2,3,4}, Ana Moreno-Alcázar^{2,3*}, Devi Treen⁵, Carlos Cedrón⁵, Francesc Colom^{3,4,5,6}, Víctor Pérez^{3,4,5,6} and Benedikt L. Amann^{2,3,4,5,6}

TABLE 1 | RCT of EMDR in psychotic disorder.

Title author, year	Sample (n)	EM/Full protocol	Control condition	Main findings	Conclusions
Kim et al., 2010	45	EMDR	PR or TAU	EMDR=PR=TAU, but EMDR>PR>TAU in negative symptoms.	No differences within all groups, except of advantage of EMDR in negative symptoms.
de Bont et al., 2013	10	EMDR	PE or WL	PE= EMDR>WL in trauma symptoms.	PTSD patients with schizophrenia benefit from trauma-focused treatment approaches.
van den Berg et al., 2015	155	EMDR	PE or WL	EMDR = PE> WL in trauma symptoms.	Both trauma-focuses treatments are effective and safe to treat PTSD symptoms in patients with chronic psychotic disorders.
Van Minnen et al., 2016*	108	DS	NDS	DS=NDS in trauma symptoms.	Trauma-focused treatments for DS should not be excluded from these treatments.
de Bont et al., 2016*	155	EMDR	WL or PE	PE = EMDR>WL In paranoid thoughts. PE>EMDR>WL in depressive symptoms.	No differences within all groups, except of advantage of EMDR in paranoid thoughts and PE in depressive symptoms.

RCT, Randomized controlled trial; EMDR, Eye Movement desensitization and reprocessing; PR, progressive relaxation; TAU, treatment as usual; PE, Prolonged exposure; WL, wait-list control; PTSD, Post-Traumatic Stress Disorder; DS, Dissociative Subtype of PTSD; NDS, Non-Dissociative Subtype of PTSD. *These data sets corresponds to the clinical trial ISRCTN 79584912 of van den Berg et al. (2015).



EMDR versus waiting list in individuals at clinical high risk for psychosis with post-traumatic stress symptoms: A randomized controlled trial

Jie Zhao^{a,b}, Dong-Yang Chen^{a,b}, Xian-Bin Li^{a,b}, Ying-Jun Xi^{a,b}, Swapna Verma^{c,d}, Fu-Chun Zhou^{a,b,e}, Chuan-Yue Wang^{a,b}

Table 2

Outcomes of treatment groups in the Intent-to-treat Sample ($N = 28$ in EMDR group; $N = 29$ in Waiting List group).

Outcome		Baseline	Endpoint	Within-group changes			Between-group differences		
		Mean (SD)	Mean (SD)	<i>t</i>	<i>P</i>	Cohen's <i>d</i>	<i>F</i>	Partial η^2	<i>P</i> value
CAPS	EMDR	75.0 (13.7)	40.8 (21.8)	8.1	<0.001	1.9	23.2	0.30	<0.001
	WL	74.0 (13.8)	62.5 (13.7)	4.0	<0.001	0.8			
SIPS_P	EMDR	10.0 (2.9)	5.0 (3.3)	8.0	<0.001	1.6	17.8	0.25	<0.001
	WL	10.5 (2.7)	8.7 (3.5)	3.3	0.002	0.6			
PCL_C	EMDR	65.0 (11.0)	46.1 (16.6)	6.7	<0.001	1.3	14.5	0.21	<0.001
	WL	65.5 (9.3)	59.1 (11.1)	3.1	0.004	0.6			
CAPE-p15	EMDR	33.8 (7.7)	25.9 (8.9)	4.4	<0.001	0.9	4.4	0.08	0.040
	WL	34.0 (7.7)	30.0 (6.1)	2.7	0.012	0.6			
SDS	EMDR	75.4 (11.6)	58.7 (14.2)	6.6	<0.001	1.3	12.3	0.19	0.001
	WL	75.1 (10.1)	68.1 (9.7)	4.4	<0.001	0.7			
SAS	EMDR	66.8 (14.1)	52.8 (15.8)	5.3	<0.001	0.9	9.2	0.15	0.004
	WL	67.9 (10.9)	62.6 (11.4)	2.7	0.011	0.5			
SSI	EMDR	14.4 (6.9)	9.3 (7.7)	5.1	<0.001	0.7	6.7	0.11	0.013
	WL	18.0 (8.5)	16.0 (8.8)	2.1	0.047	0.2			

Abbreviations: EMDR, Eye Movement Desensitization and Reprocessing; WL, Waiting List; CAPS, the Clinician-Administered PTSD Scale; SIPS_P, the total score of positive scales of the Structured Interview of Psychosis-Risk Syndromes PCL_C, the Post Traumatic Stress Disorder Check List-Civilian version CAPE, Community Assessment of Psychic Experiences SDS, Self-rating Depression Scale; SAS, Self-rating Anxiety Scale; SSI, Scale for Suicide Ideation.

Original Article


Cite this article: Varese F *et al* (2023). Trauma-focused therapy in early psychosis: results of a feasibility randomized controlled trial of EMDR for psychosis (EMDRp) in early intervention settings. *Psychological Medicine* 1–12. <https://doi.org/10.1017/S0033291723002532>

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Trauma-focused therapy in early psychosis: results of a feasibility randomized controlled trial of EMDR for psychosis (EMDRp) in early intervention settings

Filippo Varese^{1,2,3} , William Sellwood⁴, Daniel Pulford³, Yvonne Awenat¹, Leanne Bird³, Gita Bhutani⁵, Lesley-Anne Carter⁵, Linda Davies⁶, Saadia Aseem^{1,3}, Claire Davis⁵, Rebecca Hefferman-Clarke³, Claire Hilton³, Georgia Horne³, David Keane⁵, Robin Logie⁵, Debra Malkin⁵, Fiona Potter⁵, David van den Berg⁷, Shameem Zia⁵ and Richard P. Bentall⁸

¹Division of Psychology and Mental Health, School of Health Sciences, Faculty of Biological, Medical and Health

Results. Sixty participants (100% of the recruitment target) received TAU or EMDR + TAU. 83% completed at least one follow-up assessment, with 74% at 6-month and 70% at 12-month. 74% of EMDRp + TAU participants received at least eight therapy sessions and 97% rated therapy sessions demonstrated good treatment fidelity. At 6-month, there were signals of promise of efficacy of EMDRp + TAU *v.* TAU for total psychotic symptoms (PANSS), subjective recovery from psychosis, PTSD symptoms, depression, anxiety, and general health status. Signals of efficacy at 12-month were less pronounced but remained robust for PTSD symptoms and general health status.

Further RCT ongoing of EMDR in psychosis



A Multicenter Phase II RCT to Compare the Effectiveness of EMDR Versus TAU in Patients With a First-Episode Psychosis and Psychological Trauma: A Protocol Design

OPEN ACCESS

Edited by:
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Alicia Valiente-Gómez^{1,2,3,4*}, Nuria Pujol^{2,3,5}, Ana Moreno-Alcázar^{1,2,3,4}, Joaquim Radua^{6,7,8}, Eila Monteagudo-Gimeno^{4,5}, Itxaso Gardoki-Souto^{1,2,4}, Bridget Hogg^{1,2,4}, Maria José Álvarez⁹, Gemma Safont^{3,4,10}, Walter Lupo¹, Victor Pérez^{2,3,4,5}, Benedikt L. Amann^{1,2,3,4} and the FEP-EMDR Research Group

Burger et al. *Trials* (2022) 23:851
<https://doi.org/10.1186/s13063-022-06808-6>

Trials

STUDY PROTOCOL

Open Access

Trauma-focused therapies for post-traumatic stress in psychosis: study protocol for the RE. PROCESS randomized controlled trial

Simone R. Burger^{1,2*}, Tineke van der Linden^{1,3†}, Amy Hardy^{4,5}, Paul de Bont⁶, Berber van der Vleugel⁷, Anton B. P. Starling⁸, Carlijn de Roos⁹, Catherine van Zelst², Jennifer D. Gottlieb¹⁰, Kim T. Mueser¹¹, Agnes van Minnen^{12,13}, Ad de Jongh^{13,14,15,16}, Machteld Marcelis^{3,17}, Mark van der Gaag^{1,2} and David van den Berg^{1,2}



Open access

Protocol

BMJ Open Feasibility study of eye movement desensitisation and reprocessing (EMDR) in people with an at-risk mental state (ARMS) for psychosis: study protocol

Daniela Strelchuk^{1,2}, Nicola Wiles^{1,2}, Katrina M Turner^{1,2}, Catherine Derrick¹, Stan Zammit^{1,3}

EMDR studies in addiction

Autor	N	Tratamiento	Nº Sesiones	Protocolo	Resultados	Seguimiento
Hase y cols., 2008	34 pacientes hospitalizados con TRS OH	EMDR+ TAU TAU	2	CravEx	↓ craving ↓ depresión	= al 1 mes
Perez-Dandieu y cols., 2014	12 mujeres TRS OH y otras sustancias	EMDR+ TAU TAU	8 (6 meses)	Estándar	↓ estrés postraumático ↓ depresión	
Carletto y cols., 2018	40 pacientes con TRS a diferentes sustancias, ambulatorios y residenciales	EMDR+ TAU TAU	24 (6 meses)	Estándar CravEx DeTUR FASP	↓ estrés postraumático ↓ disociativos ↓ psiquiátricos	
Markus y cols., 2020	109 pacientes ambulatorios con TRS al OH	EMDR+ TAU TAU (Enfoque refuerzo comunitario)	7	CravEx DeTUR FASP	↓ consumo OH en ambos grupos ↓ craving	No se mantiene al 1 ni a los 6 meses



A Multicenter Phase II Rater-Blinded Randomized Controlled Trial to Compare the Effectiveness of Eye Movement Desensitization Reprocessing Therapy vs. Treatment as Usual in Patients With Substance Use Disorder and History of Psychological Trauma: A Study Design and Protocol

OPEN ACCESS

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Bridget Hogg^{1,2}, Laura Blanco^{9,10}, W. Lupo¹, Victor Pérez^{2,3,4,5}, Maria Robles-Martínez^{2,4,11},
Marta Torrens^{2,4,5,11} and Benedikt L. Amann^{1,2,3,4,5}*

Lortye et al. *BMC Psychiatry* (2021) 21:442
<https://doi.org/10.1186/s12888-021-03366-0>

BMC Psychiatry

STUDY PROTOCOL

Open Access

Treating posttraumatic stress disorder in substance use disorder patients with co-occurring posttraumatic stress disorder: study protocol for a randomized controlled trial to compare the effectiveness of different types and timings of treatment



Sera A. Lortye^{1*}, Joanne P. Will¹, Loes A. Marquenie¹, Anna E. Goudriaan^{1,2,3}, Amoud Amtz⁴ and Marleen M. de Waal¹



The effectiveness of eye movement desensitization and reprocessing toward anxiety disorder: A meta-analysis of randomized controlled trials

Ninik Yunitri^{a,b}, Ching-Chiu Kao^{a,c}, Hsin Chu^{d,e}, Joachim Voss^f, Huei-Ling Chiu^g, Doresses Liu^{a,c,h}, Shu-Tai H. Shen^{a,i}, Pi-Chen Chang^a, Xiao Linda Kang^{a,j}, Kuei-Ru Chou^{a,h,k,l,*}

Meta Analysis

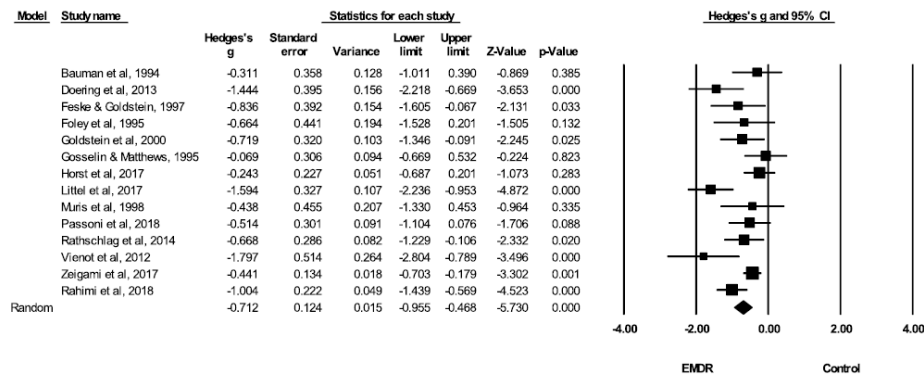


Fig. 2. Effectiveness of EMDR toward symptoms of anxiety (n = 14).

Total studies 14
 Heterogeneity: Q value = 30.68, $df = 13$ ($p = 0.004$), $I^2 = 57.63\%$
 Test for overall effect: $Z = -5.73$ ($p = 0.000$)

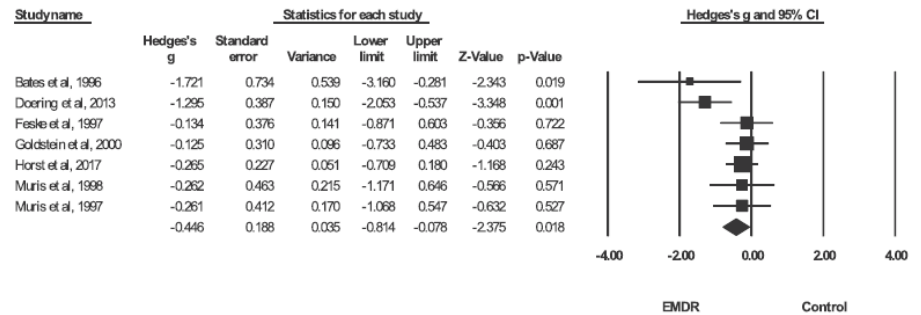
STUDY PROTOCOL

Open Access



Eye movement desensitization and reprocessing (EMDR) therapy or supportive counseling prior to exposure therapy in patients with panic disorder: study protocol for a multicenter randomized controlled trial (IMPROVE)

Bart Endhoven^{1,2*}, Klara De Cort^{3,4}, Suzy J. M. A. Matthijssen^{1,2}, Ad de Jongh^{5,6}, Agnes van Minnen^{5,7}, Puck Duits², Koen R. J. Schruers^{3,4,8}, Eva A. M. van Dis¹, Angelos M. Krypotos^{3,8}, Lotte Gerritsen¹ and Iris M. Engelhard^{1,2}



Total studies 7
 Heterogeneity: Q value = 10.43, $df = 6$ ($p = 0.11$), $I^2 = 42.48\%$
 Test for overall effect: $Z = -2.38$ ($p = 0.018$)

Fig. 3. Effectiveness of EMDR toward symptoms of phobia (n = 7).

RESEARCH ARTICLE

A randomized controlled trial comparing EMDR and CBT for obsessive-compulsive disorder

Zoe Marsden¹ | Karina Lovell² | David Blore³ | Shehzad Ali⁴ | Jaime Delgadillo⁵ 

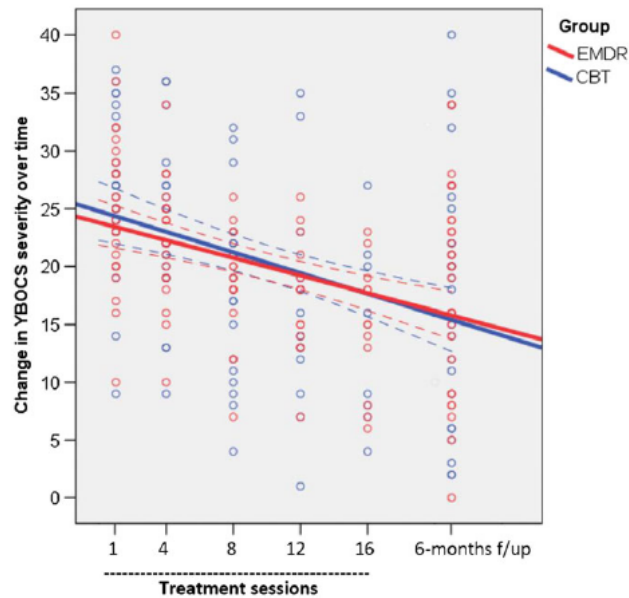


FIGURE 2 Linear growth trends and confidence intervals for Yale-Brown obsessive-compulsive scale (YBOCS) measures. CBT = cognitive behavioural therapy; EMDR = eye movement desensitization and reprocessing

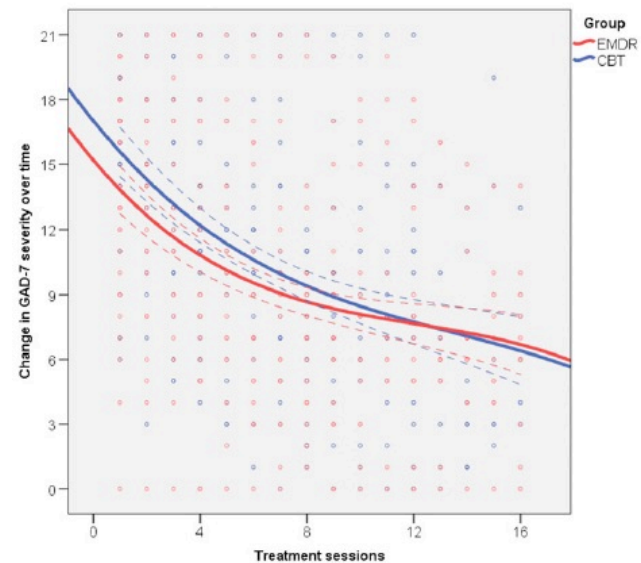


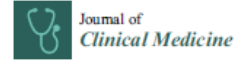
FIGURE 3 Nonlinear growth trends and confidence intervals for weekly anxiety (GAD-7) measures. CBT = cognitive behavioural therapy; EMDR = eye movement desensitization and reprocessing

EMDR and borderline personality disorders

EUROPEAN JOURNAL OF PSYCHOTRAUMATOLOGY
2019, VOL. 10, 1614822
<https://doi.org/10.1080/20008198.2019.1614822>



EUROPEAN JOURNAL OF
**PSYCHO-
TRAUMATOLOGY**
THE OFFICIAL JOURNAL OF THE EUROPEAN SOCIETY FOR TRAUMATIC STRESS STUDIES



CLINICAL RESEARCH ARTICLE

OPEN ACCESS

Feasibility of EMDR for posttraumatic stress disorder in patients with personality disorders: a pilot study

Christina W. Slotema^a, David P. G. van den Berg ^b, Annemieke Driessen^{a,c,d}, Bobbie Wilhelmus^a and Ingmar H. A. Franken^c

Article

Does EMDR Therapy Have an Effect on Memories of Emotional Abuse, Neglect and Other Types of Adverse Events in Patients with a Personality Disorder? Preliminary Data

Laurian Hafkemeijer^{1,*}, Annemieke Starrenburg¹, Job van der Palen^{2,3}, Karin Slotema^{4,5} and Ad de Jongh^{6,7,8,9,10}

Snoek *et al.* *BMC Psychiatry* (2020) 20:396
<https://doi.org/10.1186/s12888-020-02713-x>

BMC Psychiatry

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Journal of Behavior Therapy and Experimental Psychiatry

journal homepage: www.elsevier.com/locate/jbtep



Adding EMDR for PTSD at the onset of treatment of borderline personality disorder: A pilot study

Bobbie Wilhelmus^{a,*}, Marlies A.E. Marissen^b, David van den Berg^{a,c}, Annemieke Driessen^a, Mathijs L. Deen^a, Karin Slotema^{a,b}

STUDY PROTOCOL

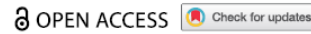
Open Access



A randomized controlled trial comparing the clinical efficacy and cost-effectiveness of eye movement desensitization and reprocessing (EMDR) and integrated EMDR-Dialectical Behavioural Therapy (DBT) in the treatment of patients with post-traumatic stress disorder and comorbid (Sub)clinical borderline personality disorder: study design

Aishah Snoek^{1,2*} , Aartjan T. F. Beekman^{2,3}, Jack Dekker^{4,5}, Inga Aarts^{1,2}, Gerard van Grootheest^{2,3}, Matthijs Blankers^{2,4,6}, Chris Vriend^{7,8}, Odile van den Heuvel^{7,8} and Kathleen Thomaes^{1,2,4}

REVIEW ARTICLE



Eye movement desensitization and reprocessing for depression: a systematic review and meta-analysis

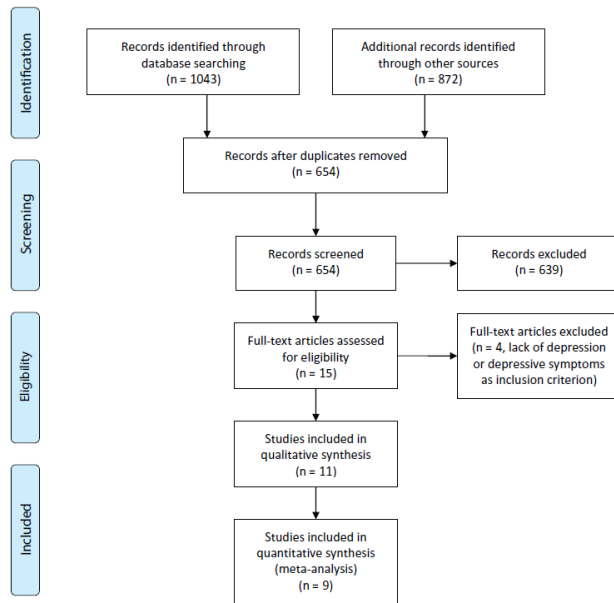
Sara Carletto ^{1a,*}, Francesca Malandrone ^{1b,*}, Paola Berchiolla ^{1b}, Francesco Oliva ^{1b}, Nicoletta Colombi ^{1c}, Michael Hase ^d, Arne Hofmann ^e and Luca Ostacoli ^{1b}

STUDY PROTOCOL

Open Access

Eye movement desensitization and reprocessing for adolescents with major depressive disorder: study protocol for a multi-site randomized controlled trial

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Source

Source	Hedges' g (95% CI)
Behnammoghadam et al., 2015	-3.74 [-4.59; -2.88]
Dominguez et al., 2020	-0.57 [-1.27; 0.13]
Hase et al., 2015	-0.96 [-1.69; -0.22]
Hase et al., 2018	-0.35 [-1.07; 0.38]
Hofmann et al., 2014	-0.81 [-1.44; -0.18]
Hogan et al., 2001	-0.46 [-1.19; 0.26]
Mauna Gauhar, 2016	-1.71 [-2.63; -0.79]
Minelli et al., 2019	-0.46 [-1.31; 0.39]
Ostacoli et al., 2018	-0.82 [-1.28; -0.37]

Total (random effects) -1.07 [-1.66; -0.48]
 Heterogeneity: $\chi^2_8 = 50.58$ ($P < .001$), $I^2 = 84\%$

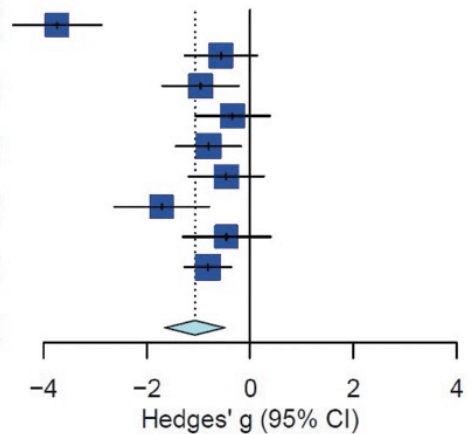


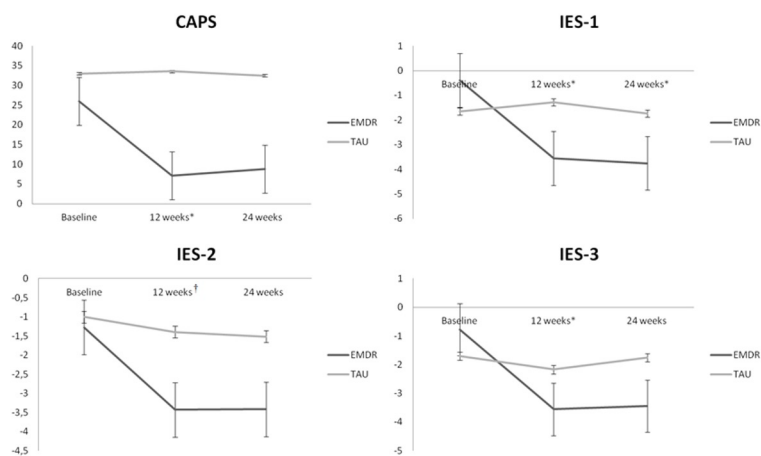
Figure 2. Overall effect of EMDR for depression: forest plot.

Figure 1. PRISMA flow diagram.

Eye movement desensitization and reprocessing therapy in subsyndromal bipolar patients with a history of traumatic events: A randomized, controlled pilot-study

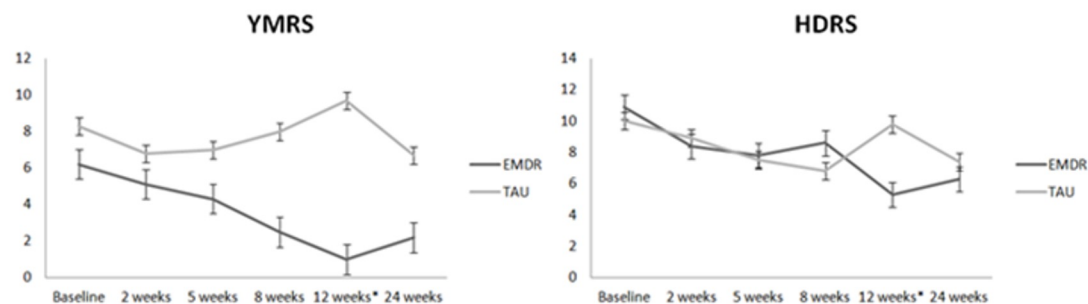
Patricia Novo^{a,b}, Ramon Landin-Romero^{a,c}, Joaquim Radua^{a,c}, Victor Vicens^{a,c}, Isabel Fernandez^d, Francisca Garcia^e, Edith Pomarol-Clotet^{a,c}, Peter J. McKenna^{a,c}, Francine Shapiro^f, Benedikt L. Amann^{a,c,*}

Figure 2. Evolution of clinical scores with LOCF intention-to-treat in the trauma symptoms were significant differences were found between the EMDR (n = 10) and TAU (n = 10) groups



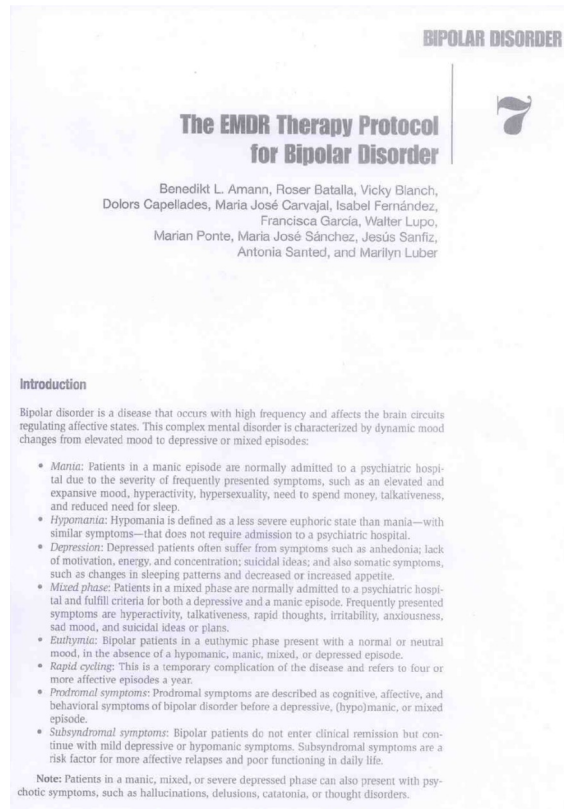
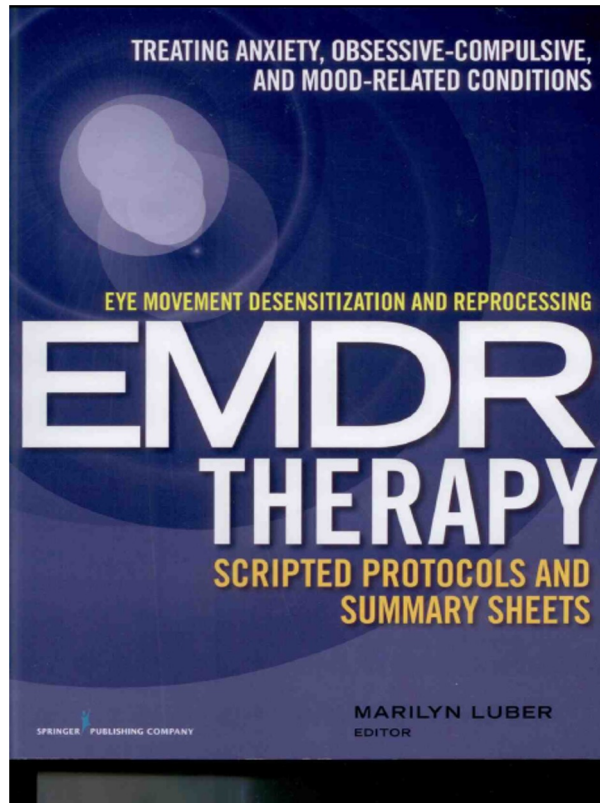
LOCF: Last Observation Carried Forward; EMDR: Eye Movement Desensitization Reprocessing; TAU: Treatment as Usual; CAPS: Clinician Administered PTSD Scale; IES-1: Impact of Event Scale 1; IES-2: Impact of Event Scale 2; IES-3: Impact of Event Scale 3; * Significant differences between groups, †Trend level statistical significance

Figure 1. Evolution of clinical scores with LOCF and intention-to-treat in the mood symptoms between the EMDR (n = 10) and TAU (n = 10) groups



LOCF: Last Observation Carried Forward; EMDR: Eye Movement Desensitization Reprocessing; TAU: Treatment as Usual; YMRS: Young Mania Rating Scale; HDRS: Hamilton Depression Rating Scale; CGI-m: Clinical Global Impression-mania; CGI-d: Clinical Global Impression-depression; * Significant differences between groups

EMDR Bipolar Manual



Moodstabilizer protocol

Insight protocol

Adherence protocol

Prodromal protocol

De-idealization of (hypo)manic symptoms

Study protocol

STUDY PROTOCOL

Open Access



Eye movement desensitization and reprocessing therapy versus supportive therapy in affective relapse prevention in bipolar patients with a history of trauma: study protocol for a randomized controlled trial

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Inclusion criteria were:

- 1) age 18 to 65
- 2) between two and six affective episodes in the previous 12 months;
- 3) current euthymic or subyndromal symptoms: i.e. scores <15 on the Bipolar Depression Rating Scale (BDRS) and <13 points on the Young Mania Rating Scale (YMRS);
- 4) at least one traumatic event according to the Clinician-Administered PTSD Scale (CAPS) with current trauma symptoms measured by the Event Scale-Revised (IES-R).

Exclusion criteria were:

- 1) current substance abuse or dependency not in remission (i.e., within previous three months), except nicotine;
- 2) history of brain trauma and/or neurological disease;
- 3) acute suicidal ideation at enrolment;
- 4) having received any type of trauma-focused psychotherapy in the previous 24 months;
- 5) planning to receive any type of concurrent psychotherapy during the study.

First multicentre RCT



Bridget Hogg, 2023: PhD thesis

Original

EMDR therapy vs. supportive therapy as adjunctive treatment in trauma-exposed bipolar patients: A randomised controlled trial

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Benedikt L. Amann^{a,b,d,t,y}

- First multicentre randomised controlled trial of trauma-focused psychotherapy in Bipolar Disorder
- EMDR therapy compared with a strong control condition, Supportive Therapy
- 6 months intervention and 2 year follow up
- Objectives: The impact of trauma-focused therapy on BD disease course, the impact on trauma and affective symptoms, and the safety and acceptability of EMDR in a BD population

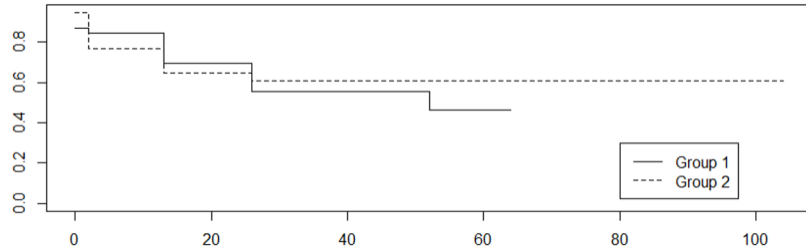
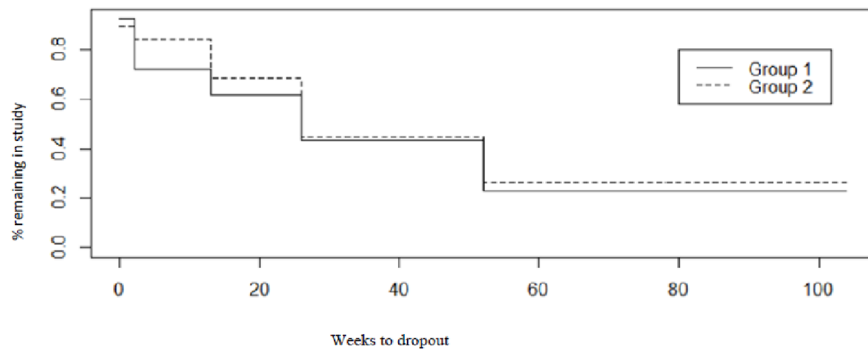


Figure 2. Risk of an affective relapse with or without hospitalization.

Key: Group 1 = Eye Movement Desensitisation and Reprocessing (EMDR) therapy; Group 2 = Supportive Therapy.

Supplementary Figure 1. Risk of dropout per treatment arm.



Key: Group 1 = Eye Movement Desensitisation and Reprocessing (EMDR) therapy; Group 2 = Supportive Therapy.

Table 1 Sociodemographic and clinical data for EMDR and ST group

	EMDR (n=39)	ST (n=38)	Sig difference	Total (n=77)
Sex n (%)				
Male	8 (20.5%)	10 (26.3%)	$\chi^2=0.110$, $df=1$, $p=0.740$	18 (23.4)
Female	31 (79.5%)	28 (73.7%)		59 (76.6)
Other	0 (0.0%)	0 (0.0%)		0 (0.0%)
Mean age in years (SD)	46.3 (9.4)	47.3 (7.3)	$t(-0.542)$, $df=71.412$, $p=0.590$	46.8 (8.4)
Ethnicity n (%)			$\chi^2=0$, $df=1$, $p=1$	
Caucasian	34 (87.2)	36 (94.5)		70 (90.9)
Latin-American	1 (2.6)	0 (0.0)		1 (1.3)
Asian	0 (0.0)	1 (2.6)		1 (1.3)
Not reported	4 (10.3)	1 (2.6)		5 (6.5)
Civil Status n (%)			$\chi^2=1.304$, $df=3$, $p=0.728$	
Single	15 (38.5)	16 (42.1)		31 (40.2)
Married	14 (35.9)	15 (39.5)		29 (37.7)
Widowed	1 (2.6)	0 (0.0)		1 (1.3)
Separated/Divorced	9 (23.1)	7 (18.4)		16 (20.8)
Mean years education (SD)	13.6 (4.0)	14.0 (3.8)		$t(-0.363)$, $df=53.947$, $p=0.718$
Education n (%)			$\chi^2=2.916$, $df=6$, $p=0.819$	
Incomplete primary	2 (5.1)	1 (2.6)		3 (3.9)
Complete primary	2 (5.1)	3 (7.9)		5 (6.5)
Incomplete secondary	4 (10.3)	5 (13.2)		9 (11.7)
Complete secondary	10 (25.6)	9 (23.7)		19 (24.7)
Incomplete tertiary	8 (20.5)	9 (23.7)		17 (22.1)
Complete tertiary	13 (33.3)	11 (28.9)		24 (31.2)
Work status n (%)			$\chi^2=7.062$, $df=8$, $p=0.530$	
Employed full-time	5 (12.8)	8 (22.9)		13 (16.9)
Employed part-time	2 (5.1)	1 (2.9)		3 (3.9)
Temporary sick leave	16 (41.0)	15 (42.9)		31 (40.3)
Permanent disability for mental health	7 (17.9)	7 (20.0)		14 (18.2)
Permanent disability for other reasons	1 (2.6)	0 (0.0)		1 (1.3)
Student	4 (10.3)	0 (0.0)		4 (5.2)
Homemaker	0 (0.0)	1 (2.9)		1 (1.3)
Unemployed	3 (7.7)	2 (5.7)		5 (6.5)
Other	1 (2.6)	1 (2.9)		2 (2.6)
Not reported	0 (0.0)	3 (7.9)		

Affective symptoms improve with EMDR

Figure 1. BDRS scores at baseline, post-treatment, and follow-up by group (unadjusted)

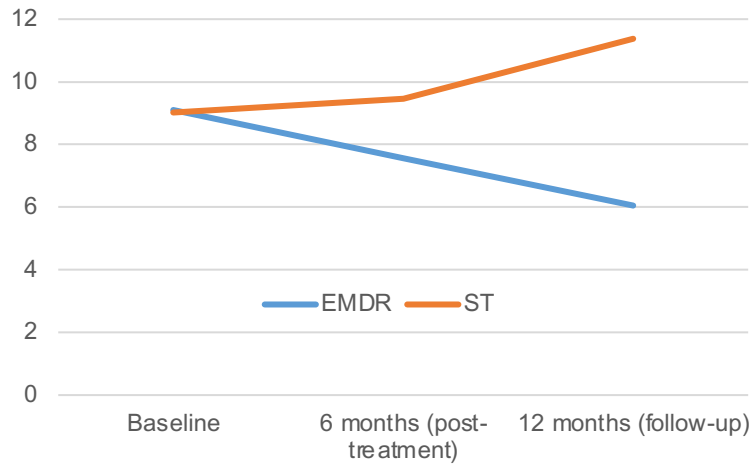
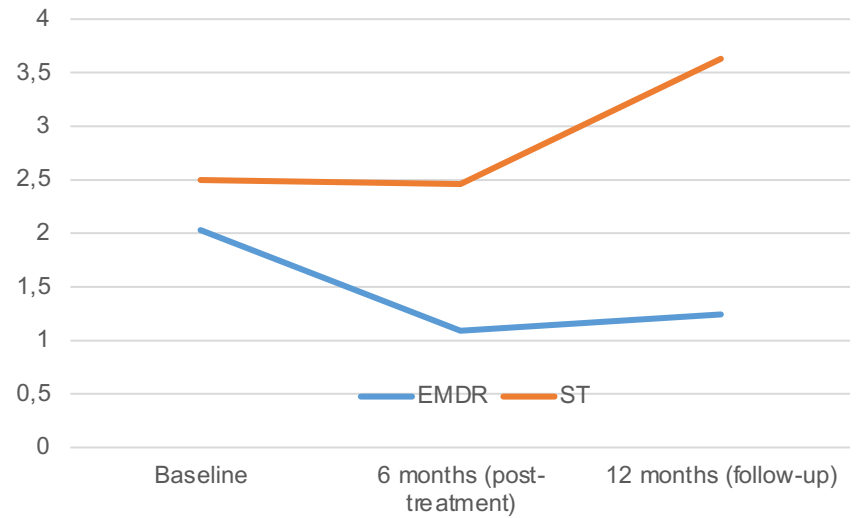


Figure 2. Unadjusted YMRS scores at baseline, post-treatment, and follow-up by group



Key. EMDR=Movement Desensitisation and Reprocessing (EMDR) Therapy, ST=Supportive Therapy.

Functioning also improved in the EMDR group

Supplementary table 1: results at all time points

	Post-treatment		12-month follow-up		24-month follow-up	
	Estimate* (SD)	Statistics	Estimate* (SD)	Statistics	Estimate* (SD)	Statistics
BDRS	2.382 (1.58)	t(1-507), df=75, p=0.136	7.475 (1.76)	t(4.252), df=75, p=0.0006, Cohen's d=0.969	4.454 (3.37)	t(1.322), df=70, p=0.190
YMRS	0.577 (0.71)	t(0.808), df=75, p=0.422	1.973 (0.88)	t(2.249), df=75, p=0.027, Cohen's d=0.513	-0.138 (0.82)	t(-0.168), df=144, p=0.867
FAST	3.558 (4.40)	t(0.809), df=74, p=0.421	8.061 (3.81)	t(2-118), df=74, p=0.038, Cohen's d=0.486	-1.502 (3.54)	t(-0.424), df=74, p=0.673
SCIP-S	-1.885 (2.88)	t(-0.695), df=65, p=0.490	-2.458 (2.60)	t(-0.946), df=71, p=0.348	-1.319 (5.27)	t(-0.250), df=70, p=0.803
IES-R	-3.267 (5.99)	t(-0.545), df=72, p=0.587	-2.807 (6.02)	t(-0.466), df=71, p=0.642	-9.998 (8.99)	t(-1.431), df=74, p=0.157
DES	1.789 (2.39)	t(0.749), df=70, p=0.456	-1.619 (2.02)	t(-0.800), df=70, p=0.427	-0.560 (2.03)	t(-0.276), df=70, p=0.783

Key. SD=Standard Deviation; BDRS: Bipolar Depression Rating Scale; YMRS: Young Mania Rating Scale; FAST: Functioning Assessment Short Test; SCIP-S: The Screen for Cognitive Impairment in Psychiatry; IES-R: Impact of Event Scale-Revised; DES: Dissociative Experiences Scale.

* Estimate: estimated difference between ST and EMDR adjusted for age, sex, illness duration and number of affective episodes over the previous 12 months.

Clinical impression of the RCT

- Patients were real world patients!
- Very complex with comorbidities, lack of social support, dissociation, highly traumatized and sensible to events, including positive events.
- Many sessions used for stabilisation
- We reprocessed first less impacting traumatic events.
- Less sessions available for severe past events.

- Working on traumas in bipolar clients is safe.
- More EMDR sessions necessary as patients are complex with a high trauma load

- The Covid pandemic influenced the study

EMDR in our psychiatric services

Centro Forum Instituto Salud Mental Hospital del Mar



Subacute ward



Day clinic

- It is safe to work on psychological trauma in the day hospital and sub-acute/long-term ward
- Trauma work is embedded in body-oriented techniques, mindfulness, body work, psychosocial integration, aguagym activity, and animal-assisted therapy
- Work on the inner parts (model: structural dissociation, IFS)
- Since these are usually complex traumatized patients, they first need a lot of psychoeducation and stabilization
- EMDR: current stressors are often dealt first
- Patients are satisfied and grateful that they are offered trauma-focused therapy

S., 43 y

- BD II, cPTSD
- In past dependency of cocaine (1 y) and abuse THC (last years before admission to day hospital). Has been admitted to dual disorder Unit.
- FH: father depressive disorder and OH abuse, sister con SUD, daughter with autodestructive behaviour,
- Biography: Born in Honduras. 10 sisters and brothers, mother separates early from her husband, whereas the mother had to organize the lives of all of them. Mother strict and pragmatic, no space for emotional support. Sexual abuse by brother. Sister mother model who is addictive. No time for playing in her childhood, attends a strict boarding school. With 19 y to Barcelona, studies, she got married, 2 children. Lives 3 y in Peru as well.
- Hyperthymic temperament. Mood lability and impulsivity since 20 years, mood fluctuations between depressive and hypomanic episodes. Predominance depressive mixed episodes with pronounced irritability.
- Various alternative therapies, start with lithium and olanzapine before day hospital. Stabilization process starts, is capable to stop THC use. Derived in september 2023 to the day hospital where we work inner parts and start with EMDR, 20 EMDR
- Moment of video: 3 months after discharge from day hospital.

Outview

- Psychological trauma is a transdiagnostic risk factor for mental disorders in adulthood
- Psychological trauma is highly frequent in psychiatric services but rarely evaluated or treated
- Watch out for cPTSD!
- We should offer trauma-focused interventions in psychiatric services
- It is safe, but it should be embedded in further therapies and stabilisation is clinically relevant
- We have first positive evidence of EMDR in various psychiatric disorders, including psychosis, depression, bipolar disorder, anxiety disorder, OCD and SUD
- Soon to come our data about the use of EMDR in dual disorders (n=142)
- Further RCT are ongoing in psychosis, depression, anxiety disorders and Borderline Personality disorder
- We need to learn where EMDR works and where it does not work
- We should start more RCT combining different psychotherapies

- Prevention of childhood trauma should be a key issue of stakeholders, politicians, health systems, WHO, EU etc.

“Security does not happen by chance, it is the result of collective consensus and public investment. We owe it to our children, the weakest citizens in our society, to enable a life free from violence and fear.”



Many thanks to the team:

**Bridget Hogg, Ana Moreno, Walter Lupo,
Daniel Guinart, Marta Fontana, Cristina
Macias, Marta Martín, Aloma Riera, Juan
Castaño, Amira Trabsa, Oscar Royuela,
Daniela Gatto (not in the picture)
Alicia Valiente (coordinator), Benedikt L.
Amann (director)**



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Mechanism of action EMDR

- Dual attention: Working memory overload (limited capacity of visuospatial sketchpad and central executive functioning) (Sharpley et al., 1996)
- Increased parasympathetic activity (Wilson et al., 1996)
- REM phase (Stickgold, 2002, 2008)
- DMN modulation (Landin-Romero et al., 2018)

- Epigenetic modulation (Vinckers et al, 2019)
- The superior colliculus-thalamus-amygdala pathway: In animal and human models, there is the inhibitory pathway between the superior colliculus and the amygdala via the thalamus with visual modulation of attention that facilitates the extinction of defensive responses (Baek et al, 2019, Szeska et al., 2023)