Webinar, Gruppo di ricerca in psicosomatica GRP
November 27, 2024

Evidence-based Treatment of PTSD: Differences, Commonalities, and Future Directions

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University of Zurich[UZH]

Evidence-based Treatment of PTSD: Differences, Commonalities, and Future Directions

- Evidence based psychotherapies for PTSD: differences and commonalities
- Medication for PTSD
- Future directions

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Levels of psychological interventions after trauma

- Self help
  (± professional conselling)
- Peer support
  (± professional conselling)
- Psychoeducation
  (explanatory therapy)
- 4-6 CBT (group) sessions

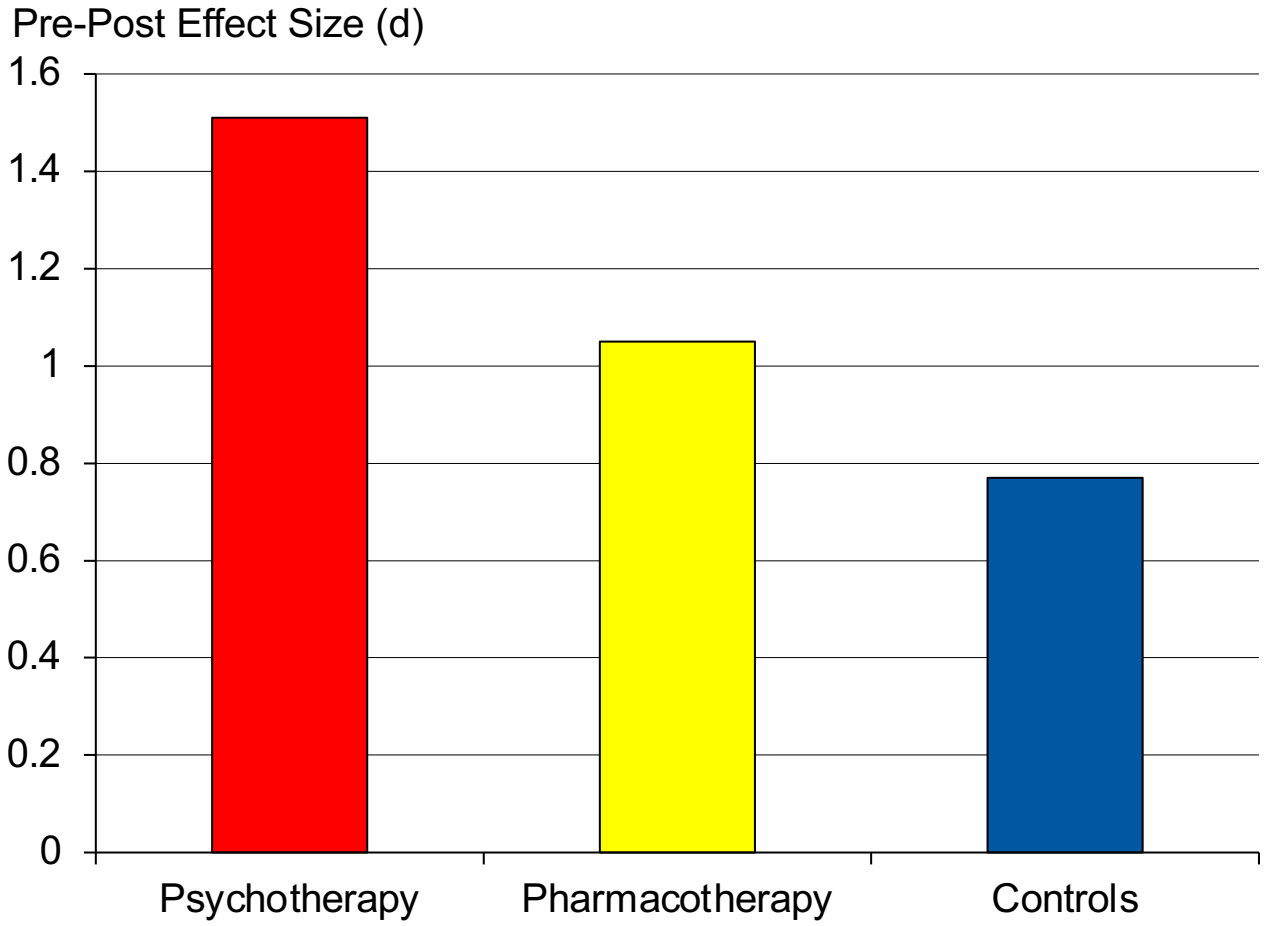
Counselors

- Evidence-based therapies, including exposure, cognitive restructuring, etc.

Psycho-therapists

Psychotherapy versus drug treatment for PTSD

van Etten & Taylor, 1998



Evidence based psychotherapies for PTSD

(in authors' alphabetical order)

– 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)

Evidence based psychotherapies for PTSD: The differences

- Duration and number of sessions
- Number and diversity of interventions
- In vivo exposure versus cognitive reappraisal of event
- Trauma processing: verbal report, written account, imaginal experiencing of event without verbalization
- Coping skills: introduction to treatment versus along the way versus no explicit attention to skills strengthening
- Integration of traumatic memories with other positive life events, creating an autobiography of the life span, versus exclusive focus on a single traumatic event

Evidence based psychotherapies for PTSD: The commonalities

- Psychoeducation
- Teaching emotion regulation and coping skills
- Imaginal exposure
- Changing cognitions (cognitive processing/restructuring)
- Targeting emotions:
  fear, shame, guilt, anger, grief, sadness, moral injury
- Reorganizing memory processes, creating a consistent trauma narrative

Psychoeducation

- Provides trauma survivors and their loved ones with information on the nature and course of posttraumatic stress reactions
- Identifies and helps with ways to cope with trauma reminders
- Discusses ways to manage distress
- Aims at facilitating therapeutic interventions, optimizing patient cooperation, and preventing relapse

Emotion regulation and coping strategies

- Are usually taught and trained in the beginning of treatment
- Improve patients' capacity to self-soothe and tolerate distress
- Help identifying, recognizing and accepting the presence of conflicting or opposing emotions
- Take center stage in the first part of Cloitre's "Skills Training in Affective and Interpersonal Regulation (STAIR) Narrative Therapy"

Imaginal exposure

- Some form of exposure to the patients' memory of their traumatic experiences can be found in virtually all trauma-focused psychotherapies
- Emphasized most strongly in Prolonged Exposure Therapy: imaginal exposure & in vivo exposure
- EMDR: Horizontal, saccadic eye movements while focusing on trauma
- Cognitive Therapy: Hot spots
- Cognitive Processing Therapy: Written account
- Brief Eclectic Psychotherapy for PTSD: Catharsis

Changing cognitions

- Cognitive Therapy: Identification and working on hot spots, Socratic dialogue, changing dysfunctional attributions and negative interpretations, behavioral experiments
- CPT: Socratic dialogue, cognitive restructuring
- PE, EMDR, BEPP: Part of the integration (or reevaluation) phase
- NET: Part of meaning making

Targeting emotions

- Emotions are targeted in all psychotherapies
- Some predominantly tackle the patients' trauma or fear network (NET, PE)
- Others focus more on guilt and shame (CPT), anger (STAIR), or grief and sadness (BEPP)
- "Moral injury" is increasingly recognized as a relevant issue that needs to be addressed in psychotherapy with combat veterans, tortured refugees, and other populations that survived complex traumatic exposure

Reorganizing memory processes

- PTSD can be understood as a memory disorder
- Chris Brewin's dual representation theory distinguishes between "sensation-near" and "contextualized" representations, previously referred to as the situationally accessible memory (SAM) and verbally accessible memory (VAM) systems
- NET: Transforming "hot" into "cold" memories
- Reorganization of memory functions and the creation of a coherent trauma narrative appear to be central goals of all trauma-focused treatments.

The “three core elements” in treating PTSD

Marylène Cloitre	Anke Ehlers	Thomas Elbert	Edna Foa	Berthold Gersons	Patricia Resick	Francine Shapiro
				Trustful therapeutic relationship	Nonspecific effects	
						Stabilization
Psycho-education					Psycho-education	
Emotion regulation					Emotion regulation	Skills training
		Exposure	• Exposure • Emotional engagement	Exposure		
Meaning making	• Meaning making • Discrimination	Meaning making	Reducing negative cognitions	Learning that life is dangerous		
	Memory changes					Processing memories
		Mobilizing resources				

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		Mobilizing resources				

EUROPEAN JOURNAL OF PSYCHOTRAUMATOLOGY

co action PUBLISHING

INVITED REVIEW ARTICLE

Psychotherapies for PTSD: what do they have in common?

Ulrich Schnyder[1]*, Anke Ehlers[2], Thomas Elbert[3], Edna B. Foa[4], Berthold P. R. Gersons[5], Patricia A. Resick[6], Francine Shapiro[7] and Marylène Cloitre[8,9]

European Journal of Psychotraumatology 2015, 6: 28186 - http://dx.doi.org/10.3402/ejpt.v6.28186

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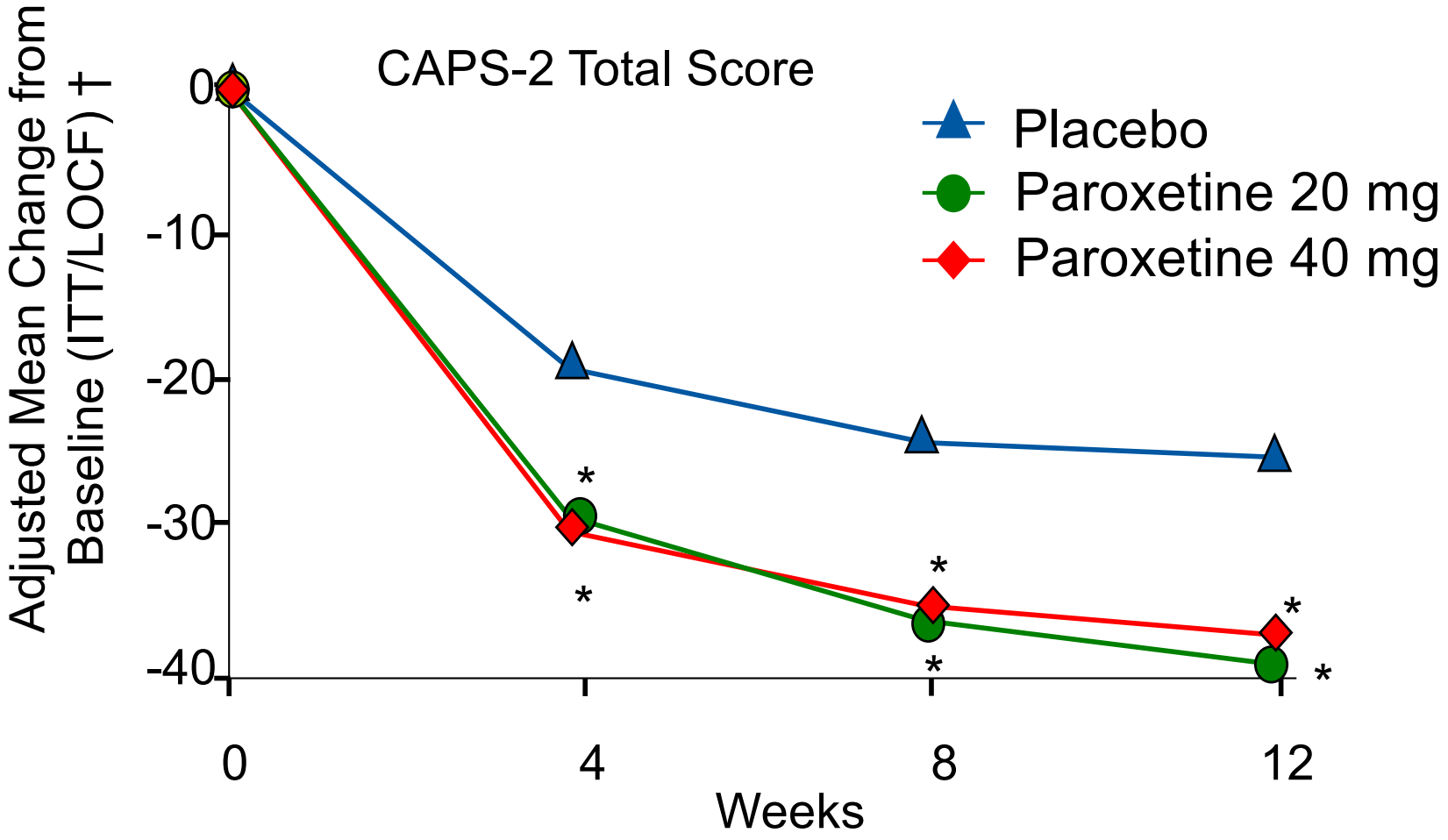
Psychopharmacotherapy for PTSD

- SSRIs/SNRIs:
  - First choice for PTSD!
  - Evidence for efficacy in not only (co-morbid) depressive, but also PTSD-specific symptoms
  - FDA approval: Paroxetin und Sertralin
  - Also effective: Venlafaxin (cave hypertension!)

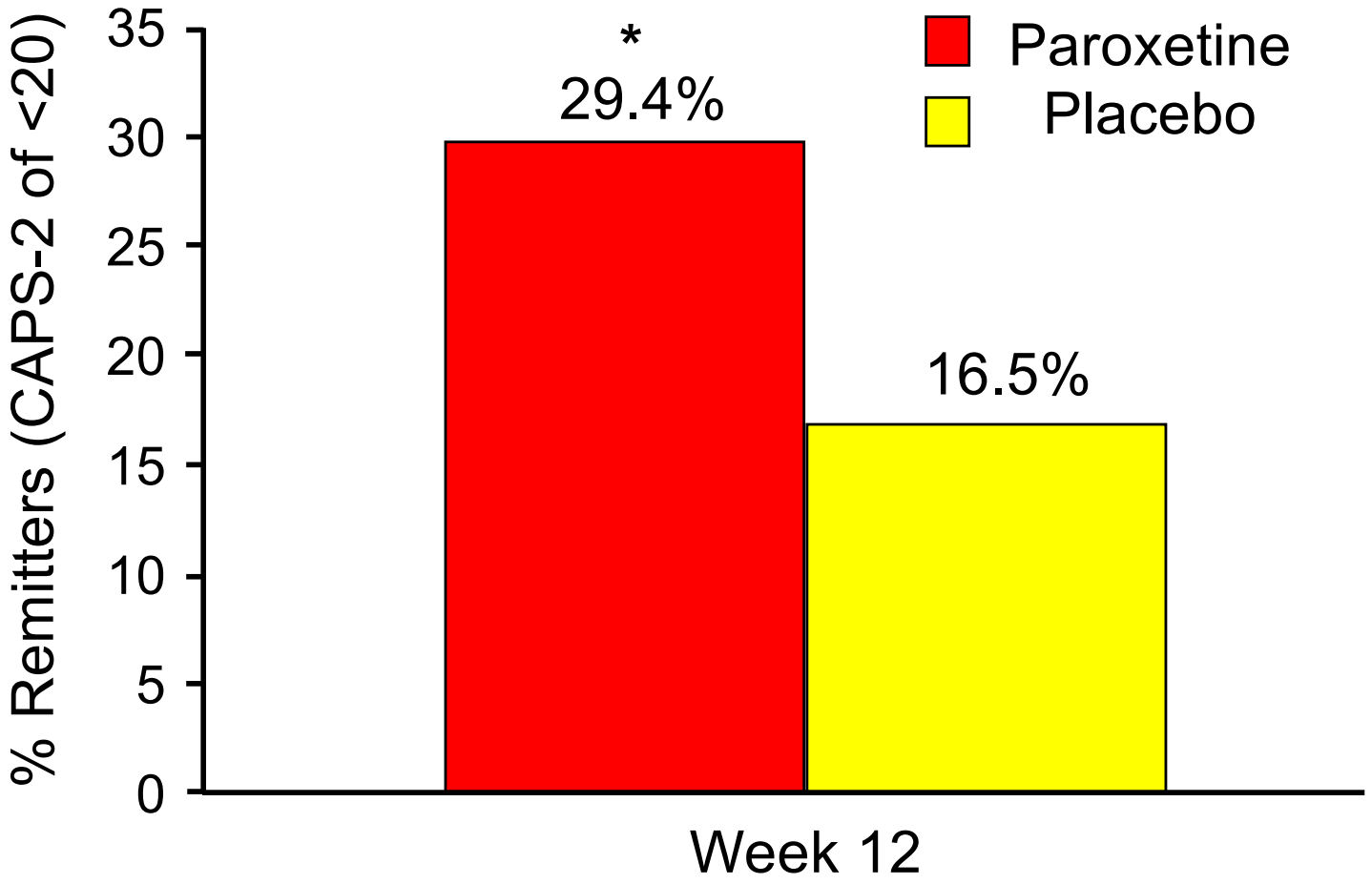
- Classic (e.g., tricyclic) antidepressants:
  - If SSRIs/SNRIs turn out to be insufficiently effective
  - In patients with marked sleep disturbance, e.g., Amitriptylin, Mianserin

Paroxetine for PTSD



*p<0.001; †Adjusted for center and covariates; GlaxoSmithKline 2000 - Study 651 (Data on file)

Paroxetine versus Placebo: PTSD remission analysis



*ITT/LOCF data set; Odds ratio = 2.29; *p=0.008; Tucker P et al. J Clin Psychiatry. 2001; 62: 860-868;
Dose = 27.6 + 6.72 mg/day; N=323

Psychopharmacotherapy for PTSD

- Benzodiazepines:
  - Most frequently prescribed medication for PTSD in GP's practice!
  - Effective in reducing arousal symptoms
  - Use temporarily for sleep disturbance
  - Caveat: dependency, cognitive impairment!
- Neuroleptics:
  - No evidence for PTSD with no comorbidity
  - Evidence for PTSD with comorbid psychotic symptoms

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Future Directions

- Psychedelics
- „Mini-interventions“
- 3MDR
- Acupuncture
- Somatic Experiencing
- Resilience training

nature medicine

ARTICLES

https://doi.org/10.1038/s41591-021-01336-3

Check for updates

OPEN

MDMA-assisted therapy for severe PTSD: a randomized, double-blind, placebo-controlled phase 3 study

Jennifer M. Mitchell[1,2]✉, Michael Bogenschutz[3], Alia Lilienstein[4], Charlotte Harrison[5], Sarah Kleiman[6], Kelly Parker-Guilbert[7], Marcela Ot'alora G.[8,9], Wael Garas[8], Casey Paleos[10], Ingmar Gorman[11], Christopher Nicholas[12], Michael Mithoefer[5,9,13], Shannon Carlin[5,9], Bruce Poulter[8,9], Ann Mithoefer[9], Sylvestre Quevedo[2,14], Gregory Wells[14], Sukhpreet S. Klaire[15], Bessel van der Kolk[16], Keren Tzarfaty[9], Revital Amiaz[17], Ray Worthy[18], Scott Shannon[19], Joshua D. Woolley[2], Cole Marta[20], Yevgeniy Gelfand[21], Emma Hapke[22], Simon Amar[23], Yair Wallach[24], Randall Brown[11], Scott Hamilton[25], Julie B. Wang[5], Allison Coker[1,5], Rebecca Matthews[5], Alberdina de Boer[5], Berra Yazar-Klosinski[4], Amy Emerson[5] and Rick Doblin[4]

Post-traumatic stress disorder (PTSD) presents a major public health problem for which currently available treatments are modestly effective. We report the findings of a randomized, double-blind, placebo-controlled, multi-site phase 3 clinical trial (NCT03537014) to test the efficacy and safety of 3,4-methylenedioxymethamphetamine (MDMA)-assisted therapy for the treatment of patients with severe PTSD, including those with common comorbidities such as dissociation, depression, a history of alcohol and substance use disorders, and childhood trauma. After psychiatric medication washout, participants ($n = 90$) were randomized 1:1 to receive manualized therapy with MDMA or with placebo, combined with three preparatory and nine integrative therapy sessions. PTSD symptoms, measured with the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5, the primary endpoint), and functional impairment, measured with the Sheehan Disability Scale (SDS, the secondary endpoint) were assessed at baseline and at 2 months after the last experimental session. Adverse events and suicidality were tracked throughout the study. MDMA was found to induce significant and robust attenuation in CAPS-5 score compared with placebo ($P < 0.0001$, $d = 0.91$) and to significantly decrease the SDS total score ($P = 0.0116$, $d = 0.43$). The mean change in CAPS-5 scores in participants completing treatment was −24.4 (s.d. 11.6) in the MDMA group and −13.9 (s.d. 11.5) in the placebo group. MDMA did not induce adverse events of abuse potential, suicidality or QT prolongation. These data indicate that, compared with manualized therapy with inactive placebo, MDMA-assisted therapy is highly efficacious in individuals with severe PTSD, and treatment is safe and well-tolerated, even in those with comorbidities. We conclude that MDMA-assisted therapy represents a potential breakthrough treatment that merits expedited clinical evaluation.

nature medicine

Article

https://doi.org/10.1038/s41591-023-02565-4

MDMA-assisted therapy for moderate to severe PTSD: a randomized, placebo-controlled phase 3 trial

Received: 2 June 2023

Accepted: 24 August 2023

Published online: 14 September 2023

Check for updates

Jennifer M. Mitchell[1,2,3] ✉, Marcela Ot'alora G.[4], Bessel van der Kolk[5], Scott Shannon[6], Michael Bogenschutz[7], Yevgeniy Gelfand[8], Casey Paleos[9], Christopher R. Nicholas[10], Sylvestre Quevedo[2,11], Brooke Balliett[12], Scott Hamilton[13], Michael Mithoefer[14], Sarah Kleiman[15], Kelly Parker-Guilbert[16], Keren Tzarfaty[17,18], Charlotte Harrison[13], Alberdina de Boer[19], Rick Doblin[20], Berra Yazar-Klosinski[13] & MAPP2 Study Collaborator Group*

Nature Medicine **volume 29**, pages 2473–2480 (September 2023)

Psychedelic Therapy – A New Paradigm of Care for Mental Health

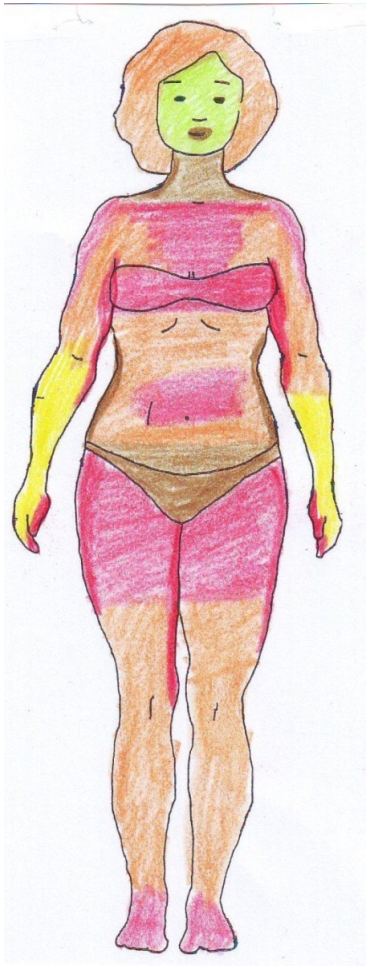
Yehuda R, Lehrner A (2023) Journal of the American Medical Association
Published online August 31, 2023. doi:10.1001/jama.2023.12900

"Psychedelic therapies address the cause of symptoms rather than merely suppressing them."

The Feeling of Being Contaminated (FBC)

Jung K, Steil R (2013) Psychother Psychosom 82: 213-220

- "Mini-Intervention" for adult patients with PTSD following child sexual abuse, plus FBC
- "Cognitive Restructuring & Imagery Modification" (CRIM)
- Two (!) treatment sessions (90 plus 50 minutes):
  - Joint internet search / calculation how often the patient's dermal cells in trauma-related body regions have been rebuilt since her last contact with the perpetrator
  - Individual imagination of cell regeneration
  - Cognitive restructuring
  - Exposure in sensu mit FBC, plus imagination
  - Booster session one week later



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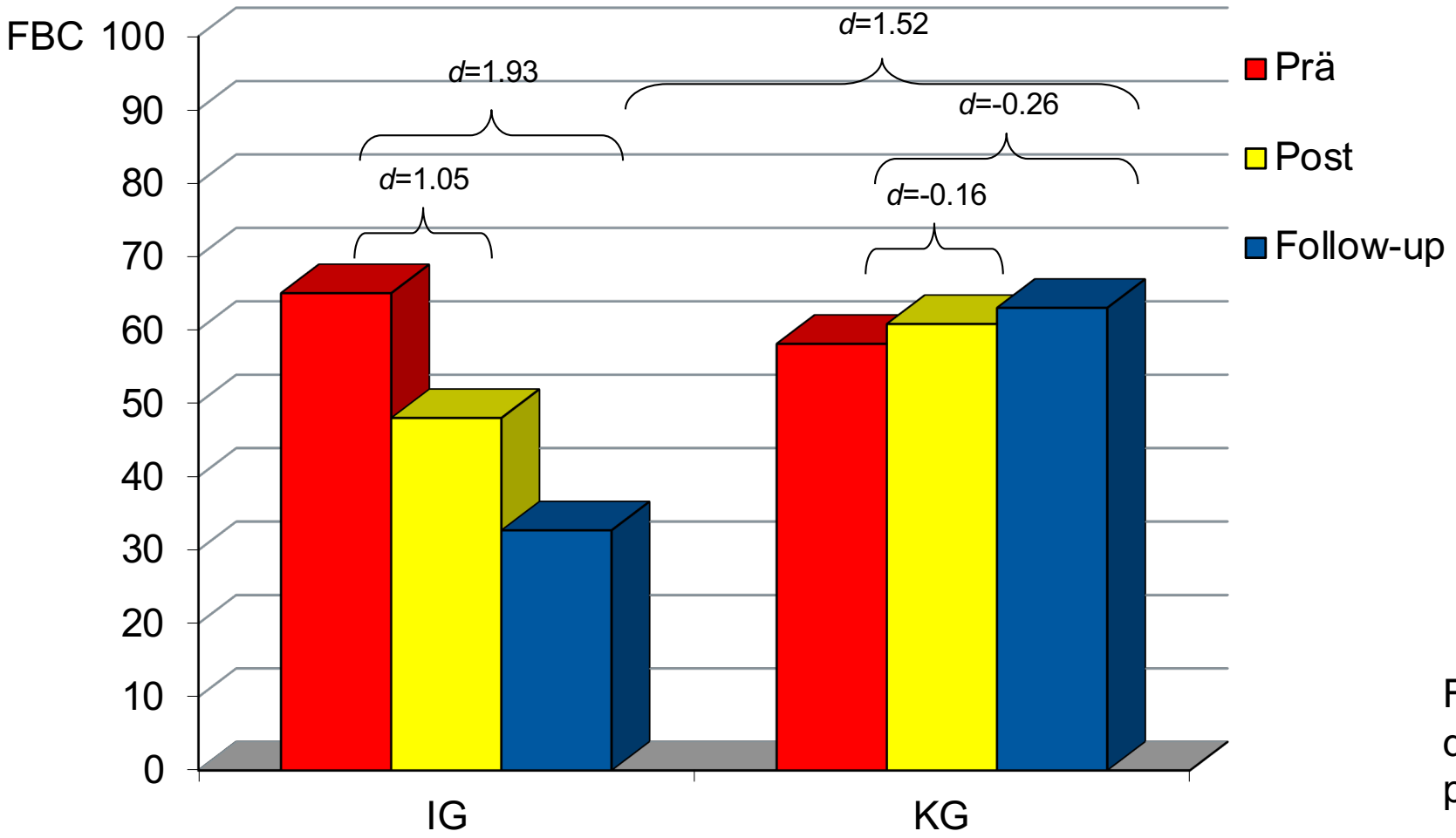
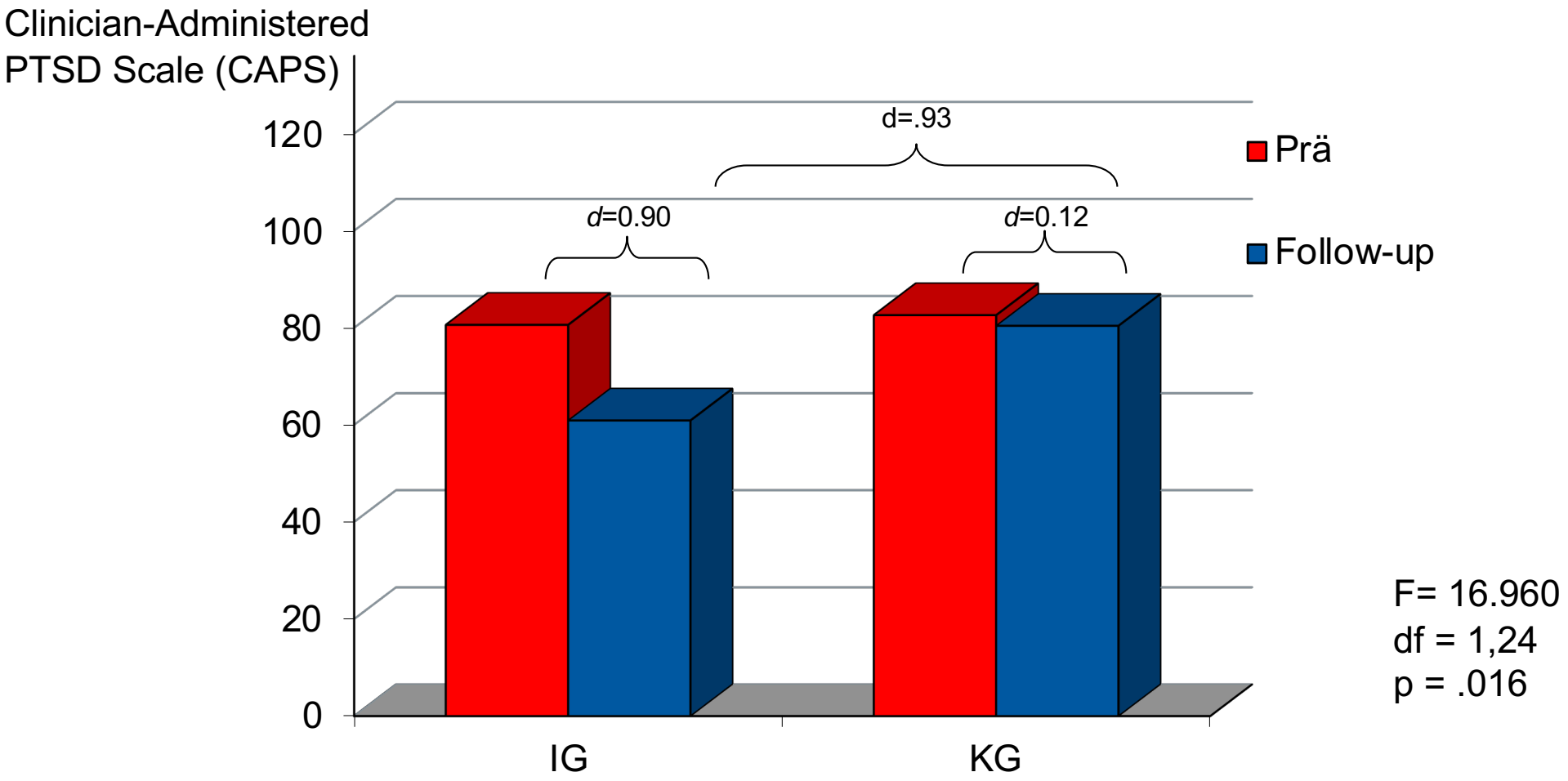


F= 15.778
df = 2, 48
p = .000

The Feeling of Being Contaminated (FBC)

Jung K, Steil R (2013) Psychother Psychosom 82: 213-220



Multi-modal Motion-assisted Memory Desensitization and Reconsolidation therapy (3MDR)

Van Gelderen et al. (2020) Psychotherapy and Psychosomatics
Bisson et al. (2020) Acta Psychiatrica Scandinavica
van Deursen et al. (2021) European Journal of Psychotraumatology

- Exposure while walking on a treadmill
- Immersive virtual reality environment
- Individualized images related to traumatic experiences
- Music both reminiscent of past trauma and supportive of reconnecting with present

EUROPEAN JOURNAL OF PSYCHOTRAUMATOLOGY
2020, VOL. 11, 1795361
https://doi.org/10.1080/20008198.2020.1795361

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

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SHORT COMMUNICATION

Non-pharmacological and non-psychological approaches to the treatment of PTSD: results of a systematic review and meta-analyses

Jonathan I. Bisson [a], Marieke van Gelderen [b,c], Neil P. Roberts [a,d] and Catrin Lewis [a]

[a]National Centre for Mental Health (NCMH), Division of Psychological Medicine and Clinical Neurosciences, Cardiff University School of Medicine, Cardiff, UK; [b]Department of Psychology, ARQ Centrum 45, Diemen, Netherlands; [c]Department of Psychiatry, Leiden University Medical Center, Leiden, Netherlands; [d]Psychology and Psychological Therapies, Cardiff & Vale University Health Board, Cardiff, UK

ABSTRACT

Background: Non-pharmacological and non-psychological approaches to the treatment of post-traumatic stress disorder (PTSD) have often been excluded from systematic reviews and meta-analyses. Consequently, we know little regarding their efficacy.

Objective: To determine the effect sizes of non-pharmacological and non-psychological treatment approaches for PTSD.

Method: We undertook a systematic review and meta-analyses following Cochrane Collaboration guidelines. A pre-determined definition of clinical importance was applied to the results and the quality of evidence was appraised using the Grading of Recommendations, Assessment, Development and Evaluations (GRADE) approach.

Results: 30 randomised controlled trials (RCTs) of a range of heterogeneous non-psychological and non-pharmacological interventions (28 in adults, two in children and adolescents) were included. There was emerging evidence for six different approaches (acupuncture, neurofeedback, saikokeishikankyoto (a herbal preparation), somatic experiencing, transcranial magnetic stimulation, and yoga).

Conclusions: Given the level of evidence available, it would be premature to offer non-pharmacological and non-psychological interventions routinely, but those with evidence of efficacy provide alternatives for people who do not respond to, do not tolerate or do not want more conventional evidence-based interventions. This review should stimulate further research in this area.

ARTICLE HISTORY
Received 21 April 2020
Revised 18 June 2020
Accepted 2 July 2020

KEYWORDS
Non-pharmacological; non-psychological; systematic review; PTSD treatment

PALABRAS CLAVE
No farmacológica; No psicológica; Revisión sistemática; Tratamiento para el TEPT

关键词
非药物; 非心理; 系统综述; PTSD治疗

HIGHLIGHTS

- There is emerging evidence of effect for

From: **Acupuncture for Combat-Related Posttraumatic Stress Disorder: A Randomized Clinical Trial**

JAMA Psychiatry. Published online February 21, 2024. doi:10.1001/jamapsychiatry.2023.5651

JAMA Psychiatry

RCT: Acupuncture for Combat-Related Posttraumatic Stress Disorder

POPULATION

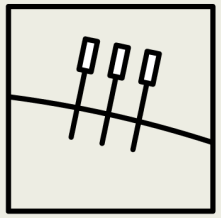
85 Men, 8 Women

Veterans with moderate to severe posttraumatic stress disorder (PTSD), acquired during combat deployment and without known confounds

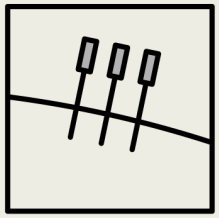
Mean age, 39.2 y (range, 18-55)

INTERVENTION

93 Individuals randomized, **92** Individuals analyzed



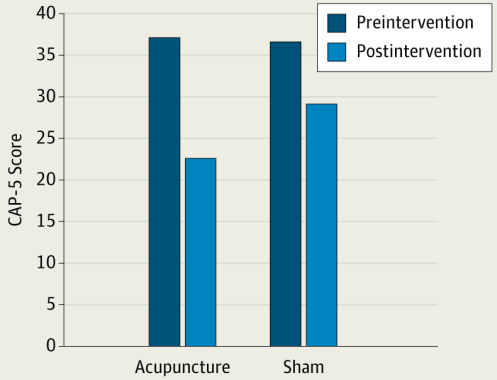
47 Verum acupuncture
Twice-weekly implementation of an alternating supine/prone protocol for 24 sessions



45 Insertive sham puncture at nonacupoints
Twice-weekly superficial insertion at nonacupoints for 24 sessions alternating supine/prone

FINDINGS

There was a significant and clinically meaningful between-group effect size from preintervention to postintervention favoring verum acupuncture over sham (mean [SD] Δ = 7.1 [11.8], $t = 2.87$, $d = 0.63$, $P < .001$)



Mean (SD) change from preintervention to postintervention, 37.1 (6.7) to 22.6 (14.1), $d = 1.17$
Mean (SD) change from preintervention to postintervention, 36.6 (5.8) to 29.1 (11.8), $d = 0.67$

SETTINGS / LOCATIONS

VA

1 Medical center in California

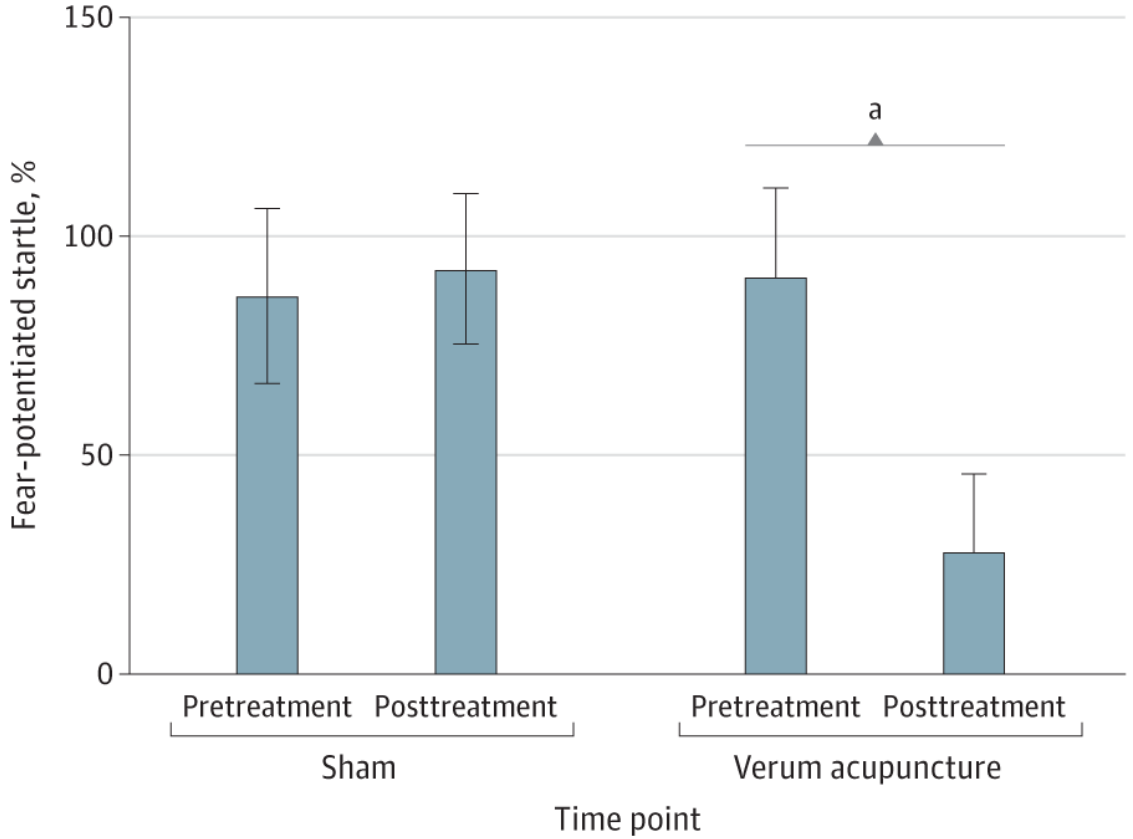
PRIMARY OUTCOME

Preintervention to postintervention between-group change in PTSD symptom severity assessed by the Clinician-Administered PTSD Scale (CAPS-5). Score range 0-80 with entry criteria ≥26

Hollifield M, Hsiao AF, Smith T, et al. Acupuncture for combat-related posttraumatic stress disorder: a randomized clinical trial. *JAMA Psychiatry*. Published online February 21, 2024. doi:10.1001/jamapsychiatry.2023.5651

From: **Acupuncture for Combat-Related Posttraumatic Stress Disorder: A Randomized Clinical Trial**

JAMA Psychiatry. Published online February 21, 2024. doi:10.1001/jamapsychiatry.2023.5651



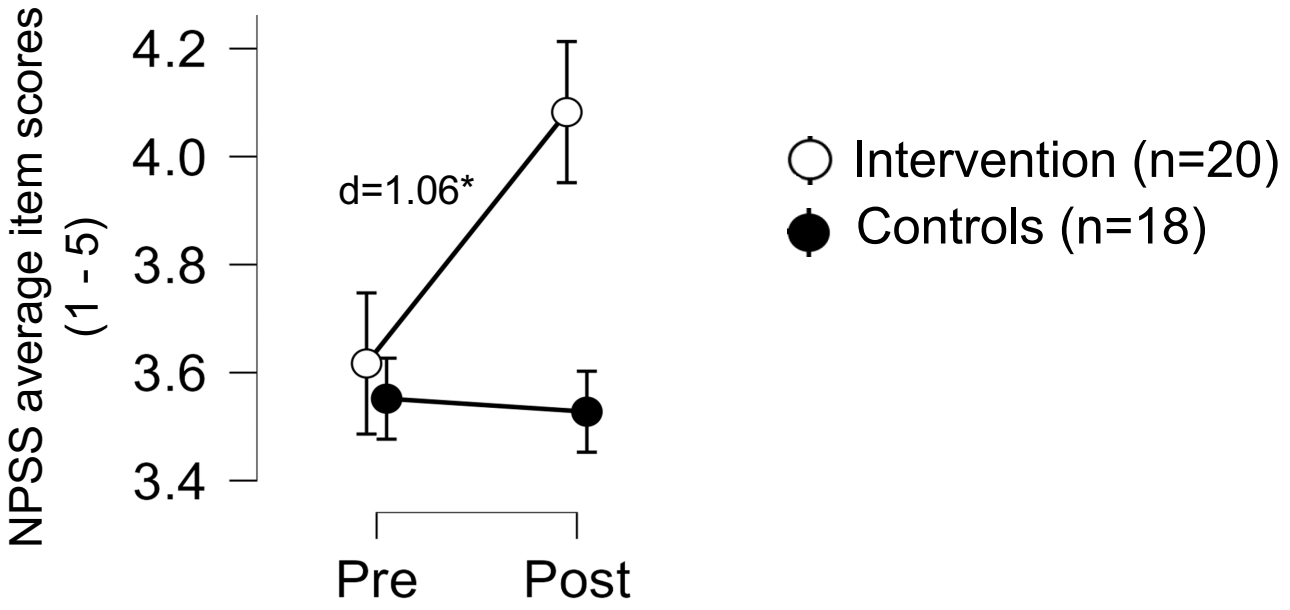
Fear-Potentiated Startle During Extinction Pretreatment and Posttreatment

a: Pretreatment to posttreatment within-subject effect in verum acupuncture group: $F_{53} = 7.47$; partial η^2, 0.13; $P = .009$. Between-group effect posttreatment: $F_{53} = 7.42$; η^2, 0.13; $P = .009$.

Somatic Experiencing

Pilot study, Monique Pfaltz, Mid Sweden University

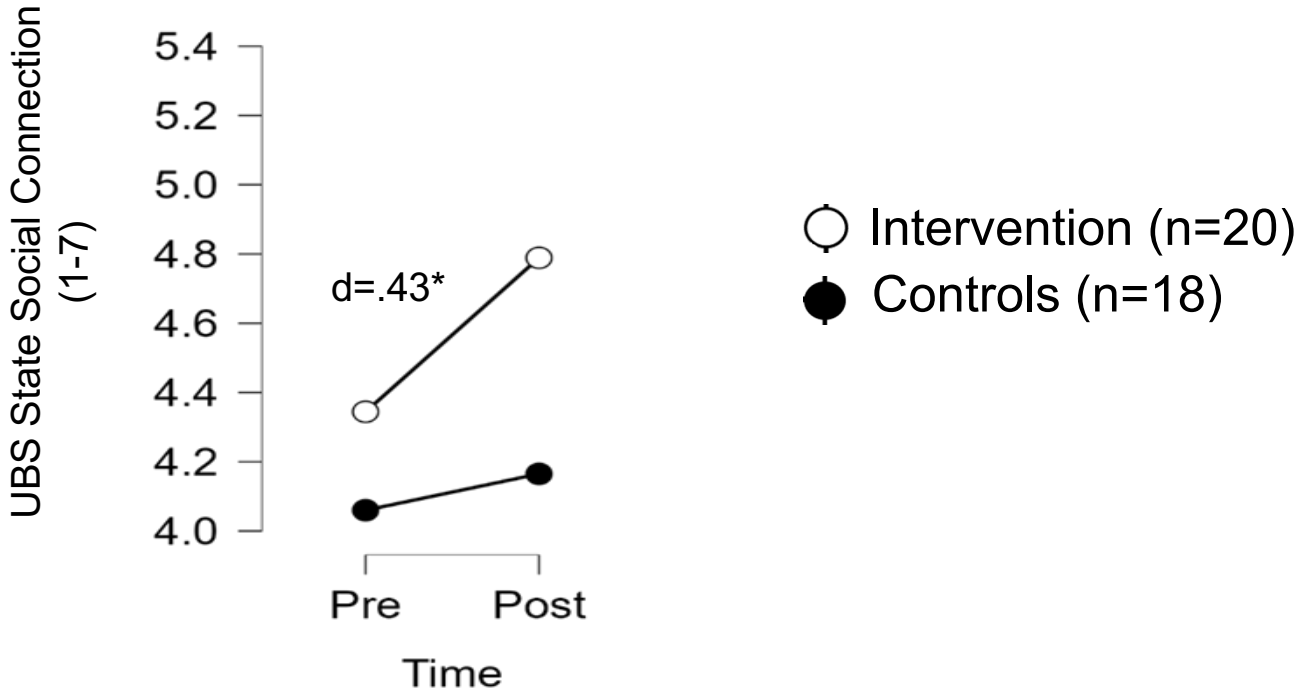
Changes in psychological safety from pre to post SE session



Somatic Experiencing

Pilot study, Monique Pfaltz, Mid Sweden University

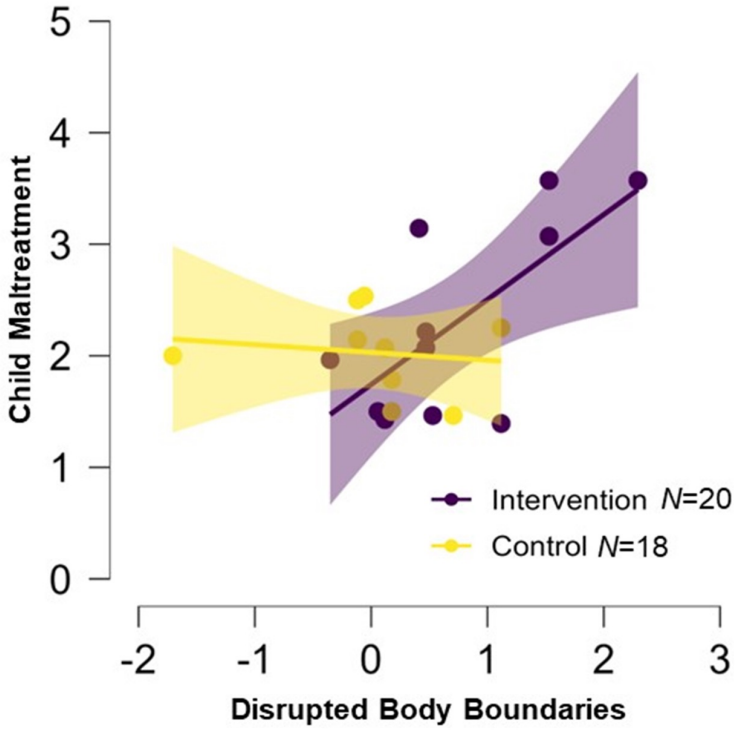
Changes in social connectedness from pre to post SE session



Somatic Experiencing

Pilot study, Monique Pfaltz, Mid Sweden University

Effect of child maltreatment on decrease in disrupted body boundaries

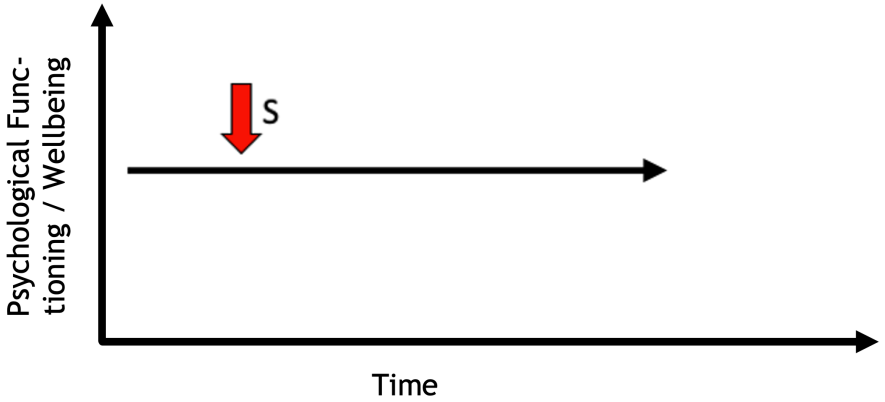


(change scores pre vs post session)

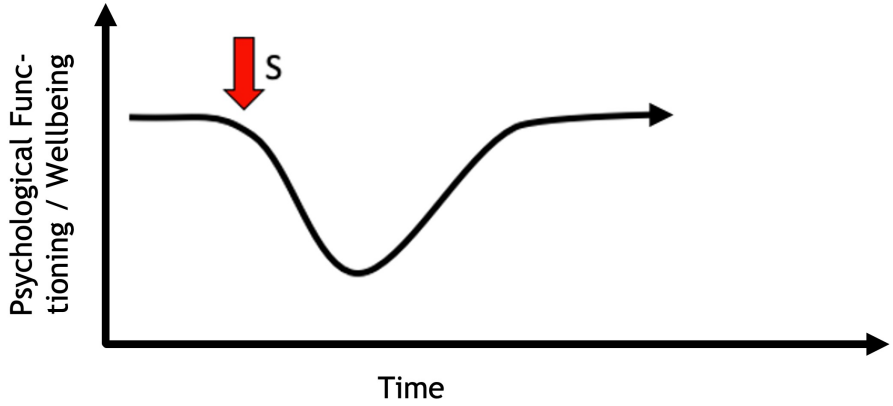
What is resilience?

- Resilience may be seen a personality trait that moderates the negative effects of stress, and promotes adaptation
- Resilient individuals have been described as possessing self-esteem, self-confidence, curiosity, and control over the environment
- Resilient people have satisfactory interpersonal relationships and a repertoire of problem-solving skills
- Resilient people tend to show adaptive behavior in the areas of social functioning, morale and physical health

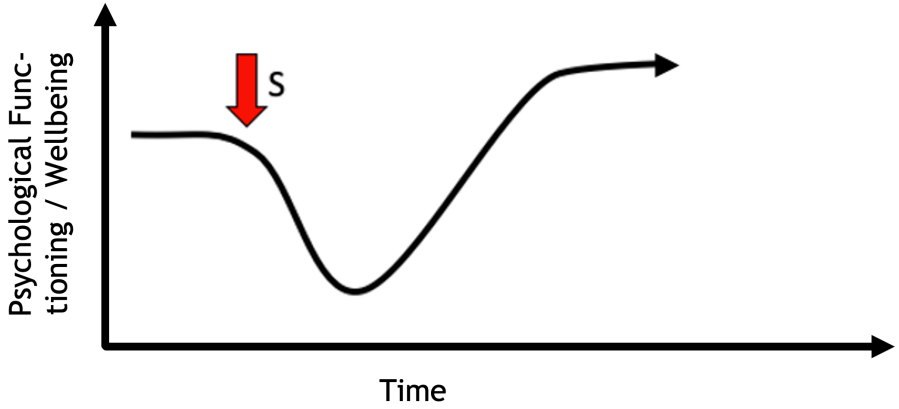
What is resilience?



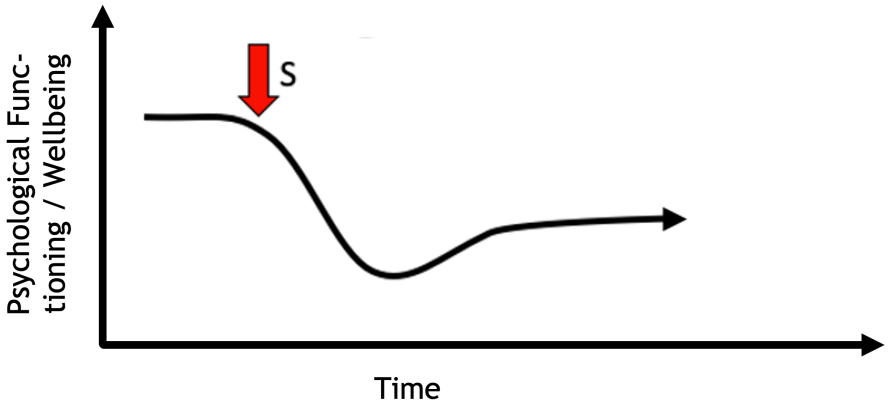
Resistance



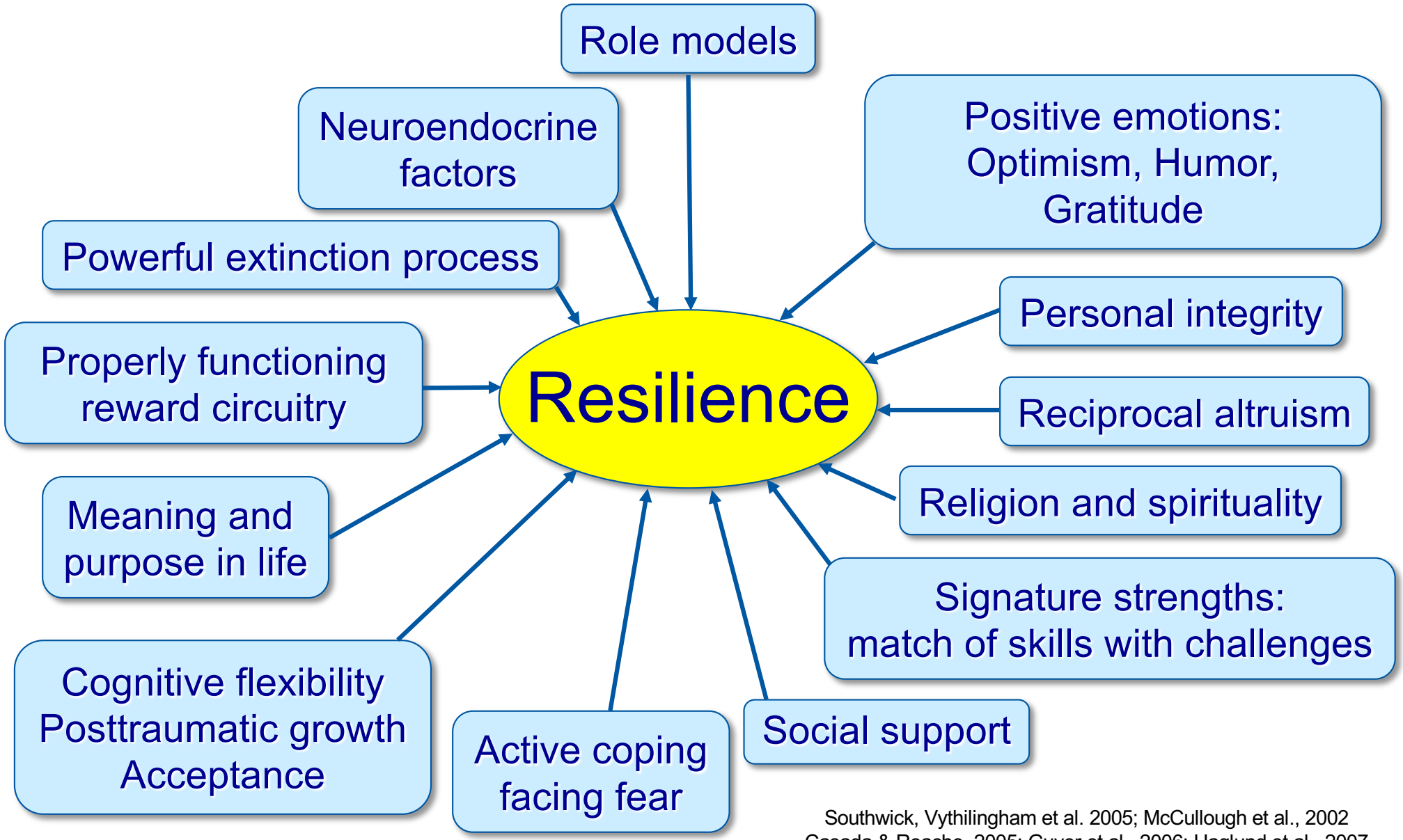
Resilience



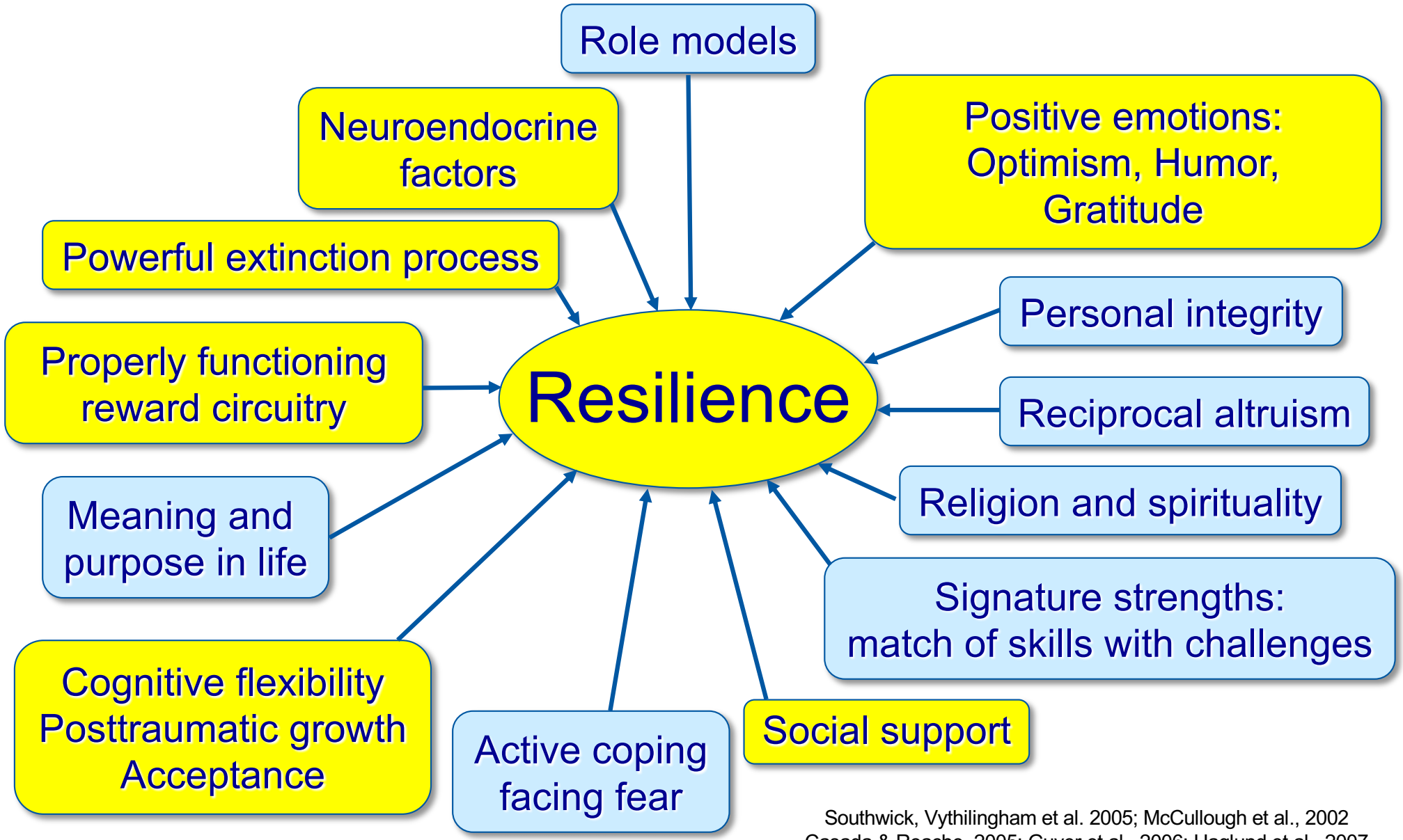
Posttraumatic Growth



Vulnerability



Southwick, Vythilingham et al. 2005; McCullough et al., 2002
Casada & Roache, 2005; Guyer et al., 2006; Haglund et al., 2007



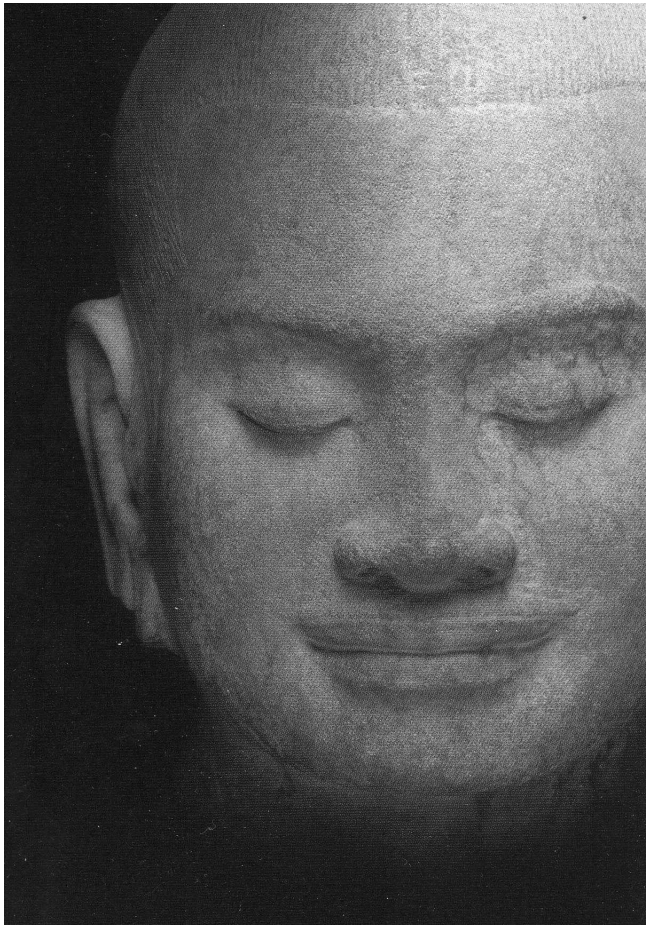
Southwick, Vythilingham et al. 2005; McCullough et al., 2002
Casada & Roache, 2005; Guyer et al., 2006; Haglund et al., 2007

Can resilience be trained?

- Stress Inoculation Training (Meichenbaum D, 1985)
- Learned Optimism Training (Seligman MEP, 1991)
- Hardiness Training (Maddi SR & Khoshaba DM, 2005)
- Psychoeducational Resilience Enhancement (Steinhardt MA & Dolbier C, 2008)
- Cognitive Conrol Training (Hertel PT & Matthews A, 2011)
- Taylored Cognitive-Behavioral Resilience Training (Zalta AK et al., 2016)
- Mindfulness Training (Goyal et al, 2014)
- Well-Being Therapy (Fava GA, 1999)

Mindfulness and Acceptance

- „Sati“: calm, non-judgmental awareness of the here and now
- 4 elements of mindfulness:
  - Mindfulness of one's body functions
  - Mindfulness of one's feelings
  - Mindfulness of content of consciousness
  - Mindfulness of consciousness itself
- MBCT: Good evidence for major depression, treatment resistent depression, and residual depressive symptoms



Jayavarman, Angkor
(12th Century)

Well-Being Therapy

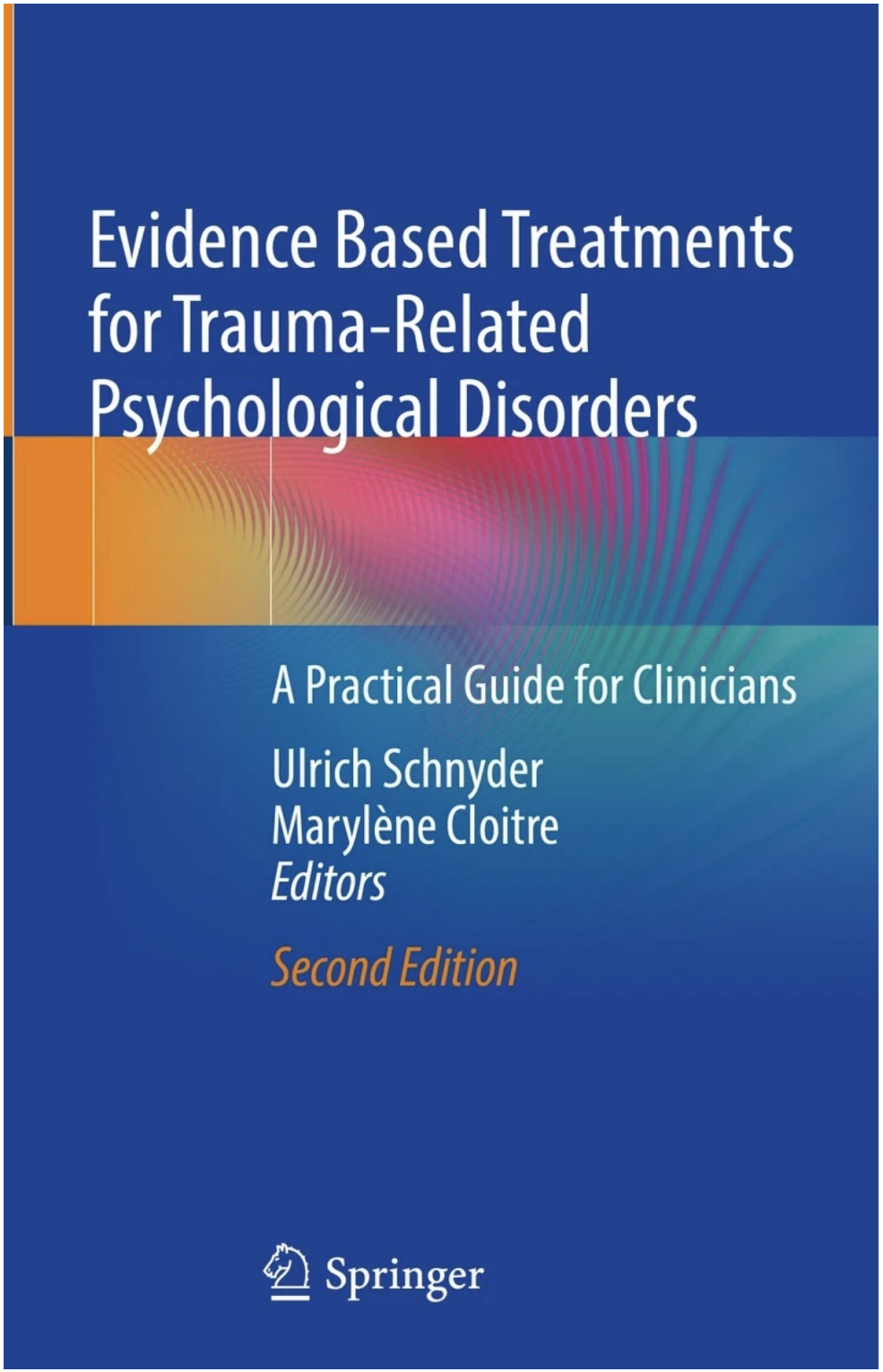
Fava GA (1999) Psychother Psychosom 68: 171-179

- Manualized, short-term psychotherapy (8 sessions): structured, directive, problem oriented, psychoeducational
- Based on Carol Ryff's multidimensional, cognitive model of "psychological well-being"
- Goal: improvements in the following six dimensions:
  - Environmental mastery
  - Personal growth
  - Purpose in life
  - Autonomy
  - Self-acceptance
  - Positive relations with others

Rosenbaum et al. 2015: Psychiatry Research

Conclusions

- The commonalities of empirically supported psychotherapies for PTSD outweigh their differences
- Psychoeducation, emotion regulation training, imaginal exposure, changing cognitions and targeting emotions aim at reorganizing memory functions and creating a coherent trauma narrative
- Psychedelics, Mini-interventions, 3MDR, Acupuncture, Somatic Experiencing
- Psychotherapy for PTSD should be complemented by interventions aimed at promoting resilience



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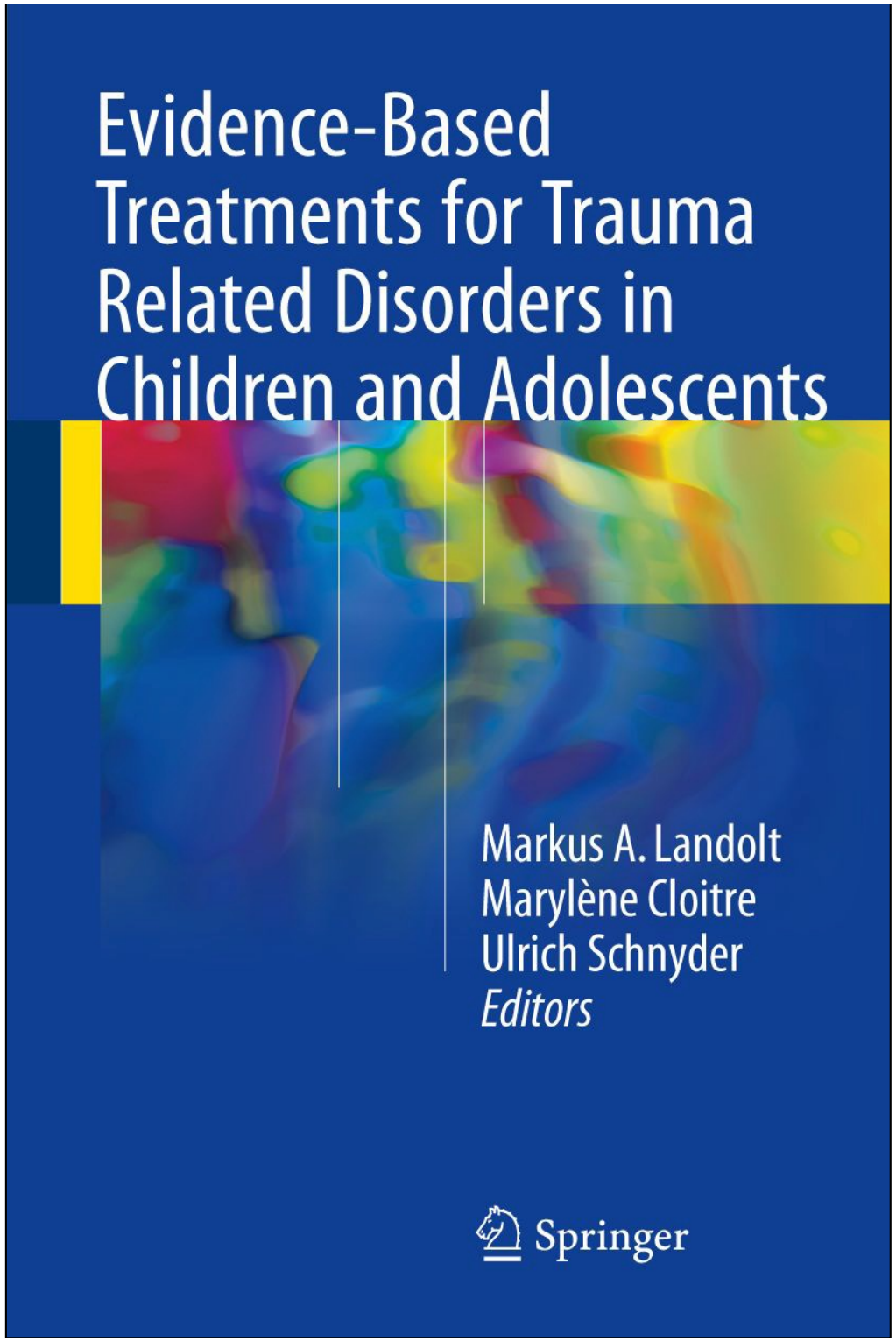

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Thank you for your attention!

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Pablo Picasso: Le Bouquet