Utrecht University

Clinical Psychology

Michaela Schok, PhD
Contact@drschok.nl

Systematic Review and Meta-Analysis on the Effectiveness of Acceptance and Commitment Therapy (ACT) for Posttraumatic Stress Symptoms

Michaela Schok, PhD (Utrecht University), Jonna Lind, Msc (ARQ National Psychotrauma Centre), Rebecca M. Kuiper, PhD (Utrecht University), Paul A. Boelen, PhD (Utrecht University and ARQ National Psychotrauma Centre) & Geert Smid, PhD (ARQ National Psychotrauma Centre and University of Humanistic Studies)

HIGHLIGHTS

- 33 studies were included in this systematic review and meta-analysis in which 1773 participants received ACT for posttraumatic stress symptoms.
- Results showed promising support for medium to large effects for applying ACT as an individual intervention to reduce posttraumatic stress symptoms.
- Further research should focus on understanding individual variation of processes of change in ACT associated with posttraumatic stress by using idionomic approaches in clinical research and practice.

Introduction

Aim of this systematic review and meta-analysis is to update the literature on the effectiveness of Acceptance and Commitment Therapy (ACT) for posttraumatic symptoms in adults (Rehman et al., 2025; Rowe-Johnson et al., 2024; Thomas, 2020).
In addition, to estimate the effect of ACT on symptom reduction for posttraumatic stress symptoms meta-analysis and evidence-synthesis were conducted (Kuiper & Clapper, 2025). We expected to find moderate to large effect sizes of ACT for reduction in posttraumatic stress symptoms (Rehman et al., 2025; Rowe-Johson et al., 2024).

Method

- A systematic literature search according to PRISMA guidelines (2020).
- Inclusion criteria were: 1) adults who participated in an ACT intervention as treatment for posttraumatic stress symptoms (18+), 2) pre-post treatment designs, 3) ACT intervention studies comparing with active and inactive control conditions (treatment as usual), and 4) randomized controlled trials.
- 749 abstracts were screened (of which 29 full text) by authors MS, PB and GS
- R was used with the 'metafor and restriktor' packages (R Core Team, 2019; G. Schwarzer, 2007; Viechtbauer, 2010).

Results

- 33 published studies were included published between 2014 and 2026 and mostly conducted in the USA (k=23).
- A total of 1773 individuals participated in all studies with an average mean age of 40.90 (*SD* = 8.95) ranging from 21.2 to 59.84 years old. Sample sizes varied from 8 to 331 participants per study.
- Most traumatic experiences were related to war, interpersonal trauma, childhood trauma, life threatening disease (veterans, active duty military personnel, victims of interpersonal trauma, or female refugees)
- Fourteen studies used a randomized controlled trial design and most studies used the PTSD Checklist for DSM-5 (PCL-5; Weathers et al., 2013) or civilian or military version.
- ACT was mostly applied in an individual format (k=17), followed by a group format (k=16), and one study applied a combination. Mean duration of ACT was 10.54 (*SD*=4.64) hours ranging from 1 to 30 hours.

Results (continued)

- An overall large effect size Hedges' *g* = −0.86 (95% CI: −1.01, −0.71; I^2= 69.22%) was found but heterogeneity was significant (see Figure 1).
- Based on visual inspection of funnel plot no indication of publication bias was detected.
- A subset of studies (k=16) without significant heterogeneity that applied ACT as an individual intervention found an overall large effect size Hedges' g = −0.75 (95% CI: −0.93, −0.57; I^2= 35.62%) .
- Evidence synthesis supported at least medium to large effect sizes of the included studies (Figure 2)

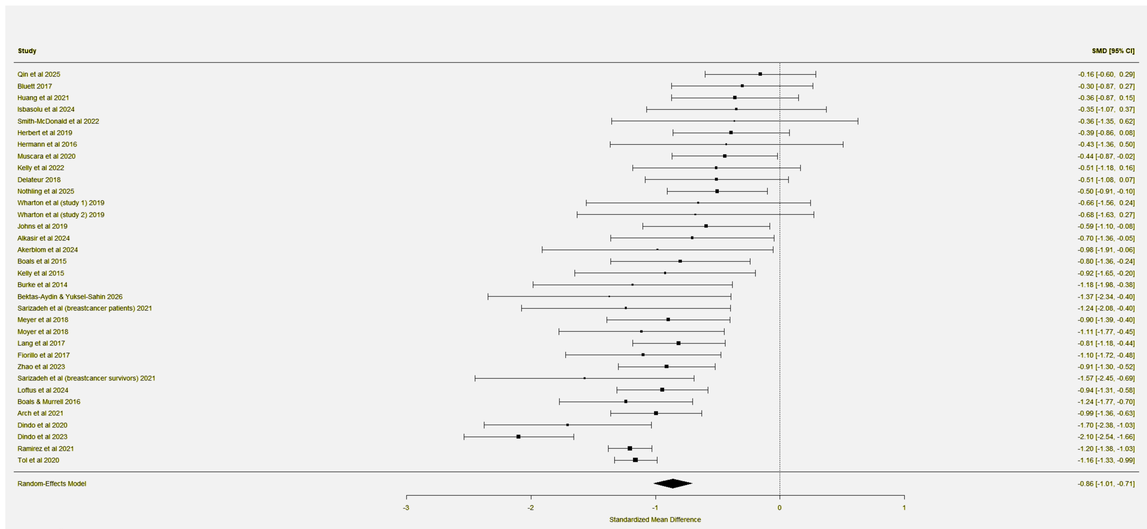

Figure 1
Forest plot of all included studies on effectiveness of ACT for posttraumatic stress symptoms (n=33)

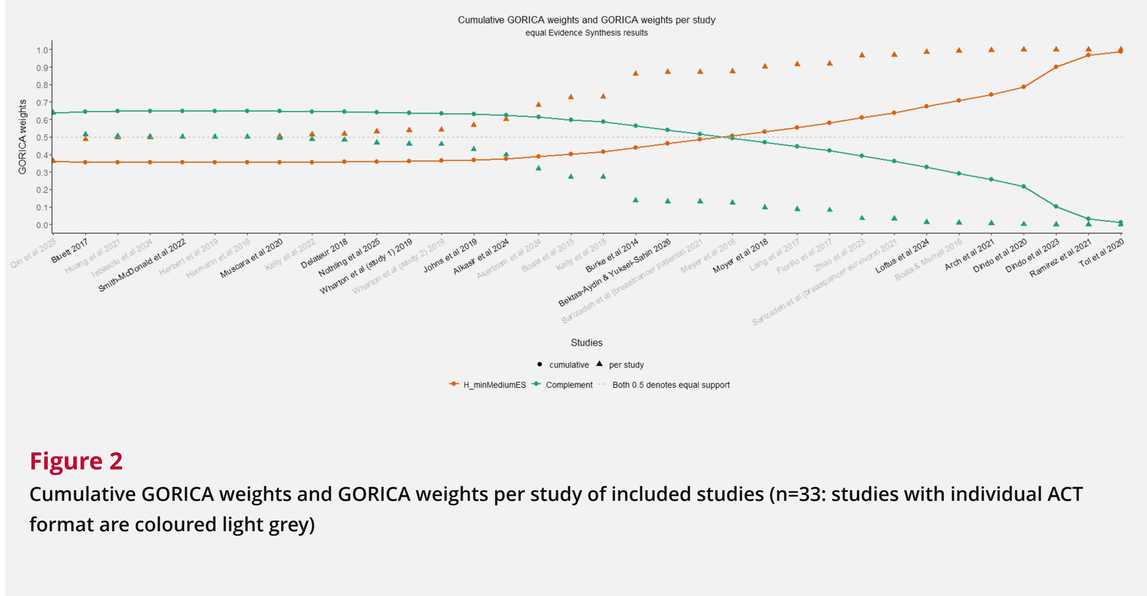

Figure 2
Cumulative GORICA weights and GORICA weights per study of included studies (n=33: studies with individual ACT format are coloured light grey)

Discussion

This systematic review and meta-analysis showed promising support for medium to large effects for applying ACT as an individual intervention to reduce posttraumatic stress symptoms. ACT based on an individual format showed less variation between studies. Further research should focus on understanding individual variation of processes of change in ACT associated with posttraumatic stress by using idionomic approaches in clinical research and practice (Gloster et al., 2024; Yee et al., 2026). This allows to go beyond the average perspective and understand which processes decrease posttraumatic stress symptoms.

References

Rehman, S., Ghazali, S. R., & Elklit, A. (2026). A Systematic and Meta-Analytical Review of Acceptance and Commitment Therapy for PTSD. *Journal of Loss and Trauma*, *31*(1), 90-119.

Rowe-Johnson, M. K., Browning, B., & Scott, B. (2025). Effects of acceptance and commitment therapy on trauma-related symptoms: A systematic review and meta-analysis. *Psychological Trauma: Theory, Research, Practice, and Policy*, *17*(3), 668.

Yee, H. F., Fraser, M. I., Ciarrochi, J., Sahdra, B., Yap, K., Hayes, S. C., Hernandez, C. & Gloster, A. T. (2026). Beyond the average: Idionomic evidence of individual-specific variability in the psychological flexibility-mood relationship. *Journal of Contextual Behavioral Science*, 100993