# The Meta-Analytic Evidence of Acceptance and Commitment Therapy: **A Review**

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**BACKGROUND**: Over 300 clinical trials have examined Acceptance and Commitment Therapy (ACT) to date. This has led to numerous meta-analysis and reviews across various disorders and in comparisons to numerous treatments. With this critical mass of studies, it is possible to reflect upon and critically examine the fundus of knowledge in order to guide further steps in ACT research.

**AIM:** This poster aims to summarize and review the results of published meta-analysis in ACT.

# **METHOD** LITERATURE SEARCH Literature research: 48 results Search Terms: Acceptance and Commitment Therapy, Meta-Analysis ACBS Website Excluded: 22 n = 8 (no ACT)n = 8 (methodology) Screening Process for meta-analysis that reported controlled effect sizes about ACT **n** = 1 (unclear) n = 3 (response to an article) n = 2 (language: not in English) Included for rating: 26 Excluded: 14 Expert Rating for: Treatment as Usual (TAU), n = 12 (no meta-analytic Waitlist (WL), Active and Cognitive Behavior information specifically Therapy (CBT) about ACT) n = 2 (no comparison group) Meta-Analysis Included on poster = 12

#### **EFFECT SIZE PROCESSING**

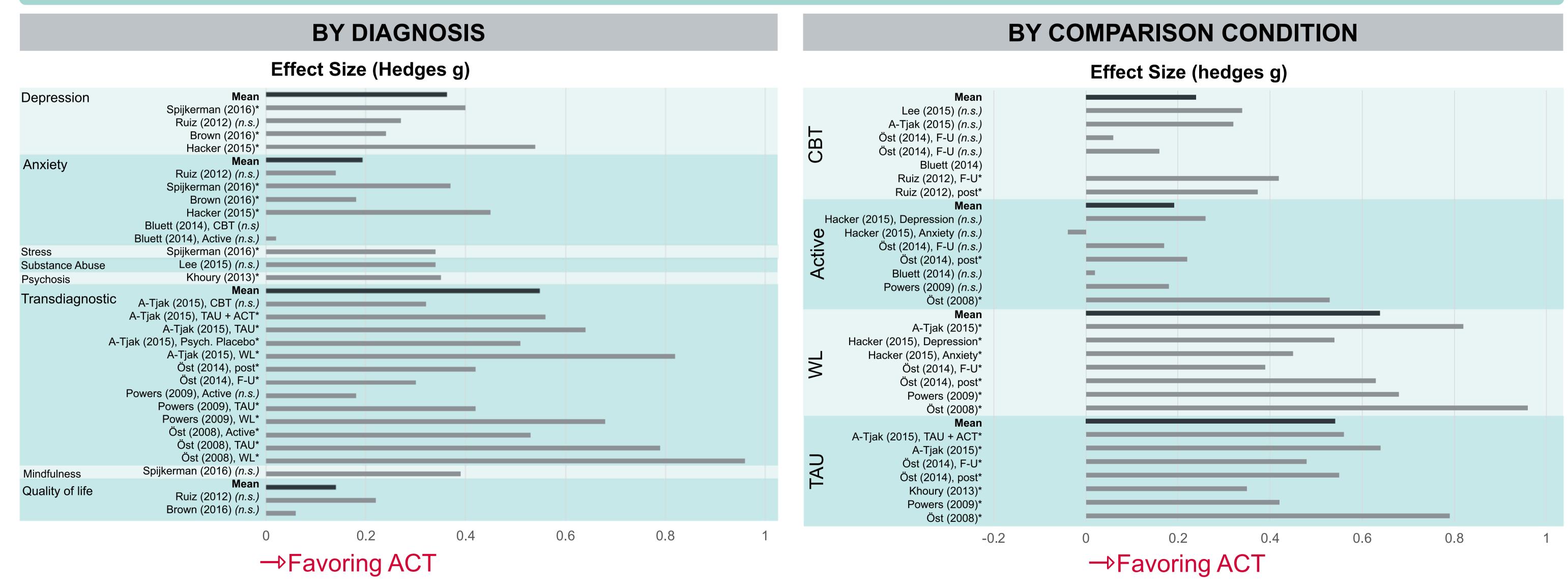
Transformation: Effect sizes that were given in Cohen's d were transformed into Hedge's g using the 'esc' package in R (Lüdecke, 2018).

**Mean calculation:** The mean values in the individual categories represent the average of the effect sizes of this category.

Double Dipping: Some Studies were used in more than one meta-analysis. Therefore, the mean value should be interpreted with caution.

**Grouping:** The grouping of effect sizes was made according to the expert rating about comparison condition. When authors additionally reported effect sizes for single diagnosis, they are displayed in the left graph. Some numbers differ in the two graphs due to the way authors have included studies in their calculations.

## **RESULTS**



\* Effect size was significantly different from zero (n.s.) Effect size was not significantly different from zero

## CONCLUSION

This poster summarizes the meta-analytic research conducted in the field of ACT and emphasizes that ACT interventions have a positive impact on patients symptomatology. Overall, the effect sizes comparing ACT to WL or TAU are stronger than the ones comparing ACT to another active treatment or CBT. Especially in the last two categories more studies and meta-analysis are needed, as many effect sizes are not significant.

Grouping the effect sizes by diagnosis revealed that more meta-analyses have been conducted on diagnoses of depression and anxiety disorders as well as studies that looked at transdiagnostic populations. In comparison, less meta-analytic evidence was found for ACT in the field of stress, substance abuse, psychosis or any other disorder. Therefore, more studies and M-A are needed to complete the picture. Despite ACT theory, few meta-analyses reported outcomes other than symptomatology such as quality of life. Considering ACT's primary aim to foster psychological flexibility, more meta-analytic evidence for process outcomes or secondary outcomes should be undertaken.

Limitations: Many meta analyses included the same RCTs in their calculations, meaning that some results of trials are more strongly represented than others. Therefore, the results have to be interpreted cautiously and future meta analyses should be mindful of this issue. Nevertheless, a clear tendency favouring ACT can be observed.



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A-Tjak, J. G. L., Davis, M. L., Morina, N., Powers, M. B., Smits, J. A. J., & Emmelkamp, P. M. G. (2015). A meta-analysis of the efficacy of acceptance and commitment therapy for clinically relevant mental and physical health problems. Psychotherapy and Khoury, B., Lecomte, T., Gaudiano, B. A., & Paquin, K. (2013). Mindfulness interventions for psychosis: A meta-analysis. Schizophrenia Research, 150(1), 176–184. doi: 10.1016/j.schres.2013.07.055 Öst, L. G. (2008). Efficacy of the third wave of behavioral therapies: A systematic review and meta-analysis. Behaviour Research and Therapy, 46(3), 296–321. doi: 10.1016/j.brat.2007. Öst, L. G. (2014). The efficacy of Acceptance and Commitment Therapy: An updated systematic review and meta-analysis. Behaviour Research and Therapy, 61, 105–121. doi: 10.1016/j.brat.2014.07.018 Powers, M. B., Zum Vörde Sive Vörding, M. B., & Emmelkamp, P. M. G. (2009). Acceptance and commitment therapy: A meta-analytic review. Psychotherapy and Psychosomatics, 78(2), 73–80. doi: 10.1159/000190790 Ruiz, F. J. (2012). Acceptance and Commitment Therapy versus Traditional Cognitive Behavioral Therapy: A Systematic Review and Meta-analysis of Current Empirical Evidence. International Journal of Psychology and Psychological Therapy, 12(3), 333.

