



Emotion Regulation Across Psychiatric Disorders: A Systematic Review and Meta-analysis



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Abstract

The ability to regulate emotions effectively has been associated with resilience to psychopathology. Emotion regulation difficulties have been proposed as a component of clinical disorders and are a primary target of a form of psychotherapy known as dialectical behavior therapy (DBT). Poor emotion regulation has been associated with specific psychiatric disorders, however, to date, no study has attempted to estimate the magnitude of the difference in emotion regulation capacity between individuals with different psychiatric disorders and healthy controls by reviewing the existing literature. In this review we are examining cross-sectional studies that compare a diagnosed psychiatric group to a healthy control group using validated and commonly used self-report emotion regulation (ER) measures (ex. DERS, ERQ, ERSQ, CERQ). The primary measure used for the meta-analysis will be mean difference in total ER scores as well as the standardized mean difference to estimate the effect size (Hedge's g) for total scores.

Introduction

- In 2019, 1 in every 8 people, or 970 million people around the world were living with a mental disorder, with anxiety and depressive disorders the most common.
- Emotion regulation refers to an individual's ability to influence their emotions using specific skills.
- Many psychiatric disorders are widely thought to involve problematic patterns of emotional reactivity and emotion regulation, and there have been reviews focusing specifically on emotion regulation in anorexia nervosa, psychosis, and bipolar disorder.
- No study to date has focused on quantifying the the differences in levels of emotion dysregulation between different psychiatric disorders by means of a meta-analysis using data in the literature.
- The goals of the study were to estimate the magnitude of differences in emotion regulation between those with and without psychiatric disorders through a meta-analysis, and to compare the effect sizes of different psychiatric disorders using hedge's g.

Methods and Materials

- A systematic review was conducted using Covidence through databases PubMed, Embase, PsycINFO, and Medline
- Inclusion Criteria consisted of empiric peer-reviewed studies that administered a self-report emotion regulation questionnaire including the DERS, ERQ, ERSQ, and CERQ to both a clinical psychiatric group and healthy control group.
- Psychiatric groups had to be diagnosed through a validated structured or semi-structured interview such as the SCID or MINI for DSM, or receiving some form of treatment for their psychiatric disorder. Disorders that met inclusion criteria consisted of ADHD, motor disorders such as Tourette's, psychotic disorders, depressive disorders, anxiety disorders, bipolar disorder, trauma and stress related disorders, dissociative disorders, somatic symptom disorders, feeding and eating disorders, sleep-wake disorders, and personality disorders.
- Studies were excluded if they had diagnoses not included from list above, sample based on self-report measure, used an emotion regulation tool not mentioned above, did not report scores for psychiatric group and healthy control, or had group defined by comorbidity.

Results

- After the review process were left with 252 included studies. 9 of the included studies focused on ADHD, 36 on anxiety disorders, 29 on bipolar disorder, 59 on borderline personality disorder, 49 on depressive disorders, 1 on dissociative disorders, 34 of eating disorders, 17 on OCD and related disorders, 20 on psychotic disorders, 16 on PTSD, 5 on sleep disorders, and 5 on somatic symptom disorders.
- Individuals with depressive disorders had significantly higher scores on the DERS (more difficulties with emotion regulation) than healthy controls. When standardizing the mean difference, the Hedge's g value was 1.86 (95% CI = 1.30 – 2.42, $p < 0.001$).
- They also had significantly higher scores on ERQ suppression. When standardizing the mean difference, the Hedge's g value was 0.50 (95% CI = 0.24 – 0.76, $p = 0.002$).
- They had significantly lower scores on ERQ reappraisal. When standardizing the mean difference, the Hedge's g value was -0.71 (95% CI = -0.88 – -0.54, $p < 0.001$).

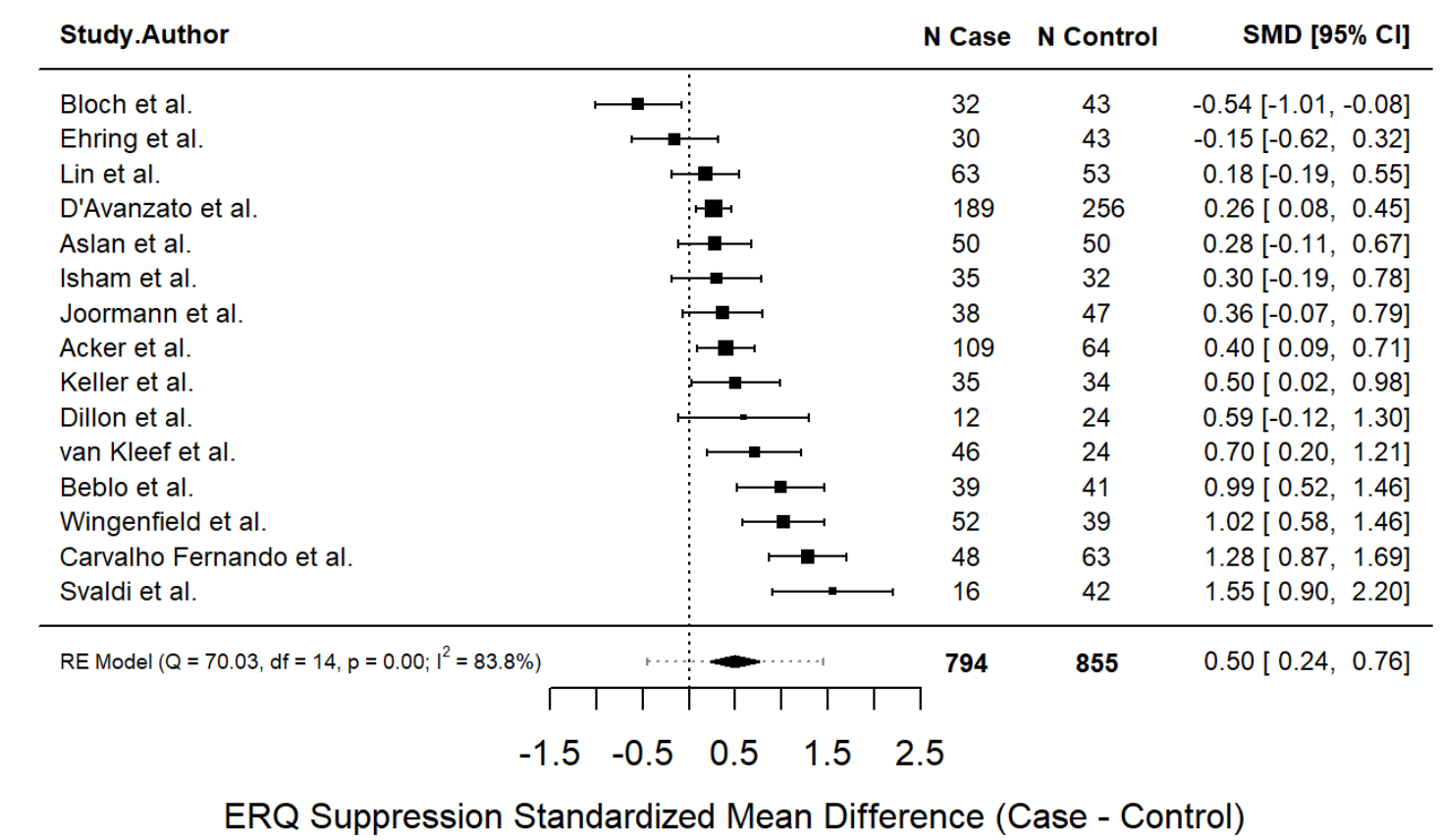


Figure 3. ERQ Suppression standardized mean difference forest plot.

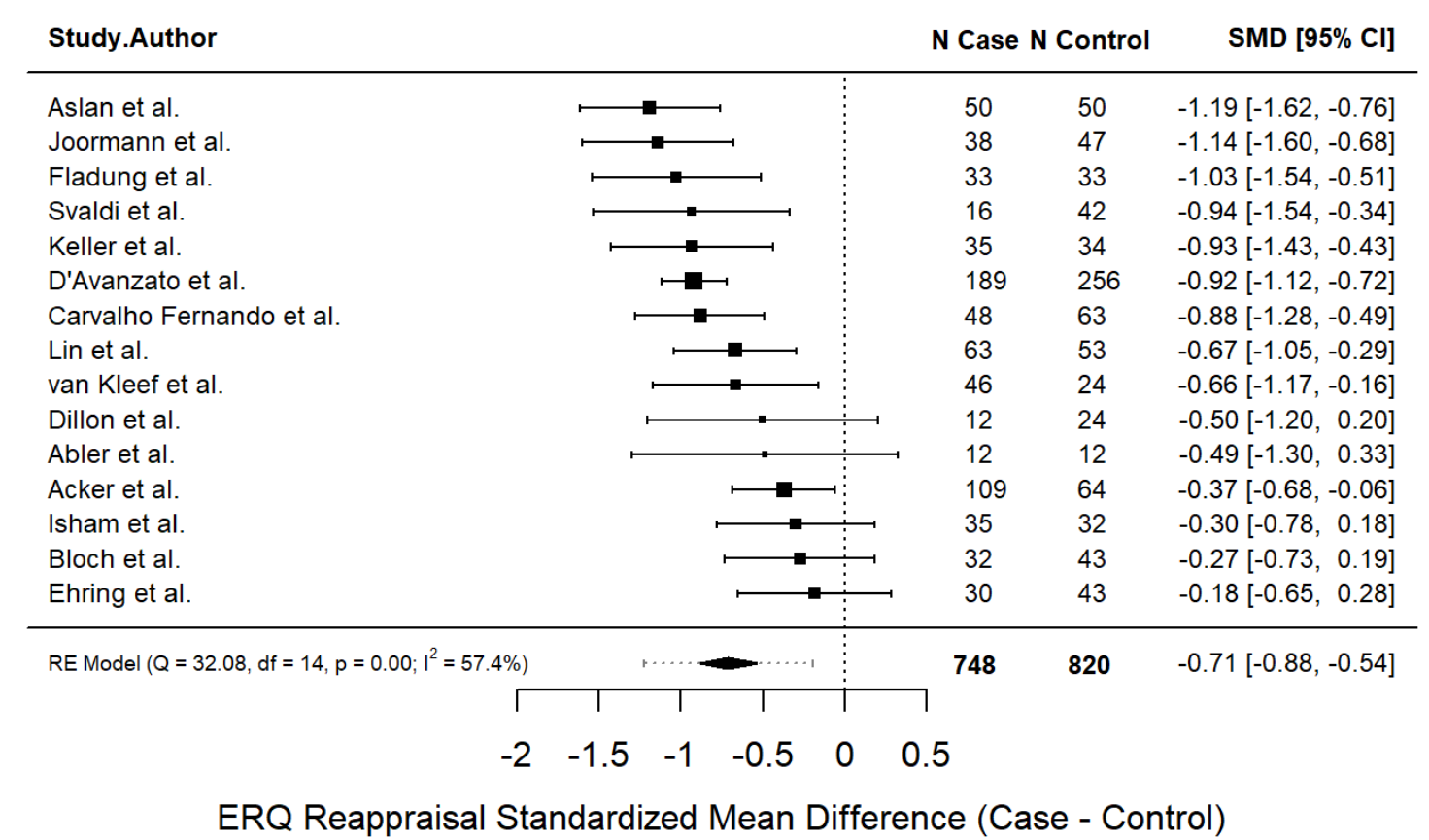


Figure 4. ERQ Reappraisal standardized mean difference forest plot.

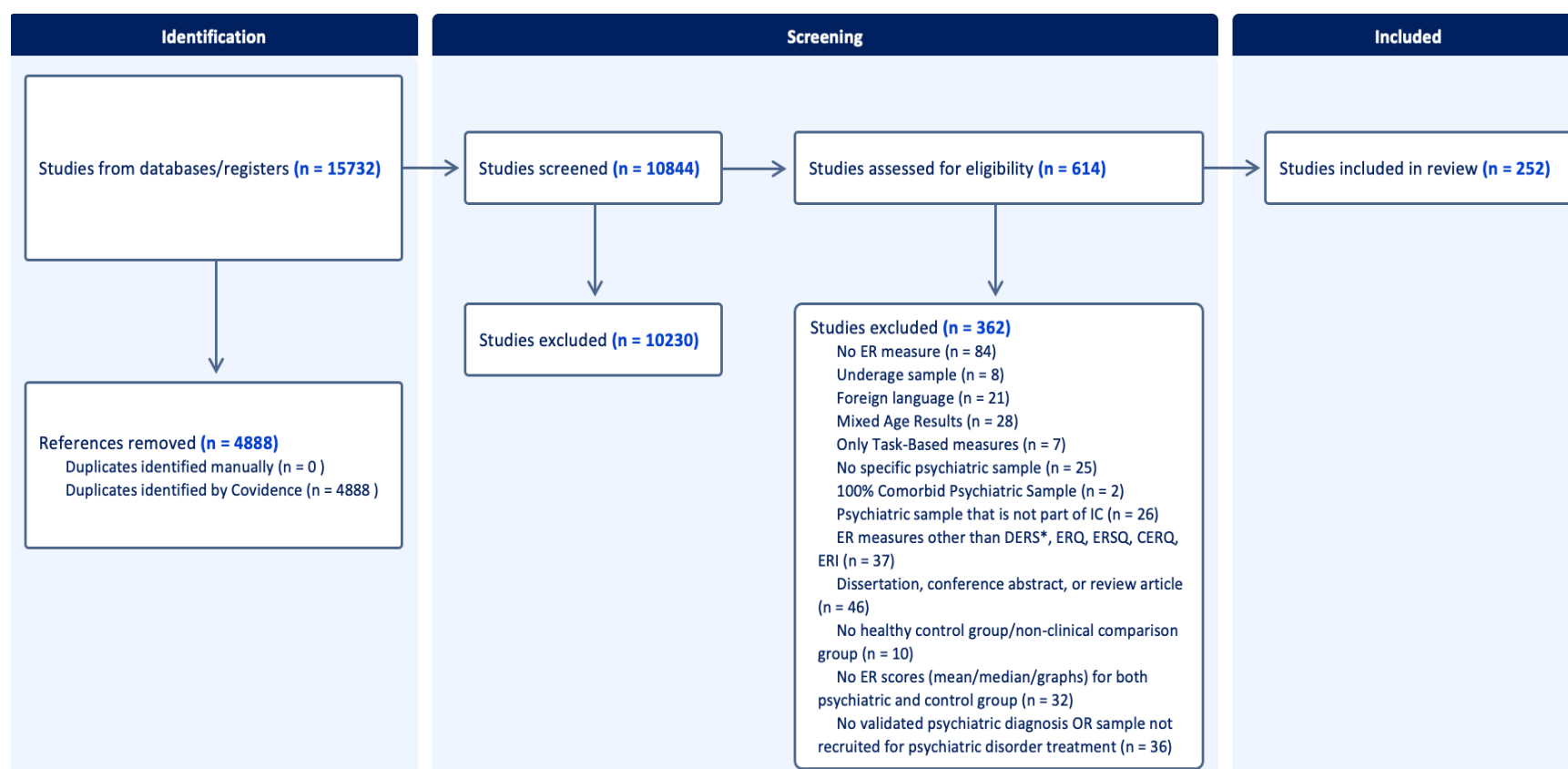


Figure 1. PRISMA flowchart for systematic review.

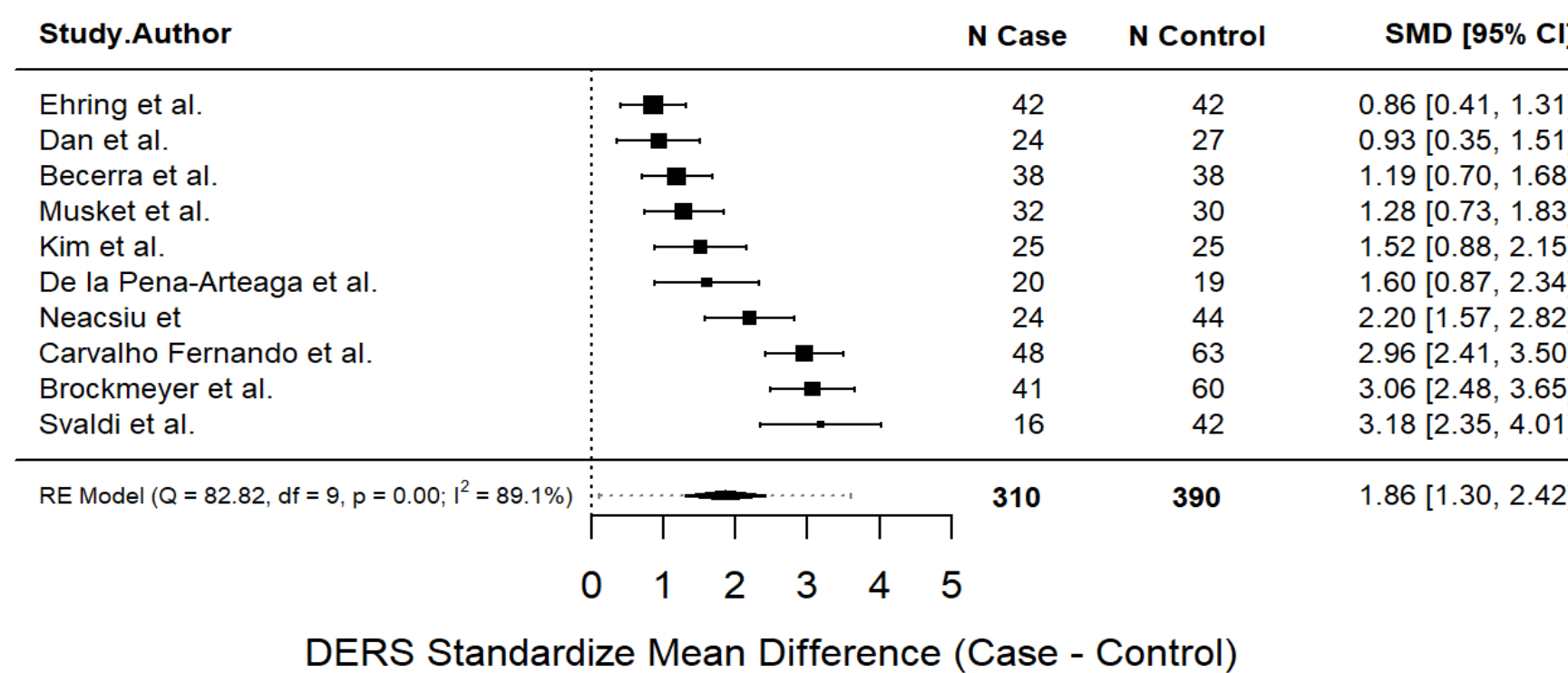


Figure 2. DERS standardized mean difference forest plot Error bars for the individual studies represent the 95% confidence interval (95% CI). The 95% CI for the summary effect is represented by the diamond width. Dashed error bars for the summary effect represent the prediction interval. The prediction interval represents a prediction of the range of possible effect sizes that could be found were a new study to be conducted

Discussion

- The results this far show that individuals with depression have significantly more emotion dysregulation than healthy controls with regards to the DERS and ERQ.
- Limitations of our study include the high level of heterogeneity that was not due to measured factors, lack of temporality, and only the use of self-report measures.
- A limitation of some studies used in the analysis was the absence of a validated tool to assess the control group for other psychiatric comorbidities, and future papers should aim to assess all participants.
- Assessing emotion regulation in patients with psychiatric conditions may eventually allow clinicians to gain a better understanding of treatment trajectories and could potentially serve as an important target for therapeutic intervention, as it has been shown that individuals with bulimia nervosa had lower DERS scores after cognitive behavioral therapy.

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