Effects of Mindfulness and Acceptance Interventions on Affect Tolerance and Sensitivity: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

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BACKGROUND

- Affect intolerance/sensitivity, defined as the inability to withstand negative emotional states, is a transdiagnostic mechanistic process implicated in the development and maintenance of numerous forms of psychopathology and negative health behaviors
- Affect tolerance and sensitivity is a higher-order construct that encompasses several related, yet distinct, lower order facets (Fig 2)
- Mindfulness and acceptance interventions have been posited to directly improve affect tolerance and sensitivity (Fig 1)
- AIM: To quantitatively synthesize the available literature evaluating mindfulness and acceptance interventions on affect tolerance and sensitivity

METHOD

- **PRISMA diagram**
  - Records identified (n = 28,112)
  - Other records identified (n = 14)
  - Records after duplicates (n = 17,875)
  - Records screened (n = 17,875)
  - Records excluded (n = 17,648)
  - Full-text assessed (n = 227)
  - Full-text excluded (n = 200)
  - Studies included (n = 25 studies across 27 manuscripts)

  **PRISMA Diagram**

- **Study Characteristics**
  - **Populations**
    - Anxiety disorders (n = 8); Healthy/unselected (n = 4); Medical population (n = 4); Borderline personality disorder (n = 3); Other psych disorders/symptoms (n = 3); Other (n = 3)
  - **Affect Tolerance/Sensitivity Outcomes**

- **Interventions**
  - Acceptance and Commitment Therapy
  - Mindfulness Based Stress Reduction
  - Other mindfulness training
  - Dialectical Behavior Therapy

RESULTS

- **Primary Analyses**
  - Pre- to post-intervention effects on affect tolerance/sensitivity
    - Hedges’ g = -.35, 95% CI = -.50 to -.19, p < .001
  - Pre- to 6-month follow-up effects on affect tolerance/sensitivity
    - Hedges’ g = -.35, 95% CI = -.61 to -.00, P < .01

Note. Funnel plots mostly symmetrical

- **Subgroup Analyses**

- **CONCLUSIONS**
  - Mindfulness and acceptance interventions are modestly effective for improving affect intolerance/sensitivity, with effects maintained up to six months
  - Effect sizes were moderated by type of control group; future work should include active control groups
  - Future work aimed at optimizing these interventions to maximally engage affect intolerance/sensitivity is warranted
  - More work is needed to examine whether changes in affect intolerance/sensitivity lead to improvements in clinical symptoms

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