

# The Effectiveness and Mediating Mechanisms of Cognitive Behavioral Therapy and Acceptance Commitment Therapy for the Treatment of Major Depression.



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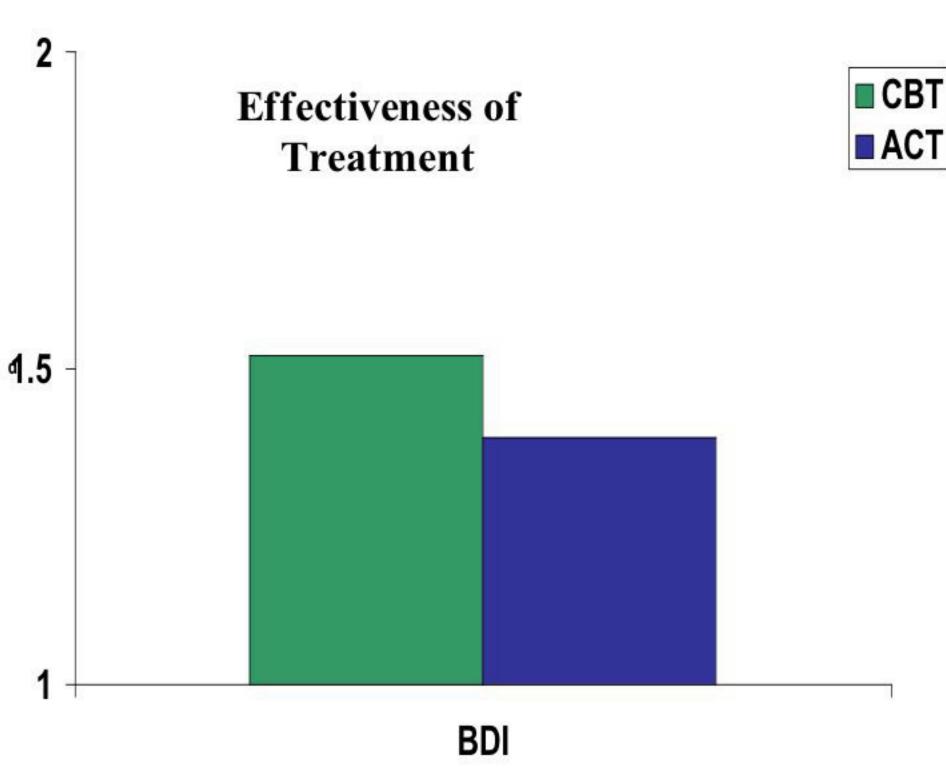
#### Introduction

- Cognitive Behavioral Therapy (CBT) is the most widely used and clinically researched therapy for depression. Acceptance Commitment Therapy (ACT), a newer variation of CBT, concentrates on discouraging experiential avoidance and decreasing attempts to control internal experiences.
- Little is known about the mechanisms by which CBT and ACT exert their positive effects. The research on mechanisms of CBT effect has often failed to find support for the theoretically proposed mediators of this therapy, such as reducing dysfunctional attitudes. Some findings suggest increased acceptance of undesirable thoughts and feelings as a specific mechanism of action for ACT. Some aspects of mindfulness (awareness, acceptance, ability to describe experiences), an explicit component of ACT, may mediate the effects of both CBT and ACT.
- The purpose of the study was to compare the effectiveness of ACT versus CBT in decreasing depression levels (measured by the Beck Depression Inventory (BDI)). Additionally, this study tested whether certain variables mediated treatment outcome differently for the two treatments, such as change in the frequency and believability of negative automatic thoughts (Automatic Thoughts Questionnaire (ATQ)) and core aspects of mindfulness (Kentucky Inventory of Mindfulness Scale (KIMS)).
- Mediational hypotheses are: (1) A decrease in automatic thoughts will mediate change in depression level for both treatment groups, with a larger decrease for CBT and (2) changes in mindfulness will mediate change in depression level for the ACT group only, since mindfulness is not considered a mechanism of action of CBT.

## Method

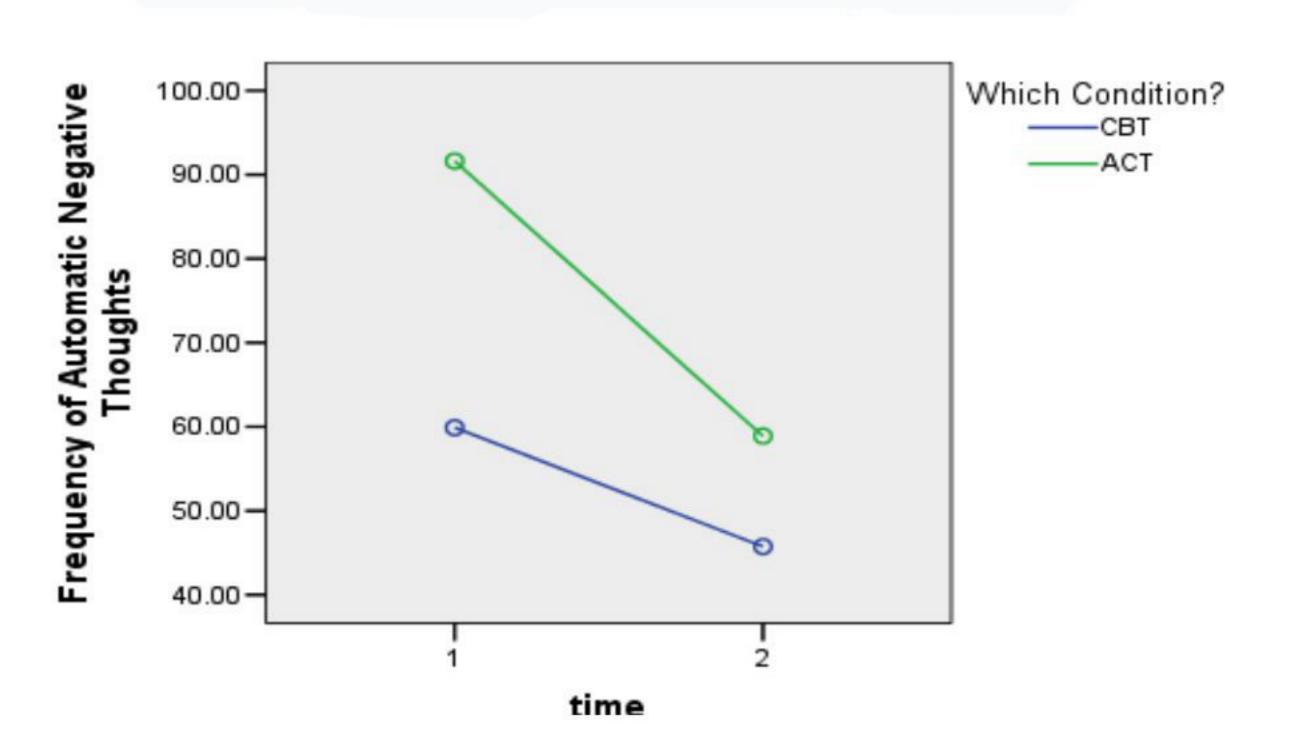
- This current research is based on an ongoing randomized clinical trial assessing the effectiveness of ACT and CBT. Patients (n = 26) are students seeking treatment for depression at a university counseling center who vary by gender (73% female), ethnicity (15% African American, 12% Asian American, 73% White), age (M = 29.88, SD = 7.1), and primary diagnosis (46% major depressive disorder, 54% other depressive disorder (dysthymia, depressive disorder not otherwise specified, bipolar disorder, and adjustment disorder)).
- Outcomes were assessed at baseline and at a 3-month follow-up point. The outcome variable was depression (BDI-2). Potential mediators were dysfunctional attitudes (ATQ; subscales: believability and frequency of attitudes), and mindfulness (KIMS; subscales: observing, act with awareness, describing, acceptance).

### Results

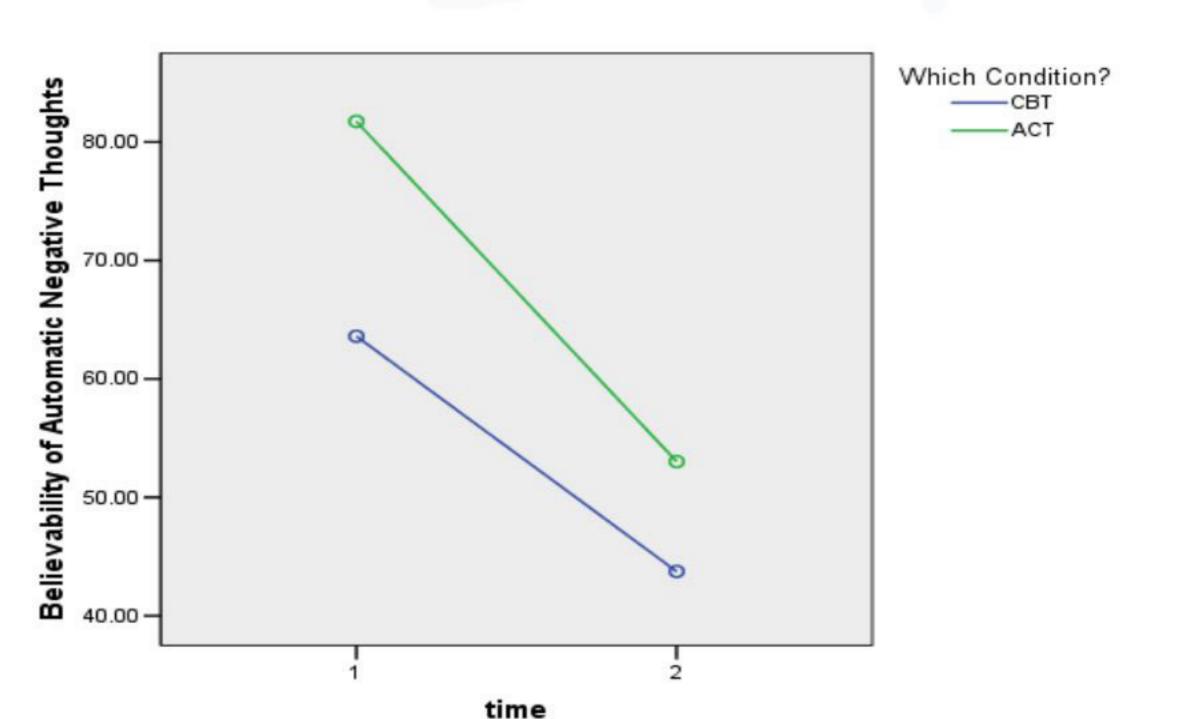


Pre-post Cohen's d. Both treatments showed large decreases in symptoms levels between baseline and the 3 month follow-up.

#### Change in ATQ-Frequency

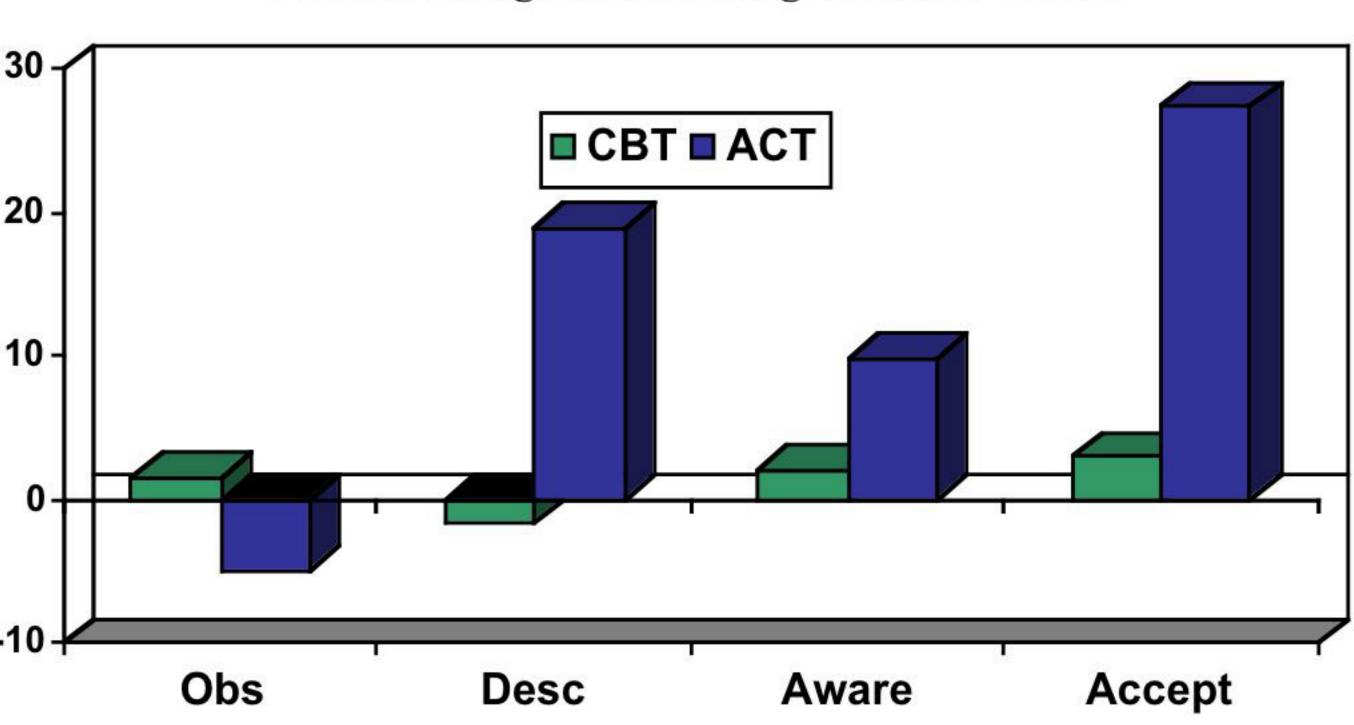


Change in ATQ-Believability





#### Percent change in mediating variables- KIMS



Proxy mediational analyses suggest that (frequency of and belief in) dysfunctional thoughts may mediate outcome for both ACT and CBT, while certain dimensions of mindfulness (describing, acting with awareness and acceptance) mediate outcome only for ACT.

## Discussion

- No significant difference was found for treatment groups based on change in BDI score over time, therefore lending support for both therapies for the treatment of depression.
- •Decreases in the frequency and believability of negative automatic thoughts was seen in both treatment groups. However findings are speculative, the two groups differ in their scores on the ATQ at baseline.
- Based on proxy mediational analyses, mediational results suggest that the frequency and belief in dysfunctional thoughts may mediate outcome for both ACT and CBT. But certain dimensions of mindfulness, such as, the ability to describe one's experiences, being aware of one's experiences and emotions, and accepting such experiences and emotions, mediate outcome only for ACT.