

## Introduction

- Chronic pain and Major Depressive Disorder (MDD) diagnoses are skyrocketing
- COVID-19 exacerbated existing crisis → drastic increases in pain and depressive symptoms
- Limited effectiveness of currently available treatments leaves individuals searching for alternative therapies
- Ketamine shows great potential for treating depression and chronic pain comorbidity, but its utility for this population has not been researched<sup>2,4</sup>
- Ketamine's efficacy alongside therapy warrants further study<sup>6</sup>
- Ketamine's optimal route of administration/dose unknown<sup>1,4</sup>
- To address gaps in the current literature, this study collects data from individuals diagnosed with MDD and a comorbid chronic pain disorder receiving two different approaches to ketamine-assisted psychotherapy (KAPT) treatment

## Methods

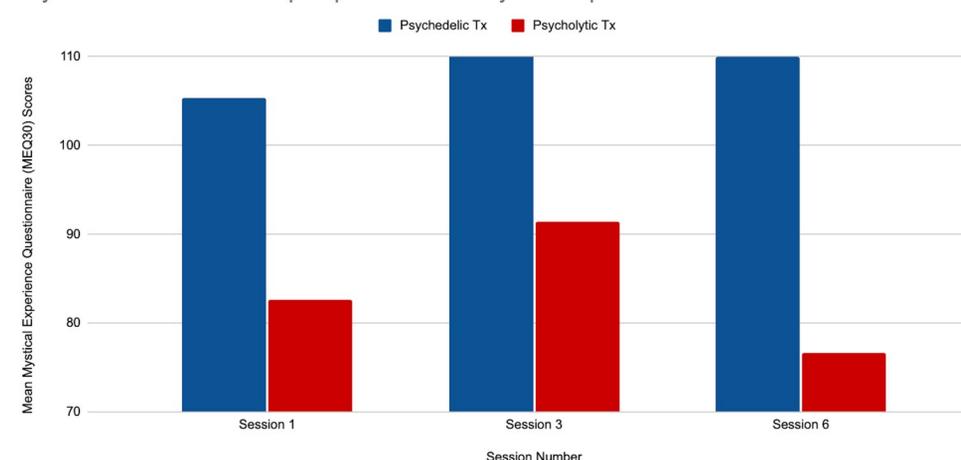
- Sample: N= 10 participants receiving either
  - Psychedelic KAPT treatment: high dose, intramuscular infusions, therapy 24 hours later (n=5)
  - Psycholytic KAPT treatment: low dose, sublingual ketamine delivered orally during therapy (n=5)
- Surveys administered throughout course of treatment to measure treatments' impact on
  - Altered states of consciousness
  - Depression, pain, anxiety, post-traumatic stress disorder (PTSD) symptoms

## Results

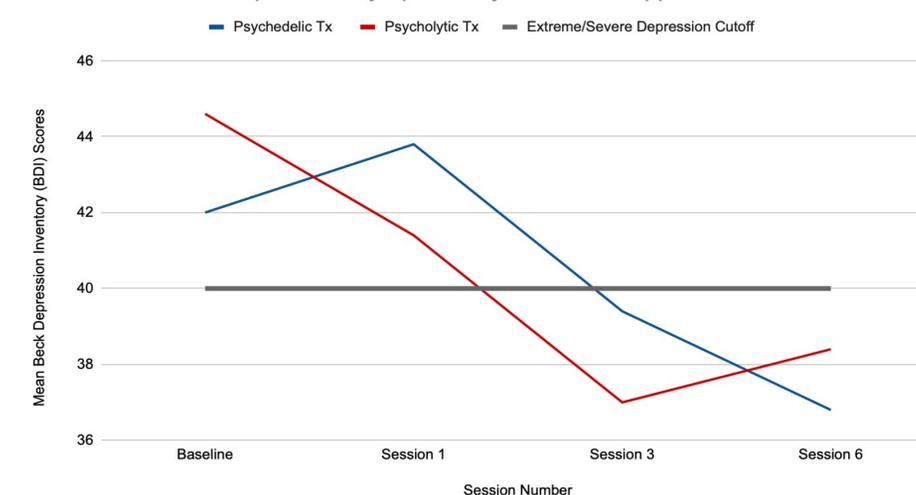
- No statistically significant differences between KAPT treatments
- Small sample size's limited statistical power → differences seen still worth noting
- All participants' depression, pain, anxiety, and PTSD symptoms declined throughout course of treatment
- Psychedelic KAPT treatment is associated with higher altered states of consciousness
- Participants who received psychedelic KAPT treatment saw a larger and more consistent decrease in symptom severity

# High Dose, Intramuscular Ketamine-Assisted Therapy Shows Promise for Treating Comorbid Major Depressive Disorder (MDD) and Chronic Pain.

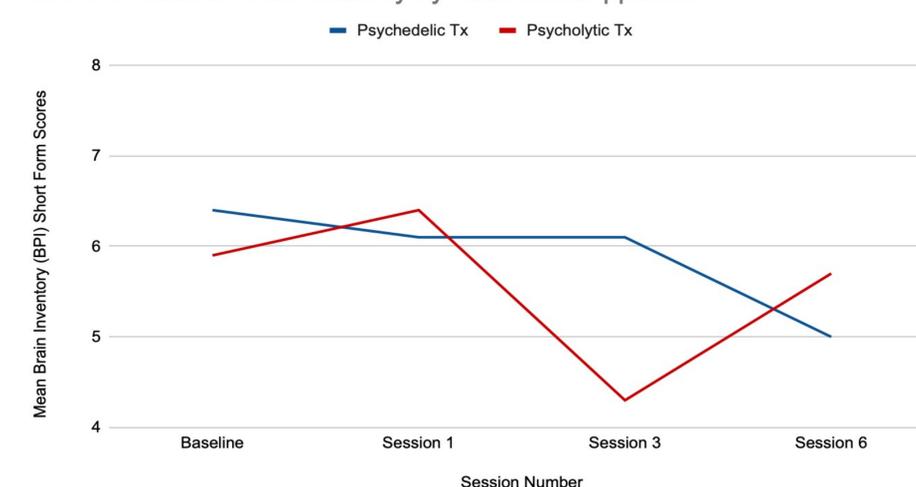
Psychedelic Treatment Group Reported Greater Mystical Experiences



KAPT's Effect on Depressive Symptoms By Treatment Approach



KAPT's Effect on Pain Severity by Treatment Approach



## Discussion

- Findings suggest KAPT may be effective for chronic pain/MDD comorbidity as well as anxiety and PTSD
- Results imply that the psychedelic approach may be more effective than the psycholytic approach

## Future Directions

- Long-term trials with larger sample sizes, randomization, and controls for route of administration/dose
- Investigation into the symptom regression seen at the end of treatment in the psycholytic group
- Further exploration of KAPT's efficacy for anxiety and PTSD

## References

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