

# IMPACT OF MDMA POLICY DIFFERENCES BETWEEN THE U.S. AND AUSTRALIA ON PTSD AFFECTED INDIVIDUALS

## BACKGROUND

- Post-Traumatic Stress Disorder (PTSD) is a severe cognitive health condition developed after one or more traumatic events that has traditionally been treated through either psychotropic or pharmacological approaches.
- However, 40-60% of patients do not respond to the available treatments, being classified as “treatment-resistant”.
- In 1961, the Single Convention of Narcotic Drugs Treaty was passed, which prohibited personal possession of 3,4-methylenedioxyamphetamine (MDMA), a psychotropic substance, but allowed for medical and scientific-based trials to continue. After a light revision in 1971, the Controlled Substance Act predominantly supported the same policy framework as the existing treaty, emphasizing the importance of international control of MDMA.
- In 1977, Leo Zeff discovered that MDMA-assisted therapy yields effective results in individuals with otherwise stalled progression, a discovery that led lots of psychiatrists to further investigate the drug. However, increased discussion regarding MDMA reached the general public, ultimately leading to the Drug Enforcement Administration’s (DEA) eventual ban of the drug in 1985 due to its potential for abuse and the unknown side-effects of using it to medically treat PTSD patients.
- Australia classifies MDMA as a Schedule 8 drug, standing as a “controlled substance” rather than a “prohibited substance” (Schedule 9). The United States has labeled MDMA a Schedule 1 drug, which means there are currently “no accepted medical uses”.
- The National Institute on Drug Abuse reported an alarmingly high increase in psychostimulant related overdose deaths from 2014 to 2023. In 2014, there were 5,716 related deaths and in 2023 there were 34, 855 deaths. This statistic is one to be taken very seriously, keeping in mind the potential for street abuse that coincides with decreased policy regulation and implementation.

## INTRODUCTION

- This review aims to expose gaps in political ideology through the evaluation of modern research, through the comparison of Australia and the United States’ contrasting perspectives, and proposal of a legal compromise that better satisfies all parties.
- MDMA-assisted therapy allows PTSD affected individuals to revisit their traumatic incidents without the excruciating side effects of anxiety and fear that would normally persist. In doing so, it is possible for patients to learn how to confront, cope, and process the painful events that took place while still being fully coherent and conscious to do so.
- This review emphasizes the contrast between the United States’ complete-ban approach that minimizes risks but restricts availability to individuals who could benefit, versus Australia’s progressive framework that permits medical usage of MDMA, opening up more potential for the drug to end up in the wrong hands.
- These differing strategies suggest the need for a hybrid legal approach carefully considering both modern scientific breakthroughs and public welfare as a whole.

## REFERENCES



## ACKNOWLEDGEMENTS

I would like to first thank my research mentor, Dr. Mason Marks, M.D., J.D. for his stewardship and oversight. Along with this, I am so grateful for my UROP leaders, Maddie Schmidt and Diya Kochhar, who have provided extensive mentorship throughout the entire duration of this project.



Fig 1. A global map showing the United States and Australia.



Fig 2. A PTSD patient receiving MDMA-assisted therapy treatment that aims to reduce neurohormones. Credit: KFF Health

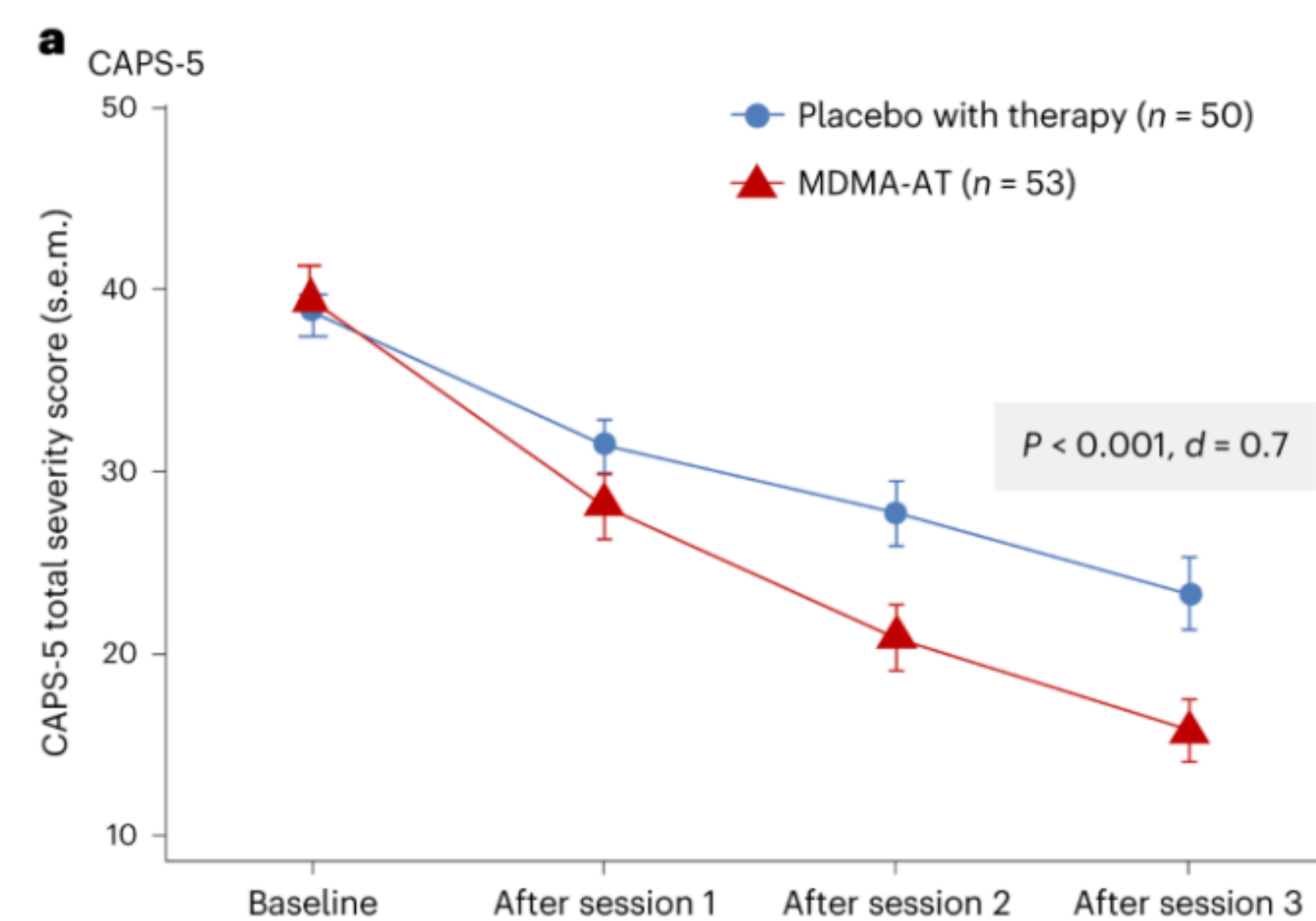


Fig 3. A study was conducted by Nature Medicine using a CAPS-5 scoring system. MDMA-assisted therapy patients experienced a 25-point change compared to the placebo control group, who decreased by just 15.

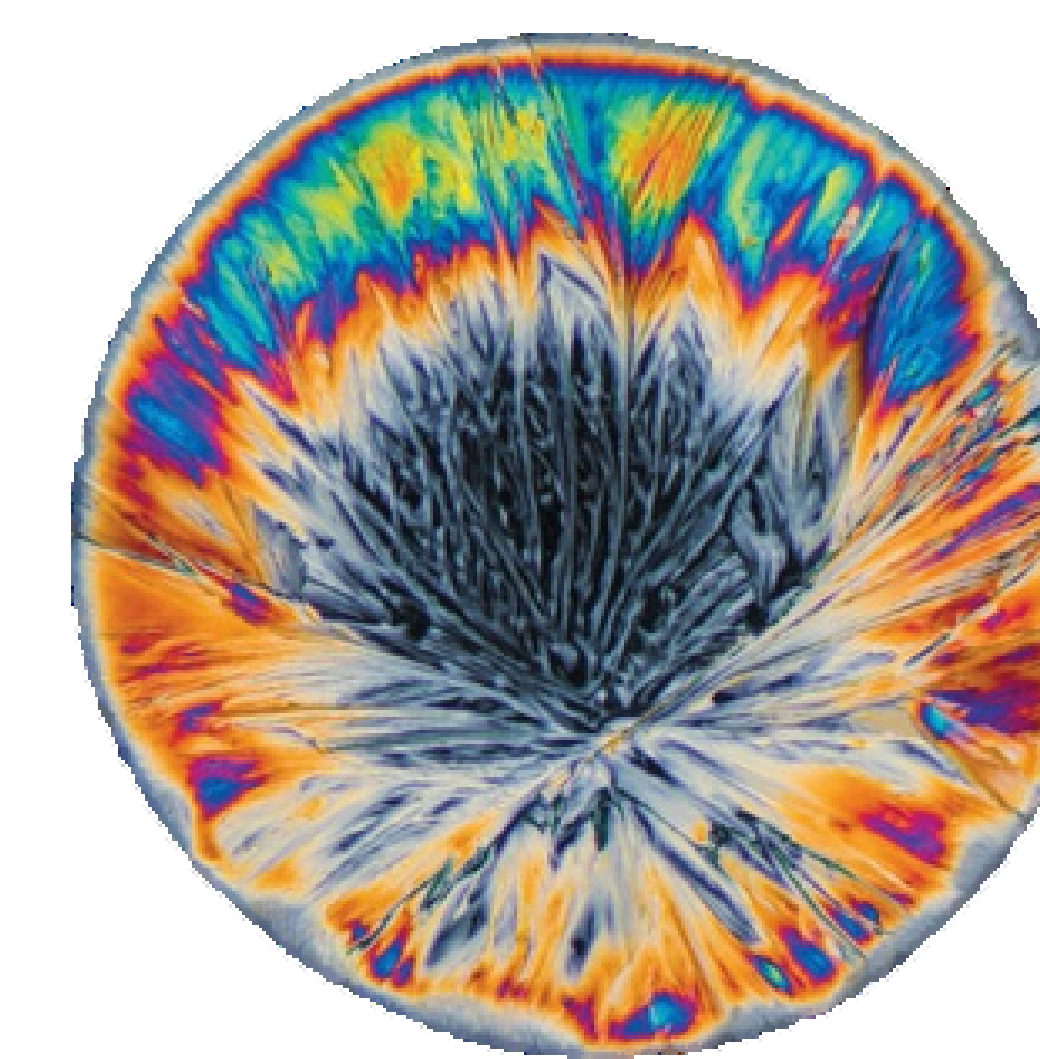


Fig 5. Polarized light microscopic view of crystallized MDMA. Credit: Maurice Mikkers

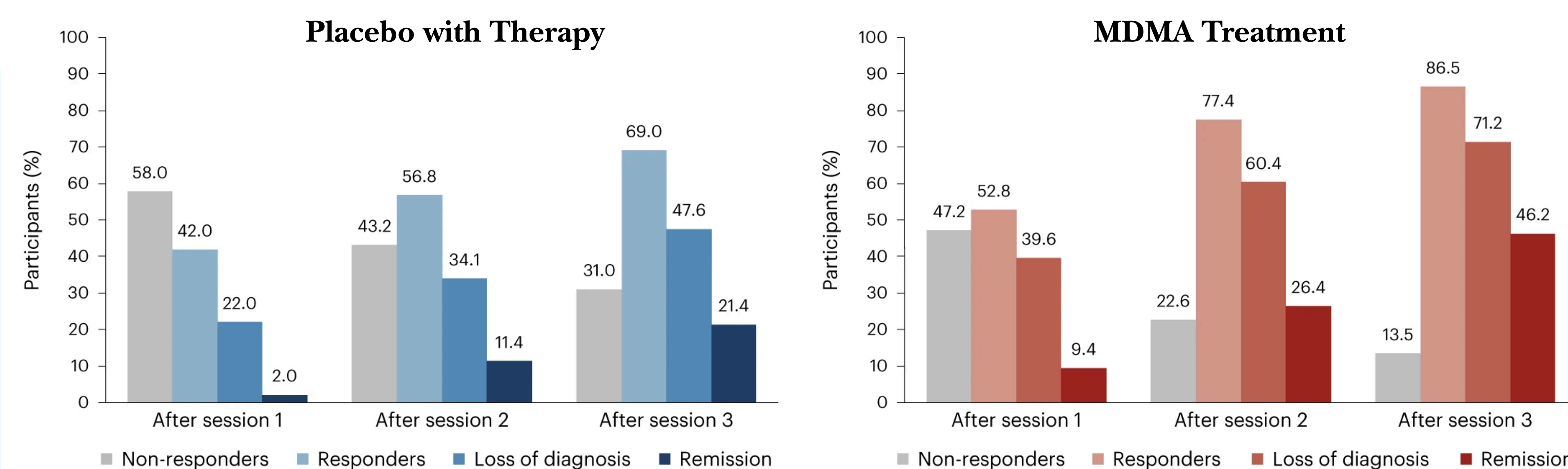


Fig 4. According to the same Nature Medicine trial, remission rates increased from 9.4% to 46.2% in the MDMA group versus the 2% to 21.4% jump the placebo group reported. Participants receiving MDMA-assisted therapy were twice as likely to exit the trial in remission compared to the placebo control group.

## STATUTES

### United States: Title 21 of the United States Code, Section 841 (21 U.S.C. § 841)

“It is unlawful to knowingly or intentionally- (1) To manufacture, distribute, or dispense, or possess with intent to manufacture, distribute, or dispense, a controlled substance; or (2) to create, distribute, or dispense, or possess with intent to distribute or dispense a counterfeit substance.”

### Australia: Therapeutic Goods Act 1989 (Sections 52AA-52EC)

“In exercising a power under subsection 52D(2), the Secretary must take the following matters into account: (a) the risks and benefits of the use of a substance; (b) the purposes for which a substance is to be used and the extent of use of a substance; (c) the toxicity of a substance; (d) the dosage, formulation, labelling, packaging and presentation of a substance; (e) the potential for abuse of a substance.”

## METHODS

- Data was carefully selected and collected from academic databases such as domestic and international statutes, global treaties, and emerging verified clinical data.
- Sources were then evaluated through a systematic qualitative process for applicable normative assumptions, lines of logic, and evidence, ultimately resulting in the formulation of a legislative alternative which would be more widely accepted while simultaneously ensuring public safety.

## ANALYSIS

- A study was conducted by Nature Medicine that observed the effectiveness of MDMA therapy to individuals with moderate to severe PTSD who did not know if they were receiving placebo or the actual treatment. Results from the trial were collected from 13 different study sites and measured on a CAPS-5 total severity score scale. CAPS-5 scores concluded asymptomatic (0-10), mild (11-22), moderate (23-34), severe (35-46), or extreme (47+). In order for the treatment to be considered “clinically effective”, a decrease of 10 or more CAPS-5 points needed to take place.
- The CAPS-5 severity score for the MDMA-AT therapy group experienced a large decline of 25 points compared to the placebo group, who experienced a change of 15 points. The study used this same CAPS-5 score system to conclude a variety of statistics, including remission rates. In order for a patient to be considered “in remission”, they needed to display a score of 11 or less.
- Following this criterion, remission rates increased from 9.4% to 46.2% in the MDMA group versus the 2% to 21.4% jump the placebo group reported. Participants receiving MDMA-assisted therapy were twice as likely to exit the trial in remission compared to the placebo control group.
- Despite these results, MDMA is remaining somewhat stagnant in Phase 3 (clinical trial stage), after being labeled by the FDA as a “breakthrough status” drug. At this point, a large increase in federal funding set aside for this sector would fill the void of wasted opportunity that exists currently. Historically, almost all trials conducted were funded by a non-profit organization, Multidisciplinary Association for Psychedelic Studies (MAPS). In December of 2024, however, clinical trials in very isolated locations received federal funding, but only for veterans experiencing treatment resistance. While this represents meaningful progress, limiting federal funding to such a narrowly defined group fails to adequately address the needs of the broader population of individuals with PTSD that do not fall under the “veteran” category, but were equally impacted.

## CONCLUSION

- As promising data continues to emerge, it is essential that clinical trials are pursued, and the MDMA-assisted therapy option is taken into careful consideration. It is undoubtedly important to analyze the medical risk, abuse potential, and possibility of death associated with MDMA, but equally as essential to recognize MDMA’s potential for healing rather than letting fear overshadow credible data.
- Those experiencing nightmares, anxiety, flashbacks, and overall poor quality of life could potentially be eased from their pain through the implementation of a further researched treatment option that can be made possible through federally funded clinical trials.
- The United States and Australia continue to have conflicting policy perspectives regarding the control of the psychotropic, strengthening the International Drug Regime’s political saliency as the ideologic divide increases, making it essential to reach a reasonable policy alternative compromise globally.