



INTRODUCTION

The War on Drugs by President Nixon classified many limited researched substances as Schedule 1 Drugs, banning them from medical and research purposes. As these decisions have began to be overturned, many new medical opportunities have arisen. Mental health is becoming an increasingly important topic presently, with many suffering from a variety of stressors. Most traumatically, PTSD has claimed many victims and needs to have effective treatment. This research compares the success in which psilocybin and MDMA can not only show promise in easing stress but to be an effective treatment for the quality of life of PTSD victims in comparison to presently known methods of treating PTSD such as Cognitive Behavior Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR).

RESEARCH METHODOLOGIES

As my research was conducted, it was by applied research. I collected information to create my own material on how psychedelics such as psilocybin and MDMA can be used as a new option for the treatment of mental disabilities such as PTSD compared to the effectiveness of practical therapy such as Cognitive Behavior Therapy and EMDR therapy. My data is qualitative as I created characteristic tables as well as a grading scale of how effective their treatment is in respective categories. Furthermore, my collection of data is done as observationally as it was not be possible to conduct an experiment with psychedelic substances. My data collection was done through a meta-analysis of varying data all displaying different characteristics of substance treatments for PTSD compared to that of CBT and EMDR. Through this meta-analysis, the creation of an arbitrary point system will allow me to rank certain substances according to their effectiveness and safety. Separating symptoms such as sleep effects, physical pain, emotional management, sensory issues and fatigue will allow me to provide an analysis of data with a clear ranking.

In order to complete this project, I first began with the collection of databases and sources from which I collected my data. From there I created my own point system depending on the data received and rank substance by effect. This collection of data will be taken from reliable wide and narrow scoping previously done studies, making sure all collected data is relevant and accurate. These sources range from University studies to national medical institutions to provide accurate, quality data.

DISCUSSION, ANALYSIS, AND EVALUATION

Cognitive Behavioral Therapy: Practice of forming a step by step process to better manage emotional and mental struggle.

Eye Movement Desensitization and Reprocessing: Practice used to slow and synchronize brain waves using eye movement to process traumatic memories.

<u>Psilocybin</u>: Schedule 1 psychedelic substance derived from hallucinogenic mushrooms. MDMA: More commonly referred to as ecstasy, a synthetic schedule 1 drug of both stimulant and hallucinogenic properties.

- Collecting this data allowed a layout of possible options and their effectiveness, as well as what they direct their focus on. While some options focused on symptoms like loss of sleep and pain, others worked to train the brain with emotional management and processing sensory fixations.
- To better this study, furthering the data collection by incorporating the therapy while under the influence of said substances would allow a greater display of what is most effective or if there are any changes in the combination of the two.

Substance vs. Therapy PTSD Treatment

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DATA AND FINIDNGS

	CBT	EMDR	Psilocybin	MDMA	
Sleep	Highly effective, even used to treat insomnia. Avoids dependency of medications	Moderately effective to correct insomnia and anxiety when related to trauma.	Generally no effect on one's sleep habits.	Has been studied to activate the brain at high levels, decreasing the ability to sleep.	Highly Beneficia (5)
Physical Pain	Allows for the understanding of pain and what causes it. Helps deal with pain and plan a solution, but itself not a solution.	Relieves both present and "phantom pain" in studies.	Moderate success in relieving pain with micro-dosing.	While there is no pain increase, pain is not treated directly by MDMA.	Beneficial (4)
Emotion Management	Allows for engagement of emotion and processing of trauma in both children and adults.	A clear reduction in emotional response to mental trauma.	Facilitates greater understanding of one's own emotions and thoughts.	Facilitates emotional closeness and empathy while reducing fear/anger with trauma.	Neutral (3)
Sensory	Symptoms of hypervigilance, fear, and concentration still persist.	Increase in processing function, allowing for heightened senses.	Increased serotonin receptor activity allows easy processing of the brain.	Increased serotonin release, is largely important in revisiting memories.	Detrimental (2)
Fatigue	Cases found with no change. Symptoms of fatigue are generally not affected.	Initial fatigue rises due to brain activity.	Depressive Fatigue moderately treatable.	Due to brain activity and possible loss of sleep fatigue is at risk for rising.	Highly Detriment (1)

CONCLUSIONS, IMPLICATIONS, AND NEXT STEPS

Conclusion:

Provided from the collected data, CBT, EMDR, Psilocybin, and MDMA all have benefits to treating PTSD, however to different categories of symptoms. While directly benefiting emotional and brain processing systems in patients, physical symptoms such as sleep and fatigue are generally not benefited by treatments. Through this research, it can be concluded that a reevaluation of the intended purpose of the War on Drugs of 1971 is in order as a variety of these banned substances hold great potential to assist in the short and long term treatment of not only PTSD but many life changing disorders.

Implications:

The real world use of the collected data is extremely relevant as PTSD rates rise constantly. Finding effective treatments to certain symptoms allows victims to find what works best for their specific case. Meanwhile, the proof of beneficial practice using these Schedule 1 substances can assist the movement to a more educated understanding of the purpose and need to utilize outlawed substances with the goal of furthering both pharmacology and toxicology.



ACKNOWLEDGEMENTS / REFERENCES

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