Psilocybin Assisted Therapy for Gambling Disorder

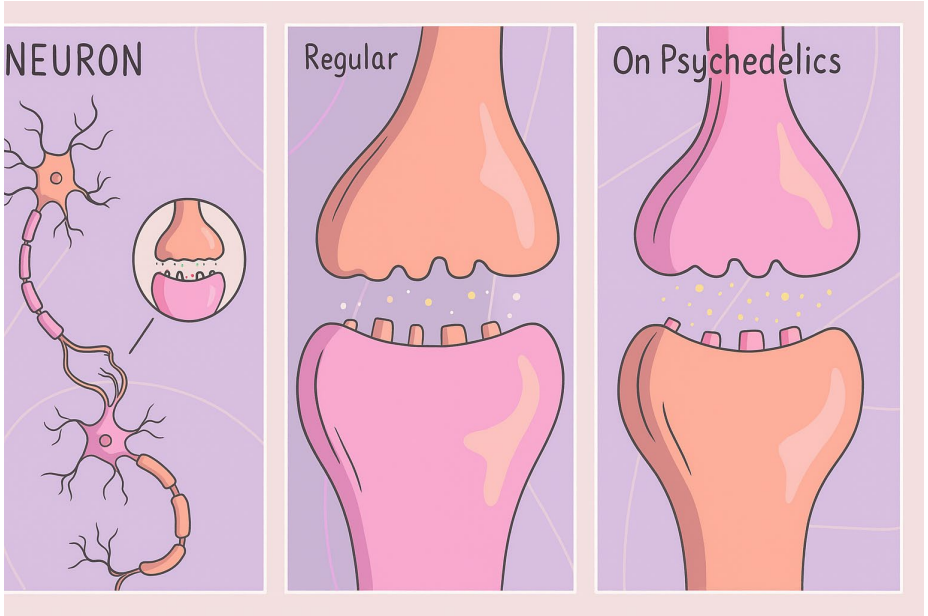
Centre of Excellence in Responsible Gaming

UNIVERSITY OF GIBRALTAR

It all starts with a middle life crisis

What are Psychedelics?

- **5-HT2A receptor agonists:** Act primarily on serotonin receptors. Classic psychedelics
- Trigger temporary changes in perception, cognition, and emotion
- Visual and auditory distortions Altered sense of time, space, and self
- Heightened emotional and sensory awareness
- **Facilitate insight and reflection**
- Deep personal or spiritual insights
- Enhanced access to repressed memories or feelings
- Can help reframe patterns, habits, or trauma



Types of Psychedelics

LSD

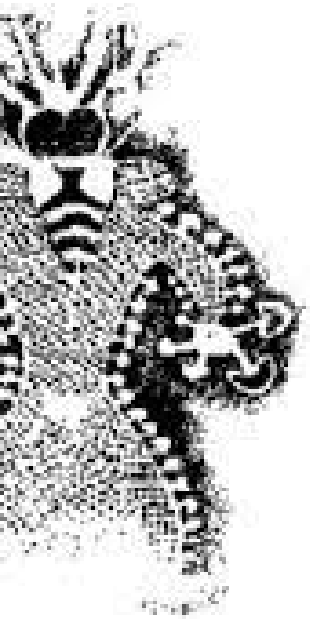
MDMA

Mescaline

Psilocybin

Psilocybin

DMT



History of Psychedelics

- **Ancient Use**: Evidence of psychedelic use can be traced back thousands of years in religious and healing rituals worldwide.
- **Early Scientific Interest:** The modern era of psychedelic research began in the mid-20th century. Albert Hofmann first synthesized LSD in 1938 and later discovered its psychedelic effects in 1943.
- **1960s Counterculture:** Psychedelics, particularly LSD and psilocybin, were central to the counterculture movement of the 1960s
- **Regulatory Crackdown:** By the late 1960s and 1970s, concerns over safety and control led to severe restrictions on psychedelic substances worldwide, effectively halting much of the scientific research.
- **A resurgence of Interest**: Since the early 2000s, scientific interest in psychedelics has been resurgent, marked by rigorous clinical trials and promising therapeutic applications.

Gambling Disorder

1. Impaired control over gambling (e.g., onset, frequency, intensity, duration, termination, context).
2. Increasing priority is given to gambling to the extent that gambling takes precedence over other life interests and daily activities.
3. Continuation or escalation of gambling despite the occurrence of negative consequences. The pattern of gambling behaviour may be continuous or episodic and recurrent.

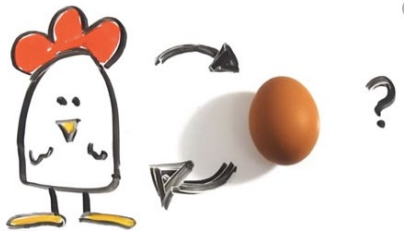
✓Lifetime prevalence 0.4% and 1% (DSM 5)
✓50% in treatment for gambling disorder have suicidal ideation, and 17% have attempted suicide.

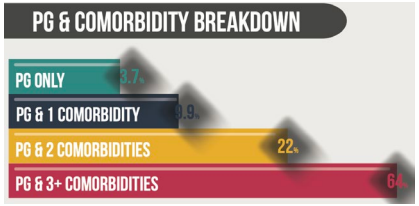
Comorbidity in Gambling Disorder:

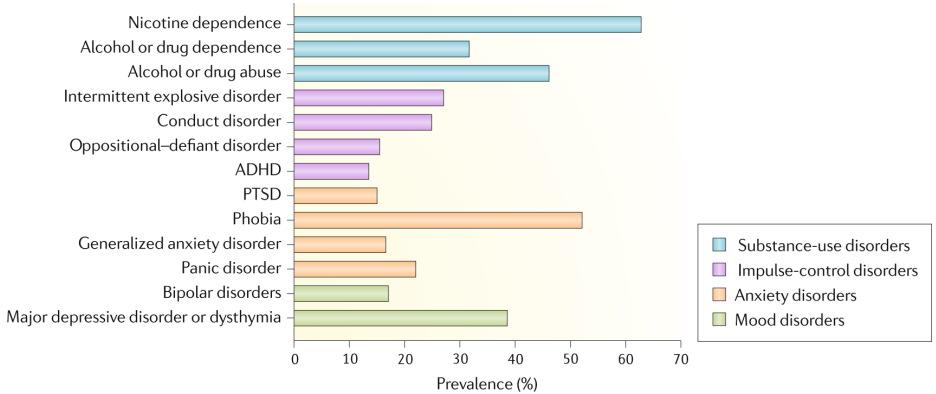
- Comorbidity describes the presence of one or more additional diseases or disorders which occur alongside a primary disease or disorder. An example would be people who are problem gamblers who also have other mental health conditions.

- **Other problems associated with Problem Gambling.**

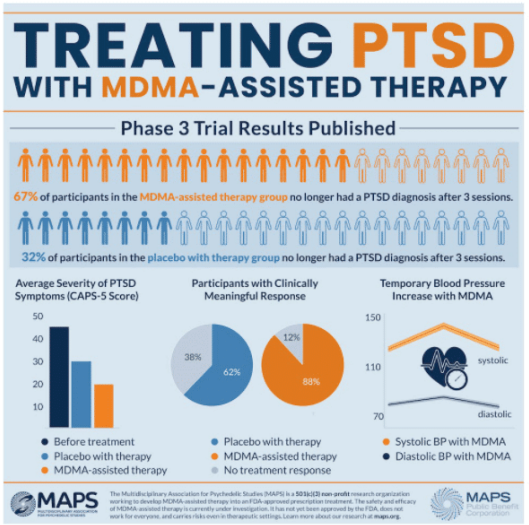
- **Gambling can be on many occasions an unhelpful coping mechanism for the person to deal with a primary disorder.**

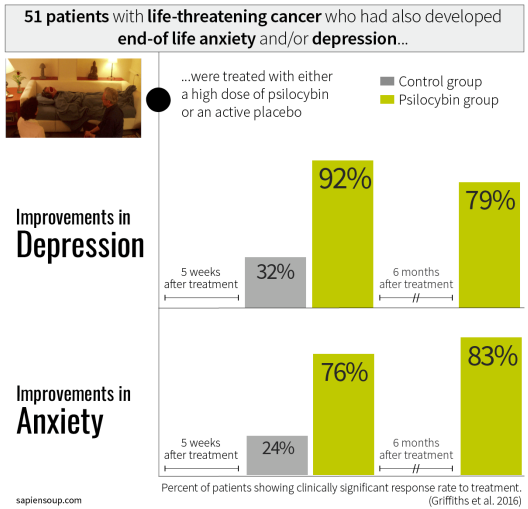


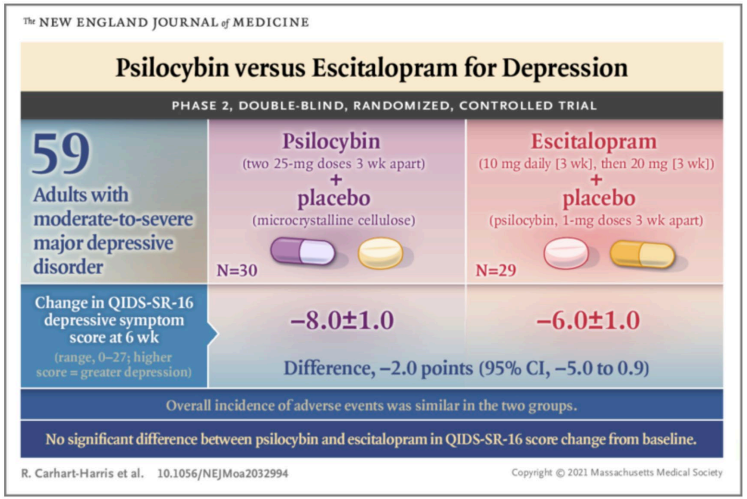


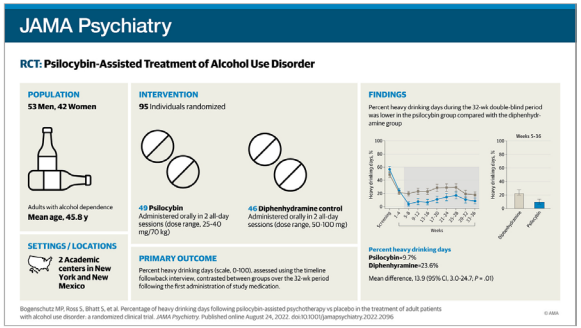


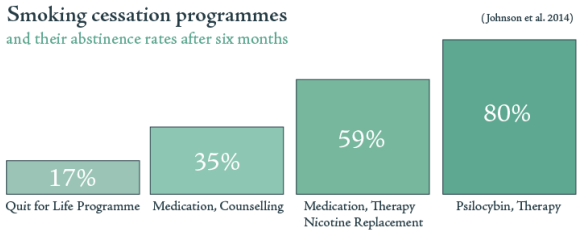
Recent research is showing promising results

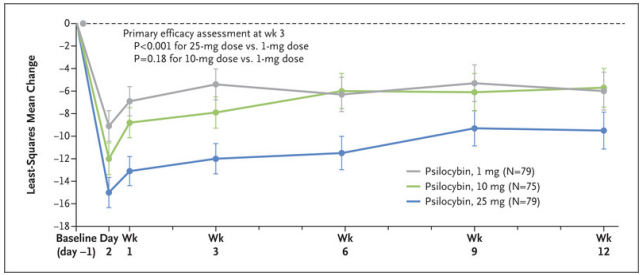






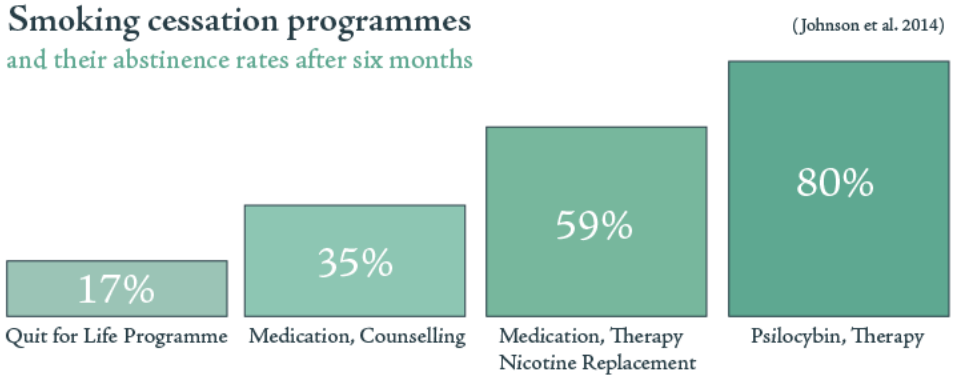






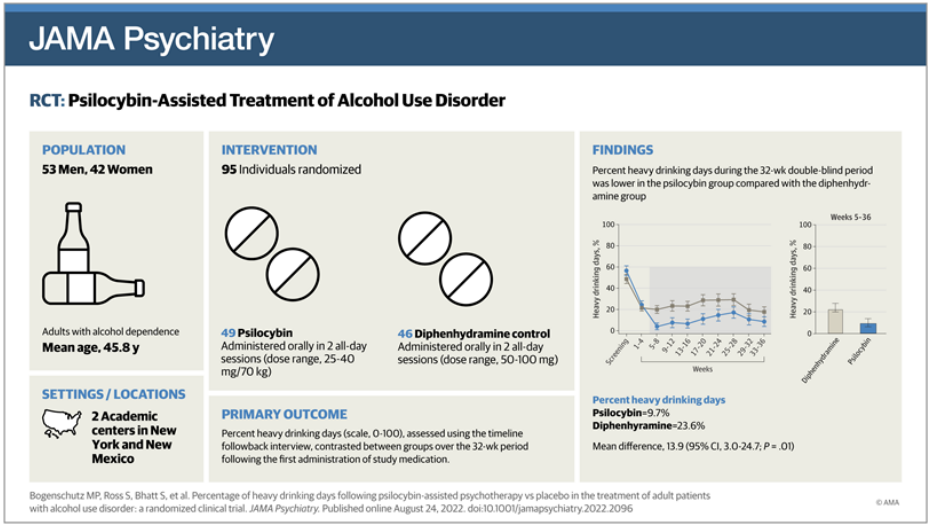
Pilot Study of the 5-HT2AR Agonist Psilocybin in the Treatment of Tobacco Addiction

- 15-week course of smoking cessation treatment, with psilocybin administration occurring in weeks 5, 7, and 13
- Follow-back and verified by biological markers 80% participants showed abstinence at 6-month follow-up
- 87% reported that their personal well-being or life satisfaction had increased very much as a result of at least one psilocybin session.
- 87% rating at least one psilocybin session among the 10 most meaningful experiences of their lives.

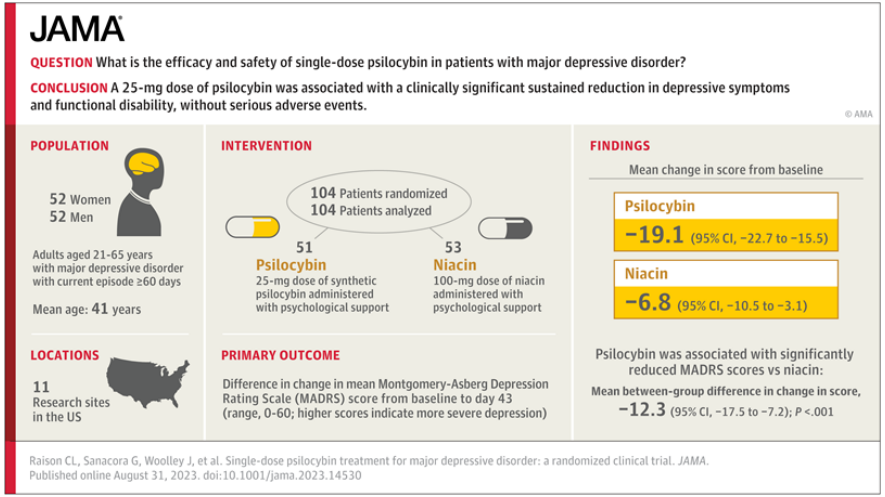


Psilocybin-Assisted Psychotherapy vs Placebo in the Treatment of Adult Patients With Alcohol Use Disorder

- Two psilocybin sessions with psychological support.
- Psilocybin-assisted therapy reduced heavy drinking by 83%.
- Eight months after the first psilocybin dose, close to half (48%) of those who had psilocybin stopped drinking altogether, twice as many as the 24% in the placebo group.
- High comorbidity of alcohol use disorder and problematic gambling Blaszczynski (2002) found that of 75 treatment-seeking gamblers in Australia, 73% had an Alcohol Use Disorder (AUD)

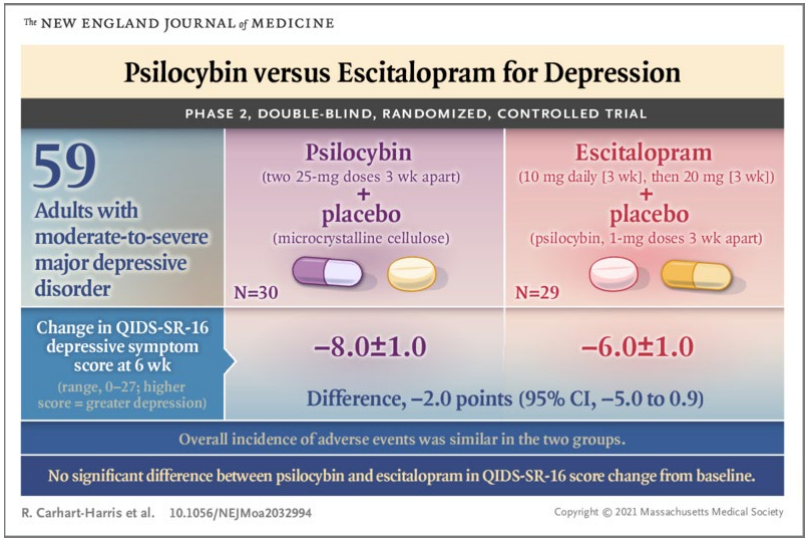


Single-Dose Psilocybin Treatment for Major Depressive Disorder - RCT



A single 25-mg dose of psilocybin administered with psychosocial support was associated with clinically and statistically significant reductions in depressive symptoms compared placebo.

Trial of Psilocybin versus Escitalopram for Depression - RCT



No significant difference in antidepressant effects between psilocybin 2x 25 mg and escitalopram. daily 10-20 mg. 2 doses of 25mg psilocybin Vs daily dose of escitalopram 10mg 3 weeks and 20mg another 3 weeks.

What about psychedelic assisted therapy to treat gambling?

- **There was virtually nothing published:**

- I believe is an innovative approach and may be worth researching.
- Preliminary studies in addiction suggest interesting therapeutic potential.
- Despite the controversy, providing new treatments for GD is in the public interest.
- The current treatments have moderate effectiveness.

Why research psychedelic-assisted therapy (PAT) for gambling disorder?

- Promising results in treating mental health disorders – Depression, Anxiety, Alcohol Use Disorder, Substance use disorder, smoking cessation, PTSD, Anorexia, end-of-life anxiety, OCD…
- High prevalence of Gambling Disorder, gambling-related harm and high relapse rates.
- High comorbidity in gambling disorder.
- Opportunity for ground-breaking research.

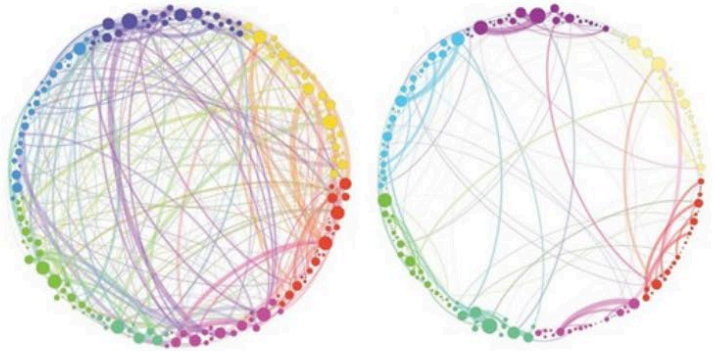
Current understanding of how psychedelics work?

Alters communication between brain networks, such as the Default Mode Network (DMN), which are associated with many mental illnesses.

Enabling patients to 'break out' of repetitive and rigid styles of thinking, feeling and behaving.

Promotes a form of "active coping", restoring patient agency.

Increased communication between brain networks (based on fMRI scans)



Psilocybin Placebo

Source: Beckley Foundation, United Kingdom
Based on clinical trials at Imperial College, London

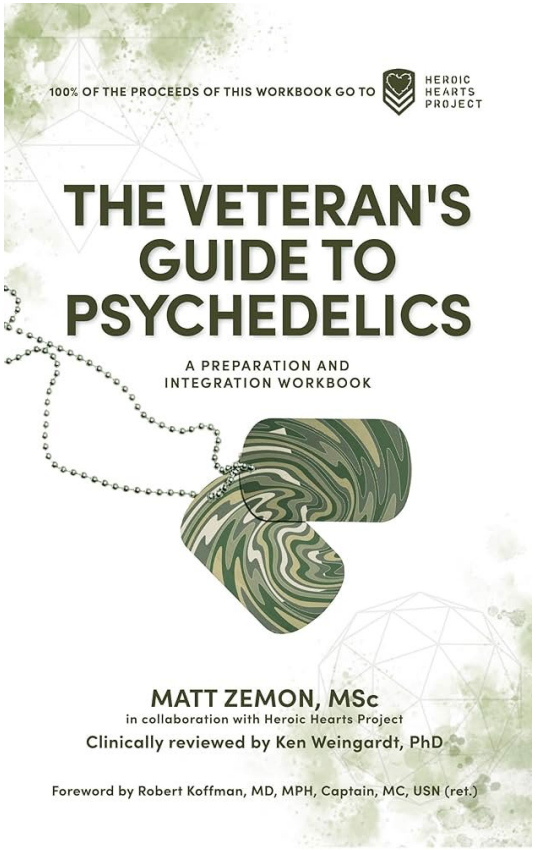
What does PAT look like?

Clinical assessment, psychological tests and interviews to ensure the suitability of the research subjects.

Preparation and objective setting of therapeutic sessions (3-6 sessions).

Dosing session (1-3 sessions of 4-6 hours per session with supervision).

Integration therapeutic sessions (3-6 sessions).



Heroic Hearts Project (HHP)

- HHP is a UK non-for-profit that facilitates access to veterans to new treatments.
- The HHP is aware that Gambling Disorder is highly prevalent among Veterans.
- They are organising a psychedelic retreat for 10 veterans with Problem Gambling in the Netherlands.
- The retreat will take place from the 6-12 of October.
- They have kindly invited me to collect data for my PhD research.

Next Steps?

- We have published a paper in the Journal of Behavioral about the potential of PAT to treat GD.
- We are conducting an expert opinion study on the views of PAT and gambling disorder experts.
- We have been invited to observe the first retreat for people affected by GD and we have received Ethics Approval.
- The Heroic Hearts is still have a couple of spaces free for the retreat.

Research questions:

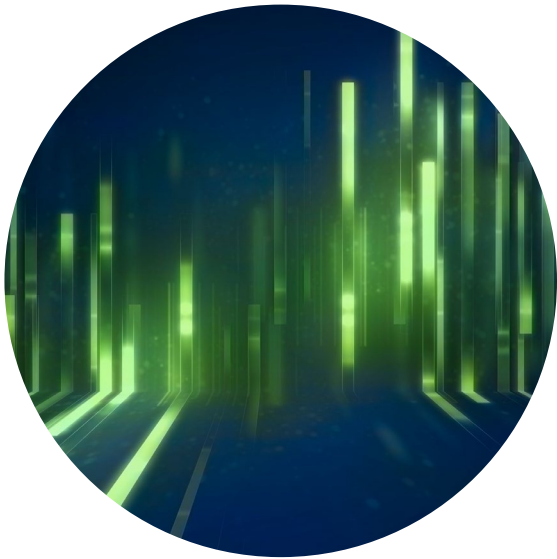
Is psilocybin-assisted therapy a potential and effective treatment option for problematic gambling?

Does psilocybin-assisted therapy have an impact on decreasing anxiety, depression, suicidality, and other related issues in people suffering from gambling disorder?

What is the prognosis after treatment?

What are the experiences of people affected by gambling disorder undergoing psilocybin-assisted? (Phenomenological experience)

Is there potential to conduct RCT?



Psychedelic-assisted therapy for people with gambling disorder?

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Authors: Pedro Romero, Andrea Czakó, Wim van den Brink, and Zsolt Demetrovics ... VIEW MORE +

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Abstract

Gambling disorder is a severe mental health and behavioural problem with harmful consequences, including financial, relationship and mental health problems. The present paper initiates discussion on the use of psychedelics combined with psychotherapeutic support as a potential treatment option for people living with a gambling disorder. Recent studies have shown promising results using psychedelic-assisted therapy (PAT) to treat anxiety, depression, post-traumatic stress disorder, and various substance use disorders. Considering the similarities in the underlying psychosocial and neurobiological mechanisms of gambling disorder and other addictive disorders, the authors suggest that psychedelic-assisted therapy could be effective in treating gambling disorder. The paper also underscores the need for further research into the viability and effectiveness