



# Psychedelic-Assisted Psychotherapy (PAP): Information for the General Public



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**Summary:** Psychedelic-assisted psychotherapy (PAP) is the use of a psychedelic drug (such as psilocybin, aka magic mushrooms, LSD, or others) in a controlled, supervised environment as part of therapy for conditions such as addictions, anxiety and trauma. Unfortunately, there is limited evidence on the effectiveness of psychedelic-assisted psychotherapy, compared to other standard treatments such as psychotherapy. Talk with a trusted healthcare provider if you are wondering about psychedelic-assisted psychotherapy.

# D's Story

D. is a 50-year paramedic. After years of exposure to difficult, traumatic situations, he developed PTSD. He has tried various treatments, but none appear helpful. One of his colleagues suggests he try using magic mushrooms.

#### Introduction

Psychedelics (also known as hallucinogens) are a class of psychoactive substances that produce changes in sensory perception, sense of time, emotions and thinking.

Typical effects include

- Euphoria, and a sense of relaxation and wellbeing;
- Hallucinations such as seeing and hearing things that others cannot.

Some people experience these as pleasant and, as a result, will use psychedelics on a recreational basis. On the other hand, others can have a 'bad trip' where they experience negative moods and scary, disturbing hallucinations. This can lead to panic and dangerous, risky behaviours, such as running across a road or even suicide attempts.

There are many different kinds of psychedelics. Some occur naturally, in trees, vines, seeds, fungi and leaves, whereas others are made in a laboratory.

Commonly used psychedelics include:

Ayahuasca

- DMT
- LSD
- NBOMes
- Psilocybin (magic mushrooms).

Since ancient times, indigenous cultures have used psychedelics as part of healing rituals, supervised by healers such as shamans.

During the hippie era of the 1960s, psychedelics were popularized, mainly for recreational use.

During the 1970s, there was a freeze on research into psychedelics. The "war on drugs" in the 1980s and 90s similarly harmed investigation into psychedelics.

In recent years, however, there has been renewed interest in using psychedelics thanks to newer research.

## What is Psychedelic-Assisted Psychotherapy (PAP)?

Psychedelic-assisted psychotherapy (PAP) is ingesting a psychedelic drug in a controlled, supervised environment as part of therapy for conditions such as addictions, anxiety and PTSD -- it is NOT simply ingesting psychedelics recreationally.

#### Research

Research suggests that psychedelic-assisted psychotherapy may help conditions such as PTSD, anxiety, depression and chronic pain, even in cases where conventional medical treatments have been ineffective.

One study examined patients with severe PTSD who were given MDMA (the club aka ecstasy) and psychotherapy (Mitchell, 2021). After treatment, the study showed that 67% had remission of their PTSD. The study authors concluded that "...MDMA-assisted therapy represents a potential breakthrough treatment that merits expedited clinical evaluation."

# How Might Psychedelics Work?

One theory on how psychedelics might work is that they improve neuroplasticity, the brain's ability to change and adapt.

When people are overwhelmed by stress, anxiety, trauma or depression, the brain becomes 'stuck' and unable to process. Psychedelics possibly help people process their stress, anxiety or depression, allowing them to see things in a new light and make sense of their struggles. With the support of a therapist, the person can integrate their new thoughts and perspectives into their life.

## What is the Legal Status of Psychedelics in Canada?

Psilocybin and magic mushrooms are controlled substances in Canada, which means they are illegal to use.

However, it is possible to access treatment through approved clinics that have Health Canada approval for legal access to psilocybin or receive Health Canada exemptions in exceptional situations (e.g. using psilocybin for chronic pain associated with cancer).

# What Psychedelic Therapy Looks Like

Psychedelic therapy (aka psychedelic counseling) is a type of therapy that combines:

- Talk therapy, and
- Psychedelics, generally psilocybin (aka magic mushrooms).

#### First visit

• During the first visit, you meet with the therapist.

#### Preparatory visits

- You meet for several sessions to build trust, similar to typical therapy sessions.
- Before the psychedelic session, the patient and the therapist will review what happens during the psychedelic session.

#### Psychedelic session:

- During this session, the patient takes a psychedelic in a dosage that will trigger a psychedelic experience. Doses are larger than typically taken in micro-dosing.
- The therapist supports the person throughout the psychedelic experience (i.e. trip).
- The user is provided with aids like eyeshades and preselected music playlists to create a soothing sensory environment.
- The user is encouraged to 'let go and follow wherever the experience leads them.
- Practices that reduce the risk of a bad trip include
  - The fact that there is a safe professional with the person at all times
  - The environment is a low stimulation environment.

#### Follow-up sessions

- After the psychedelic session, several shorter 'integrating' sessions help patients process their new realizations.
- Some patients find it helpful to repeat their psychedelic session.

## How Might Psychedelics Work?

One theory on how psychedelics work is that they improve neuroplasticity, the brain's ability to change and adapt. When people are struggling with stress, anxiety, trauma or depression, one can imagine that the brain cannot change or adapt. Psychedelics disrupt the "stuckness" and allow the person to access other ways of thinking. For example, it might enable a person struggling with trauma to process and see their trauma in a new light, and allow them to realize a new sense of purpose, hope, belonging and meanwhile. With the support of a psychotherapist, the person can integrate their new thoughts and perspectives into their life.

## Frequently Asked Questions (FAQ)

#### Q. Are psychedelics addictive?

A. Hallucinogens (such as psilocybin) are not addictive -- they do not provide a dopamine/adrenaline reward, unlike other drugs such as nicotine or cannabis.

# Risks of Hallucinogens

Psychedelics do carry risks, and thus, only use them under the supervision of a qualified health professional.

Acute intoxication from hallucinogens can cause

- Increased or irregular heart rate and blood pressure,
- Rapid breathing
- Vomiting, sweating and chills
- Numbness
- Flashbacks
- Confusion and trouble concentrating
- Dizziness

- Blurred vision
- Clumsiness

The term "bad trip" describes an unpleasant experience while intoxicated. Classic symptoms of a bad trip include:

- Extreme paranoia
- Extreme mood swings
- Seeing or hearing things that are terrifying and disturbing;

Bad trips can even lead to risk-taking behavior, traumatic injuries and even death. E.g. classic examples include the person who becomes terrified by a scary hallucination, which can lead them to run away from the danger (e.g. running into traffic), or fight (e.g. becoming aggressive and violent).

Factors that can increase the risk of a bad trip include:

- Taking higher doses of the psychedelic;
- Being in a negative emotional state before using the psychedelic;
- Settings with excessive stimulation;
- Being dehydrated, using alcohol or other drugs;
- Being alone without a safe person.

Long-term side effects

Hallucinogen-persisting perceptual disorder (HPPD): Although rare, some people can even develop
permanent hallucinations, the so-called "endless trip" after using hallucinogens. For some people,
treatments such as antipsychotic medications or anticonvulsants (e.g. lamotrigine) may be helpful.

People should NOT be using psilocybin if they have:

- Problems with psychosis, e.g. seeing or hearing things.
- Paranoia, a feeling that you are in danger from others or that others are against you, e.g. spying on you, planning to hurt you, etc.

# Other Uses of Psychedelics

Microdosing psychedelics is consuming very low doses of a psychedelic substance. The dosage consumed is typically 1/10 the required dose to cause a hallucinogenic experience. People who microdose claim that it improves their mood, stress or creativity.

Unfortunately, there is a lack of scientific literature to support this practice. Studies do seem to suggest improved mood and stress, though it is uncertain if it helps creativity. The evidence so far suggests a significant placebo effect (Kaertner, 2021).

# D's Story, Part 2

D. asks his family doctor about psychedelic-assisted psychotherapy. On the basis that he has tried varous treatments without success, his physician tells him about a private clinic that offers psychedelic-assisted psychotherapy.

He meets for several sessions with the psychotherapist. They talk about his hopes and goals for treatment. He builds a trusting relationship with the psychotherapist.

When ready, he has a psychedelic session using psilocybin. During his psychedelic experience, he can see his trauma and life in a new light.

With time and the therapist's help, he can work through and process his trauma and integrate his new realizations into his life and understanding. His psychedelic session is not a sudden, quick fix. However, his psychedelic-assisted psychotherapy allows him to get unstuck and move to the next phase of his healing journey.

### References

Anderson, T., Petranker, R., Christopher, A. et al. Psychedelic microdosing benefits and challenges: an empirical codebook. Harm Reduct J 16, 43 (2019). https://doi.org/10.1186/s12954-019-0308-4.

Kamyar Razavi, Robin Gill: 'People are desperate to heal': The push for psychedelic-assisted therapy in Canada, Global News, Published June 12, 2021.

https://globalnews.ca/news/7939882/mushrooms-psychedelic-therapy-canada/

Kaertner, L.S., Steinborn, M.B., Kettner, H. et al. Positive expectations predict improved mental-health outcomes linked to psychedelic microdosing. Sci Rep 11, 1941 (2021). <a href="https://doi.org/10.1038/s41598-021-81446-7">https://doi.org/10.1038/s41598-021-81446-7</a>

Mitchell, J.M., Bogenschutz, M., Lilienstein, A. et al. MDMA-assisted therapy for severe PTSD: a randomized, double-blind, placebo-controlled phase 3 study. Nat Med 27, 1025–1033 (2021). https://doi.org/10.1038/s41591-021-01336-3

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