From 'Magic Mushrooms' to Medicine: What Clinicians Should Know About Psilocybin-Assisted Therapy

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Overview of Today

- Contextual recognition and history lesson
- Mechanisms of action of PAT
- Review the basic model and structure of PAT
- Applicability to populations and research overview
- Roles of supporting or referring clinicians
- Case study

*NASW Colorado chapter has approved CE credit

Accuracy, Utility, and Risks Statement

While academic and professional research has for decades investigated the effects of psychedelics broadly and psilocybin specifically, the existing body research and conclusions is less extensive compared to other traditional psychotherapies . The presenters will present findings and acknowledge where these findings are tentative or early in development.

Treatment using this approach is still federally illegal and additional specialized training and licensure is required to complete this treatment with patients. Therefore, this presentation is for informational purposes only and does not train attendees to use this approach with patients, and clinicians are not encouraged to utilize psychedelic substances with their clients outside state-specific legal models. Utilization of psilocybin with clients outside of the state-specific legal model may result in harm to the client, the clinician, and the psychedelic movement at large.

Program Notices

Conflicts of Interest:

- None

Commercial Support:

- None

AI Use Disclosure

AI was used to generate some images and graphics

AI was used to assist with visual formatting

Audience Poll: What is your level of familiarity with Psilocybin-Assisted Therapy?

A: I'm very familiar – I'm here for a refresher
B: Somewhat familiar – I know a little bit
C: New to me – I'm just learning about it

Disclaimers

Federally Illegal

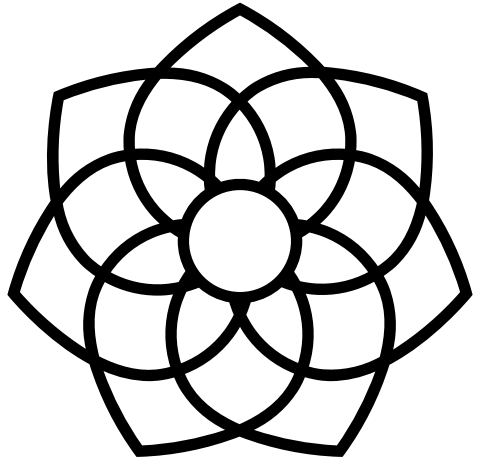
- Hopeful that future FDA approval will change this

Focus on Colorado Model

- Oregon has a different model of access
- Legislation has passed in New Mexico, but not accessible to public yet
  - 1st state to pass via legislation vs ballot measure
- About a dozen other states have pending legislation or have limited access (e.g., university research)

Disclaimers Contd.

- This viewpoint represents, or is at least influenced by, a "Western," Americanized, and medicalized understanding of psilocybin uses and mechanisms of actions
- Emphasis on symptom reduction
- Understanding change via physiology
- Taking place within a capitalistic system
- Occurring within a larger context of colonization
- E.g., Contrasts cultures that see illness caused by spiritual rupture with ancestors



What do you notice in yourself?

Psychedelics

Psilocybin

- *AI generated image


D.A.R.E.®
TO RESIST DRUGS
AND VIOLENCE.

*AI generated image

Audience Poll: In 1-3 words, what came to mind?

Our Context in Time

5 waves of psychedelics	1: ~5,000 BCE to 1800, indigenous/ancient use	
	2: 1800's to 1950's, early scientific research	
	3: 1960's – 1980's, counter-culture and prohibition	
	4: 1990's – 2010's, psychedelic renaissance	
	5: 2020's – today, mainstream, commercialization, decriminalization	*Mushrooms are the new avocado toast!*

Psilocybin is Introduced to the West

Psilocybin largely driven to the fringes in Central America by Spanish Catholic invaders (1500's+)

Maria Sabina (1894-1985) of Huautla de Jiménez, Oaxaca

1955 R. Gordon Wasson first Westerner to participate in velada w/ Maria

1957 Life Magazine article published

1958 Albert Hofmann isolates and synthesizes psilocybin at Sandoz Laboratory

1950's – 1960's

Huautla de Jiménez is overrun by tourists

Late 1950's - early 1960's Hundreds of studies AND psychedelics (LSD included) "escape the laboratory" in the U.S. and proliferate, often associated with counter-culture movements

John Ehrlichman, Nixon Administration Domestic Policy Chief

"The Nixon campaign in 1968, and the Nixon White House after that, had two enemies: the antiwar left and Black people. You understand what I'm saying? We knew we couldn't make it illegal to be either against the war or Black, but by getting the public to associate the hippies with marijuana and Blacks with heroin, and then criminalizing both heavily, we could disrupt those communities. We could arrest their leaders, raid their homes, break up their meetings, and vilify them night after night on the evening news. Did we know we were lying about the drugs? Of course we did."

1994, interview with journalist Dan Baum

The War on Drugs: Controlled Substances Act (1970)

Controlled Substances Act designated drug schedules, effectively ending psychedelic research

Schedule 1: defined as drugs with no currently accepted medical use and a high potential for abuse.

- Currently includes heroin, psilocybin, MDMA, cannabis, Quaaludes, bath salts

Research Reemerges

~1999-2000 Roland Griffiths begins establishing psilocybin research program at Johns Hopkins University School of Medicine

- Griffiths, R.R., Richards, W.A., McCann, U., & Jesse, R. (2006). Psilocybin can occasion mystical-type experiences having substantial, and sustained personal meaning and spiritual significance. Psychopharmacology, 187(3), 268-283.

Recent wave of research

- About 200 clinical studies published since 2006

What is Psychedelic-Assisted Therapy (PAT)?

A therapeutic approach combining psychedelics with psychotherapy

Focuses on mental health conditions like PTSD, depression, anxiety, addiction

Involves preparation, guided session, and post-session integration

Substances Commonly Used

Psilocybin – used for depression and existential distress

MDMA – used primarily for PTSD

Ketamine – effective for depression and suicidal ideation

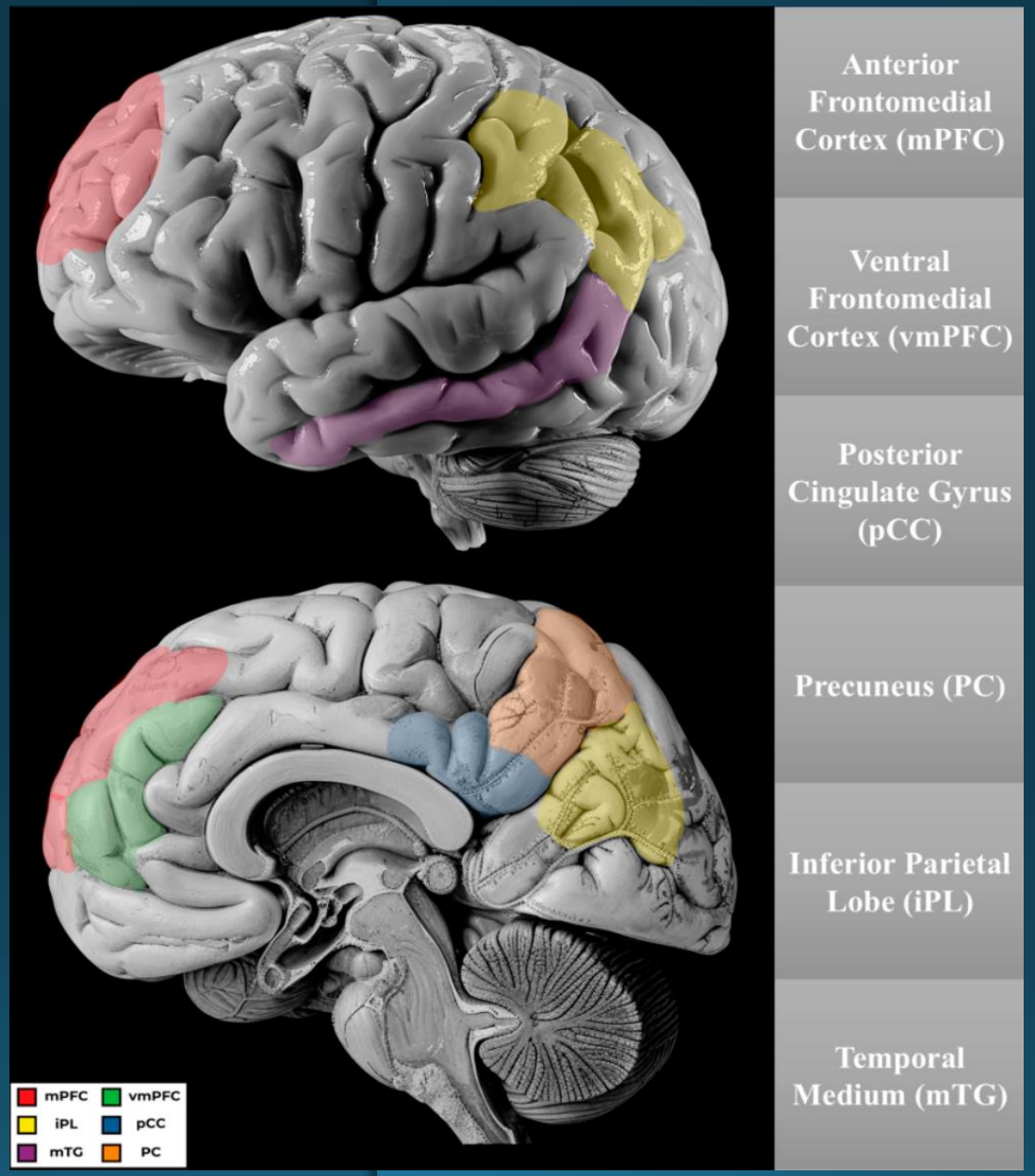
LSD – being studied for anxiety and mood disorders

Ibogaine – used for opiate dependence

Potential Mechanisms of Action

- DEFAULT MODE NETWORK DISRUPTION
- INCREASED NEUROPLASTICITY
- INCREASED ENTROPY
- VIA 5-HT2A (SEROTONIN) RECEPTORS
- EMOTIONAL PROCESSING
- FEAR EXTINCTION
- COGNITIVE FLEXIBILITY

Default Mode Network



Azarias, F. R., Almeida, G. H. D. R., de Melo, L. F., Grassi Rici, R. E., & Maria, D. A. (2025). The journey of the default mode network: Development, function, and impact on mental health. *Biology, 14*(4), 395. https://doi.org/10.3390/biology14040395

Default Mode Network

- **Active when our mind is not task focused, eg., pre FMRI task. Hence "default mode."**
- Associated with:
  - Sense of independent/differentiated self
    - Self-referential thinking
    - "I am me and I am not you"
  - Narrative about self
    - Integrating experiences into a coherent narrative
    - "I have a story"
  - Mental time travel
    - Imagining the future
    - Replaying the past
- Overly active = rumination, rigidly holding onto core beliefs and stories about ourselves
- Can get oriented to traumatic material

Entropy

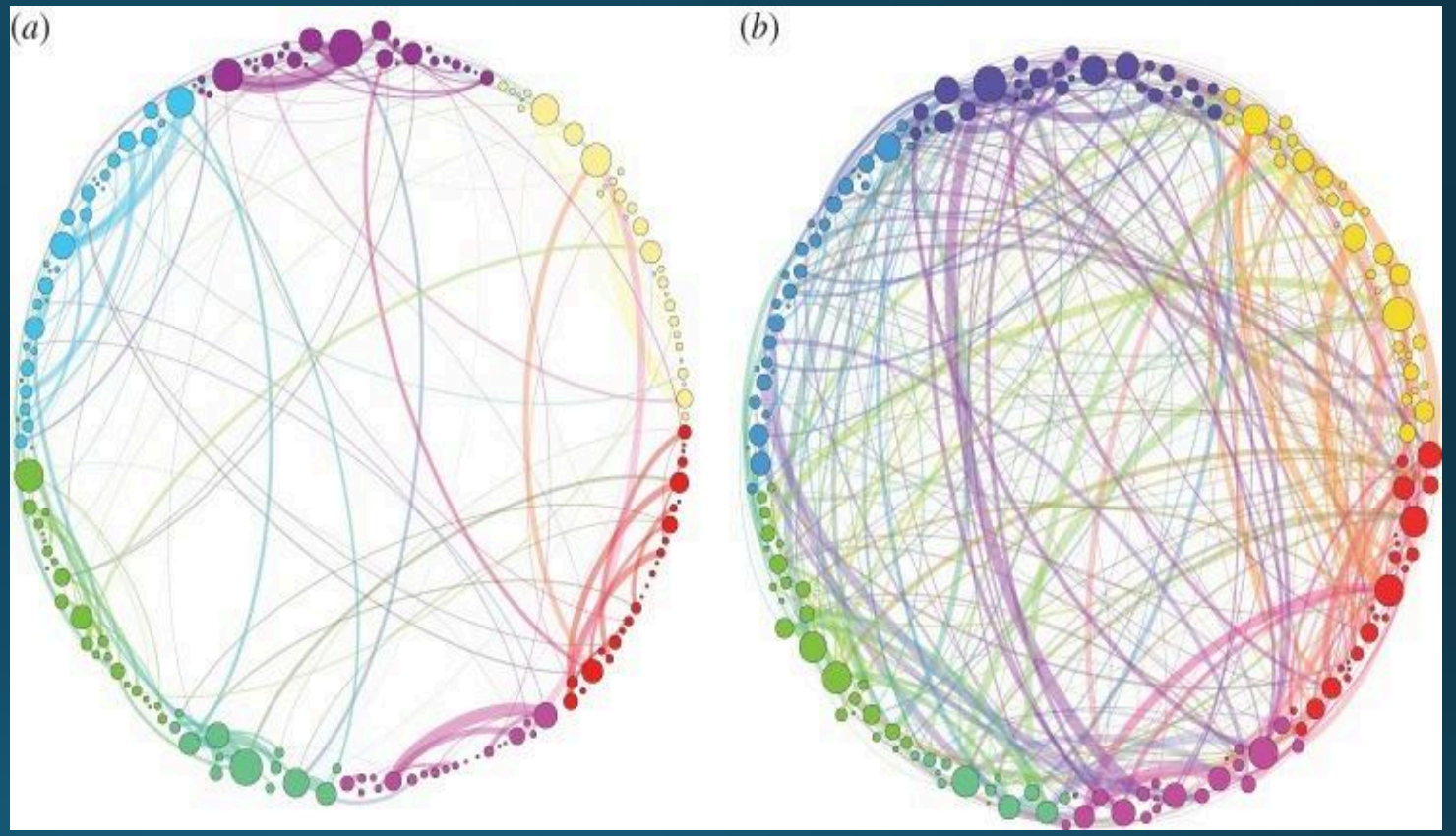
Psilocybin increases entropy

Low entropy systems:

rigid, hierarchical, limited communication across regions

High entropy systems:

flexible and malleable, more "flat" rather than hierarchy, increased communication across regions



Brain (a) vs brain on psilocybin (b)

Petri, G., Expert, P., Turkheimer, F., Carhart-Harris, R., Nutt, D., Hellyer, P. J., & Vaccarino, F. (2014). *Homological scaffolds of brain functional networks*. **Journal of the Royal Society Interface, 11**(101), 20140873. https://doi.org/10.1098/rsif.2014.0873

Neuroplasticity

- Substantially increased neuroplasticity during administration session
  - Neurogenesis and synaptogenesis
- Increased neuroplasticity for about 7-10 days after administration session
  - Hence the directive "No major life changes or decisions in the next two weeks."
- Analogy: Imagine you could go to the gym and have a session count 100x toward strength building.

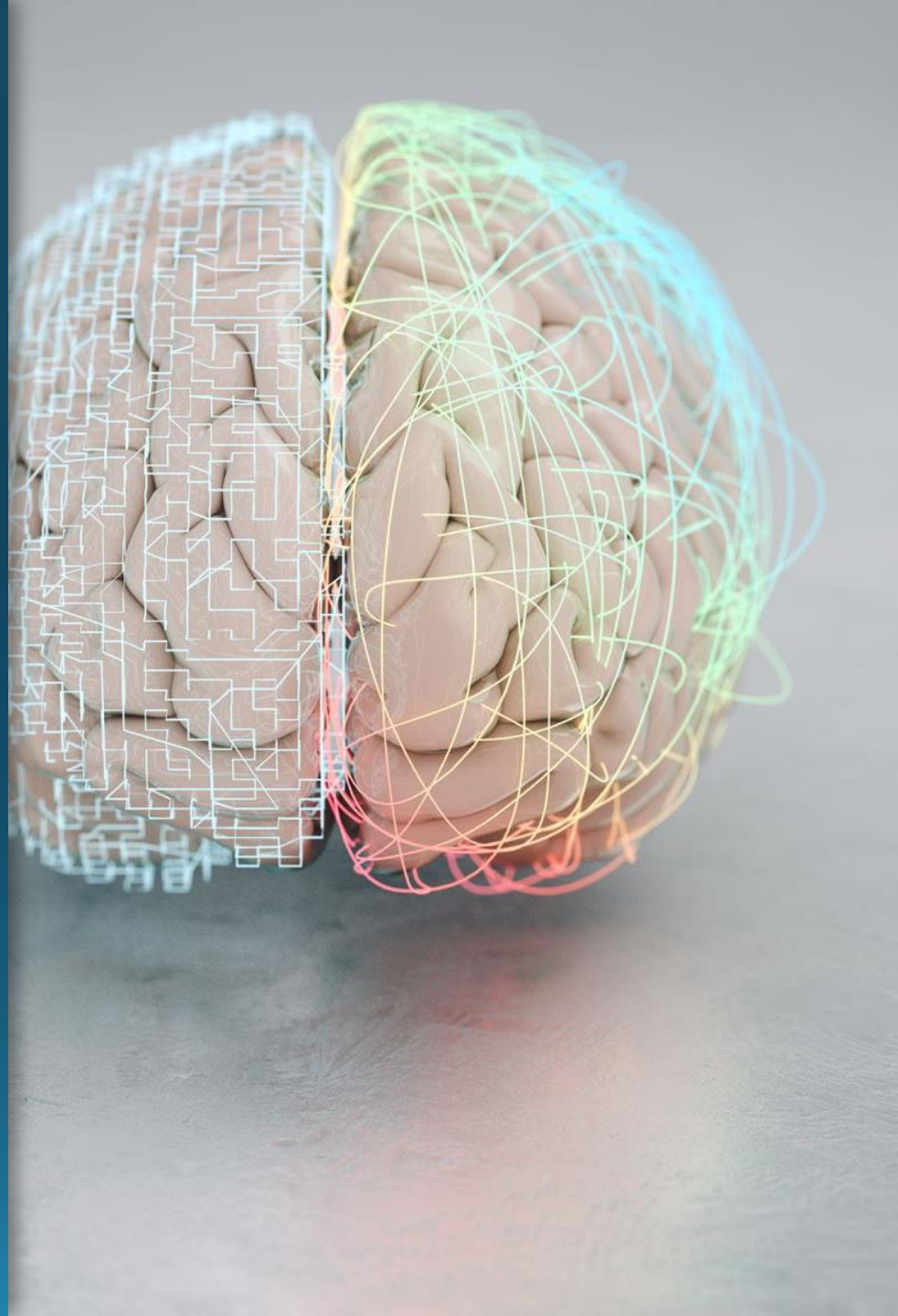
Mechanisms of Action: Brain➪Mind

Pathological mind

- Rigid thinking patterns, loops, rumination
- Strong associations between thoughts-feelings-sensations
- Very strong sense of ego ("I")
- Disconnection from others, including non-human entities (nature, etc.)
- History reviewing, future predicting

PAT can

- Loosen rigid thinking patterns, allowing for development of new views of self/world/other
- Engender new emotional responses



Core Model

Phase	Focus
Preparation	Establish rapport, assess readiness, build trust, clarify intentions, safety planning
Dosing Session	Support inner-directed experience, ensure safety, observe and reflect
Integration	Assist meaning-making, emotional processing, behavior change

Colorado Regulated Model

Licensed entities:

- Grower/cultivator
- Lab testing for purity and potency
- Healing Center
- Handler
- Facilitator
  - Clinical vs non-clinical

Preparation (In-person or Tele)

- Ensuring that PAT and client are a good fit for one another
- 1 session is required, 2 or more is ideal
- Psychoeducation – “Flight instructions”
  - "If you see a door go through it. If you see a staircase, climb it. If you see a monster, ask it 'what are you trying to teach me?'"
- History gathering
- Intention setting
  - What is it that this person wants to work toward?
- Informed consent
- Forms forms forms!

Intention Setting

- Goals vs. intentions
- Expansive vs. directive
- Overarching themes

- Example intentions:
  - Explore the barriers to trusting myself
  - Open myself to healing grief and disconnection so I can live with peace, presence, and love
  - Learn that I am more than the emotions that are keeping me stuck
  - To release rigidity and judgment and connect to presence and compassion
  - To experience myself as lovable and worthy from the inside, not just as a thought
  - To open myself to the possibility of relief in order to reconnect with the parts of myself that feel buried
- Grounding statements/mantras
  - Trust and let go
  - Accept and release
  - All is welcome

Set and Setting

Set (Mindset):

- The individual's internal state going into the session
- Includes beliefs, expectations, intentions, and emotional tone
- Cultivated through preparation, mindfulness, and intention setting

Setting (Environment):

- The external context and physical environment
- Includes safety, lighting, comfort, aesthetics, and interpersonal dynamics
- The therapist plays a key role in creating a safe and supportive setting
- Music can play an important role

Administration/ Journey Session

- 4-6+ hours
- Music likely (indigenous, synthwave-ish, nature-inspired and/or classical)
- Eye shades likely
- Direct inward – therapist in non-directive approach
  - We cannot control the intensity or context that emerges
- The mushroom does not give the answer. It assigns the homework.
- Group vs. Individual

Common Experiences During Journey

- Time feels distorted or nonexistent
- Sense of unity with others/nature/universe
- Sense of self softens/dissolves
- Reexperiencing earlier moments, in one's life and beyond
- Profound emotional openness/release/experience
- Connection with ancestors/spirits/others
- Sense of peace/acceptance/surrender
- Transformation into another form/substance

Therapist's Role: Non-Directive, Person-Centered Support

Non-directive stance:

- The therapist does not "guide" the content of the psychedelic experience
- Instead, they hold space, offer reassurance, and reflect what arises
- Emphasizes **trust in the client's inner healing intelligence**

Relational presence:

- Grounded, attuned, emotionally regulated therapist presence
- Responds with empathy, curiosity, and minimal interpretation
- Supports clients to move *through* difficult material rather than away from it

Reset LLC (left), ETC Hospitality (right) in Colorado

Reset LLC (left), ETC Hospitality (right) in Colorado

Integration (In-person or Tele)

- Ideally within 24-72 hours
  - Can vary depending on number of integration sessions
- Window of up two 7-10 days of increased neuroplasticity
  - Encouraging no major life decisions
- Highly Rogerian, helping make sense and translate insights into new changes in client life
  - Often using metaphor
  - IFS, Jungian, ACT perspectives often utilized
  - Also, mystery
- Setting bx intentions for how to integrate new insights and make change
- CO requires 1 session, more are ideal
- Community support is ideal, including integration groups, etc.

Disorders with Emerging Supportive Research

- MDD*
  - Especially in the area of existential crisis (e.g., cancer dx)
- Treatment Resistant Depression *
- GAD
- OCD
- PTSD
- Substance use disorders
- Chronic pain
- Disordered eating

*FDA breakthrough designation

Study	Sample	Key Result
Von Rotz et al., 2023	N = 52 adults with MDD	**54% in remission for MDD at 14 days** and significant decrease in MADRS and BDI scores
Sloshower et al., 2023	N = 19 adults with MDD	66.7% of adults improved and **46.7% in remission for MDD at 2 months**
Goodwin et al., 2022	N = 233 adults with treatment-resistant depression	**Significant decrease in depression at 3 weeks** but not 12 weeks.
Carhart-Harris et al., 2021	N = 59 adults with MDD	**Psilocybin similarly effective as escitalopram (SSRI)**
Davis et al., 2021	N = 27 adults with MDD	**Significantly lower MDD scores at 4 weeks** compared to waitlist
Griffiths et al., 2016	N = 51 adults with cancer-related depression/anxiety	**At 6 months,** 79% showed significant response,**71% depression remission, 63% anxiety remission**
Ross et al., 2016	N = 29 adults with cancer-related depression/anxiety	**83% showed significant improvement at 6 weeks**
Grob et al., 2011	N = 12 adults with cancer-related depression/anxiety	**At 6 months, significant BDI score decrease**

Bahji, A., Lunsky, I., Gutierrez, G., & Vazquez, G. (2023). Efficacy and safety of four psychedelic-assisted therapies for adults with symptoms of depression, anxiety, and posttraumatic stress disorder: A systematic review and meta-analysis. Journal of Psychoactive Drugs, 57(1), 1–16. https://doi.org/10.1080/02791072.2023.2278586

Revised Mystical Experience Questionnaire (MEQ-30)

- Scores associated with stronger outcomes
- https://psychology-tools.com/test/meq-30
- William James, qualities of a mystical experience
  - Ineffability – defies expression in words
  - Noetic quality – irrefutable knowing
  - Transiency – not persistent
  - Passivity -- peak experience is received, not actively sought

Research Limitations

- 80+ percent of study participants are non-Hispanic White
- Limited data on Socioeconomic Status
- Limited LGBTQ+ Representation
- Lack of analysis of treatment effects across demographics

- Institutional mistrust
- Lack of workforce diversity
- Regulatory barriers

Talking with clients

- Can't "recommend" something that is federally illegal
- Can provide psychoeducation
  - For therapists, consider how you talk to your clients about medication even though you cannot prescribe
- How would I know if my client might benefit from this? Ideal candidates:
  - Have willingness to move toward inner material
  - Can grasp ACT/CBT/IFS etc. concepts logically but difficulty translating it to felt sense or action
  - Are seeking/would benefit from new ways of seeing the self/world
    - Existential crisis, view self as isolated, difficulty with forgiveness, etc.
  - Have support system/inner resources to withstand a shakeup
    - Community support, ego strength, sense of self, reality testing, grounded belief systems
    - "You have to be somebody before you become nobody" - Jack Engler

Rule Outs (or proceed with extreme caution)

- OR has some of these as rule outs, CO says to use judgment
- Personal or family history of psychosis
- Present SI – generalized instability
- Bipolar I (especially lithium use)
- Under 21 years old
- Active substance use disorder with use in the past 30-days
- Heart, blood pressure and other medical conditions (healthy enough to climb several flights of stairs?)

The main questions to ask:

Can this person tolerate a destabilization? Do they have an intact enough "ego" to tolerate dismantling it for a period of time?

- **People exhibiting behaviors consistent with BPD likely need a lot of support and need to demonstrate stabilization**
- **May need to taper off their SSRI's for a while before**

Do's and Don'ts

Do

- Provide info about clinical research
- "Nothing clearly disqualifies you"
- State it's not FDA approved
- Refer to multiple facilitators/directory
  - https://dnm.colorado.gov/accessing-regulated-natural-medicine
  - https://list.withalthea.com/

Don't

- “Recommend” PAT
- Provide "clearance" or "green light"

Risks/Challenges

- Challenging Experiences aka "Bad Trips"
- HPPD
- SSRI challenges
- Medication interactions
- Research is still early/limited
- Clients underreporting rule outs
- Expectations
- Power differentials/abuses

What Is My Role As Primary Therapist If I Refer to PAT

- PAT is typically time-limited, focused treatment
- Therapist role in preparation and integration
  - Outside of and within formal PAT process
  - Consultation

Controversies

- Access and equity: high costs and limited availability
- Commercialization and pharmaceutical monopolies
- Cultural appropriation of Indigenous medicines (e.g., ayahuasca)
- Concerns over therapist misconduct and abuse of vulnerable states
- Cultural messaging/stigma

Ethical Considerations

- Informed consent is critical: patients must understand risks and expectations
- Set and setting shape the therapeutic outcome
- Therapist boundaries and training essential due to power imbalances
- Cultural sensitivity needed when using traditional plant medicines
- Integration therapy post-session is ethically necessary

Case Study

- 40s Caucasian heterosexual, cisgender male
- Former EMT of 25 years
- - PTSD from workplace trauma exposures
- Alcohol Use Disorder
- Intention: "To let go and let the light in"

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