



## PSYCHEDELIC-ASSISTED THERAPY FOR YOUTH AND WHAT WE KNOW FROM ADULT STUDIES

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**Received:** February 10, 2022

**Accepted:** April 17, 2022

**Published:** June 30, 2022

### Suggested Citation:

Fedewa, A., Richardson, M., & Watson, A. (2022). Psychedelic-assisted therapy for youth and what we know from adult studies. *Turkish International Journal of Special Education and Guidance & Counselling (TIJSEG)*, 11(1), 1-9.



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### Abstract

Psychedelic-assisted therapy has garnered national media coverage over the last several years and is touting significant benefits for adult mental health. Part of the Phase III clinical trials, however, will be soliciting adolescents as participants in this alternative therapy. An overview of the research in psychedelic-assisted therapy and what this would look like for adolescents will keep school psychologists informed on this potential treatment for youth who struggle with a variety of mental health concerns.

**Keywords:** Social-emotional intervention, PTSD, depression, anxiety.

### INTRODUCTION

Since 2019, youth mental health disorders have increased by 9% for adolescents in the United States (Mental Health America, 2021). More alarming is that minority youths' percentages are much higher than this average; 12.4% of children who identify as more than one race have a mental health disorder (e.g., depression, anxiety, substance abuse, emotional disturbance, etc.), and LGBTQ\* youth have the highest rate of suicidal ideation (Mental Health America, 2021). These percentages are well above the average rate for all adolescent children (Center for Disease Control, 2021). Further, a significant lack of available resources, especially in conjunction with the Covid-19 pandemic, is contributing to a higher prevalence of abuse, neglect, and the increasing diagnostic rates of post-traumatic stress disorder (PTSD) in children (Department of Veterans Affairs, 2021).

The search for treatments to address anxiety and depressive symptomatology have grown 62% since 2019, which was most significantly found in the adolescent age group (Mental Health America, 2021). The continual growth of diagnosed mental health disorders among youth coupled with the declining rate of practitioners (Mental Health America, 2021) and effective modes of treatment (Merikanas, et al., 2013) make the need for effective and novel treatments that much more necessary. Depression and anxiety disorders associated with past trauma have especially shown resistance to adequate treatment among youth (Louis et al., 2010). These indications have provided an avenue for researchers to explore the potential of psychedelic-assisted therapy for adolescents in clinically approved settings. Recently, the medicinal use of psychedelics to treat mental disorders in adults has



gained popularity, and subsequently, more credibility in western culture from ongoing clinical trials data (Reiff et al., 2020; Schenberg, 2018; Smith, 2019)

Although the use of psychedelic-assisted therapy to address adult symptomatology is gaining more traction amongst researchers, the use of such substances for youth suffering from 4 mental disorders is unknown. However, Phase 2 and 3 trials with adults suggest promising evidence for the application of psychedelics in improving adult mental health (Carhart-Harris et al., 2016; Gasser et al., 2014; Mithoefer, 2011; Mithoefer, 2013). Additional studies will soon be underway for the application of MDMA (3,4-MethylenedioxyMethamphetamine) and Psilocybin (the active ingredient in “magic mushrooms”) for adolescents—likely to target trauma, depression, and anxiety—within the next 2-3 years given that adult clinical trials are currently in Phase III of FDA approval. Thus, soon, school psychologists will be able to inform teachers, parents, and other stakeholders about this alternative treatment and will need to be aware of current research, practice, and cultural implications involving psychedelic-assisted therapy for adolescents. Thus, this paper will outline what this therapy could look like for youth based on current research and practice for adults. Implications for practitioners and clients of color will be discussed and resources will be provided for practitioners who wish to pursue additional information on the topic.

## PSYCHEDELIC-ASSISTED THERAPY WITH ADULTS

### Psychedelics Used and Empirical Outcomes

In the last decade, clinical studies using both natural and synthetic psychedelics to address mental health disorders have widely increased (Reiff et al., 2020). This shift has been in response to the growing need of practitioners due to an increase in mental health disorders, limited accessibility to treatment (Mental Health America) and the stall of development in innovative, traditional medications (Schenberg, 2018). The research on potential benefits of psychedelics is not a novel idea, but a reemergence of what was put on hold with the U.S. Controlled Substance Act of 1970 that classified the undermentioned drugs as Schedule 1 (Brown, 2021). In fact, empirical research dating back to the 1950's and 1960's showed promising results for improving adult mental health (Reiff et al., 2020). Nearly 70 years later, researchers have found themselves back at these initial findings. Modern nomenclature now refers to this process as Psychedelic-Assisted Psychotherapy, otherwise known as “PAP”. Clinical studies on PAP have sought to learn the effects of specific substances for clients with anxiety, depression, PTSD, substance-abuse, and suicidality. Such therapeutics have included Lysergic Acid Diethylamide (LSD), MDMA, 2-(2- Chlorophenyl)-2-(methylamino) cyclohexanone (Ketamine), and Psilocybin (Schenberg, 2018). Given the differences of chemical structure and effects, each substance has been carefully selected, administered, and studied for clients who exhibit similar clusters of symptomatology.

The most widely investigated pairing has been Ketamine with depressive disorders as it is currently the only nationally legal psychedelic available (Dore et al., 2019). Ketamine has also been used for obsessive-compulsive disorder (OCD), PTSD, suicidal ideation, and substance misuse. Its effects include modifying consciousness (i.e., changing mood and cognition; Mion, 2017) and administration is through oral or intranasal methods over 1-12 sessions. According to Schenberg (2018) 68 trials have been completed with 21 ongoing, which included nearly 6,000 individuals. The second most studied substance is MDMA through oral administration over the course of two to three sessions. Participants who participate in MDMA trials have been diagnosed with PTSD, Autism Spectrum Disorder (ASD) with social anxiety, existential anxiety, or Alcohol Abuse Disorder (Schenberg, 2018). 17 trials have been completed with many more ongoing at the present time after MDMA was designated as a breakthrough therapy for PTSD by the FDA in 2017 (Feduccia et al., 2019). The third most researched psychedelic is Psilocybin, which is given orally over one to three sessions. Eight trials have been completed with five ongoing studies with over 500+ participants. Psilocybin has been researched with depression, existential anxiety, alcohol dependence, cocaine related disorders, and cigarette dependence (Schenberg, 2018). Clinical findings have suggested that this is a potentially



useful therapy for depression, as fMRI scans have shown evidence of “improved ability” to recall memories and increased “vividness” and visual imagery of memories. Compared to placebo, psilocybin has been shown to exclusively activate brain regions associated with sensory experiences and vision (Brown, 2021; Carhartt-Harris, 2016). Finally, LSD, the most potent of the psychedelics researched to date, has been administered orally over the course of two sessions to address existential anxiety. Currently, only three trials have been conducted for this therapy with 100+ participants (Schenberg, 2018). Initial results found this was an effective therapy for adults with life-threatening conditions (e.g., terminal cancer) with anxiety scores dropping and maintained at the 12-month follow-up (Brown, 2021; Gasser et al., 2014). Two other psychedelics that are not presently in clinical trials but have been evaluated in smaller research studies, include ibogaine and Ayahuasca, most notably for substance use disorders (Reiff et al., 2020; Schenberg, 2018).

### Structure of Psychedelic-Therapy Sessions

PAP sessions include preparatory, and post drug-free therapy sessions sandwiched with the actual administration and therapeutic session of the drug. Overall, there are very few sessions completed for each client compared to traditional psychotherapy (Schenberg, 2018). The preparatory meeting aims to establish a relationship between the therapist and client in a safe and judgment-free environment (Reif et al., 2020). This is followed by the actual administration session where a trained professional administers the drug and provides structured therapy and monitoring of the client. A safe “set and setting” (MAPS, 2004) is a critical component of successful psychedelic-assisted therapy. The setting is the physical environment for the experience, where the session will take place (MAPS, 2004). This will look different for each person given their unique situation, interests, comfortability, and goals. The set refers to the mindset and emotions of the client as they enter the psychedelic experience. The set of the person changes and can be made to feel safe and welcomed within the therapeutic relationship (MAPS, 2004). Cultural considerations are imperative in the considerations of set and setting. The preparation and a focus on individual characteristics, goals, and safety are of the utmost importance when participating in PAP. Clients may listen to music and wear an eye mask as the therapist encourages them to bring their thoughts, emotions, and memories into awareness. The goal, then, is for the psychedelic to deepen their insight, facilitate change, and foster personal growth (Brown, 2021). Post-administrative sessions revolve around processing the therapeutic session and integrating the insights and meaning from the experience into everyday life (Schenberg, 2018).

### Long-Term Outcomes

It has been concluded through 95+ clinical trials that psychedelic substances decrease symptoms of mental-health disorders for extended periods of time (notably years for some follow up studies over very few sessions; Frood, 2012; Schenberg, 2018). Specific benefits include facilitating positive, meaningful, or “mystical” psychological experiences; enhancing the therapeutic relationship; cultivating introspection and awareness of thoughts, feelings, and memories; helping the client process and regulate difficult emotions; and enhancing cognitive flexibility and creativity (Brown, 2021). The positive outcomes for client mental health paired with a significantly lower cost and time-effectiveness of the treatments are encouraging. Moreover, clients have reported an extended period of relief from symptoms or abstinence from previously abused drugs. In fact, self-reported abstinence from alcohol went up considerably after psilocybin treatment and were maintained at 36 weeks post-therapy (Bogenschutz et al., 2015; Brown, 2021). Psilocybin was found to be effective for anxiety and depression in terminally diagnosed cancer patients at seven-week follow up (Ross, 2016). Another example of the benefit of PAP was seen by Luoma et al. (2020) with MDMA on social anxiety for adults with autism; 80% of those who were administered the drug reported a positive outcome compared to placebo groups at one-month post-administration (Brown, 2021). Further, compared to placebo groups, researchers found that MDMA helped to regulate negative emotions like anxiety (Dobin, 2002; Brown 2021) and after just two PAP sessions, most people in the treatment group no longer met the criteria for PTSD and were able to maintain these outcomes for over a year at follow-up (Brown 2021; Mithoefer et al., 2019).



## **Safety of Psychedelic-Assisted Therapy**

It should be noted, too, that adverse effects for any of the PAP therapeutics have been minimal. Because of the chemical structure of many of the compounds, the effects are nonaddictive and relatively safe (Brown, 2021). Concerns primarily focus on the type and amount of the administered psychedelic. Drugs that are consumed in large amounts can adversely affect one's physical and mental health (Brown, 2021; Hill & Thomas, 2011; Nichols 2016), especially those of synthetic nature like LSD and MDMA (Brown 2021; Nichols, 2016). It is clear from these findings that both the client's history and current medication regimen should be thoroughly considered when deciding on PAP as a recommended therapy (Brown, 2021; Johnson et al., 2018; Reiff et al., 2020). Likewise, targeting what drug, how much, and when to administer is equally as important once a client and their therapist decide to proceed (Nichols, 2016).

## **POTENTIAL FOR PSYCHEDELIC-ASSISTED THERAPY WITH ADOLESCENTS**

It should be re-emphasized that there are no current clinical trials taking place with PAP and adolescents. Thus, there are currently only anecdotal findings regarding PAP as a possible therapy for youth given the positive and encouraging outcomes with adults. MDMA-assisted therapy, for example is being sought to help “heal the psychological and emotional damage caused by sexual assault, war, violent crime, and other traumas” (MAPS, 2021) in addition to “social anxiety related to life threatening illnesses” (MAPS, 2021). Specific clients targeted would be those who have not responded to other therapies or medications in relief of symptoms. America's youth are no stranger to these types of mental health disorders and traumas. Therefore, it is important to consider this therapy in relation to PTSD and other disorders as MDMA makes its way through Phase 3 clinical trials, producing the possibility for youth to be tested as early as 2023 when it is deemed safe and efficacious for adults in the earlier stages of Phase 3 (National Institutes of Health, 2021). Until then, personal experiences and testimonies are the best considerations practitioners have for PAP usage with adolescents at present.

The Multidisciplinary Association for Psychedelic Studies (MAPS) has been one of the leading groups advocating for psychedelic and marijuana therapy for families and adolescents. Their mission is to provide accurate educational information surrounding illegal substances that may be of use in treating the mental health crisis in America. Specifically, their Rites of Passage project aims to share families' experiences with such substances to provide information to others who are considering or may be curious about the potential use and risks of psychedelics.

In terms of anecdotal findings, there are several limitations to consider, as fear of societal rejection, legal ramifications, and health considerations often discourage parents from recounting their child's usage of mind-altering substances. The MAPS website (<https://maps.org>) gives various accounts from parents. In one article, a mother discusses how an informal PAP therapy of Ayahuasca helped her son overcome opioid addiction. This aligns with the current research previously discussed revolving around substance abuse as a potential area for psychedelics to be useful in treatment. Another article depicted a mother and son's peyote ritual as a rite of passage. “When he was eleven and twelve, he was drifting away from our close bond. More troubled in school, getting into fights, and becoming rebellious, he was clearly ready to create a new identity of his own within the context of his peer group and the outside world” (MAPS, 2004). The mother described taking her son into the mountains and introducing him to plant medicines such as peyote, mescaline, and psilocybin. Together, the pair said prayers, and the mother recounted her prior experience with the drug at hand. Further, she informed her son about the effects in advance of ingestion. “I talked about the traditional uses of psychoactive plants, and I explained how they were tools. I told him how the plants were teachers, and they were medicines and that this was the appropriate, respectful way to use them in whatever form you get them in, whether 1peyote, mescaline, or LSD” (MAPS, 2004). Following the “trip,” she stated that her son's demeanor changed greatly. He was more honest, easy-going, and developed a stronger bond with his mother. This specific example exemplifies the consideration of cultural



practices that must be considered for individualized experiences as well as the power of set and setting for influencing client outcomes.

Within the MAPS website, there are many accounts regarding the potential of MDMA at the end-of-life care or to develop a closer, more harmonious bond with others. For example, one couple successfully used MDMA to cope with the premature death of their 13-year-old son who had been diagnosed with cancer (MAPS, 2004). In another account, a daughter helped to administer MDMA to her terminally ill father at the end of his life. She described the experience as monumental in easing his suffering while also creating an everlasting bond with him at what would have normally been the worst experience of her life. This relationship building piece appears to be a common theme among those that have used MDMA with their children. One U.S. federal prosecutor stated:

“I was having trouble communicating with my teenage daughter. We took MDMA together, hoping it might help our relationship. My daughter started crying. She said I never really listened to her. Wagging my finger at her, I adamantly insisted that I was always receptive to hearing what she had to say. Suddenly, I realized that I had interrupted her. Then I admitted that I had not really listened to her. After that, we began to work more closely on the specific things that were interfering with our intimacy.” (MAPS, 2004).

Given these anecdotal testimonies, it is evident that there is a major overlap between these personal experiences and the clinical structure of PAP therapy. Further, the usage between children and their parents seems to address the same research potential of these substances (i.e., mental health disorders, substance abuse, existential anxiety, etc.). Although cultural considerations have not been emphasized in the research thus far, it should be an important factor in the conversation regarding PAP as we discuss in more detail below. These findings--along with the controlled, adult clinical trials--shed light on the potential of this therapy to address the growing state of mental health decline and shifting cultural context for the medicinal use of drugs in society.

## WHAT WOULD PSYCHEDELIC-THERAPY LOOK LIKE FOR YOUTH?

Psychedelic-assisted therapy for youth would likely share common practices with current practices for adults with a few exceptions. First, like adults, participants would be screened carefully for underlying cardiovascular health conditions and psychiatric conditions, excluding those with certain personality disorders (Steig, 2021). Given that youth are less likely to have developed such severe symptomatology, the excluded criteria will likely not affect as many youths as it does for the current adult samples involved in clinical trials. Like adults, adolescents would undergo an extensive intake process to review what possible topics may arise during the drug-induced therapy session. It will be important for this information to be evaluated and analyzed to illustrate how these past occurrences have potentially affected their present symptomatology. After the intake is complete, several preparatory sessions (typically 3, 90minute sessions) would be completed to gather extensive background information and to prepare the youth for the psychedelic-assisted session.

On the day of the psychedelic-assisted therapy session, the adolescent would likely be led by the therapist and perhaps one additional co-therapist for the duration of the 6–10-hour session. The room would be set up like a comfortable living area and the participants would be able to comfortably eat, drink and use the restroom as they please throughout the session. The youth would also be given protective eyewear and soothing music tailored to the particular psychedelic and intention of the session to allow for a comfortable “set and setting.” These factors are considered essential in adult psychedelic assisted therapy to achieve optimum results within the therapy session. When individuals are kept at ease and safe within their environment, there is a better chance of processing difficult events that affect current functioning. The adolescent client would receive their first dose at the beginning of the session and then an optional additional half dose of the psychedelic substance about ninety minutes into the session as is typical with MDMA-assisted therapy for adults (Steig, 2021).



From that point, clients are directed inward to the previously discussed topics of the preparatory sessions.

It is important to acknowledge the similarities to adults, as Psychedelic-assisted therapy will not stop after the first session for adolescents. In addition to the preparatory sessions, after the psychedelic-assisted therapy session, adolescents would be aided by their clinicians to help make sense of the topics that arose during the session in several follow-up sessions, a process known in the psychedelic-assisted therapy literature as “integration” (Williams et al., 2020). It is the goal of these integration sessions to link current symptomatology with previous adverse experiences and to provide the client with the support to make the changes necessary in their lives (Steig, 2021). For adolescents, a critical component to healing will be ensuring they have the social and therapeutic support necessary to heal after a possibly insightful and intense psychedelic experience. These components would be integral to the post psychedelic-assisted therapy sessions where integration would take place for adolescents engaging in this type of therapy.

## **CULTURAL CONSIDERATIONS FOR PSYCHEDELIC-ASSISTED THERAPY**

Given the rising mental health concerns for children and adolescents who identify as black or persons of color (Staff, 2020), as well as the stigma associated with psychedelic use in communities of color, an especially important aspect to consider in the future of psychedelic-assisted therapy for adolescents is the level of cultural competence of the therapist (Staff, 2020). Having cultural competence involves being able to recognize and have an awareness for how diversity impacts the therapeutic relationship and conceptualization of the client’s presenting problem. This skill will be essential for psychedelic-assisted therapy as practitioners will be assisting youth who exhibit psychological distress in a vulnerable state and process of consciousness. Adolescents with psychological distress can include people of color, which will require culturally sensitive care. In the adult psychedelic-assisted literature, there are racial inequalities which are perpetuated by a distrust of psychedelic substances in many communities of color (Staff, 2020). To avoid the perpetuation of this cycle in the treatment of adolescents, it will be critical that clinicians who are providing psychedelic-assisted therapy for youth receive the necessary training to carry out culturally responsive care and provide a therapeutic environment for adolescents that will be safe and minimize harm. Integrating effective strategies for social justice within psychedelic therapy may include advocating for fair practices, being aware of one’s privileges, and educating themselves as well as others around them on issues of privilege and power and how these manifest in the therapeutic relationship (Song et al., 2019). When psychedelic-assisted therapy becomes a treatment option for youth in the future, School psychologists can look for providers who exhibit culturally responsive practices and promote issues of diversity and inclusion within their clinical centers and communities.

## **RESOURCES FOR FUTURE EXPLORATION**

This article is by no means exhaustive of the current state of research in psychedelic-assisted therapy. The following websites and articles may be of interest to school psychologists who wish to know more about the current state of research and application of PAP in clinical settings. Because clinical trials for adolescent PAP could begin as early as 2023, understanding the state of the research for adults provides a window into the possible outcomes and applications for youth.

1. Multidisciplinary Association for Psychedelic Studies (MAPS): <https://maps.org/research/mdma>

This site provides an overview of published and ongoing clinical trials research for MDMA-assisted psychotherapy and provides training for therapists to conduct psychedelic-assisted therapy.

2. Compass Pathways:

<https://compasspathways.com/our-research/psilocybin-therapy/therapist-training/>



This site provides an overview of published and ongoing clinical trials research for psilocybin and provides training for therapists to conduct psychedelic-assisted therapy.

3. The Ketamine Training Center: <https://theketaminetrainingcenter.com/resources/>

This site provides an overview of published and ongoing clinical trials research for Ketamine-assisted psychotherapy and provides training for therapists to conduct Ketamine-assisted psychedelic therapy.

4. Peer-Reviewed Article on the role of LSD and MDMA in psychedelic-assisted therapy: Smith, D. E. (2019). The role of Psychedelic Drugs in the evolution of psychedelic medicine. *Journal of Psychoactive Drugs*, 51(2), 98-101. <https://doi.org.ezproxy.uky.edu/10.1080/02791072.2019.1589607>

This peer reviewed article reviews the historical context of psychedelic drugs and illustrated how LSD can act as a potential therapeutic treatment for alcoholism. Also, the use of therapeutic intervention using MDMA.

5. Empirical Study on Placebo vs Psychedelics and Contextual Factors: Olson, J. A., Suissa-Rocheleau, L., Lifshitz, M., Raz, A., & Veissière, S. P. L. (2020). Tripping on nothing: Placebo psychedelics and contextual factors. *Psychopharmacology*, 237(5), 1371–1382. <https://doi-org.ezproxy.uky.edu/10.1007/s00213-020-05464-5>

Provides an overview of psychedelic effects using a placebo on control groups to analyze the comparison of psychedelic experiences.

6. MDMA-assisted therapy for Trauma in Adults: Pixler, L. (2017). Psychedelic movement: Healing trauma through MDMA (3,4-15 methylenedioxymethamphetamine)-assisted authentic movement psychotherapy. *Journal of Transpersonal Psychology*, 49(2), 121-135.

Provides an overview of a clinical trial using MDMA-assisted psychotherapy while examining the connection between psychedelic substances and PTSD.

7. Follow-up Study for Effects of MDMA-assisted Therapy for Trauma: Barone, W., Beck, J., Mitsunaga-Whitten, M., & Perl, P. (2019). Perceived benefits of MDMA-assisted psychotherapy beyond symptom reduction: Qualitative follow-up study of a clinical trial for individuals with treatment-resistant PTSD. *Journal of Psychoactive Drugs*, 51(2), 199-208. <https://doi.org.ezproxy.uky.edu/10.1080/02791072.2019.1580805>

Experimentation on psychotherapy in relation to PTSD in veterans, firefighters, and police officers.

8. Empirical article investigating psychedelic-assisted group therapy: Trope, A., Anderson, B. T., Hooker, A. R., Glick, G., Stauffer, C., & Woolley, J. D. (2019). Psychedelic-assisted group therapy: A systematic review. *Journal of Psychoactive Drugs*, 51(2), 174-188. <https://doi-org.ezproxy.uky.edu/10.1080/02791072.2019.1593559>

Provides an overview on the effects of group therapy with psychedelics.

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