EXPRESSIONS OF THE MIND, BODY, AND SPIRIT: A JUNGIAN-GROUNDED ART THERAPY PROTOCOL FOR PSILOCYBIN-ASSISTED THERAPY

by

Brady A. Savani

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ABSTRACT

This professional contribution presents an innovative art therapy protocol designed to integrate seamlessly with psilocybin-assisted psychotherapy. Grounded in humanistic, insight-oriented, and Jungian theoretical frameworks, the protocol aims to enhance the therapeutic effects of psilocybin therapy by providing a comprehensive approach to preparation and integration. Drawing from a synthesis of literature, theory, and experiential inquiry, the protocol addresses critical aspects of therapy while offering flexibility to accommodate individual needs. The resurgence of interest in psychedelics has sparked renewed exploration in mental health disciplines, highlighting the potential for transformative healing. Through the integration of art therapy, individuals undergoing psychedelic experiences can symbolically express and explore insights, enriching the therapeutic landscape with profound exploration and integration. Challenges encountered during the autoethnographic exploration of the protocol provided valuable opportunities for refinement, while moments of success underscored its potential applications in practice. The author acknowledges implicit bias in her inquiry and expresses a hopeful anticipation for the protocol's testing and implementation in vivo. This step is seen as vital for advancing its development as an effective therapeutic tool. In essence, the integration of art therapy with psilocybin therapy through this proposed protocol provides a person-centered approach to healing and self-discovery, merging ancient wisdom with modern science to foster profound transformation and growth.

Key words: psilocybin therapy, psychedelic therapy, art therapy, Jungian psychology, humanistic, insight-oriented, integrative

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My husband, Jake. *Just as your kindness, patience, and strength have remained unwavering since beginning our journey together, so too has my appreciation and admiration of you as a human being. The pursuit of my career as an art therapist was made possible by your support. I am so grateful for you. Thank you for everything, and I look forward to our continued journey through life together. I love you.*

Dr. James C Harris, known to me as Uncle Jim. *It is difficult to convey the impact and influence Uncle Jim has had on my life, both during his lifetime and following his death. Uncle Jim introduced me to the work of Carl Jung when I was a child, planting the first seeds of my interest in psychology and Jungian Theory. In the beginning stages of developing this professional contribution, the idea struck me to search for literature on the topic of Jung's Red Book and Psychedelic Therapy. Perhaps in a moment of synchronicity, the first result that populated was an opinion article by Uncle Jim written just months prior to his death. The opinions and ideas set forth in his article later became a foundational component of what I present in this paper. The bond my uncle and I shared has always been so special to me, and I have treated this project as a modest means of carrying on but a small fraction of his life's work and legacy.*

Dedicated to Aunt Cathy & Uncle Jim.

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CHAPTER 1: INTRODUCTION

In recent years, the resurgence of interest in psychedelics and their therapeutic potential has ignited a profound resurgence in research and exploration across numerous mental health disciplines. This resurgence marks a promising shift, particularly considering the stagnation caused by the United States government's ban on psychedelics in 1970, which halted research efforts in this area for four decades. However, since the early 2000s, a limited but steadily growing body of research has been permitted to resume, illuminating promising findings regarding the therapeutic applications of psychedelics in various mental health conditions, including anxiety, mood disorders, trauma, substance abuse, and end-of-life care (Reiff et al., 2020).

This professional contribution to the field of art therapy embodies my comprehensive exploration and synthesis of literature and theory, laying the groundwork for the development of an innovative art therapy protocol. The primary aim of this protocol is to integrate art therapy seamlessly within the framework of psilocybin-assisted psychotherapy. Drawing from a humanistic, insight-oriented therapeutic approach grounded in elements of Jungian Theory, the protocol is meticulously crafted to complement and enhance the therapeutic effects of psilocybin therapy. Informed by the pioneering research conducted by Griffiths, Johnson, and their colleagues at Johns Hopkins University (Barrett et al., 2015; Griffiths et al., 2006; Johnson et. al., 2008; MacLean et al., 2012), this protocol adheres closely to their established framework and protocols of psilocybin therapeutic interventions. Importantly, while initially tailored for integration with psilocybin therapy, the protocol's versatility allows for potential adaptation to other psychedelic modalities, thus extending its utility across diverse treatment settings.

The inherent characteristics of psilocybin-assisted therapy, characterized by its holistic approach and openness to mystical-type experiences and spirituality, make it particularly conducive to the integration of art therapy and Jungian theory. Art therapy, despite its current limited presence within the field of psychedelic therapy, offers a unique avenue for individuals undergoing psychedelic experiences to express and explore their insights symbolically, enriching the therapeutic landscape with profound symbolic exploration and integration.

This comprehensive exploration and proposed protocol serve to contribute in bridging the gap between art therapy and psychedelic-assisted psychotherapy, shedding light on the historical context of psychedelic therapy research, current research trends, and the limited role of art therapy in this area of study. Through this integration, I strive to pave the way for a new and promising therapeutic approach, enriching the lives of individuals seeking healing through these modalities.

CHAPTER 2: LITERATURE REVIEW

This literature review explores the dynamic landscape of psychedelic therapy research, which has experienced a resurgence in recent years following decades of dormancy due to government restrictions. Historically, psychedelics held promise as a therapeutic modality in the 1950s and 1960s, only to be abruptly halted by the United States government's ban in 1970, stifling research for four decades. However, since the early 2000s, a renewed interest has allowed a limited amount of research to resume, revealing promising therapeutic applications for a range of mental health conditions.

The review encompasses various aspects, including the history of psychedelic therapy research, tracing its origins and the pioneering studies conducted in its infancy. It also delves into the resurgence of research in recent years, examining the current state of psychedelic therapy and its therapeutic potential across a spectrum of conditions, from anxiety and mood disorders to substance abuse and end-of-life care. It also discusses the protocols and safety guidelines established by researchers at which form the foundational framework for the proposed art therapy protocol later introduced. While the focus of this professional contribution is primarily psilocybin therapy, this review of literature also explores the approved off-label use of ketamine-based psychedelic therapy for comparative purposes.

Despite the burgeoning interest and research in psychedelic therapy, the review acknowledges the limited existing research and presence of art therapy within this domain. It also explores the intersection of Jungian psychology with psychedelics, highlighting potential synergies and avenues for further exploration.

Overall, this literature review aims to provide a comprehensive overview of the historical context, current research trends, and emerging themes in the field of psychedelic therapy, while also shedding light on the role of art therapy and Jungian psychology within this evolving landscape.

Psychedelics can be divided into four classes based on their pharmacological profiles and chemical structures: classic psychedelics (serotonin 2A receptor agonists), empathogens or entactogens (mixed serotonin and dopamine reuptake inhibitors and releasers), dissociative anesthetic agents (N-methyl-D-aspartate [NMDA] antagonists), and atypical hallucinogens, which affect multiple neurotransmitter systems (Reiff et al., 2020). This literature review will only cover in detail three psychedelics as they relate to psychopharmacology and psychedelic-assisted therapy: lysergic acid diethylamide (LSD), and psilocybin (both serotonergic hallucinogens); and ketamine (a dissociative anesthetic). LSD is important in a historical context, as it was the first and most studied psychedelic during the first wave of research. Psilocybin, currently a schedule I drug, has been gaining rapid traction in research settings for the treatment for mood disorders, and there is optimism that it will become legal in clinical settings within the next two to four years (Johnson, 2023). Ketamine is currently a legal and approved intervention for treatment-resistant mood disorders in the United States.

History

The history of psychedelic therapy is deeply rooted in ancient indigenous practices and later evolved through pivotal moments in modern history. Ancient Mesoamerican civilizations utilized hallucinogenic substances in sacred rituals, fostering healing through mystical experiences and communication with divine powers. In the mid-20th century, the discovery of

LSD marked the beginning of modern psychedelic research, with initial investigations focused on understanding psychosis; however, the potential of LSD and other psychedelics in psychotherapy was soon uncovered. Groundbreaking research paved the way for a shift in perception towards psychedelics, leading to the emergence of therapeutic models that emphasized spiritual awakening and personal growth. Despite promising outcomes, the reputation of psychedelics faced challenges, eventually culminating in their classification as Schedule I drugs in 1970. This historical trajectory lays the foundation for understanding the complex interplay between ancient traditions, scientific inquiry, and societal attitudes that have shaped the field of psychedelic therapy.

Ancient Indigenous History

The concept of treatment or healing with psychedelics is by no means a modern psychopharmacological breakthrough, but rather an ancient and sacred practice that spanned across several pre-Columbian Mesoamerican civilizations. Carod-Artal (2015) writes that Archaeological, ethnohistorical, and ethnographic evidence show that throughout history, these cultures used hallucinogenic substances in magical, therapeutic, and religious rituals. These substances are designated as entheogens since their purpose was to promote mysticism and communication with divine powers among these cultures. Healing was made possible by the connection to the spiritual realm via these substances, and was facilitated by a priest or shaman. Ancient Mesoamerican use of enthoegens was a deeply sacred practice and were carried out with elaborate and complex rituals (Carod-Artal, 2015). At present, numerous hallucinogens are still used in ritual among indigenous societies of Mesoamerica. In the United States, The American

Indian Religious Freedom Act permits the sacramental use of peyote for members of the Native American Church (Carod-Artal, 2015).

Modern History

In 1947, after Hofmann's (1947, 1980) discovery of LSD, the pharmaceutical company for which Hofmann worked, Sandoz, had begun to market LSD under the trade name Delysid. Delysid was marketed as an adjunctive psychotherapy medication and as a compound for experimental studies (Reiff et al., 2020). Sandoz offered to supply researchers with the compound free of charge, and was largely responsible for the first wave of psychedelic research. Many researchers looked at LSD as a key to understanding psychosis, and Delysid was initially marketed this way. In fact, the first name for psychedelics was actually "psychomimetics," because of how the effects of the drugs were observed to mirror psychosis, particularly that of schizophrenia (Pollan, 2018). Eventually, psychedelic research spanned further than their application of examining psychosis.

Once scientists continued to investigate LSD and other "psychomimetics", and experimented with the compounds on subjects and themselves, the attitude towards the drugs, and what they could potentially offer, began to shift. One such scientist was psychiatrist Humphrey Osmond (1957), who coined the term *psychedelic* to classify these compounds in his publication in the Annals of the New York Academy of Sciences. Osmond wrote: "If mimicking mental illness were the main characteristic of these agents, 'psychotomimetics' would indeed be a suitable generic term. It is true that they do so, but they do much more. Why are we always preoccupied with the pathological, the negative?" (Osmond, 1957, p. 429). Osmond (1957) made a particular case for LSD in psychotherapy and the treatment of alcoholism, citing his own work

and the work of others, including Sandison, Abramson, Frederiking, and Hubbard. All had reported successes with LSD in assisting and enhancing psychotherapy to varying degrees at varying doses.

In 1951, Osmond began his work at Weyburn Mental Hospital in Saskatchewan, Canada where he had substantial research funding and worked with a biochemist colleague, Dr. Abram Hoffer. The hospital had many alcoholic patients who had not responded to all previous treatments (Tanne, 2004). Osmond and Hoffer noted that the effects produced by LSD appeared similar to that of delirium tremens— the most severe form of alcohol withdrawal, manifested by altered mental status and sympathetic autonomic hyperactivity. Many recovering alcoholics who have gone through this difficult and unpleasant experience look back on as it a conversion experience and the basis of a spiritual awakening that allows them to remain sober (Pollan, 2018). With this observation, Osmond and Hoffer formed the hypothesis (based on the psychomimetic model) that a controlled induced delirium from a single high dose of LSD could help alcoholics stay sober. Over the next ten years, Osmond and Hoffer treated over 2,000 alcoholics using LSD, and with surprising success—40% to 45% of those treated had not returned to drinking after a year (Tanne, 2004).

While the success of the treatment was worthy of attention, it was the participants' subjective reports of their experiences which garnered interest. While "psychotic changes" were sometimes reported, which included illusions and hallucinations, paranoid delusions, and severe anxiety, more often the reported experiences of the subjects bore little resemblance to the horror of delirium tremens, but instead were surprisingly positive (Pollan, 2018). Blewett and Chwelos (1959) used the case reports of Osmond and Hoffer's work to detail features of the experience of

LSD in their manual, *Handbook for the Therapeutic Use of Lysergic Acid Diethylamide-25: Individual and Group Procedures*. Included in these experiences are a feeling of being at one with the universe; the ability to see oneself objectively; development of a profound understanding of philosophy or religion; and increased sensitivity to others (Blewett & Chwelos, 1959). For many of the alcoholics treated at Weyburn, the LSD experienced seemed to involve something closer to a transcendental spiritual experience than a temporary psychosis. These results led Osmond and Hoffer to rethink their delirium tremens hypothesis and the psychomimetic model altogether (Pollan, 2018). Osmond (1957) wanted to shift the perception of these substances in a more positive direction, hence the move to classify these drugs and the theoretical model as "psychedelics" (meaning mind-manifesting). The focus on subjects' feelings and subjective experiences also marked an important theoretical shift in psychedelics research from behaviorism to phenomenology.

Osmond and Hoffer continued to develop methodology for psychedelic therapy. Protocols that are still used today were developed by Osmond and Hoffer, with contributions from non-scientists Huxley (1954), author of "The Doors of Perception," who championed the intellectual and spiritual implications of hallucinogenic drugs; and Hubbard who emphasized the concept of "set and setting" and the tremendous influence it has on a psychedelic trip. Hubbard protested using a clinical setting when LSD was used and opted for a room with soft light, relaxing music, pictures, and candles. This helped put the patient in a good state of mind (the set) thanks to their external environment (the setting). This setting later went on to be coined the "Hubbard Room" (Pollan, 2018).

In the mid 1950's, Bill Wilson (affectionately known as Bill W.), the cofounder of Alcoholics Anonymous (AA), learned of Osmond and Hoffer's work with alcoholics. Bill W. was not naive to the idea that a drug could evoke a life-changing spiritual experience, for he credited his own sobriety to a mystical experience he had on belladonna, a plant-derived hallucinogen administered to him at at a Manhattan hospital in 1943. The idea of surrendering to a "higher power" is a cornerstone of AA, and can be traced back in large part to Bill W.'s psychedelic trip (Pollan, 2018). Based on his own past experience, Bill W. was enthusiastic about LSD treatment for alcoholism. In 1956, Bill W. Had several LSD sessions with Sidney Cohen and Betty Eisner at UCLA. These sessions convinced him that LSD could reliably invoke the type of spiritual awakening he believed was necessary for one to get sober, and suggested that it have a place in AA. His colleagues on the board disagreed however, believing that to endorse the use of any mind-altering substance was too risky to the organization's message (Pollan, 2018).

Cohen, like the Canadian researchers, too started out researching LSD under a psychomimetic model, but soon had a theoretical shift to something more encompassing. Cohen adopted Sandison et al.'s (1954) "psycholytic" model. Psycholytic means psyche- or mind-loosening. A psycholytic model is characterized by small repeated doses of hallucinogenic substance, which differed from Osmond and Hoffer's approach of a single administration of a large ego-dissolving dose. Sandison (1954), Cohen (1964), and Grof (1976, 2008) all reported that with small doses (25-150 micrograms) of LSD, their patients' ego defenses relaxed, allowing them to discuss difficult topics with relative ease. Grof (1976, 2008), who was psychoanalytically trained, argued that when working with patients administered moderate doses of LSD, patients would have better access to their unconscious, childhood traumas, and be able

to easily partake in free association. While Grof found success in the psycholytic approach to psychedelics, he later would go on to be a proponent of high-dose psychedelic model of therapy pioneered by Osmond & Hoffer, after trying high doses of LSD himself and finding the experiences difficult but "healing and transforming" (Grof, 2008 p.126). It was standard belief and practice for researchers and therapists to take the medicine they were administering to patients, which is ultimately what led to the broadened view and research of psychedelics.

As psycholytic therapy with LSD became more mainstream in the late 50's and early 60's, so too emerged the first cracks of the reputation of psychedelics. Numerous celebrities who underwent psycholytic therapy with LSD were giving praising testimonials, which resulted in remarkably good press for LSD; but by 1959, LSD was showing up on the streets of some cities, which also garnered its own press attention. Several therapists and researchers were holding "sessions" in their homes for friends and colleagues, stretching the criteria of what constituted "research". Many researchers during this time were becoming disillusioned with LSD and psychedelics given that their use and reputation was falling so far from science.

In 1960, after psilocybin mushrooms had been introduced to the United States, Timothy Leary and Richard Alpert (who later went on to be known as Ram Dass) started the Psilocybin Project at Harvard. The research done under the Psilocybin Project had nowhere near the rigor of research done with LSD over the past decade, and the organization accomplished relatively little. One such experiment, The Concord Prison Experiment, was conducted from 1961 to 1963, and is one of the best-known studies in psychedelic psychotherapy literature. The study involved the administration of psilocybin-assisted group psychotherapy to 32 prisoners in an effort to reduce recidivism rates. Concord State Prison had projected that 56% of the 32 prisoners would return to

incarceration after six months. Leary et al. (1965) showed that only 27% of the participants returned to prison, and claimed that this was evidence that psilocybin reduces recidivism rates among prisoners. However, when a follow up study was conducted in 1998 by Doblin, founder of the Multidisciplinary Association for Psychedelic Studies (MAPS), the results found that Leary et. al.'s (1998) published claims of treatment effect were erroneous. Doblin (1998) investigated and interviewed 21 of the 32 participants of Leary's study, the recidivism rate among them was 71%. Doblin (1998) found that the range of possible recidivism rates among the entire sample is similar to the projected rate from Concord State Prison, rendering Leary's assertions false.

Over the few years of the Psilocybin Project's existence, Leary became disillusioned with research and science. He was far more interested in the spiritual and cultural implications of psychedelics than he was in their value in a therapeutic setting. By 1962, various faculty members and administrators at Harvard were concerned about the safety of Leary and Alpert's research subjects, and critiqued the rigor of their research. In particular, Leary and Alpert were often under the influence of psilocybin during the administration of studies. In 1963, Leary and Alpert were dismissed from Harvard after Alpert had administered psilocybin to an undergraduate student (which was prohibited by Harvard) off campus. Leary became an icon of the counter-culture movement of the sixties, as did LSD and psilocybin mushrooms. Psychedelics were seen by many to be inextricably linked to radical shifts in society, particularly when it came to the opinion of the Vietnam War. In 1970, The Controlled Substances Act was established; LSD and psilocybin were classified as Schedule I drugs, the most restricted level, which is defined as drugs with no currently accepted medical use and a high potential for abuse.

Scientists researching psychedelics were given the notice to immediately cease all operations. Some researchers (and therapists) chose to go underground, but by 1970, the first era of psychedelics research was effectively dead.

Current Research

Pollan (2018) argues that 2006 was the most important year for the modern renaissance of psychedelics research. In 2006, there were three events that allowed for the re-emergence of this research: 1. a symposium for the centennial birthday of Albert Hofmann, where Hofmann and researchers from a variety of disciplines, including neuroscience, psychiatry, pharmacology, consciousness studies, and the arts, explored the impact of Hofmann's invention on society, culture, and potential for treating a number of mental disorders; 2. A unanimous decision by the US Supreme Court to rule that a tiny religious sect could import ayahuasca (which contains the Schedule I substance dimethyltryptamine or DMT) for sacramental use; and 3. Griffiths's (2006) landmark publication: *Psilocybin Can Occasion Mystical Type Experiences Having Substantial and Sustained Meaning and Spiritual Significance*.

Psychedelics research had resumed in the 1990's in Germany, The United States, and Switzerland (Carhatt-Harris & Goodwin, 2017). In the United States, Strassman, et al. (1994) published the first human clinical trials of DMT. Though a dull roar existed in this area of research existed prior to 2006, Griffiths et al.'s (2006) study was the first rigorously designed, double-blind, placebo controlled clinical study in more than 40 years to investigate the psychological effects of a classic psychedelic. The participants of this study, when interviewed 2 months after being administered a high dose of psilocybin, rated the experience as having substantial personal meaning and spiritual significance, and attributed sustained positive changes

in attitudes and behavior to the experience (Griffiths et al. 2006). Griffiths's paper was well-received and applauded for its rigor by the scientific community, and marked the beginning of the robust re-emergence of psychedelics research (Pollan, 2018).

Cancer-Related Psychiatric Conditions

Since 2006, Griffiths has gone on to publish several studies on various psychedelics, and can be viewed as a pioneer of the renaissance of psychedelics research. In 2019, he founded the Center for Psychedelic and Consciousness Research at Johns Hopkins Bayview Medical Center. Among Griffiths's work is a 2016 study where the effects of psilocybin were studied in 51 cancer patients with life-threatening diagnoses and symptoms of depression and/or anxiety. Griffiths et al. (2016) sought to build off the work of two previous double-blind, placebo-controlled studies in which the effects of classic hallucinogens psilocybin (Grob et al., 2011) and LSD (Gasser et al., 2014) were examined in 12 patients with life-threatening illness, including cancer. Both studies showed promising results of decreased psychological distress among participants.

Griffiths et al.'s (2016) study was a two-session, double-blind cross-over design which compared the effects of a low (14 mg/70 kg) versus high (22 or 30 mg/70 kg) psilocybin dose on measures of depressed mood, anxiety, and quality of life, as well as measures of short-term and enduring changes in attitudes and behavior. The study spanned across 9 months, with the first session taking place approximately 1 month after enrollment, and the second session taking place approximately 5 weeks later.

Sessions took place in a room designed to look like a tranquil living room. For most of the time during the session, participants were encouraged to lie down on the couch, use an eye mask to block external visual distraction, and use headphones through which a music program

was played— this has become the standard protocol for psychedelic therapy and research. During sessions, monitors were nondirective and supportive, and they encouraged participants to "trust, let go and be open" to the experience.

The high dose produced significantly greater ratings of positive persisting effects on attitudes about life and self, mood changes, social effects, behavior, and spirituality. There were no serious adverse events. Griffiths et al.'s (2016) study demonstrated that a high dose of psilocybin produced large and significant decreases in clinician-rated and self-rated measures of depression, anxiety or mood disturbance, and increases in measures of quality of life, life meaning, death acceptance, and optimism. What is even more remarkable, is that these effects were sustained at 6 months.

Similar to Griffiths's work, Ross et al. (2016) also demonstrated clinically significant results with single-dose psilocybin among cancer patients. In Ross et al.'s (2016) double-blind, placebo-controlled, crossover trial, 29 patients (90% of which met criteria for cancer-related adjustment disorder) with cancer-related anxiety and depression were randomly assigned and received treatment with single-dose psilocybin (0.3 mg/kg) or niacin (placebo), both in conjunction with psychotherapy.

Results of primary outcome measures showed that single moderate-dose psilocybin, in conjunction with psychotherapy, produced rapid, robust, and sustained clinical benefits in terms of reduction of anxiety and depression in patients with life threatening cancer. The magnitude of change did not vary between the psilocybin- or niacin-first groups. Both groups demonstrated significant clinical improvements in anxiety and depression from baseline relative to the final assessment. Similar to Griffiths et al.'s (2016) findings, participants in this study showed

enduring effects of the treatment. At the 6.5-month followup, psilocybin was associated with continued anti-depressant and anxiolytic effects— approximately 60–80% of participants continued with clinically significant reductions in depression or anxiety.

As for secondary outcomes of Ross et al.'s (2016) study, psilocybin decreased cancer-related demoralization and hopelessness, while improving spiritual wellbeing, general life satisfaction, and quality of life. Psilocybin experiences were reported as highly meaningful and spiritual, and associated with positive cognitive, affective, spiritual, and behavioral effects lasting weeks to months.There were no serious adverse events, either medical or psychiatric, in the trial that were attributed to psilocybin. Since the early 1990s, approximately 2000 doses of psilocybin (ranging from low to high doses) have been safely administered to humans in the United States and Europe, in carefully controlled scientific settings, with no reports of any medical or psychiatric serious adverse events, including no reported cases of prolonged psychosis or Hallucinogen Persisting Perception Disorder (HPPD) (Studerus et al., 2011).

The most common psychiatric disorders in patients with cancer are depressive and anxiety spectrum disorders, as well as adjustment disorders, with rates of any psychiatric disorder in cancer patients as high as 30–40% (Ross, 2018). Clinically significant psychiatric distress in cancer patients is associated with a variety of poor outcomes, including: lower quality-of-life, decreased social function, increased disability, medication non-adherence, increased emergency room visits and hospital stays, hastened desire for death, increased rates of suicide, adverse medical outcomes, and decreased survival rates from the cancer (Ross, 2018). Pharmacologic and psychosocial treatments are commonly used to treat depressive and anxiety spectrum disorders in cancer patients, but their effectiveness is limited and mixed. Patients must

deal with side effects of psychoactive medications, and moreover, several meta analyses of placebo controlled trials of anti-depressants to treat cancer-related depression have failed to demonstrate a clear effect of treatment over placebo (Ross, 2018).

The modern studies published on the therapeutic effects of psychedelics in cancer-related psychiatric conditions have shown promising results. The most studied and robust data from the controlled trials exists for classic hallucinogens (psilocybin and LSD) to treat cancer-related psychiatric disorders. these trials strongly suggest that psilocybin-assisted therapy for patients with cancer-related psychiatric illness produces rapid and robust antidepressant and anxiolytic response rates, and sustained improvements in cancer-related anxiety and depression, as well as improvements in existential distress (Griffiths et al., 2016; Grob et al., 2011; Ross et al., 2016).

Major Depressive Disorder

Carhartt Harris et al. (2016) conducted an open-label feasibility study using psilocybin treatment in patients with treatment-resistant depression. Patients, investigators, raters, and statisticians were not blinded to treatment assignment, and all participants received the intervention. Psilocybin was administered to participants in two doses: psilocybin an initial low dose to establish safety, and then a subsequent high treatment dose 7 days later. To be included in the study, participants had to have a diagnosis of Major Depressive Disorder (MDD) of moderate to severe degree (17+ on the 21-item Hamilton Depression Rating scale [HAM-D]), and no improvement despite two adequate courses of antidepressant treatment of different classes lasting at least 6 weeks within the current depressive episode.

After rigorous screening, 12 participants went on to receive the intervention. Prior to receiving treatment, participants underwent a preparatory session, which consisted of

psychoeducation about psilocybin, allowing subjects to talk about the perceived origins of their depression, and simulation of aspects of the dosing session itself, such as listening to a sample of the session music while wearing eyeshades.

Psychiatrists monitoring the sessions utilized a non-directive, supportive approach, allowing the patient to experience a mostly uninterrupted inner "journey". Check-ins on how the patient was feeling occurred at the same timepoints as physiological recordings (blood pressure and heart rate). Patients returned to the research facility 1 day after their high-dose session for a session with their psychiatrist to discuss their experience. There was an additional follow-up one week after their high-dose session, during which all baseline questionnaires and assessments were repeated and an opportunity was provided for further psychological debriefing; and subsequent assessments of clinical progress were done via email 2, 3, and 5 weeks after the high-dose session. Final follow-up was done remotely at 3 months after the high-dose session.

Carhartt Harris et al. (2016) found that Quick Inventory Depression Symptoms (QIDS) scores for the participants were significantly reduced from baseline at 1 week and 3 months post-treatment, with the maximum effect at 2 weeks. All subjects showed reduction in depression severity was sustained at 3 months, with 7 subjects meeting criteria for remission using the Beck Depression Inventory (BDI) (Beck & Steer, 1987). Though these results are promising in terms of a possible new treatment for depression, because this was a small-scale feasibility study, strong inferences cannot be made about the treatment's therapeutic efficacy. However, the data do suggest that psilocybin can be safely administered to this population, and further research is warranted. In 2018, a 6-month follow-up was conducted with the cohort, and found that five participants still to be in remission (Carhart-Harris et al., 2018) .

Davis et al. (2020) and later Gukasyan et al. (2022), both conducting research at the Center for Psychedelic and Consciousness Research at Johns Hopkins, expanded on the work of Carhartt-Harris et al. (2016, 2018). In Davis et al.'s (2020) study, Adults aged 21 to 75 years with an MDD diagnosis, not currently using antidepressant medications, and without histories of psychotic disorder, serious suicide attempt, or hospitalization were eligible to participate. 27 participants were randomized to either an immediate treatment group or a delayed treatment group. The use of a delayed treatment control (8 weeks total) was chosen to differentiate the psilocybin intervention from spontaneous symptom improvement. The intervention period was 8 weeks and involved at least 18 in-person visits, including 2 daylong psilocybin sessions. Like previous studies using psilocybin interventions, the visit schedule included preparatory meetings with 2 session facilitators before the first psilocybin session as well as 2-3 hour follow-up meetings after psilocybin sessions.

Severity of depression was assessed using the GRID-HAMD assessment (Zimmerman et al., 2013). Scores 0-7 indicate no depression; 8-16: mild depression; 17-23: moderate depression; and ≥24: severe depression. A clinically significant response was defined as 50% or greater decrease from baseline; symptom remission was defined as a score of 7 or lower. Following the psilocybin session, 17 participants (71%) at week 1 and 17 participants (71%) at week 4 had a clinically significant response to the intervention, and 14 participants (58%) at week 1 and 13 participants (54%) at week 4 met the criteria for remission of depression.

Gukasyan et al. (2022) published a 12 month follow-up to this study. Together, Davis et al. (2020) and Gukasyan et al. (2022) found large decreases from baseline in GRID-HAMD scores among participants observed at 1-, 3-, 6-, and 12-month follow-up. Treatment response

(≥50% reduction in GRID-HAMD score from baseline) and remission were 75% and 58%, respectively, at 12 months. These findings showed that the antidepressant response to psilocybin was sustained among the 24 participants.

While most psychedelic interventions for depression and other mood disorders are currently strictly confined to research settings, ketamine has been available for both approved and off-label use in the United States since 2019. Ketamine is currently approved in the form of esketamine (a nasal spray) for treatment-resistant MDD, but this intervention does not evoke a psychedelic experience, and therefore will be omitted from review. Off-label use of ketamine includes intravenous (IV), intramuscular (IM), and most recently sublingual administration to treat treatment-resistant MDD as well as anxiety disorders and trauma-related disorders. Unlike psilocybin, which has been studied primarily investigating the efficacy of one large dose, ketamine therapy typically follows a course of therapy, with treatment sessions spanning over several weeks.

Zarate et al. (2006) published one of the premier studies that demonstrated the rapid antidepressant effects of ketamine. Zarate et al. (2006) argued that existing therapies for major depression have a lag of onset of action of several weeks, resulting in considerable morbidity, and that exploring pharmacological interventions that have rapid and sustained antidepressant effects would have an enormous impact on patient care. This was a randomized, placebo-controlled, double blind crossover study with 18 participants diagnosed with treatment-resistant MDD. The primary outcome assessment used was the Hamilton Depression Rating Scale (HDRS) (Hamilton, 1960), as well as numerous secondary assessments, including the BDI (Beck & Steer, 1987). Subjects were assessed 60 minutes prior to infusion of either ketamine or saline

(placebo) and at 40, 80, 110 and 230 minutes after infusion; as well as 1, 2, 3 and 7 days after infusion. Effects testing showed significant improvement for ketamine at 110 minutes sustained through 7 days. Depressed mood, guilt, work and interests, and anxiety improved significantly, with the earliest improvements for depressed mood beginning at 40 minutes post-infusion. Five of the participants met criteria for remission 1 day after treatment.

The findings from this study by Zarate et al. (2006) were significant because they highlighted the rapid and sustained antidepressant effects of ketamine in individuals with treatment-resistant major depression. The study helped to pave the way for further research into the potential therapeutic use of ketamine for depression and other mood disorders. Murrough et al. (2013) later expanded on the work of Zarate et al. (2006) with a larger sample size of 73 participants with treatment-resistant MDD, and found repeated results of rapid and sustained antidepressant effects of ketamine.

Phillips et al. (2019) published a study which expanded on the use of numerous ketamine IV infusions as a course of treatment and maintenance for depression originally put forth by Shiroma et al. (2014). Phillips et al.'s (2019) study was a three-phase clinical trial of 41 participants which sought to investigate the effectiveness of a course of numerous ketamine infusions following relapse after a single administration of ketamine infusion. The primary assessment tool use to establish baseline data on subjects' depression severity was the Montgomery-Asberg Depression Rating Scale (MADRS) (Montgomery & Asberg, 1975).

The purpose of phase I was a randomized double-blind crossover to test the efficacy of ketamine compared with an active control placebo (midazolam, a short acting benzodiazepine); the administration of each drug occurred 7 days apart. Twenty-four hours after the single

ketamine infusion, 11 participants met criteria for antidepressant response, and 2 participants met criteria for remission. The mean decrease in MADRS score of these single-infusion responders was 22.3 points; nonresponders had a mean decrease of 6.7 points. To proceed to phase two, participants were required to have a return of 80% of their baseline MADRS score.

The purpose of phase two was to test reinstatement of antidepressant response after relapse and to evaluate the efficacy of repeated infusions. In phase two, participants received a course of six ketamine infusions, administered three times per week for 2 weeks. Of the 41 participants treated in phase two, 39 completed the full course of infusions. At post-phase two follow up, 23 (59%) met antidepressant response criteria, and 9 (23%) achieved remission. The median number of infusions needed to first meet response criteria was three. Nonresponders exited the study after phase two.

23 participants who had at least a 50% improvement in MADRS scores after phase two infusions continued to phase 3, which was intended to test antidepressant maintenance. Phase three consisted of one infusion per week for four weeks. No changes in MADRS scores were seen during the maintenance phase, and 21 responders (91%) met antidepressant response crieteria throughout the maintenance period.

Although there was no formal follow up of participants after the completion of the study, 10 participants were subsequently enrolled in a psychotherapy study led by one of the authors. Participants who enrolled in the secondary study within two weeks of completing the ketamine trial maintained their antidepressant response; however, participants who enrolled 3 or more weeks after their final ketamine infusion relapsed, and presented with severe depressive symptoms. Phillips et al. (2019) argues these qualitative findings suggest that continuation of

ketamine infusions is necessary to sustain antidepressant benefits even after a course of successful maintenance infusions.

As research and off-label applications of ketamine have progressed, sublingual (SL) dissolvable ketamine tablets have emerged as a novel approach for delivery. There are now several companies in the United States that offer this as an off-label treatment for depression and anxiety. The programs are designed for at-home self-administration, and overseen and facilitated by a trained psychotherapist and/or physician through a virtual health platform.

Hassan et al. (2022) published a retrospective study on the safety and effectiveness of this mode of treatment for depression and anxiety. Data was obtained from a telemedicine practice, *My Ketamine Home*, that specializes in at-home SL ketamine treatment. Between 12/1/2020 - 9/30/2021, 4,404 individuals sought treatment from the practice, of which 1,101 were enrolled. Patient registration included a detailed health history and demographic information, after which an intake consultation was performed. Relevant medical history was reviewed by psychiatric nurse practitioners to diagnose MDD and generalized anxiety disorder (GAD) according to DSM-V criteria. Patients who were not excluded due to contraindications (which will be discussed in detail later in this literature review) were provided information about ketamine treatment, terms and conditions, and a treatment consent form. These protocols are standard across all practices of this nature.

Patients completed the Patient Health Questionnaire (PHQ-9) to establish baseline data about their depressive symptoms, and the Generalized Anxiety Disorder Screener (GAD-7) to establish baseline anxiety symptoms. After obtaining informed consent, patients were express-mailed a 300 mg rapid dissolve tablet of ketamine for SL administration as well as instructions

which heavily emphasize the importance of "set and setting". *My Ketamine Home* uses a treatment course of 6 SL ketamine treatments, based on evidence of prior research showing effectiveness of 6 IV ketamine infusions. Upon completion of the initial ketamine administration, patients were asked to complete an online experience report for clinical review, where it was determined whether or not the patient would continue with treatment as well as dosage of subquesnt treatments (maintaining at 300 mg or increasing to 450 mg).

Patients were then mailed their next two SL tablets, and repeated the self-administration procedure for the two additional treatments on separate days. Patients again completed an experience report as well as the PHQ-9 and GAD-7 to assess progress. After review of the report, clinical determination was made for a final shipment of 3 additional ketamine tablets. Following the same protocols, patients completed treatment and were asked to complete a final report, PHQ-9 and GAD-7 within two days of their final dose.

Data analysis for this study was of 669 patients who had completed at least 3 SL ketamine treatments and who had completed all reports and assessments. The findings of this study showed that in as few as three doses of SL ketamine nearly half of patients with moderate to severe depression saw and improvement of reducing their PHQ-9 and GAD-7 scores to half of their intake scores. This reduction rate improved to 60% in patients who completed the clinically recommended 6 treatments, further illustrating the cumulative nature of successive ketamine sessions also seen in previous research. The authors of this study reported no major adverse events (symptoms requiring medical care or hospitalizations). The most common minor adverse events were nausea, dizziness, headache and loss of balance. With these findings, Hassan et al. (2022) concludes that at-home SL ketamine therapy can be an effective treatment for depression

and anxiety in appropriate cases; and adds to the growing body of literature that demonstrates the psychopharmacological potential of ketamine.

An obvious limitation to this study by Hassan et al. (2022), though, is that there is no follow up with the patients after their completion of the ketamine treatment, so there is no way to know whether their condition improvements were sustained. As previously suggested by Phillips et al. (2019), there is evidence to suggest that maintenance ketamine treatments must be continued in order to sustain treatment response or remission. So, while the short term effects of at-home SL ketamine therapy are compelling, the existing literature on ketamine therapy fails to support that response and remission from this treatment can be maintained as a standalone treatment.

Wilkinson et al. (2017) recognized the rapid, but short-lived antidepressant effects of ketamine and sought to investigate if CBT could sustain these effects. Patients who were pursuing ketamine infusion therapy for treatment-resistant depression were invited to participate in the study. If enrolled, the subjects began a 12-session, 10-week course of CBT concurrently with a short 4-treatment, 2-week course of intravenous ketamine in a clinical setting. Sixteen participants initiated the protocol, with 8 (50%) attaining a response to the ketamine and 7 (43.8%) achieving remission during the first two weeks of protocol. Among responders, the relapse rate at the end of the CBT course (8 weeks following the last ketamine exposure) was 25% (2/8). On longer-term follow up, 5 of 8 subjects eventually relapsed with a median time-to-relapse being 12 weeks following ketamine exposure.

Drozdz et al. (2022) conducted a review of 17 studies from 2007-2022 that featured ketamine administration in conjunction with varying modalities of psychotherapy in the

treatment of various disorders, including MDD. Drozdz et al. (2022) states that ketamine's demonstrated ability to produce antidepressant and anxiolytic effects likely facilitates psychotherapy, but the current research lacks the sample sizes, standardization, and overall rigor to draw conclusions on the efficacy of ketamine assisted psychotherapy (KAP). As research in this area continues, a focus on increasing the duration of positive effects may lead to effective interventions and maintenance programs, improving KAP such that it becomes an effective, long-lasting treatment for complex and chronic disorders.

Overall, ketamine research findings greatly differ from psilocybin research findings which show that a single high dose intervention often produces significant and sustained antidepressant and anxiolytic effects—up to a year for a significant amount of individuals. Though psilocybin studies were found to generally have a greater emphasis on psychotherapy (even in a limited capacity), processing, and meaning making; even the ketamine studies that feature psychotherapy of various types fail to result in long-term sustained effects when compared to psilocybin.

Current Protocols and Guidelines for Safety

Johnson et al.'s (2008) publication on Johns Hopkins University protocols and safety guidelines for psychedelic and other psychoactive drug research stands as a cornerstone in the realm of psychedelic research. This seminal work outlines rigorous protocols and safety measures essential for conducting ethically sound and scientifically rigorous studies involving psychedelics and other psychoactive substances. By establishing comprehensive guidelines, Johnson et al. have played a crucial role in ensuring the safety of participants and the validity of research outcomes, while also contributing to the maximization of therapeutic benefits.

Furthermore, these protocols serve as a model for other institutions and researchers embarking on similar investigations, contributing to the standardization and legitimacy of psychedelic research efforts globally. At Johns Hopkins University, this publication serves as a guiding framework for ongoing research endeavors in the field of psychedelics, providing researchers with invaluable guidance on study design, participant screening, dosing protocols, and integration strategies. Moreover, it underscores the university's commitment to advancing the understanding of psychedelic substances in therapeutic contexts, paving the way for groundbreaking discoveries and transformative interventions in mental health care.

Art Therapy and Creativity

Given that research with psychedelics and psychedelic-assisted therapy has just resumed within the last twenty years in a limited capacity, it makes sense that the field of art therapy has yet to establish itself within the field. Art therapy has virtually no substantial presence in the field of psychedelic therapy, but its presence is not absent entirely. There is literature that exists on creativity in relation to psychedelics, which provides a foundation for Art Therapy's prospective presence. Furthermore, the concept of the "ineffability" of psychedelic experiences arguably creates a demand for the presence of the integration of art therapy in psychedelic assisted therapy.

In 1995, Allan published a case study from a volunteer who participated in a larger research project by Strassman (1995) entitled *Human Psychopharmacology and Neuroendocrinology with Psilocybin*. Housed within this project was Allan's (1995) own research project: Archetypal Art Therapy (AAT) with Psilocybin. Allan's position was that image is the central focus in AAT, and psychedelics are image-creating and altering substances. The

project was created to document and test AAT methods, investigate the metaphor of images produced in a psychedelic state, and determine how this informs research volunteers. Ten study participants in the main study enrolled in the AAT portion.

Allan acknowledged that the art making in this study did not meet the criteria for "therapy," but a therapeutic dynamic was in place. Art making afforded the participants to organize and maintain the visual information evoked by psilocybin. Writing metaphorically about the art encouraged the participants to find relationships within their art, and deepening their understanding of their experiences. The art provided a place to release the experiences of the session— capturing moments of euphoria, terror, and profound insight. When these experiences were released into the art, the participant no longer had the burden of holding their experiences. The art also gave a tangible view of the participant's experience both to the participant and the researchers.

Allan presents the case of a 38 year old male, who created art over four "Multi Medium Art Studio Situation" sessions at increasingly high doses of psilocybin. Four to five hours after the administration of psilocybin, the participant created an image from his experience and write a metaphor statement about each image. Prior to sessions with psilocybin, the participant first completed a session without the drug to establish baseline data. In this initial session, he created a watercolor image of flowers on a landscape with a prominent sun in the sky. The image's metaphor statement was "the embracing sun warms the green earth as the three dancing flowers play on a perfect day".

In session 1, the participant received 0.056 mg/kg of psilocybin and created four images using various materials. Although this is was a low dose, Allan (1995) stated that the participant

had less inhibition with the materials and increased art production, which was the trend for all of the participants. The first image created on psilocybin, an abstract image created with watercolor, is entitled “the Ear of the heart encompasses the earth”. Another from this session, a 3D volcano created from cut and folded construction paper, is entitled “the mother volcano erupts energy & children gather around & watch reverently”. The subsequent higher-dose sessions continued to yield highly esoteric metaphor statements. Such as, “2-6-95 the Buddha comes in primary colors heads attenuated to the divine” to describe an abstract image using acrylic on a plastic plate made under a high dose of psilocybin (0.7mg/kg). Allan’s (1995) findings showed that psilocybin enhanced creativity and exploration of art materials. With high doses, he gravitated toward abstraction with his pieces and his metaphors. The art making process allowed the participant to process and understand his experience on a deeper level through physical and metaphorical manifestation.

While this study provided interesting qualitative data, it would have benefitted the study to include quantitative measures of some sort, such as a questionnaire that was designed to record how beneficial the process was to the participants in strengthening their understanding of their experience. In order for art therapy to be integrated into psychedelic therapy research, there needs to be qualitative evidence justifying the importance of the field’s presence. Additionally, while the creation of art under the influence of psilocybin is interesting, it could be argued that this is not an approach that should be taken for maximizing therapeutic value to the individual, which was even recognized by Allan (1995) herself. Current protocols for psilocybin research place psychotherapy before and after the drug session, for there is an understanding of the

importance that sensory deprivation and introspection has on the therapeutic value of a psychedelic experience.

A major component to psychedelic therapy is integration— applying insights gained from the psychedelic experience to one's life. Husum (2022) created the course *Psychedelic Integration for A Life Transformed* which utilizes art therapy to help individuals who have undergone psychedelic experiences for the purpose of healing gain deeper understanding into their experience. Husum (2022) used a trauma-informed modality to create the course, which is structured around Herman's (1992) 3 stages of trauma recovery: safety and stabilization, remembrance and mourning, and reconnection and integration.

The art therapy directives utilized by Husum (2022) are heavily rooted in grounding, relationships and attachment, and the exploration of one's life's purpose. Past-Present-Future drawings are used in two different modules with the intention of illustrating how views of oneself may develop as understanding and integration too develops. Husum (2022) developed this program because she felt there was a need for a greater emphasis on integration and the therapeutic work that is required in order to benefit from the use of psychedelics. With the recent rise in interest and popularity of these medicines, they can often be erroneously viewed as a "magic bullet" type of treatment— a healing and therapeutic experience in and of itself which requires little to no processing on behalf of the individual. This type of misunderstanding illustrates the need for rigorous protocols in research and practice; without them, the risk of history repeating itself in the form of prohibition is high.

While art therapy has yet to establish a significant presence in psychedelic therapy, literature exists on psychedelics and creative expression, which serves as further justification for

art therapy's role in the field. Human creativity poses a unique challenge to research, given its difficulty to define and measure; therefore, much of the literature on this topic consists of anecdotal reports and qualitative studies.

One such collection of anecdotal case studies was published by American psychiatrist Oscar Janiger, who between 1954 and 1962 facilitated nearly 1,000 LSD sessions for people between ages 18 and 81 in a variety of professions (De Rios & Janiger, 2003). During the course of this work two experiential characteristics emerged repeatedly – those of spontaneous spiritual experiences and those of boosts to subjects' experiences of creativity. The latter observation led Janiger to conduct a parallel study which examined the effects of LSD on creativity in a controlled setting. 60 visual artists were enrolled as participants and were administered LSD over a 7 year period. The subjects produced over 250 drawings that were later analyzed by a professor of art history, who compared the artists' work before and after the LSD sessions. Following LSD sessions, it was reported that the drug appeared to have enhanced certain characteristics of the artists' work, including a tendency toward more expressionistic work, a greater freedom from previous mental sets, and a heightened sense of affect (De Rios and Janiger, 2003; Sessa, 2008). All three of these characteristics are foundational to successful art therapy.

Jungian Psychology and Psychedelic Experiences

Hill's (2013) "Confrontation with the unconscious: Jungian depth psychology and psychedelic experience," explores the intersection of Jungian depth psychology and psychedelic experiences. Hill's book delves into the rich tapestry of the human psyche, drawing parallels between key concepts of Jungian psychology and the profound subjective experiences and insights garnered through psychedelic experiences. Hill's exploration sheds light on the

transformative potential of psychedelic substances in facilitating encounters with the unconscious mind and unlocking deep-seated psychological processes.

One of the key themes examined in Hill's work is the concept of individuation, a central tenet of Jungian psychology. Through a Jungian lens, individuation is understood as the process of integrating disparate aspects of the psyche to achieve wholeness and self-realization. Hill suggests that psychedelic experiences can catalyze this process by providing individuals with direct access to unconscious material, facilitating the exploration and integration of shadow aspects, archetypal imagery, and unresolved psychological conflicts.

Moreover, Hill illuminates the role of symbolism and mythological motifs in psychedelic experiences, drawing parallels to Jung's theory of archetypes. He argues that the symbolic language of the unconscious, as encountered in psychedelic states, reflects universal patterns of human experience and mythological imagery. By engaging with these symbols and archetypes, individuals may gain profound insights into their personal narratives and the collective unconscious, leading to enhanced self-awareness and psychological growth.

Furthermore, Hill explores the therapeutic implications of integrating Jungian depth psychology with psychedelic-assisted psychotherapy. He suggests that incorporating Jungian principles into therapeutic frameworks can provide a robust framework for navigating and integrating the often challenging and revelatory experiences induced by psychedelics. Through guided exploration and interpretation, individuals may glean profound insights into their psyche, leading to profound healing and transformation, highlighting the importance of integrating depth Jungian psychological principles into therapeutic practice for maximizing therapeutic benefits.

This literature review culminates with Harris's (2021) work titled "Psychedelic-Assisted Psychotherapy and Carl Jung's Red Book." Jung's (2009) Red Book, also known as Liber Novus, stands as a deeply personal exploration of his own soul and psyche, captured through writings and artwork. Regarded as a highly esoteric masterpiece, the Red Book remained private during Jung's lifetime, shared only with a select few trusted confidants. Its publication in 2009, long after Jung's passing, revealed insights into his profound understanding of the human psyche. Jung's enduring influence extends to the field of art therapy, where his appreciation for exploring the imaginative mind through artistic expression has led many to regard him as the "father" of art therapy.

Central to Jung's philosophy is the concept of the "collective unconscious," a reservoir of shared psychological experiences, symbols, and archetypes inherent in all human beings across cultures and time periods. Through practices such as "active imagination," Jung accessed this collective unconscious, delving into the depths of symbolism emerging from dreams and fantasies. Due to the intrinsic similarities between Jung's concepts and psychedelic therapy, particularly in their shared emphasis on symbolic exploration, the collective unconscious, and the integration of unconscious material for therapeutic benefit, Harris (2021), echoes the sentiments of Hill (2013), and asserts that a grounding in Jungian psychology is imperative for psychedelic guides and therapists, regardless of their therapeutic orientation.

Summary

This literature review explored the historical context of psychedelic therapy, tracing its roots from ancient entheogenic practices to the initial wave of modern research. It also examined contemporary studies, showcasing substantial data supporting the therapeutic efficacy of

psilocybin-assisted therapy and other psychedelic modalities. This review investigated art therapy's modest current presence in this field, but underscored great potential for its applications. Furthermore, it outlined the relevance of Jungian psychology to psychedelic therapy, offering insights that contributed to the development of the proposed protocol. The forthcoming chapters will delve deeper into the intricacies of this protocol, detailing the foundations upon which it was developed, methodology, guiding principles, and practical application in both medical and non-medical settings. Thus, this literature review serves as a prelude to the main body of work, where the protocol will be unveiled and its therapeutic potential fully realized.

CHAPTER 3: METHODS

The purpose of this professional contribution is to propose an art therapy protocol which has been developed with the intention of integrating art therapy within psilocybin-assisted therapy. The protocol utilizes a person-centered, insight-oriented approach grounded in Jungian psychology. This protocol adheres closely to established framework of psychedelic therapeutic interventions set forth by Johns Hopkins University researchers (Barrett et al., 2015; Griffiths et al., 2006; Johnson et. al., 2008; MacLean et al., 2012), and has been designed for seamless integration within the context of established verbal-based approaches to psilocybin-assisted therapy. This protocol consists of 6 art-based directives: 3 of which are intended for use in preparation counseling sessions, and 3 for use in post-administration processing and integration sessions.

The development of this professional contribution utilized a comprehensive methodology that underpins the creation of such a protocol, encompassing an integrative synthesis of literature and theory, engagement with expert perspectives, as well as autoethnographic exploration rooted in self-reflective practice. By embracing a multidimensional approach, the goal of this publication is to contribute to the emerging discourse surrounding psychedelic therapeutic modalities, as well as propose and justify the presence of art therapy within such modalities.

Integrative Synthesis of Literature and Theory

The methodology began with an integrative synthesis of literature and theory, serving as the foundational framework for the development of the art therapy protocol. This phase involved an exhaustive review of existing literature spanning the domains of psychedelic agents, experiences, and therapeutic applications; psilocybin-assisted therapy; Jungian psychology and

its relevance to psychedelic experiences; and the practice of art therapy. Through a meticulous examination of seminal studies, contemporary research findings, and theoretical frameworks, this professional contribution encompasses a comprehensive understanding of the therapeutic potential of psilocybin, the core tenets of Jungian psychology, the principles underlying art therapy interventions, and the rationale behind integrating art therapy as an effective adjunct to this treatment modality.

Despite the extensive review conducted across various domains, a notable limitation inherent to this method was the scarcity of research literature specifically examining art therapy in relation to psychedelic-assisted therapies. While literature and practice pertaining to art therapy within psychedelic therapy are not altogether obsolete, it is evident that art therapy has yet to firmly establish itself within this field. Consequently, this publication and the proposed comprehensive protocol represent pioneering efforts within this emerging area of study. Despite the current lack of supporting literature on the topic, the extensive research and meticulous consideration that have gone into the development of this protocol instill confidence in its potential efficacy and contribution to the evolving landscape of therapeutic interventions.

Experiential Inquiry and Self-Reflective Practice

The final component of the methodology included an autoethnographic exploration and completion of the proposed protocol in a self-reflective manner. In the absence of legal access to psilocybin in the state of Pennsylvania, the autoethnographic component of this research required an alternative approach to the direct engagement with psilocybin-assisted therapy. Given this constraint, the author opted to draw upon a past highly-transformative experience with transcendental properties within a therapeutic framework, as a foundational reference point for

the autoethnographic exploration. This particular personal experience was selected for its resemblance to the subjective experiences induced by therapeutic high-dose psilocybin.

The autoethnographic process was completed in three phases to parallel the three-phase approach to psilocybin-assisted therapy: (1) preparation, (2) administration, and (3) processing and integration. During completion of the preparatory phase, the author reflected on current areas of personal struggle and goals for personal growth. The author then completed each of the three preparatory art-based directives over the course of 10 days. To simulate the drug administration phase of psilocybin assisted therapy, the author first utilized deep reflection and introspection to recall and delve into the previously mentioned past transformative experience. The author then engaged in meditation techniques and Jung's method of active imagination to evoke symbolic and archetypal dimensions of the experiences. The author engaged in this process for 1.5 hours per day over 5 consecutive days as a means of accessing deeper levels of memory, introspection and understanding of the past experience. For the experiential inquiry of third and final treatment phase dedicated to processing and integration, the author completed the final three art therapy directives of the protocol over the course of 10 days.

As a concluding component of the autoethnographic exploration, the author completed a written reflection on their personal experience with completing the art therapy protocol. This reflective process allowed for integration of insights gained from the autoethnographic journey and articulation of the impact of the protocol on personal growth and understanding. Furthermore, the reflection served as a means of validating and contextualizing the experiential findings within the broader framework of psilocybin-assisted therapy and art therapy integration.

An additional important limitation within this autoethnographic component arises from the fact that, as the creator of the protocol, the author's involvement introduces biases or preconceptions that inherently influence both the approach to and interpretation of the protocol and its findings. Furthermore, the author's background and expertise in the field of art therapy may also further influence these perceptions. Acknowledging and addressing these limitations establishes the intention to strive for greater objectivity and validity, ultimately enhancing the credibility and trustworthiness of the author's experiential findings.

CHAPTER 4: SCIENTIFIC, CLINICAL AND THEORETICAL FOUNDATIONS OF PROPOSED ART THERAPY PROTOCOL

This professional contribution to the field of art therapy encompasses an exhaustive examination and synthesis of literature and theory, serving as the foundational framework for the development of an art therapy protocol meticulously crafted for seamless integration within the context of psilocybin psychedelic therapy. Oriented within a humanistic, insight-oriented therapeutic approach, the art therapy directives I outline are grounded in elements of Jungian Theory, enriching the therapeutic landscape with profound symbolic exploration and integration. Drawing from the pioneering research conducted by Griffiths and Johnson (and colleagues) at Johns Hopkins University (Barrett et al., 2015; Griffiths et al., 2006; Johnson et. al., 2008; MacLean et al., 2012), my protocol adheres closely to their established framework of psychedelic therapeutic interventions. I argue that the inherent characteristics of psilocybin-assisted therapy, characterized by its holistic approach and openness to mystical-type experiences and spirituality, make it particularly conducive to the integration of art therapy and Jungian theory. While the genesis of this protocol lies in the context of psilocybin therapy, its adaptable nature allows for potential extension to other modalities of psychedelic therapy, contingent upon the judgment of the administering clinicians.

In navigating the terminology used throughout this professional contribution, it's pertinent to clarify the distinction between "patients" and "clients." With the anticipation of psilocybin's potential federal legalization and FDA approval for therapeutic use, it is assumed that its administration will be confined to medical settings under the supervision of a physician, in which. In such contexts, synthetic psilocybin would likely be the administered form of drug.

The terminology for an individual undergoing treatment in this setting is “patient”. However, in states where psilocybin mushrooms have been decriminalized or legalized, and in mental health facilities operating within non-medical models, the appropriate terminology shifts to “client.”

Given that my protocol has been developed heavily relying upon clinical-based research and is designed to align with the standards and protocols of medical settings, I will primarily use the term “patient" to refer to individuals undergoing treatment. It is essential to note, however, that the adaptability of my protocol extends beyond medical contexts. While the terminology may vary, the fundamental principles and directives outlined in this discussion remain applicable across diverse treatment settings, including both medical and non-medical environments. Therefore, while the terminology may shift based on the regulatory context, the essence of the protocol remains foundational, facilitating its broader applicability and utility in various therapeutic contexts.

Brief Overview of Psychopharmacology of Psilocybin

Psilocybin and its pharmacologically active metabolite psilocin are the psychoactive compounds found in “magic” mushrooms. Hofmann first synthesized psilocybin in 1958, and synthetic psilocybin is the pharmacological agent used in research settings. Psilocybin and psilocin are tryptamines, structurally related to serotonin (MacCallum et al., 2022). Psilocybin is a prodrug and must be converted to its metabolite psilocin in order to cross the blood-brain barrier and elicit its neurological effects. Following oral ingestion, psilocybin is rapidly dephosphorylated via the acidic environment of the stomach into psilocin. Psilocin, once crossed the blood-brain barrier, binds to several serotonergic receptors with a particularly strong affinity for the 5-HT_{2A} receptor found in large numbers on the cortex. As with all classical tryptamine

psychedelics, the subjective effects of psilocin are primarily mediated by agonism of the 5-HT2A receptors (MacCallum et al., 2022). The downstream effects of 5-HT2A receptor binding lead to an increase in release of glutamate which also likely contributes to the psychedelic effects of psilocin. Additionally, it is proposed that psilocin's neurobiological signaling pathways induce changes in neuroplasticity through increased expression of glutamate and brain-derived neurotrophic factor (BDNF). The potential connection between BDNF and depression is one suggested mechanism for psilocin's therapeutic effect (De Vos et al., 2021).

Psychoactive and Physiological Effects of Psilocybin

Current research of psilocybin therapy utilizes a single high dose administration of pure synthetic psilocybin. The effects detailed in this paper exclusively refer to a high dose psychedelic experience. Current protocols have recently switched from using weight-based dosing to a fixed psilocybin dose, most commonly 25 mg. This dose is consistent with the previous 0.3 mg/kg weight-based dosing. The fixed 25 mg dose approach has been validated in a recent secondary analysis of prior trial data, which found no significant differences for psychedelic effects compared to weight-based doses of 0.29 mg/kg and 0.43 mg/kg (MacCallum et al., 2022). A high dose of psilocybin is often colloquially referred to as a "heroic dose", a term popularized by Terrence McKenna in the 1980's and 1990's. McKenna was a writer, philosopher, and ethnobotanist who is a well-known figure within the psychedelic movement or community. The term "heroic" is used to convey the idea that such doses can lead to a transformative and potentially challenging journey, akin to a heroic adventure.

Importance of Terminology in Relation to Effects of Psilocybin

While psilocybin and other classic psychedelics are sometimes referred to as hallucinogens, modern research tends to avoid this dated terminology as it primarily focuses on the perceptual aspects of the drugs, and fails to convey their encompassing psychological effects. “Hallucinogen” is also a misleading term—while illusions or disturbances of visual perception are common (i.e.- walls appearing to be waving), only in very rare circumstances do these drugs cause true hallucinations by definition. Furthermore, visual effects are a trivial aspect of the therapeutic mechanisms of psilocybin. In fact, in therapeutic protocols of psilocybin and other psychedelic administration, participants wear blindfolds to minimize their interaction with their visual field, as it distracts from the more important therapeutic mechanisms of action which arise from the individual “journeying inward”. The preferred term “psychedelic” means “mind-manifesting”, and serves as a better categorization of these drugs and their effects.

Subjective Psychoactive Effects of Psilocybin

The profound psychoactive effects of therapeutic psilocybin administration cannot be overstated. The experience is often referred to as *ineffable*— a concept I will later revisit when I present my justification for the integration of art therapy with this modality. The duration of the psychedelic state induced by high dose psilocybin therapy can range from 4 to 8 hours. Most people experience the offset or 'return' from the psychedelic state after approximately 6 hours, with typical residual mild subjective effects lasting for a few hours post-treatment. (Griffiths et al., 2006; Johnson, 2023). Therapeutic protocols employ the use of eye masks and headphones (through which supportive music is played) during psilocybin sessions. This minimizes the distractions of environmental stimuli and facilitates one’s “journey inward”. With the removal of

external visual stimuli, the individual will still experience perceptual changes such as visual illusions and intensification of colors. Other effects such as proprioceptive changes, and synesthesia (i.e.- seeing music as colors) may also occur. Psilocybin prompts significant changes to thoughts and cognition, and magnifies emotions. Laughing and crying are both common experiences and it is not uncommon for someone to swing from one state to another rapidly. Anxiety is also a common experience, particularly during the onset of treatment. Anxiety can be mitigated (but likely not extinguished) with proper preparation, which is later outlined in detail (Johnson et al., 2008).

Profound and "Mystical-Type" Experiences

The Revised Mystical Experiences Questionnaire (MEQ-30) (MacLean et al., 2012) is a 30-item assessment modified from the original 43-item MEQ (Pahnke, 1963). The MEQ-30 was developed as a tool for the evaluation of single mystical experiences evoked by psychedelics. Since its development, Barrett et al. (2015) published a study establishing the valid use of the MEQ-30 as an efficient measure of individual mystical experiences. This tool has become an accepted cornerstone in psilocybin research. Its content can be used to understand common profound subjective experiences elicited by high-dose psilocybin administration. The four major experience categories of the MEQ-30 are mystical, positive mood, transcendence of time and space, and ineffability. The MEQ-30 can be found in Appendix A.

High-dose psilocybin administration induces a highly dissociative state, wherein individuals often feel disconnected from their bodies and reality. However, traditional definition and understanding of psychiatric dissociative symptoms do not fully encompass the subjective effects of a psychedelic state. The transformative therapeutic value of psilocybin therapy is

believed to stem from the profound, often ineffable, experiences during a session, and their subsequent insights and integration into one's life (Richards, 2016). An individual may feel as though they have entered another world or dimension, and/or experience a loss of sense of time. One may even feel as though they are in a place that *transcends* time, or that they are experiencing "timelessness" (MacLean et al., 2012).

A sense of boundlessness is common, with many reporting feelings of "oneness" in various forms— such as "oneness" with the universe, humanity or an "inner world" (Johnson, 2023). These feelings may evoke a sense of profound empathy, where a person may feel as though they are experiencing or understanding the collective joy or suffering of all life on Earth (Johnson, 2023). Profound changes in one's sense of self may occur, including a complete loss of one's self-identity. This phenomenon is sometimes referred to as "ego loss" or "ego death" (Grof & Halifax, 1977; Grof, 2008).

The magnitude of these experiences and emotions are often interpreted by individuals as spiritual experiences, which resultantly leads to the exploration of "big-picture" concepts such as spirituality and life-meaning (Johnson, 2023). One may feel a sense of spiritual height, a freedom from the limitations of their personal self, or a deep sense of unity or bond with "something greater," or higher power (MacLean et al., 2012). Griffiths et al.'s (2016) groundbreaking psilocybin study with terminal cancer patients demonstrated remarkable findings on patients' insights and shifts in attitude regarding life-meaning and death acceptance. Notably, higher MEQ-30 scores were highly predictive of long-term positive changes in attitudes, mood, behavior, and spirituality (Griffiths et al., 2016).

Intense emotions are likely to arise during a psilocybin session. Feelings of peace and tranquility, joy, ecstasy, reverence, and a sense of awe are all commonly reported experiences. Conversely, it is also common for a person to experience profound moments of sadness, or somberness. Tearing or crying is a common phenomenon and can arise from the intensity of any emotion, such as an overwhelming sense of joy or beauty, or deep feelings of sadness (Johnson et al., 2008; Griffiths et al., 2016).

Preparatory sessions aim to equip individuals to approach all emotions and experiences, whether pleasant or challenging, with openness, acceptance, and curiosity (Johnson et al., 2008). With this approach, even if an individual is momentarily gripped by sadness or difficult emotions, the goal is to allow for the processing of these emotions, and subsequently arrive to a sense of acceptance and understanding. Once this process is completed, the difficult experience typically relents and evolves—often giving way to a pleasant experience. However, it may be the case where an individual must process through a series of difficult psychic material (which refers to material arising from the psyche). Regardless of the number or sequence of difficult or challenging experiences, these occurrences must always be met with the same approach of openness, acceptance, and curiosity.

Challenging Experiences

The importance of preparing those undergoing psychedelic treatment to approach emotions and experiences with openness, acceptance, and curiosity cannot be overstated. While relatively rare (but still substantially documented), individuals may encounter difficult or frightening scenes or material during their journey (Johnson et al., 2008). Fear, like any other emotion, can be intensified in a psychedelic state. This category of experiences has colloquially

become known as a "bad trip”—a term originating from the 1960s counter-culture movement which was intrinsically linked with the recreational use of psychedelics. However, in modern clinically-based research, the term "challenging experience" is preferred (Johnson et al., 2008). This distinction is important because (1) with proper preparation, a challenging experience within a psychedelic state can be successfully navigated; and (2) a challenging experience should not be categorized as “bad” or “negative,” as they often yield important insights and therapeutic value. Protocols and guidelines created for clinical use of therapeutic psilocybin(/psychedelics) have shown to minimize such adverse reactions; however, they can still occur in a highly controlled supportive environments (Barrett et al., 2016).

The Challenging Experience Questionnaire (CEQ) (Barrett et al., 2016) was developed as a tool for measuring challenging experiences induced by psilocybin. The CEQ utilizes seven experience categories to provide a profile of challenging aspects common to psilocybin, which include grief, fear, death, insanity, isolation, physical distress, and paranoia. The CEQ was developed using a multitude of studies and surveys providing individual, subjective accounts of challenging experiences while in a psilocybin-induced psychedelic state. Combining data items from Barrett et al.'s (2016) publication with Johnson et al.'s (2008) safety guidelines offers a comprehensive understanding of potential phenomena during a challenging experience.

Challenging experiences can range in severity and manageability. Particularly in highly distressing or disturbing situations, a person’s natural reaction is the desire or attempt to “think their way out of it” or control or flee the imagery, sensation or emotion (Pollan, 2018). Regardless of the perceived severity, individuals are guided to mentally surrender to the experience.

Perceived bodily sensations evoked by psychedelic states can be challenging for some individuals. It is possible for one to experience extremely convincing sensations of dissolving, melting, or exploding. Successfully navigating these experiences involves surrendering and *allowing* oneself to dissolve, melt, or explode (Johnson et al., 2008). This same approach applies to the much more extreme example of an individual feeling as if they are going to die. The individual is guided and encouraged to "allow" oneself to die (Pollan, 2018). With this example, it is important to note that psilocybin is a remarkably physiologically safe drug and there are no recorded deaths directly attributed to psilocybin administration in research settings (Johnson et al., 2008). Primary physical concerns relate to mild transient increases in heart rate and blood pressure associated with emotional processing in sessions. Thus, serious or uncontrolled cardiovascular conditions are often considered to be relative contraindications (MacCullum, 2022). Screening, assessment, and contraindications are further discussed later in this chapter.

In the context of challenging experiences, the perception of impending death or experiencing one's own death is well-documented in research literature (Barrett et al., 2016). In all such cases, these experiences are sensational phenomena of the psychedelic experience; individuals do not actually die. Of course, the statistical probability of a person suffering a serious medical emergency during *any* psychological or medical treatment can never be zero, which is why clinical protocols of this treatment modality include utilization of an on-site physician. This particular example of a challenging experience can not only be extremely frightening for the individual undergoing treatment, but also for an under-prepared clinician or session monitor. This type of phenomena speaks to the seriousness, commitment, and high level

of knowledge and understanding a clinician must possess if they choose to work within this therapeutic modality.

Disturbing, repulsive, and frightening imagery and illusions are other examples of categorically challenging experiences. Individuals may experience the presence of repulsive biological material such as urine, feces, pus, or dead flesh (Barrett et al., 2016). An individual may feel as though they are in a "Hell realm," with visualizations of demons, monsters, or other wrathful deities (Barrett et al., 2016). In all such cases, the individual is guided to remain calm, accept their presence, and engage with the challenging content with the desire to understand their significance (Johnson et al., 2008). Other documented challenging experiences include feelings of being trapped, helplessness, isolation, frustration, anger, sadness, grief, or despair. One may feel as if they are going insane or that they will never return from the psychedelic experience (Barrett et al., 2016).

Even though severe or unrelenting challenging experiences are rare in therapeutic settings, it is important that this phenomena is thoroughly discussed and well-understood. Clinicians and support staff must possess a comprehensive understanding of the range of possible subjective effects and know how to prepare, navigate, and process these experiences effectively. Most importantly, difficult psychedelic experiences should be viewed as opportunities for psychological growth and insight. Within a therapeutic context, challenging experiences are generally seen as a natural part of the uncovering process (Hill, 2013).

The most important aspect of navigating challenging experiences comes down to control. The term "bad trip" refers to when a psychedelic session devolves into difficult or challenging material overtaking the entirety of the remaining session, which occurs when difficult psychic

material is met with resistance rather than acceptance. Resistance or attempts to control challenging experiences can often lead to encountering progressively more intense material. Conversely, when these experiences are met with openness and acceptance, the difficult material eventually remits.

Experiences Related to One's Life

In psilocybin therapy, individuals encounter material from their own life experiences during psychedelic sessions, akin to other forms of therapy. In preparatory sessions conducted prior to administration, significant aspects of an individual's life are discussed with the clinician and additional session monitor. These preparatory sessions, detailed later in this chapter, serve a critical purpose, as personal material may "emerge" under the effects of psilocybin. Consequently, a person may experience intense thoughts, feelings, or visions related their personal history or world-view (Johnson et al., 2008).

This material can vary widely, ranging from pleasant and happy memories to the confrontation of difficult or traumatic experiences. With psilocybin therapy, there is great therapeutic potential pertaining to difficult life experiences. Psilocybin and other psychedelic agents can reduce an individual's resistance to repressed traumatic memories and feelings, facilitating the process of coming to terms with past trauma. Additionally, mystical-type subjective experiences, such as feelings of support and connectedness, can often accompany one's exploration of difficult or traumatic personal material in the psychedelic state. This dynamic allows for the potential of significant reframing of one's perspective and beliefs about one's self, life, and outlook (Johnson, 2023).

Emerging research on psilocybin and trauma-related disorders builds upon the foundational work of first-wave researcher Stanislav Grof. Grof's research with LSD highlighted the tremendous potential of psychedelic therapeutic modalities in treating trauma-related disorders (Grof, 2008; Hill, 2013). There are also numerous published personal accounts of individuals who have experienced significant improvements in post-traumatic stress disorder (PTSD) symptoms and overall attitudes toward past traumas following psilocybin and other psychedelic treatments, both in research and non-research settings. Notably, veterans represent a significant population among these accounts. Prompted by the compelling data and accounts in this field, the Department of Veterans Affairs (VA) issued a request in January 2024 for proposals from its network of VA researchers and academic institutions to explore the use of specific psychedelic compounds in the treatment of PTSD and depression, signaling a promising future for psychedelic therapeutic modalities.

Psychological Origins and Therapeutic Mechanisms of Subjective Experiences

The psychological origins and therapeutic mechanisms of subjective experiences under psychedelics essentially follow the same underpinnings of any other psychological phenomena, in that there are multiple theoretical models of explanation. Theoretical perspectives will vary among researchers, clinicians, and scholars. Depth-psychology and psychodynamic perspectives; transcendence and mystical perspectives; and Default Mode Network perspectives are all prominent theories. Based on my research and understanding of psilocybin-induced psychedelic states and psilocybin-assisted therapy, I believe the best approach to understanding psychological origins and therapeutic mechanisms should be holistic and interdisciplinary.

Psilocybin-assisted therapy largely aligns with humanistic and insight-oriented therapeutic orientations. A general observational and experiential belief among many in the field of therapeutic psilocybin is that the psychic material "presented" to an individual during a psychedelic experience reflects areas of one's life that require attention and processing (Huxley, 1954; Johnson, 2023). This evidence-supported concept underscores the profound therapeutic potential of psilocybin therapy, as individuals are often enabled to confront personal material in the presence of an ineffable sense of support and acceptance.

Johns Hopkins University Protocol For Treatment

To begin this section, I will outline the therapeutic protocol established by Griffiths et al. (2016) in their publication on psilocybin therapy with terminal cancer patients, alongside Johnson et al.'s (2008) publication on Johns Hopkins University protocols and safety guidelines for psychedelic and other psychoactive drug research. Given that Johnson's protocols are written and intended for research settings, I have adapted them where appropriate to reflect their use in clinical settings in anticipation of the potential legalization and FDA approval of psilocybin treatments. Furthermore, I have expanded on certain protocols to incorporate my own opinions and guidance on the course of treatment, while still maintaining and adhering to the overall framework. Johnson's publication of guidelines and protocols is exhaustive, some of which are not directly applicable to the purpose of this professional contribution, and have thus been omitted in this discussion.

Screening and Assessment

The initial step of this protocol involves the assessment of individuals seeking treatment. In Griffiths et al.'s (2016) study, participants had life-threatening cancer diagnoses, coupled with

DSM-IV diagnoses that included anxiety and/or mood-related symptoms. In a hypothetical clinical setting, this stage would entail diagnosing or reviewing the diagnosis of the patient seeking treatment. Considering current psychedelic research and the patient population for which ketamine therapy is currently approved, eligible diagnoses for psilocybin treatment would likely include anxiety disorders, mood disorders, and post-traumatic stress disorder.

Individuals must also undergo assessment for contraindications to psychedelic treatment. Griffiths et al.'s (2016) full list of inclusion and exclusion criteria for this particular study can be found in Appendix B. For the purpose of our discussion, I will primarily focus on Griffiths' identified psychiatric contraindications for psychedelic treatment. This study was conducted during the era of The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), however, I have amended the list of contraindications to reflect the current use of DSM-V. These include individuals with severity of depression or anxiety symptoms warranting immediate treatment with antidepressant or anxiolytic medication (i.e.- due to suicidal ideation); current or past history of meeting DSM-V criteria for Schizophrenia, Psychotic Disorder (unless substance-induced or due to a medical condition), or Bipolar I or II Disorder; current or past history within the last 5 year of meeting DSM-V criteria for alcohol or drug dependence (excluding caffeine and nicotine); have a first or second degree relative with schizophrenia, psychotic disorder (unless substance induced or due to a medical condition), or bipolar I or II disorder; and/or currently meets DSM-V criteria for Dissociative Disorder, Anorexia Nervosa, Bulimia Nervosa, or other psychiatric conditions judged to be incompatible with establishment of rapport or safe exposure to psilocybin. (Griffiths et al., 2016). Important physiological contraindications include blood pressure exceeding 140 systolic or 90 diastolic; epilepsy with

history of seizures; and females who are (or are potentially) pregnant or breastfeeding (Griffths, 2016). There are also specific exclusions and conditions regarding certain psychoactive drugs. While reviewing and familiarizing oneself with this list of contraindications is important, if psilocybin treatment were to receive FDA approval in the future, exclusion criteria would be established as standard requirements in a clinical setting. The psychological and physiological effects of psilocybin, including their relation to contraindications, will be discussed later in this paper.

As with any clinical administration of psychoactive drugs, preparation must include a comprehensive review of the consent form. Proper consent forms must outline in plain language the range experiences that may result from administration of psychedelic drugs. Compared to other drug classes, describing psychedelics to a naïve individual may pose difficulty; thus, clinicians should expect to dedicate additional time to discuss possible subjective effects (Johnson et al., 2008). The consent form should also detail the approximate time course of the drug and its toxicity profile. Importantly, the consent form should also state that there is a relatively small risk of adverse effects lasting for hours to days after the administration session, including mood disorders, psychotic disorders, and anxiety disorders. Additionally, it should state that there are rare reports suggesting that exposure to psychedelics appears to cause, accelerate, or precipitate the onset of significant psychiatric illnesses such as psychoses and visual perceptual abnormalities (Johnson et al., 2008). This underscores the importance of strictly adhering to psychiatric contraindications as exclusionary criteria for psychedelic treatment, as individuals with these conditions are at higher risk of serious adverse events. The individual undergoing treatment must also be informed of their right to exit the treatment course at any

point prior to psilocybin administration, and the clinical team should create an environment where the individual feels comfortable doing so.

Preparation

Once an individual has been screened and approved for treatment, the next phase of treatment involves preparation counseling sessions. At Johns Hopkins, two session monitors are assigned per patient, one of which is a credentialed mental health clinician who serves as the lead clinician or primary monitor. The assistant session monitor does not necessarily need to be credentialed, but should have commensurate knowledge, experience, and training for their role. This dual-monitor setup is recommended to ensure that the patient is never left unattended during the session, even if one monitor must briefly leave during session for any reason.

Preparation sessions consist of a series of meetings between the session monitors and the patient. The purpose of these meetings is to build rapport and trust which minimizes the risk of fear or anxiety reactions during the psychedelic session. In Johns Hopkins psilocybin studies, there are at least eight contact hours over the course of at least four meetings typically over the course of one month. Additional preparatory sessions may be implemented if deemed necessary by either the patient or the clinician. If sufficient rapport and trust are not established even after additional preparatory sessions, the treatment course must be re-evaluated, which may include reassignment of monitoring personnel, or the postponement or cancellation of the administration session. Trust and rapport must be established with *both* monitors, in case one must briefly leave the room during the treatment. At least one of these meetings should be conducted in the psilocybin treatment room to familiarize the individual with the environment (Johnson et al., 2008).

During these preparatory counseling sessions, meaningful aspects of the patient's life are discussed with the clinician including their reasons for seeking treatment, childhood, romantic life, current relationship dynamics with family and friends, philosophical and spiritual beliefs, as well as thoughts and feelings concerning the upcoming psychedelic session. By the conclusion of the preparatory phase, patients should ideally feel safe with their session monitors following these personal discussions. These sessions are crucial as patients may experience intense thoughts, feelings, and visions related to their personal history or worldview during the psychedelic session. Understanding the patient's personal history enables the monitor to comprehend the patient's experience during the psilocybin session and offer support and guidance should strong emotions emerge (Johnson et al., 2008).

Possible subjective experiences must be discussed with the patient, including challenging experiences and how to navigate them. The detail to which subjective experiences were discussed earlier in this chapter would never be necessary or appropriate for the preparation of a patient. In fact, imparting a high level of detail pertaining to possible experiences is deemed unethical, as doing so may create expectation or suggestibility within a patient. In regard to challenging experiences, patients should be informed on the possibility of encountering disturbing imagery, sensations, or difficult emotions, without overwhelming them with excessive detail that could be clinically destructive.

As previously discussed, patients should be guided to approach the psychedelic experience with openness, acceptance, and curiosity, particularly regarding challenging experiences. They can be provided with examples, such as encountering entities of various types (benign, friendly, malicious, etc.). Patients are encouraged to engage with these entities with the

aim of understanding their presence. Patients should also feel assured that their support team will be present throughout the session to assist them in navigating any aspect of their experience.

Finally, it is important to reassure the individual of their inner strength and resilience as a human being (Johnson, 2023). They are embarking on a therapeutic journey of profound self-insight and exploration. Despite the often other-worldly and lengthy nature of a psilocybin session, they remain connected to their body, surroundings, and support network, and will ultimately emerge from the experience. At Johns Hopkins, the guiding mantra of "Trust, let go, and be open" is upheld throughout the patient's treatment (Johnson et al., 2008; Johnson, 2023).

Psilocybin Session

The safe and effective administration of psilocybin relies on keen attention to physical environment and procedural protocols. Careful consideration is given to the environment and ambiance of the treatment room, as this plays a crucial role in fostering a therapeutic atmosphere conducive to healing. Additionally, measures are implemented to ensure the physical safety of both patients and staff, minimizing potential risks associated with perceptual alterations induced by psilocybin. Adherence to strict conduct and procedural guidelines by session monitors is essential for maintaining a supportive environment and responding effectively to any adverse reactions that may arise during the session. Through comprehensive planning and adherence to established protocols, the set and setting of psilocybin therapy endeavors to optimize therapeutic outcomes while prioritizing patient safety and well-being.

Physical Environment

The physical environment of the treatment room, often referred to as “set and setting,” is an imperative component to psilocybin assisted therapy. Regardless of the larger clinical facility

the treatment room may be housed in, the environment should be dimly lit and furnished to resemble a comfortable living room-type atmosphere, with aesthetic features including a soft or neutral color palette, artwork, and decoration. The patient should have a comfortable recliner or bed to lie in through the duration of the session to promote relaxation. This departure from a typical medical clinical setting aims to reduce the likelihood of distress. An overly clinical environment with a sterile look and feel (i.e.- white walls, medical equipment, personnel in white coats) may increase anxiety and distress reactions in patients (Johnson et al., 2008). Similarly, clinicians and session monitors should avoid wearing white coats or similar medical attire.

Attention must also be paid to the physical safety of the environment. The room should be designed and furnished with the awareness of perceptual changes and disorientation that can occur under psilocybin. Therefore, any potentially dangerous objects (i.e.- furniture with sharp corners, glass lamps, or statues) should be avoided. If there is a window in the room, precautions must be taken to prevent the patient from escaping during a delusional episode (Johnson et al., 2008). Telephones should be absent from the room and the patient's cell phone should be surrendered prior to the session; an incoming call can be distracting or alarming while in a psychedelic state. Additionally, availability of a telephone or cell phone presents the risk of a patient making a phone call while under the influence of psilocybin (Johnson et al., 2008).

Ideally, there should be a private restroom housed within a suite or in very close proximity to the treatment room. If this is not feasible, measures must be taken to mitigate interactions with other individuals when escorting the patient to a distant or shared restroom (Johnson et al., 2008). Realistically, achieving an ideal physical environment may be

challenging; therefore, facilitators must be resourceful and knowledgeable in order to create the soothing and secure atmosphere this treatment requires.

Although considerable attention must be given to crafting a peaceful and supportive environment, the patient will ideally spend very little time interacting with it during the psilocybin session. Following the administration of the psilocybin dose, the patient is instructed to wear eye shades, preferably a high-quality and comfortable sleep mask, and headphones. Eye shades limit external stimuli and interaction, which is counterproductive to the therapeutic effects of psilocybin therapy. High doses of psilocybin will cause visual illusions— for example, walls or furniture may appear to be "breathing" or rippling. While these types of visual effects may be interesting, interactions with external environment is antithetical to the purpose and therapeutic mechanism of "journeying inward" during a psilocybin session.

Headphones are worn through which supportive music is played. Headphones should not be noise-cancelling and music should be played at a relatively low volume, as session monitors and patients must be able to communicate throughout the session if necessary. Opinions on music selection for psychedelic therapy have changed over the years. Classical music has historically been the favored genre, but recently instrumental, "ambient" synthesizer-based music is being favored. All of the music used in sessions must be pre-screened and pre-determined by the clinical team. Music is a powerful modulator of affect, therefore the selected music must have suitable instrumentation, tone and tempo that is germane to the therapeutic process.

Music for psilocybin therapy is not extensively detailed in Johnson et al.'s (2008) protocols; however, through my research, I have developed comprehensive guidance on this critical aspect of treatment. I believe instrumental ambient electronic music, sometimes

categorized under “dreamscape” or similar genres, is the premier choice for psilocybin assisted therapy. The calm and fluid nature of this genre lends itself to both anxiety-reduction as well as the nature of the psychedelic experience itself. Additionally, the selected music should be free of any words or lyrics, though there are exceptions that can be employed in a limited capacity. For instance, a patient may wish to begin their session with a brief guided meditation or prayer that is personally meaningful. If it is screened and deemed appropriate for treatment, the playlist can begin with this selection.

Another example of a lyrical exception is the album “Music for Psychedelic Therapy” by Jon Hopkins (2021). This album by Hopkins was primarily designed to match the duration of a psychedelic ketamine treatment session, which typically lasts a much shorter duration than a psilocybin session. That said, this album can still be used for psilocybin sessions if it is placed within a long-duration playlist of music, since its qualities are ideal for psychedelic treatment modalities. The final track of this album titled *Sit Around The Fire* is approximately 8 minutes in length, and incorporates audio from a spiritual talk given by Ram Dass (a prominent spiritual teacher formerly known as Richard Alpert) set to music. While this track selection may not be suitable for all patients, it can be discussed and included in treatment if the concept of spirituality is expressed or welcomed by the patient, and if this album is utilized. Additionally, Hopkins’ (2021) album can still be utilized with this singular track omitted. Inclusion of spiritual elements must never be imposed upon a patient without their knowledge and consent; ethical such as this considerations such as this will be discussed later in this chapter.

Music playlists should be curated by a knowledgeable clinician or through collaboration between treatment team members and a clinician. Playlists should be a minimum of 8 hours.

Although a typical psilocybin time course is approximately 6 hours, and unlikely to span 8 hours, it is beneficial to have a music playlist which exceeds expected session duration. Streaming services available today offer an expansive selection of suitable albums and individual tracks for playlist curation. I believe it is best practice to use a series of complete albums by various artists, as these albums often have a cohesive flow and seamless transitions between tracks, which helps minimize any sense of disjointedness in the playlist. Additionally, there is a broad range of meditative music tracks available, some over 2 hours in length, which can also be employed.

In summary, the set and setting of psilocybin assisted therapy is a major component of the therapeutic modality. The environment created for administration sessions is unique and requires a wealth of planning and consideration. The overall goal is to make the session environment as supportive as possible in order to mitigate distress and anxiety, and enhance therapeutic efficacy.

Conduct and Procedures

Johns Hopkins psilocybin protocols adhere to a medical model of treatment; therefore, the availability of an attending physician is the first safety guideline outlined for psilocybin session procedures. Protocol states that a physician should be available should any medical complications or emergencies arise during session. Psilocybin has a very favorable physiological safety profile, but one area of concern is acute hypertension. Medication for treatment of acute hypertension should be immediately available in the event that blood pressure exceeds pre-determined safety parameters (Johnson et al., 2008).

Adverse psychological reactions are minimized under conditions that provide strong interpersonal support to the patient. Session monitors should carefully observe the patient throughout the session and be attentive of signs of distress (Johnson et al., 2008). If participants

become distressed or anxious at any point during session, the appropriate first response is to provide strong personal support and reassurance (O'Brien, 2006). If a negative psychological reaction seems to be escalating, the monitors should convey a solid and unified sense of security and calm, and meet the patient's experience with empathy. Attempts to "talk a patient down", distract or minimize the experience may be counterproductive, further escalating the situation (Johnson et al., 2008).

Patients experiencing a heightened reaction must be supportively guided to surrender to the experience, as previously outlined. It can also be helpful to remind the patient of the nature of the treatment and assure that they will return to normal consciousness when the drug has run its course (Johnson et al., 2008). In situations of heightened distress, therapeutic touch may be helpful and can be used at the discretion of the clinician. Simply holding the hand of the patient can be a powerful form of support, a technique referred to as "interpersonal grounding". It is suggested that monitors demonstrate this practice during preparation sessions to familiarize and normalize its use during the treatment session. Many research participants have reported that a reassuring hand provides an incredible sense of stability and connection (Johnson et al., 2008).

If patients have been appropriately screened and therapeutic guidelines are adhered to, reassurance from monitors should be sufficient to de-escalate acute psychological distress. At the time of Johnson's (2008) publication on safety guidelines, reassurance had been sufficient to diffuse 100% of cases of distress among research participants. In last-resort circumstances in which no reassurance-based interventions are successful after several attempts, anxiolytic medications should be immediately available to be administered to the patient. Johns Hopkins

protocols recommend the use of a 10 mg oral dose of diazepam in such circumstances (Johnson et al., 2008).

The role of session monitors is to create a safe and supportive space for the patient to achieve maximum therapeutic benefit from psilocybin treatment. Preparation counseling sessions are the foundation of this treatment, informing the clinician's approach to guidance and communications during the treatment session. Session monitors, especially the lead clinician, must be well-versed on the array of possible subjective effects of psilocybin and proper guidance techniques.

Since psilocybin is a long-duration drug, it should be expected that the patient will need to use the restroom at some point during session and monitors should gently assist the patient to the restroom. While motor impairment is typically minimal under the influence of psilocybin, the proprioceptive and visual effects may be disorienting (Johnson et al., 2008). Restroom protocols should ensure patient privacy and safety, with a monitor remaining in close proximity to the patient at all times. Johnson also specifies that a patient must not be able to lock the door of the restroom. This will require either that the restroom door does not lock or that staff have a key to access the restroom if a patient were to barricade themselves in it. The assisting personnel should wait closely outside of the restroom to grant privacy whilst maintaining availability if the patient should need assistance.

If a session monitor needs to leave the room for any reason, the second session monitor must remain with the patient. One monitor must be present at all times throughout the session, never leaving the patient unattended. Because of the intimate nature of this treatment and importance of trust and rapport, any personnel who may come in contact with the patient on a

session day should have at least met the patient once prior to the session (Johnson et al., 2008). It is ideal that the patient only interacts with their session monitors, but they should also be familiar with any additional personnel they may encounter.

Serious attention must be given to the possibility of patients attempting to leave the treatment site under the influence of psilocybin. If a patient attempts to leave the treatment site during a restroom trip or at any other point, the individual should be met with compassionate but firm direction to return to the session room, as there are significant risks associated with allowing a patient to leave the treatment site under the effects of psilocybin. Although most individuals maintain reasonable control under a psychedelic state, panic or delusional reactions can result in major and life-threatening consequences (i.e.-jumping out of windows, or exiting the facility and encountering dangerous situations such as traffic). Such scenarios are exceedingly rare with highly controlled protocols, but preparedness and vigilance are necessary for this treatment modality.

Post-Treatment Session Processing and Integration

Although the psychedelic experience itself often yields significant therapeutic benefit, post-treatment counseling dedicated to processing and integrating the patient's psilocybin experience is a critical component of this modality. These counseling sessions usually involve only the lead clinician and the patient. However, I will later introduce my integrative art therapy protocol, which necessitates the involvement of an art therapist either as the lead clinician or as a co-facilitator of this treatment. If the art therapist is a co-facilitator, they should be involved throughout the entire course of treatment (i.e.- preparatory sessions and the psilocybin session). The first session should take place the day after psilocybin administration to assess patient safety

and psychological stability (Johnson et al., 2008). Initial meetings are dedicated to providing the patient with the opportunity to discuss their thoughts and feelings regarding the psilocybin session. As processing sessions progress, discussions should expand to explore specific areas of interest and therapeutic value. In research settings, the number of processing sessions are fairly limited due to study timelines, but clinical applications of psilocybin-assisted therapy would ideally allow for longer-duration counseling.

Throughout processing and integration sessions, the clinician should facilitate discussions led by the patient. If there are aspects of the experience the clinician deems therapeutically pertinent, they may initiate discussion of these topics using clinical judgment. This approach aligns with person-centered, insight-oriented counseling. After discussing the psychedelic experience itself, counseling sessions evolve to resemble typical therapy sessions, exploring elements of the patient's life and drawing from the psychedelic experience to aid in insight, reframing, and goal-setting for the future.

Given the intense and unique nature of a high-dose psilocybin psychedelic experience, patients may struggle to articulate certain aspects of their experience (Johnson et al., 2008). This is expected, and although the goal is to verbally process as much of the experience as possible, some degree of ineffability typically persists. This should not be viewed as a short-coming or characterized negatively, but rather as a positive mystical-type experience characteristic of psilocybin therapy, as reflected in the inclusion of "ineffability" in the MEQ-30 (MacLean et al., 2012). The art therapy directives intended for processing sessions, which I will later present, have been developed with these verbalization challenges in mind and provide a nonverbal means for expression and processing.

The nature of the psilocybin experience may also leave patients feeling that discussing it with others outside of a therapeutic setting would be difficult. Clinicians within this modality must possess a deep understanding of the subjective effects of psilocybin to provide patients with a sense of understanding. During the first wave of psychedelic research, it was common practice for clinicians administering psychedelic treatments to undergo the treatment themselves to gain experiential understanding. There is no peer-reviewed literature on this practice in modern research to date, and it is understood that viewpoints on it vary widely. Whether clinicians can or should undergo psilocybin treatment (if they meet screening criteria) to gain therapeutic understanding will ultimately depend on regulatory and facility protocols. It can be argued that doing so could benefit the individuals they are treating; however, effective therapy in this field can still be achieved through professional training, knowledge, and understanding of the therapeutic process.

Ethical Considerations

The intimate and vulnerable nature of this intervention poses unique ethical considerations for clinicians and session monitors. One must balance the ethical responsibilities to adequately prepare the patient for the range of potential powerful effects of the psychedelic experience without imparting a bias or expectation of the experience onto the individual, as classical psychedelics have been shown to increase suggestibility (Sjoberg & Hollister, 1965). Increased suggestibility is of the greatest concern in relation to the phenomenology of mystical-type or spiritual experiences. Although spiritual experiences are included among the range of effects conveyed in preparation, the monitors should emphasize that these are not the only variety of interesting or valuable effects that may occur. In the Johns Hopkins studies,

participants are not encouraged to read the available published literature on psychedelic effects as part of their preparation in order to minimize preconceived expectations of what their experience may entail (Johnson et al., 2008). With this in mind, I would argue that patients seeking information pertaining to "what to expect" should be discouraged and given a thoughtful explanation of the rationale of this discouragement.

Furthermore, a clinician must adopt the stance that meaning-making of any subjective experience must be done solely by the patient. Session monitors must not "interpret" aspects of the psychedelic experience, but only offer support in the patient's meaning-making process. Patients will often confront "big picture" questions and topics during this form of therapy. The meaning of life, the existence of God or a higher power, and contemplation of the universe and one's place within it are some examples of immense questions that often arise for individuals. When these metaphysical questions do arise, it is imperative that session monitors remain silent and allow the patient to reach their own answers or meanings (Johnson, 2023). However, it is important to note that exceptions may arise, particularly if a patient is incorrectly interpreting an experience to mean something destructive or harmful. As always, sound clinical judgment is paramount and should be exercised when appropriate.

The intimate setting of this intervention also raises important considerations. Session monitors accompany the patient throughout the psilocybin session. While therapeutic touch is permissible with informed consent, its use should be limited. Finally, just as the session monitors must maintain neutrality, the rooms used for preparation, administration, and processing should also remain neutral. As previously mentioned, the setting for psilocybin sessions may include artwork and decoration, but religious or spiritual symbols should not be included in the decor.

Although the decision ultimately rests with the clinician or facility, it may be reasonable to allow a patient to bring their own small object of spiritual or personal significance to be placed in the room during their treatment.

Jungian Theory and Psychedelic Experiences

Psilocybin-assisted therapy emerges as a holistic therapeutic approach, incorporating various theoretical orientations and methodologies. While therapeutic styles differ among practitioners, prevailing approaches tend to embrace insight-oriented, humanistic principles with foundations in depth psychology. In his publication *Psychedelic-Assisted Psychotherapy and Carl Jung's Red Book*, Harris (2021) underscores the importance of Jungian depth psychology as a fundamental background for psychedelic therapists, irrespective of their therapeutic orientation. Carl Jung developed and employed a radically inquisitive approach to the human psyche by leveraging his own personal practice of exploring his mind through introspection, imagination, and self-analysis. With this unique mode of inquiry into the human psyche coupled with his embrace of spiritual and mystical sensibility, many have turned to Jung's work for insight into psychedelic experiences since their first-wave emergence in the 1950's (Hill, 2013). This section explores various Jungian concepts and their relevance to psilocybin-assisted therapy, aligning with Harris's perspective by incorporating Jungian elements into the art therapy directives of the proposed protocol later in this chapter.

Jung's View of Psychedelics

Despite a wealth of literature exploring the intersection of Jungian psychology with psychedelic experiences and therapy, it's essential to acknowledge Jung's personal stance on psychedelics. Jung maintained that he did not use psychedelics, nor did he give them to patients

as a therapeutic agent or facilitator. In fact, Jung held a critical opinion of psychedelics, as he believed these drugs too quickly and easily opened a window into the unconscious and collective unconscious psyche that would be difficult to integrate psychologically (Hill, 2013; Harris, 2021). Though there are many elements of psychedelic experience and insight which parallel Jung's personal accounts of exploration of the psyche, Jung's technique of reaching this psychic material was through use of "active imagination," involving intentional engagement with images and symbols that emerge from dreams and fantasies.

Due to Jung's disapproval of therapeutic use of psychedelics, many Jungian-oriented practitioners historically held similar critical opinions; however, modern literature on the therapeutic value of psychedelics has introduced a more nuanced opinion among Jungian Theorists. Despite Jung's critical view of psychedelics, there are elements of psychedelic experiences which are implicitly relevant to Jung's approach to the psyche. There are many published rebuttals to Jung's stance, as well as literature that both acknowledges and respects Jung's view whilst exploring the importance and relevance of Jungian Theory to Psychedelic Therapy.

Basic Jungian Concepts

Prior to discussing Jungian concepts in relation to psychedelic therapy, it is important to establish the foundational concepts of Jungian psychology. Carl Jung's theories offer unique perspectives and insights into the human psyche, emphasizing the interconnectedness of the conscious and unconscious mind, the significance of archetypes and symbolism, and the process of individuation. This section provides an overview of these fundamental Jungian concepts,

facilitating a deeper understanding of a theoretical framework that informs the development and implementation of my Jungian-grounded art therapy protocol.

Conscious and Unconscious

Jung's model of the conscious mind comprises three main components: the ego, the personal unconscious, and the collective unconscious. The ego serves as the center of consciousness and identity, housing one's perceptions, thoughts, and experiences in the present moment. It navigates the external world and shapes an individual's sense of self and personality. Jung describes the unconscious as all psychic contents and processes that are not conscious, or not related to the ego in any perceptible way (Jung, 1921/1971). The personal unconscious contains all of the "acquisitions" of personal life—all ideas, sensations, perceptions, images, and emotions that are derived from personal experience, but which one has forgotten, repressed, or did not notice in the first place (Jung, 1921/1971; Hill, 2013). Some of the material of the personal unconscious can be recalled to the conscious mind. The collective unconscious consists of the psychological contents and the patterns of life and behavior that each of us has inherited from our evolutionary past, and therefore is shared among all human beings. Jung discusses the content of the collective unconscious in terms of archetypes, which are potent images and themes with universal meanings that have been expressed through the ages across a wide range of cultures (Jung, 1921/1971; Hill, 2013).

Jung viewed the conscious and unconscious as complementary and engaged in a compensatory relationship with one another, with the unconscious balancing and supplementing the ego through dreams, fantasies, and visions. The ego experiences these unconscious manifestations as unexpected and strange, yet, the unconscious often brings forth wisdom that

consciousness lacks (Hill, 2013). This concept underscores Jung's emphasis of the value of dreams and fantasies garnered by active imagination.

Archetypes

Jungian archetypes are innate, universal symbols or themes residing in the collective unconscious, shared by all of humanity. The collective unconscious and archetypes are of particular interest when viewing psychedelic experiences through a Jungian lens. The four main archetypes of Jungian psychology are the Persona, Shadow, Anima/Animus, and Self.

The Persona can be understood as the social mask or role that an individual presents to the outside world. It is the identity an individual adopts in various social contexts. The Persona helps individuals navigate societal expectations and interactional demands, but an over-reliance of the Persona can also lead to a loss of connection with the true self (Wilmer, 1987).

The Shadow represents the repressed aspects of the personality—one's "dark" side that contains traits and impulses that are not accepted or easily acknowledged by the conscious mind. There is a human desire to avoid or reject the Shadow, for it encompasses traits, desires, and emotions that the individual finds unacceptable, undesirable, or incompatible with their conscious identity or Persona. Confrontation, acceptance, and integration of the Shadow is a crucial aspect of Jung's proposed process of becoming one's true and authentic self, referred to as individuation.

The Anima is the feminine aspect within the male psyche, and the Animus is the masculine aspect within the female psyche. Modern discussion and understanding around the Anima/Animus has evolved since Jung's first conceptualization, but in simplest terms, this

archetype of the unconscious psyche is a counterpart of the conscious sex/gender, and it is believed by Jungian Theorists to play a significant role in an individual's relationships.

The Self is the archetype of wholeness. It represents the totality of the psyche—the union of conscious and unconscious aspects. The archetypal image of the self is represented by the circle, or mandala. The process of individuation is complex and involves integration of many aspects of one's psyche, including aligning the ego with the Self, leading to a more authentic and complete sense of self.

There are numerous Jungian archetypes in addition to the four main archetypes that will not be individually detailed here. Since the proposed protocol is grounded in Jungian concepts, it is not necessary to delve into the extensive breadth of archetypes for the purpose of this discussion. However, clinicians who incorporate a Jungian approach to therapy, whether psychedelic or otherwise, should acquaint themselves with Jung's archetypes and their role within the psyche. When addressing this topic, Jung cautioned that archetypes are challenging to understand because one's intellect tends to oversimplify their multiple and paradoxical meanings (Hill, 2013). Moreover, experiencing the qualities and effects of archetypes almost always engages one's emotions, which adds to the difficulty of comprehending archetypes intellectually.

While archetypal imagery is indeed a product of the collective unconscious, it's essential to note that not all images or symbols emerging from the collective unconscious are archetypal. The collective unconscious encompasses a vast array of personal and cultural symbols, memories, and experiences unique to individuals or specific groups. Archetypes represent only a subset of this broader collection, embodying the most fundamental and universal aspects (Hill, 2013). Although literature exists on the interpretation of archetypal imagery and symbols in the

context of psilocybin therapy, it is crucial to uphold the person-centered principle that only the patient/client should interpret the content encountered during their subjective experience.

Individuation and The Role of Active Imagination

Jung's concept of individuation is a lifelong, teleological psychological process and journey toward achieving a holistic and authentic sense of self. Central to Jungian psychology is the process of bringing unconscious content into consciousness, which forms the foundation of individuation and involves the integration of these conscious and unconscious psychic elements. This process extends to the confrontation of archetypal symbols and themes from the collective unconscious, providing a framework for personal growth. A significant aspect of individuation involves the acknowledgment and reconciliation of the Shadow, as well as the alignment of the ego with the Self (Storr, 1983; Wilmer, 1987). Storr (1983) summarizes Jung's literature on individuation by stating that individuation is essentially a spiritual journey, wherein "paying attention to the voice within, the individual achieves a new synthesis between conscious and unconscious, a sense of calm acceptance and detachment, and a realization of the meaning of life" (p. 19).

One technique Jung developed as a means of achieving individuation is "active imagination". Active imagination is a process aimed at accessing and engaging with the contents of the unconscious mind whilst judgment is suspended and consciousness maintained. Jung encouraged his patients to fantasize, take note of what fantasies occurred to them, and to allow these fantasies to unfold without interference or judgment (Storr, 1983). In this way, the approach to active imagination parallels the therapeutic approach to psychedelic experiences. Jung also encouraged patients to express their fantasies through drawing and painting, finding

that this technique both helped the individual to rediscover hidden parts of oneself and visually depict their psychological journey (Storr, 1983).

Jung's Red Book (2009) is a personal journal that he began in 1913 following his split with Freud, and continued to work on for several decades. Although kept private during Jung's lifetime, the Red Book was published in 2009 with permission from his family. In this manuscript, Jung documented his inner explorations, fantasies, and encounters with the unconscious through his personal practice of active imagination. The Red Book book contains Jung's handwritten text alongside 205 elaborate and vividly colored illustrations. Jung's intricate and symbolic images represent a captivating exploration of his inner world and unconscious.

The Relationship between Psychedelic Experience and Jungian Psychology

The core Jungian concepts of exploration of the unconscious and active imagination intrinsically lend themselves to psilocybin-assisted therapy, and form the basis of Harris's (2021) opinion that approaches to psychedelic-assisted therapy should have a grounding in Jungian Theory, regardless of a therapist's orientation. Moreover, Jung's emphasis of the importance of psychotherapeutic creative expression provides further justification for the integration of art therapy within the modality of psilocybin-assisted therapy or similar psychedelic therapeutic modalities.

Jung described the years of pursuing his inner images as the most important of his life (Hill, 2013). Jung initially resisted the images that arose from his unconscious before he surrendering to the experience. Describing this journey in the chapter "Confrontation with The Unconscious," in his autobiography Memories, Dreams, Reflections, Jung (1989) writes:

> In order to grasp the fantasies which were stirring in me 'underground,' I knew that I had to let myself plummet down into them, as it were. I felt not only violent resistance to this, but a distinct fear. For I was afraid of losing command of myself and becoming a prey to the fantasies— and as a psychiatrist I realized all too well what that meant. After prolonged hesitation, however, I saw that there was no other way out. (p. 178)

Jung identified the mechanism underlying his confrontation with the unconscious as a lowering of the threshold of consciousness, or an *abaissement du niveau mental* (or simply *abaissement*). An *abaissement* in a Jungian context is characterized a reduced intensity of consciousness that begins with a loss of concentration or attention. This lowering of consciousness allows manifestations of unconscious material to enter awareness, leading to the manifestation of images, visions, or hallucinations (Hill, 2013). Intense emotional states also play a role in lowering the threshold of consciousness. When applied to psychedelic experiences, Hill (2013) writes that the psychedelic agent initially lowers the threshold of consciousness to such an extent that archetypal images enter consciousness. The emotions associated with the archetypal material lower the threshold even further. This sequence continues until one is immersed in an intense psychedelic-induced state. Individuals lacking psychological stability are naturally more vulnerable to potential disruptive effects of an *abaissement,* which aligns with previously outlined exclusionary criteria of personal or familial history of psychotic disorders; and severe depressive or anxiety disorders.

Jung's approach of surrendering without judgment to the experience of confronting unconscious content via active imagination mirrors the approach that must be taken in a psychedelic-induced state. Preparation for psilocybin assisted therapy emphasizes the importance

of openness, acceptance, and curiosity when navigating the content that arises within the psychedelic state— whether pleasant or difficult.

The Shadow archetype deserves important distinction when examining psychedelic therapy, particularly in regard to challenging experiences. Ann Shulgin, esteemed former psychedelic therapist, asserts that the degree of insight achieved in any psychedelic session depends on one's willingness to acknowledge one's Shadow. In a publication recounting her work in this field (primarily with MDMA-assisted therapy), Shulgin (2001) explains that the Shadow manifests as the image of a dark and powerful entity; usually, but not always, in the form of a large powerful animal. When the individual has a clear view of their Shadow, Shulgin's (2001) approach to confrontation was to gently urge the client to first face, then enter into the "beast's" skin, and look through its eyes, which is often met with resistance. Not only does the conscious mind need to fight its own revulsion, shame, and fear of the Shadow aspect of the psyche, but the mind may project on the Shadow an equal resistance to being seen or touched. Any manifestation of the Shadow within a psychedelic state brings forward difficult feelings, especially fear. The presence of such malignant or revolting imagery is inevitably met with the recognition that they originate from and inhabit one's own being. Without the perspective and understanding rooted in Jungian Theory that every individual has a Shadow that must be met and integrated, encounters with Shadow material can be highly distressing.

During experiences of confronting the unconscious, Jung believed that an individual must differentiate oneself from the unconscious material while simultaneously working to bring this content into relationship with the consciousness—a process referred to as integration. Integration is arguably the most important component of psilocybin-assisted therapy, regardless of

theoretical orientation. Jung's main critique of psychedelic-assisted therapy was his belief that the flooding of unconscious material would make integration virtually impossible, but this belief has been rebutted by many practitioners and experts in the field of psychedelic therapy. By prioritizing integrative counseling sessions following high-dose psilocybin administration, both research findings and subjective reports regarding this modality have demonstrated significant positive transformative effects, both immediate and long-term.

Due to Jung's inclination towards spirituality and mysticism in his approach and theory of the human psyche, modern psychology often holds a critical or unfavorable view of Jungian Theory—frequently being dismissed as "pseudoscientific" or considered a historical artifact in the development of modern psychology. This may inevitably lead some to thereby dismiss the notion of grounding any form of therapy in Jungian Theory. However, in the context of psilocybin-assisted therapy, it is important to consider that even the most scientifically-rigorous modern research in this field not only accepts, but embraces mystical-type experiences, and even quantifies this data through utilization of the MEQ-30 (MacLean et al., 2012). Furthermore, higher MEQ-30 scores have even been demonstrated to be predictive of long-term positive outcomes following psilocybin sessions (Griffiths et al., 2016). For this reason, as well as the parallels between Jungian practices and psychedelic experiences, it would be short-sighted to dismiss the incorporation of Jungian depth-psychology in the therapeutic use of psilocybin. The demonstrated value of mystical-type elements of psilocybin therapy should be embraced, and therefore therapeutic approaches which align or nurture such experiences should as well.

Art Therapy and Psilocybin Assisted Therapy

Psilocybin-assisted therapy is a unique and multifaceted modality, and rife with opportunity for the integration of holistic and human-centered therapeutic approaches. In the next section, I will present the case for the integration of art therapy within psilocybin-assisted therapy, as well as my protocol of art-based directives to be used in both preparation, and processing and integration counseling sessions.

Justification for Integration of Art Therapy

The integration of art therapy with psilocybin-assisted therapy is predicated on the recognition of the inherent limitations of verbal expression in capturing the depth of psychedelic experiences. Psilocybin often induces ineffable insights and emotions that transcend language. Additionally, there is a wealth of literature that speaks to the enhancement of creativity and creative expression following psychedelic experiences. Although art therapy is a young field, its growing body of literature and research offer well-documented therapeutic benefits and efficacy. Art therapy provides a nonverbal outlet for patients to express these profound dimensions, tapping into symbolism and creative expression.

Ineffability and Nonverbal Expression

Perhaps the greatest strength of art therapy is its ability to allow for the expression of one's psyche and inner world through nonverbal means. Images and image formation, whether mental or created as tangible art, are crucial in all art therapy practice because through art-making, individuals can and reframe how they feel, respond to an event or experience, and facilitate emotional or behavioral change (Malchiodi, 2011). As previously mentioned, "ineffability" is one of the four major experience categories of the MEQ-30 (MacLean et al.,

2012). The transformative quality of a high-dose psilocybin psychedelic experience arises from its extraordinary and profound nature. The experience is so unique that an individual may have difficulty verbalizing certain aspects or the overall nature of their experience, hence the inclusion of "ineffability" as one of the four major experience categories of the MEQ-30 (MacLean et al., 2012). Although verbalization to the best of one's ability has demonstrated effectiveness for integrative processing and therapeutic outcome thus far, the integration process can arguably be strengthened by the addition of non-verbal expression through art-based therapeutic processing.

To better understand the benefits of nonverbal expression and processing that art therapy provides, we can explore the hemispheric distinctions of the brain and their relation to art therapy. The main functions of the left and right hemispheres of the brain are well-known to those in the fields of psychology and neuroscience. The left hemisphere is typically associated with language ability and understanding; and analytical and sequential processes. Logic and problem-solving are associated with left-hemisphere function (Corballis, 2014). The right hemisphere is often considered dominant for visual and spatial abilities. It is associated with intuitive processes, creativity, imagination, and holistic thinking. It contributes to understanding and processing information in a more global or holistic manner. While both hemispheres are involved in emotional processing, the right hemisphere is often linked to the recognition and expression of emotions (Corballis, 2014). The right hemisphere integrates information across modalities more readily than the left hemisphere (Lusebrink, 2004). In a brain absent of disability disruptive to hemispheric function and coordination, both hemispheres are fully active and integrated with each other in their functioning (Lusebrink, 2004). Sensory and other types of information are transferred between the two hemispheres via the corpus callosum through

differentiated channels (Lusebrink, 2004). Therefore, the brain functions as an integrated whole, and both hemispheres collaborate to perform most cognitive functions. The plasticity of the brain allows for adaptation to innate hemispheric asymmetries (Corballis, 2014; Lusebrink, 2004).

When viewing the psychedelic experience through the lens of hemispheric differences of the brain, it is easy to see why verbalization of such an experience can prove difficult or impossible. There are many qualities of the psychedelic experience that defy left-hemisphere logic or understanding. Furthermore, the subjective effects of psychedelic experiences are overwhelmingly aligned with right-hemispheric function, such as vivid visual illusions, intensification of colors, heightened affect, and spiritual or mystical-type experiences laden with an intuitive sense-of-knowing. While the brain's hemispheres operate asymmetrically, they work together integratively during the psychedelic experience. When individuals "return" from the experience, they can typically verbally express and process a significant portion of it; however, certain aspects may remain inaccessible to verbal processing alone. By utilizing art therapy as a component of psilocybin-assisted therapy, the opportunity arises for an individual to access the “ineffable” components of their experience via artistic expression and visual imagery. Art-making engages both hemispheres of the brain, and strongly engages right-hemispheric processes (Malchiodi, 2011).

The inability to verbally describe or express something is often a frustrating experience. We can certainly all think of examples in our own lives where words have escaped us to illustrate this point. In a therapeutic context, difficulty expressing one’s ideas, emotions, experiences, etc., carries implications beyond personal frustration, for the inability to access these expressions consequently hinders the ability to process them. An individual can feel as though they are

mentally or emotionally “holding” that of which they desire to, but cannot verbally articulate. Art therapy allows an individual to unburden themselves from what they are psychologically holding by “placing” these contents into the image they create. Giving someone the opportunity to visually and/or symbolically represent this personal content in a therapeutic context can aid in their own expression, understanding, and processing. Furthermore, the process of creating and completing these visual representations can open pathways or means of verbal expression which were previously inaccessible prior to the art-making process.

Art therapy’s strength of nonverbal expression is particularly relevant to populations with trauma and trauma-related disorders. Broca's area, located in the left hemisphere of the brain's frontal lobe, is primarily involved in speech production and language processing, helping to form and articulate words. The amygdala, located deep within the brain's temporal lobes, plays a crucial role in processing emotions, particularly fear and other strong emotions. It is involved in emotional responses, emotional learning, and the formation of emotional memories (Lusebrink, 2004). Brain imaging has demonstrated that when traumatized individuals are exposed to scripts of their traumatic event, Broca’s area shuts down, and simultaneously, the amygdala becomes aroused (King, 2016; Tripp, 2007). Consequently, the ability to articulate traumatic events and accompanied emotions can be impeded or blocked entirely. Right brain activation through art-making allows for less reliance on verbal language areas. Furthermore, the activation of sensory components in the brain during art-based interventions allow for difficult or traumatic memories to be more easily explored (Lusebrink, 2004). With the growing interest in utilizing psychedelic-based therapies with veterans suffering from PTSD, the inclusion of art therapy within these treatments can prove to be complementary and synergistic in individuals with history of trauma.

In a modality as complex and transformative as psilocybin-assisted therapy, utilization of both verbal and nonverbal means of expression and processing provides a more encompassing, integrative, and holistic approach to therapy. The integration of art therapy with the current talk-based approach to psilocybin-assisted therapy would strengthen the transformative potential of this treatment, as art-making creates an avenue for the ineffable qualities of the psychedelic experience to be expressed. Additionally, although the creation of imagery can potentially facilitate articulation of previously ineffable content, it is important to emphasize that art-making can satisfy one's need or desire to do so. Creative and artistic expression is a powerful and deeply personal process. If an individual is capable of visually capturing or representing difficult-to-describe feelings or experiences, the created image may be enough for the individual to feel as though their processing of such content is complete. In some research applications where the goal is to collect as much verbal data as possible on the experience, this can be a frustrating notion. However, in a therapeutic setting where the well-being and development of an individual is paramount, it should be welcomed.

Creativity and Creative Expression

The effects of psychedelic substances on creativity and creative expression are complex and not yet extensively researched. While anecdotal accounts and nonscientific literature throughout history strongly suggest that psychedelics can enhance creativity, researching this phenomenon is uniquely challenging, and thus quantitative scientific data on the subject is limited. While psychedelic-enhanced creativity is not necessary to justify the integration of art therapy within psychedelic modalities, such integration holds potential to address this subjective effect. Art therapy's access to creativity and creative expression can not only facilitate positive

therapeutic outcomes but also provide a means for future research on the effects of psychedelics on creativity.

Because the purpose of this professional contribution pertains to enhancing therapeutic outcomes via the integration of art therapy with psilocybin-assisted therapy, I will not extensively detail the relatively limited scientific literature that has been published on psychedelics and creativity. Much of the research that exists on this topic is focused on psychopharmacological mechanisms; as well as attempts to quantitatively measure creative thinking, rather than investigate creative expression or the psychological benefits of creativity. Instead, I will briefly review current understandings of human creativity, as well as the role of creativity in art therapy.

Although human creativity is difficult to define and measure, the creative process has been understood as a dynamic process, requiring shifting between modes of thought. These modes include divergent thinking, which involves generating novel and original ideas, and convergent thinking, which is the subsequent evaluation of ideas in regard to their usefulness and effectiveness (Guilford, 1967; Mason et al., 2011). Rogers (1959) described internal and external conditions necessary for enhancing the creative process. Internal conditions include low psychological defensiveness, flexibility in thinking, openness to diverse perspectives, comfort with ambiguity, sensitivity to emotions and intuitive insight, aesthetic appreciation, and an openness to metaphorical thinking and experimentation. External conditions presented by Rogers include an atmosphere of psychological safety and freedom in which the subject is permitted to think and feel whatever is discovered within oneself (Rogers, 1959; Sessa, 2008).

Given what has been established about the subjective effects of high-dose psilocybin and the approach to psilocybin-assisted therapy, it can be argued that Rogers' internal and external conditions of creative enhancement can largely be met and facilitated by this specific form of treatment. Although research has demonstrated the remarkable efficacy of psilocybin-assisted therapy, it is still poorly understood *why* or *how* this treatment is so effective in producing sustained positive psychological outcomes. Therefore, it is reasonable to hypothesize that an enhancement of divergent and convergent thinking in relation to one's life experiences and future outlook can be a component of the overall therapeutic process of this treatment.

Natalie Rogers (1993), a leader in expressive arts therapy, introduced the concept of "creative connection" to emphasize the integration of arts in therapy, arguing that creative expressions such as drawing can activate emotions and thoughts (Malchiodi, 2011; Rogers, 1993). Indeed, creativity lies at the core of art therapy, serving as a means for both the nonverbal expression of inner experiences, and subsequent verbal processing. McNiff's (2011) extensive arts-based research highlights how the creative process and artistic expression can deepen one's understanding of the self and others, surpassing the limitations of strictly verbal-based therapies. While human creativity is inherently understood, its scientific investigation and quantification remains challenging— this has certainly been the case regarding the exploration of creativity within psychedelic experiences and therapy. Incorporating art therapy into this modality offers a method for accessing an individual's creative expression, potentially leading to both enhanced therapeutic outcomes, as well as facilitating future research endeavors.

Efficacy & Therapeutic Benefits of Art Therapy

When art therapy first emerged as its own defined field, it was originally practiced within two distinct theoretical orientations: art as therapy, which focused on the process of art-making; and art psychotherapy, which focused on the finished created product and relying on the triangulated relationship between therapist, artist, and the artwork. Modern art therapy has grown to be vast in breadth, depth, and scope; spanning along a continuum of numerous and nuanced approaches (Gussak & Rosal, 2016). As art therapy has progressed, its stance has continued to shift toward embracing an emphasis on science-based philosophy and practice, rather than being rooted solely as an art-based practice (Malchiodi, 2011).

Just as human creativity is a challenging area of empirical research, so too is art therapy —creativity, after all, sits at the core of the practice. While art therapy research has historically produced a wealth of case studies to illustrate its benefits and efficacy, advances in research have allowed for new insight into the neurophysiological underpinnings of how and why art therapy works, some of which I have previously addressed. As new technologies allow researchers to image neurological and physiological activity in the body, medical and mental health professionals are learning more about the relationship between mind and body. The body's reaction to the experience of drawing, painting, or otherwise engaging in art demonstrates why art therapy can be effective with various populations (Malchiodi, 2011). Conscious and unconscious mental activity, mind-body connectedness, use of mental and visual imagery, activation of both brain hemispheres and bilateral stimulation, and communication between the limbic system and cerebral cortex form the basis of the therapeutic benefits of art therapy (King, 2016).

Images have an impact on how we feel and react, eliciting sensations such as pleasure, fear, anxiety, or calm; and there is evidence that images can alter mood and even induce a sense of well-being (Benson, 2009; Malchiodi, 2011). Humans think in images and use symbol and metaphor to communicate both concrete and abstract ideas. In art therapy, what an individual feels internally is represented through external created imagery; simultaneously, the external forms evoke an internal feeling response. The correspondence between the artistic expression created by an individual and their inner experiences, emotions, or psychological states illustrates the isomorphic nature of art therapy (King, 2016; Lusebrink, 2004). Neuroimaging techniques have expanded and supported the understanding of the connections between visual expression and the brain—the process of creating an image elicits physical, physiological, and emotional changes at the structural level of the brain (King, 2016; Lusebrink, 2004).

As a new field, art therapy is just beginning to define its territory within the world of neuroscience and rigorous quantitative research. In 2014, Maujean et al. conducted a systematic review of eight methodologically rigorous randomized controlled trials (RCT) investigating the efficacy of art therapy. The aim of the review was to examine the current state of the literature and include only RCTs that randomly assigned adults to either an art therapy intervention or to a control group that received no treatment, standard care, or a comparable activity. Of Maujean et al.'s (2014) reviewed studies, all but one demonstrated beneficial effects of art therapy indicating that art therapy may be useful across a wide range of populations, with the possible exception of people with schizophrenia. With that said, there are hundreds of art therapy publications utilizing varying methodologies and rigor which establish evidence of the modality's efficacy.

Because the still-emerging field of art therapy is still in the process of establishing itself as an empirically evidence-based treatment, it is sometimes dismissed by clinically-oriented professionals in longer-established medical and mental health disciplines. In 2014, neuroscientist and psychologist Lukasz M. Konopka PhD, published an opinion recognizing the research efforts of the field, acknowledging the need for further research, and advocating for the acceptance and integration of art therapy within medical-model disciplines. He states:

> If we accept that scientific and artistic processes use congruent networks, we can assume that artists and scientists use very similar brain processes to deploy their conceptualizations. As such, in terms of therapy, there is no difference between using scientifically validated novel art therapy and other current standard therapeutic interventions. Treating human pathology using art gives us a tremendous alternative unique and novel option for engaging brain networks that enhance the way the brain processes information, incorporates external and internal data, and develops new efficient brain connections (Konopka, 2014).

Konopka goes on to state that art therapists and other clinicians share the goal for humans to become better adapted to their environments. Therefore, scientists, clinicians, and art therapists must come together to share and discuss their experiences.

While the recent efforts and successes of art therapy establishing itself as a science-based modality are exciting and important to the advancement of the field, I argue that it is equally as important to recognize and embrace the aspects of art therapy that remain elusive to scientific explanation. Art and artistic expression is innate within human beings—anyone who has seen a baby “finger paint” with their food, or a young child’s enthusiasm and propensity for scribbling

or drawing has witnessed this inner drive to create art. Dissanayake (1992) demonstrates in her book *Homo Aestheticus: Where Art Comes from and Why* that art-making meets a genetically encoded survival need; a "core tendency" that she terms "making special" (p. 42). The existence and value of art throughout human time is central to our species survival and ability to thrive. Art making, in all of its forms, keeps communities together in times of loss, change, or celebration (Lovell, 2001).

The creation and appreciation of art is intrinsically woven into the fabric of the human spirit and experience. Jung drew parallels between artistic creation and alchemical processes, seeing both as symbolic journeys of transformation and self-discovery. He explored these themes in his writings on alchemy and symbolism, emphasizing the transformative power of artistic expression. The healing power of expression, meaning-making, and ways-of-knowing through art will likely always evade scientific explanation; consequently, so too will these aspects of art therapy. I am among the many who believe this to be a strength, not weakness, of art therapy. I also argue that both the scientific and mystical-type aspects of art therapy align harmoniously with those of psilocybin-assisted therapy. In the following section, I will detail my art directive protocol for the integration of these modalities.

CHAPTER 5: ART THERAPY PROTOCOL FOR PSILOCYBIN-ASSISTED THERAPY

The art therapy protocol I am proposing for use in counseling sessions for psilocybin-assisted therapy consists of 6 art-based directives: 3 for use in preparatory sessions, and 3 for use in post-administration processing and integration sessions. These directives have been designed to coincide with discussions and goals of treatment using the framework of the Johns Hopkins research and protocols previously discussed; therefore, in-depth guidance or instruction on processing is not included in this section. Observation and discussion pertaining specifically to artwork is dependent on the training and philosophy of the facilitating art therapist. For example, observations regarding an individual's material choice and process of art-making, formal elements and content of completed imagery, and discussions of interpretation of imagery are all pertinent to the overall therapeutic process. I am also presenting the option of supplemental directives for post-administration sessions in addition to the standard protocol. The use of supplemental directives is intended to allow for a patient to express and process material that is specifically germane to their experience and therapeutic objectives.

The art directives of this protocol have been developed to be used in addition to standard verbal-only counseling sessions. Each directive has a verbal counseling component: there is a time allotted to art-making, which is then verbally discussed and processed for the remainder of a session. The time allotted to art-making will depend upon the duration of session appointments. For a one hour session, art-making for preparation directives should be allotted 15 to 20 minutes to allow time for verbal discussion. Processing and integration directives may benefit from longer art-making sessions. If a patient requires more time to complete an image, facilitation of this should be done at the discernment of the clinician. This can include allowing the patient to

work on the same drawing over multiple sessions. Longer art-making sessions are more applicable to post-administration sessions, as preparation sessions are comparatively more succinct in nature. Ultimately, the schedule for art-based therapy will be dependent on and adapted to the overall course of treatment. The art directives are to be used in the specific order they are presented, but the way in which they are integrated within verbal-only sessions is at the discretion of treating clinicians.

With each directive, I will also address related Jungian principles. Following the insights of Harris (2021), my approach to psilocybin-assisted therapy and the development of this protocol are grounded in Jungian psychology. However, it's important to note that while Jungian principles heavily influence the framework, the application of the protocol is not exclusively tethered to a Jungian orientation. Instead, it offers flexibility for integration with diverse therapeutic approaches and client needs. Importantly, this protocol does not require that the administering art therapist be a Jungian analyst or even Jungian-oriented, allowing for accessibility and adaptation within various therapeutic backgrounds.

The presented directives each feature an example of artwork, obtained through the author's autoethnographic completion of the proposed protocol. For a detailed explanation of the methodology used in this process, refer to Chapter 3. Additionally, the author's reflections on the included artwork and experiential process are presented in Chapter 5.

Each directive was developed to be utilized with 11 x 17 white drawing paper, but the art therapist may wish to offer paper of varying sizes for a patient to choose from. An assortment of materials should be available for the patient to work with. These include: pencils, erasers, black ink pens, colored pencils, crayons, chalk pastels, oil pastels, and markers (ideally both fine and

broad tip). Acrylic and/or watercolor paint can be included, but the art therapist may wish to reserve these materials for use in post-administration sessions only. The facilitating art therapist may choose to include additional materials and media— the array of materials available to a patient will largely depend on the philosophy of the practice facilitating treatment, but at a minimum should include those which have been previously specified.

As is standard within the practice of art therapy as a whole, the decision to engage in art-making is solely that of the patient. While the completion of this protocol in its entirety over the course of treatment is certainly the intention, there is no “requirement” to do so. The individual receiving treatment may opt out of any of the proposed art directives, in which case verbal based counseling would continue as normal.

Art Therapy Directives for Preparation Sessions

Preparation sessions serve as the crucial foundation for ensuring the safety of patients and maximizing therapeutic efficacy. The following three directives are designed to address and enhance key aspects of preparation, providing patients with tools and strategies to navigate their psychedelic journey.

Opening Mandala

The term "mandala" is derived from Sanskrit, meaning “circle”. A mandala is a geometric circular figure that holds significance within various cultures, Jungian psychology, and art therapy. In Eastern religions, mandalas are viewed as spiritual and ritual symbols to represent the universe, wholeness, and the interconnectedness of all things. They serve as tools for meditation, guiding practitioners on a journey of self-discovery and enlightenment. In Jungian psychology, mandalas are seen as representations of the Self, the collective unconscious, and the process of

individuation. The practice of creating mandalas was personally important to Jung, who began working on mandalas during World War I (1914-1918). Each morning Jung sketched a mandala —a practice which allowed him to observe that these drawings were visual representations of his inner state. Mandalas are well-researched and utilized in art therapy, as it draws from these principles and provides a contained space to visually represent one's self-concept, inner state, and hold chaotic psychic material.

Directive: The art therapist should utilize a pre-drawn mandala (a simple empty circle drawn with thin marker or digitally rendered) that is 8 to 9 inches in diameter to present to the patient. Ask the patient to first take a moment to reflect on their life and self in a holistic sense. This may include context of the circumstances which led the individual to seek treatment. Then, instruct the patient to create an image within the mandala using any materials of their choice.

Purpose: Beginning art therapy with a mandala is beneficial to both the patient and therapist. A circle is a familiar shape, and this familiarity can help to reduce the anxiety that is often felt beginning something new or foreign. The circle also communicates that an individual's art (and therefore psychic material) will be contained within the borders of the circle, and can provide a sense of relief that there is no expectation to fill an entire blank page with artwork, which can be daunting even to seasoned artists. Furthermore, there is substantial published literature demonstrating grounding and anxiety-reduction effects of mandala creation and art-making as a whole, which is important throughout the entirety of an individual's course of psychedelic-based treatment (Malchiodi, 2011; Sandmire et al., 2012; Slegelis, 1987). As previously discussed, anxiety is an expected occurrence among patients undergoing treatment; therefore, management and reduction of anxiety is a premier goal of preparatory sessions. The

mandala and its therapeutic benefits serve as an accessible and non-threatening introduction to both art therapy and psilocybin assisted therapy as a whole.

The mandala "introduction" is two-fold. Drawing from knowledge of the use of mandalas in art therapy and Jungian psychology, a mandala serves as an art-based "introduction" of oneself to the art therapist. Along with the verbal introduction and therapeutic rapport of a new patient, this self-representational image can provide the clinical team with a deeper and more holistic conceptualization of the individual seeking treatment. Additionally, this introductory mandala is one of two mandala directives included in this protocol—the second of which is the final art directive to commence treatment. Therefore, the created image of this directive can serve as a baseline to informally assess and compare a patient's mandalas pre- and post-treatment.

Image 1. *Opening Mandala*

Establishing Connection, Security, and Support

Directive: Instruct the patient to visualize and create an image that represents oneself floating in an unfamiliar environment, but tethered to a source of unconditional love and support. The art therapist must state that the connecting tether should be drawn so that it is firmly attached both to the individual, and to the source of love and support— there is no risk that the

tether will break or detach. It should be explained to the patient that the tether serves multiple purposes. First, it is a tool that allows the individual to communicate with their support guides during their psychedelic experience—this dynamic can be likened to an astronaut and "ground control". Second, the tether is the mechanism which ensures that the patient will "return" from their "journey". Third, the tether serves as a general sense of trust and security.

If the tether that is drawn appears loose, detached, or otherwise insecure, this must be addressed by the art therapist and clinical team, and explored through verbal counseling. It may be determined that the patient unintentionally drew a tether that appears weak or insecure. More importantly, this finding may indicate that a patient is lacking a sense of security and trust in some area. Possibilities may include the therapeutic relationship, belief in one's self and capabilities, the overall treatment modality, among others. It also may signal that a patient is experiencing significant anxiety or fear regarding the psychedelic experience. If it is determined that an image of an insecure tether is clinically significant, the origins of the patient's insecurity or lack of trust should be explored and rectified as much as possible prior to administration of psilocybin. It is unrealistic that a patient undergoing this treatment will be completely void of anxiety or insecurity, therefore keen clinical judgment must be exercised when determining if these issues are resolved enough to progress.

Once these issues have been addressed and resolved, the art therapist should instruct the patient to return to the drawing and amend the tether so that it is securely connected and attached to both the image of the individual and the support source. If it is revealed that security and trust cannot be established, the clinical team should re-evaluate the patient's treatment plan and eligibility for this treatment. Just as Johnson et al.'s (2008) protocols dictate, a change in clinical

support personnel may have to be implemented, or a patient may need to be withdrawn from treatment.

Purpose: A high dose psilocybin-induced psychedelic state induces a highly dissociative state and subjective effects that may seem other-worldly. It is also likely that an individual will experience intense emotions. For an individual who is naive to the effects of psychedelics, the foreign experience can be anxiety-inducing or even frightening. If this anxiety is not managed through the course of therapy, one may feel as if they are going insane, or that they will never return from the psychedelic experience (Barrett et al., 2016). The goal of this directive is to alleviate anxiety and foster a sense of safety and connection for the patient during the psychedelic experience.

Preparatory sessions must establish trust: a patient's trust in themselves that they are robust and will persevere through the experience if it presents challenges, and trust between the patient and their clinicians/guides who are there to support them throughout their experience. If it is pertinent to the individual, one's trust in spiritual sources should be established as well. A goal of preparatory sessions is to ensure that the patient knows that, despite how dissociated they may feel, they are always connected to their bodies and the "real world", and will return from the experience. They also must know that they will remain supported throughout the entire process, both by their clinical team/guides, as well as by any spiritual support they have identified.

This directive should ideally be completed after therapeutic rapport has been firmly established, and enough information has been gathered about the patient's life. These sessions should include exploration of the patient's support system and identification of sources of strength and connection. By doing so, the art therapist can provide guidance on the specific,

patient-centered elements that constitute their image of the “source of love and support”. These may include the patient’s clinicians and support guides, spiritual sources, one’s self and areas of personal strength, and the patient’s family and loved ones. The physical act of drawing (thereby tangibly creating) a tether which anchors an in individual to their support system reinforces the before-mentioned principles and goals of preparatory sessions. The completed image also serves as a visual reminder for the patient as they undergo treatment. Jungian principles embedded within this directive include connections to the Self, spirituality, and the Collective Unconscious.

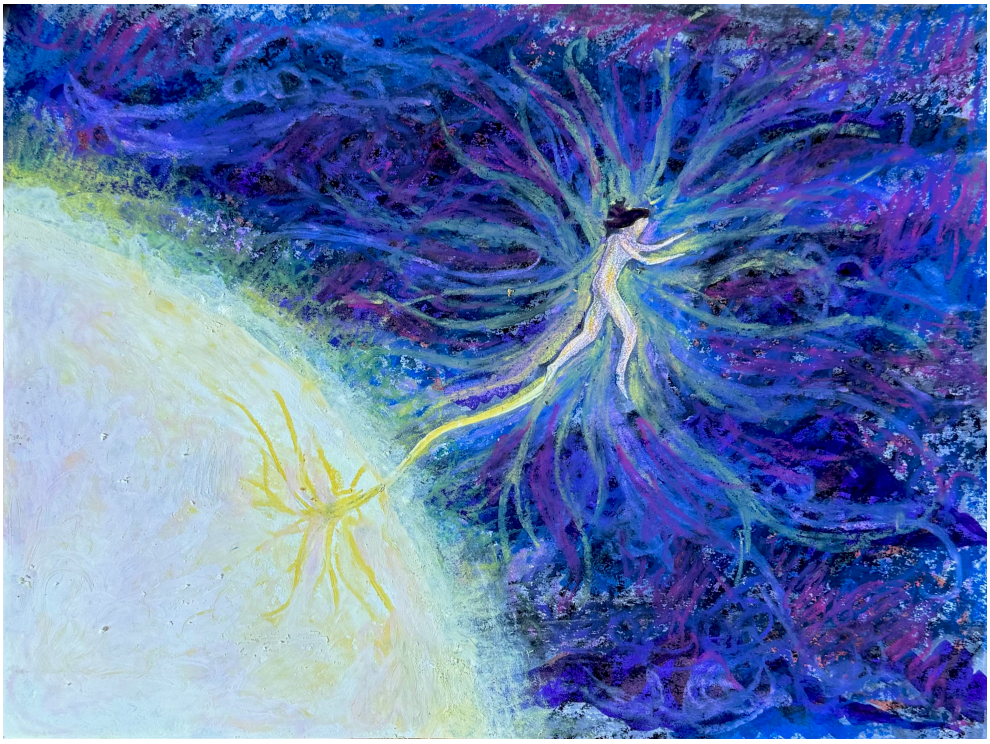

Image 2. *Establishing Connection, Security, and Support*

Facing Fear

Directive: This is a two-part directive. The art therapist should utilize a piece of paper that is folded in half in a landscape orientation. First, instruct the patient to create an image of a frightening scene, which may include frightening figures (animals, creatures, monsters, entities,

etc) on the right-hand half of the paper. Once this has been completed, then instruct the patient to create an image of themselves facing this frightening scene on the left-hand half of the paper. The patient should be instructed to imbue a sense of calmness, acceptance, curiosity and safety within this second drawing. Questions like "what does this fearful creature *need*?" or "how can I help this creature?" can be helpful in creating this context.

Purpose: Challenging experiences may arise during psychedelic experience, such as difficult or intense emotions; or disturbing or frightening imagery. This directive should be used in tandem with sessions that are dedicated to patient-education and discussion pertaining possible difficult or challenging experiences which I have previously detailed at length.

The premier goal of sessions dedicated to challenging experiences is instilling in the patient that they must approach these experiences with openness, acceptance, and curiosity. This directive allows the patient to "practice" utilizing this approach while in the safety of both the therapeutic space, as well as a lucid and familiar mental state. Like the previous directive, the physical act of drawing, as well as the completed visual imagery, can serve to reinforce these principles and tools that they will rely on if they encounter challenging material.

The most pertinent Jungian principles pertaining to this phenomena and therapeutic goal are the Shadow, and the integration of the Shadow and Self. This art-based directive is one I find particularly useful and important to one's therapeutic process and overall psychological development. The research on psilocybin shows that it is statistically unlikely that an individual will experience a *significant* or highly-distressing challenging experience, such as a vivid visual encounter with a frightening entity. While this is certainly preferable and easier to navigate, there

is much insight to be gleaned from confrontation with such Shadow material. After all, the Shadow must first be confronted and accepted before it can be integrated.

Through this Shadow-focused exercise, a patient is afforded the opportunity to still engage with this meaningful therapeutic process given that it is unlikely to arise during the psychedelic experience. Furthermore, by dedicating this modest amount of time to exploring and processing Jung's concept of the Shadow with a patient, it is my belief that doing so would *further* reduce the likelihood of the event of a dramatic and frightening confrontation with Shadow material under a psychedelic state. Through discussion of the Shadow, its existence becomes normalized, and an individual learns that this part of the psyche is not to be feared. By confronting the Shadow with courage and honesty, individuals can transform it from a source of fear or anxiety into a powerful tool for personal development and growth. This type of reframing is not only important for one's personal development, but also further prepares an individual for their psilocybin session.

Image 3. *Facing Fear*

Art Therapy Directives for Processing and Integration Following Psilocybin Session

Integration is crucial for therapeutic efficacy and positive outcomes in psilocybin-assisted therapy, and all other psychedelic-based treatments. Charmaine Husum RCAT, RTC, CT, DKATI, a registered and licensed art therapist in Calgary, Canada, has developed groundbreaking art-based methods and programs tailored for psychedelic integration therapy, including an online virtual course (Husum, 2022). Husum works with individuals who have participated in ceremonies, treatments, or other experiences with various psychedelic medicines. It's essential to clarify that while Husum specializes in psychedelic integration therapy, she does not administer these medicines herself (Husum, 2022; Psychedelic Support, 2022).

In an interview published by the organization Psychedelic Support (2022), Husum emphasizes the vital importance of thorough integration following psychedelic experiences, citing this as a primary motivation for her work. She highlights scenarios where individuals, having engaged in ceremonies or therapies with psychedelic plant medicines such as ayahuasca, often require further therapeutic support beyond brief post-ceremony processing sessions. Moreover, Husum addresses that with the recent rise in attention and interest surrounding therapeutic psychedelics, there is a prevalent misconception that psychedelics offer a quick fix for emotional and psychological issues—that simply undergoing a psychedelic session will evoke transformation without intensive integrative processing. Not only is this belief inaccurate, but it can lead to adverse outcomes as the effects of psychedelics may exacerbate existing difficulties if not properly integrated. The intense subjective effects and life material that can surface during psychedelic experiences can be overwhelming, even traumatic, and therefore

difficult for an individual to make sense of. Consequently, one can be left to feel as if their difficulties or conditions have been exacerbated rather than relieved (Psychedelic Support, 2022).

Husum's emphasis on the importance of integration is well-supported by literature, particularly that from the first wave of scientific and cultural interest in psychedelics. Husum's approach to psychedelic integration therapy is holistic and incorporative of mysticism and spirituality, as she holds a deep reverence for the entheogenic histories and uses of psychedelic plant medicines (Husum, 2022; Psychedelic Support, 2022).

Image of The Psychedelic Experience

Directive: Instruct the patient to create an image that visually represents either of the following: 1) the most significant insight or takeaway from their psychedelic experience; 2) the most significant moment from their experience (this can coincide with option 1, and can be presented as such); or 3) the experience as a whole. This directive should be completed very soon after the psilocybin session—preferably during the first or second processing session. At this point, I recommend the consideration of introducing a broader range of art materials and media to a patient to choose from during processing and integration sessions, such as watercolor and acrylic paints. Again, the array of materials will largely depend on broader contexts under which treatment is being administered.

Purpose: The rationale for administering this directive soon after the psilocybin session is to more or less "capture" one's initial response (cognitive, emotional, spiritual, etc) prior to any significant dissipation or alterations that may arise with the passing of time. Additionally, given the amount of anecdotal literature on enhancement of creativity and creative expression following psychedelics, exploration and depiction of this experience through art-making may be

something a patient finds particularly appealing or resonant. Relatedly, art therapy's integration with psychedelic therapy can prove useful in various areas of research, including on the topic of psychedelics and creativity.

Documenting an individual's immediate responses and insights from the psilocybin session establishes a starting point and directionality for proceeding with processing and integration. Changes in a patient's presentation (i.e.-mood, perception, cognition, etc.) following psilocybin administration are likely to be noticed and recorded by the clinical team. Likewise, any changes in a patient's artwork and art-making process should be noted as well. A patient's artwork within this course of treatment provides another means of comparative measure for assessing therapeutic efficacy and outcomes.

Image 4. *Image of the Psychedelic Experience*

This directive is subjective and the created images are likely to vary widely with each patient. Therefore, Jungian concepts specific to an individual will also vary. However, some

objective concepts grounded within this area of processing are the unconscious, the Collective Unconscious, and archetypal imagery. Jung also believed and emphasized the importance of artistic exploration and representation of the unconscious.

Self Within The Larger Picture

Directive: Instruct the patient to create an image that is representative of oneself in relation to some larger context or "picture" of life and existence. Ways to explore or expand on this idea include asking the patient to reflect on any changes in their perception surrounding "big picture" thinking. For example, reflection on their sense of identity and place in the world or universe—has this evolved or shifted as a result of their psychedelic experience? How do they perceive themselves within the broader tapestry of existence? How do they view themes of interconnectedness and unity with various aspects of the universe? While there is a representation of the self, this image can be abstract, and it may be beneficial to encourage an abstract approach. Therefore, another way to approach this directive is to prompt the patient to reflect on any "big picture" or mystical insights and experiences that may have arisen, and subsequently create an image to represent this concept as a whole, or significant themes which have emerged.

The way in which this directive is presented and discussed should be informed by previous discussions on the patient's subjective experience. It may be the case that a patient did not experience any new or profound shifts or insights pertaining to "big picture" themes. The patient should still complete the directive as intended, as it still serves as a basis for further processing and therapeutic progress.

Purpose: Earlier in this paper, I discussed The Revised Mystical Experiences Questionnaire (MEQ-30) (MacLean et al., 2012). To summarize, the MEQ-30 was developed as a tool for the evaluation of mystical experiences evoked by psychedelics, and is the basis on which this directive was developed. Higher MEQ-30 scores in clinical research have been correlated with and predictive of long-term positive changes in attitudes, mood, behavior, and spirituality (Griffiths et al., 2016). These mystical-type experiences are a hallmark of psilocybin therapy, and given their intense and unusual nature, the patient may have difficulty verbalizing these aspects of their overall experience (Johnson et al., 2008).

The purpose of this directive is to supplement verbal discussion of these experiences, and allow for nonverbal expression and conceptualization through art-making, thereby enhancing the overall therapeutic process. A patient will likely desire to express any mystical-type experiences or insights, but the magnitude and gravity of these experiences make verbalization difficult. Content which cannot be verbally expressed can make an individual feel as though it is "stuck" or as if they are "holding" this content. Art making allows for this held content to be placed within the created image. This directive provides a means for an individual to symbolically represent this type of profound personal content, and can aid in their own expression, understanding, and processing. Furthermore, the completed artwork serves as documentation of such experiences, which is not only useful for clinicians, but can be a meaningful relic for the patient.

If a patient did not have such experiences during their psilocybin session, the information gleaned from the completion of this directive is still valuable to their overall treatment and therapeutic process. Furthermore, takeaways and insights do not need to be

profound in order to be valuable. Again, this directive is intended to be completed after clinicians have gotten an overall sense and understanding of the patient's subjective experiences. The way in which this directive (and all directives of this protocol) is approached and presented to a patient is highly dependent on the clinical judgment of the administrating art therapist. Therefore, it may be adapted to simply ask the patient to create an image of a key insight or takeaway from their experience. Similarly, this directive can be used with patients to further explore challenging experiences—aiding in further exploration, processing, and meaning-making.

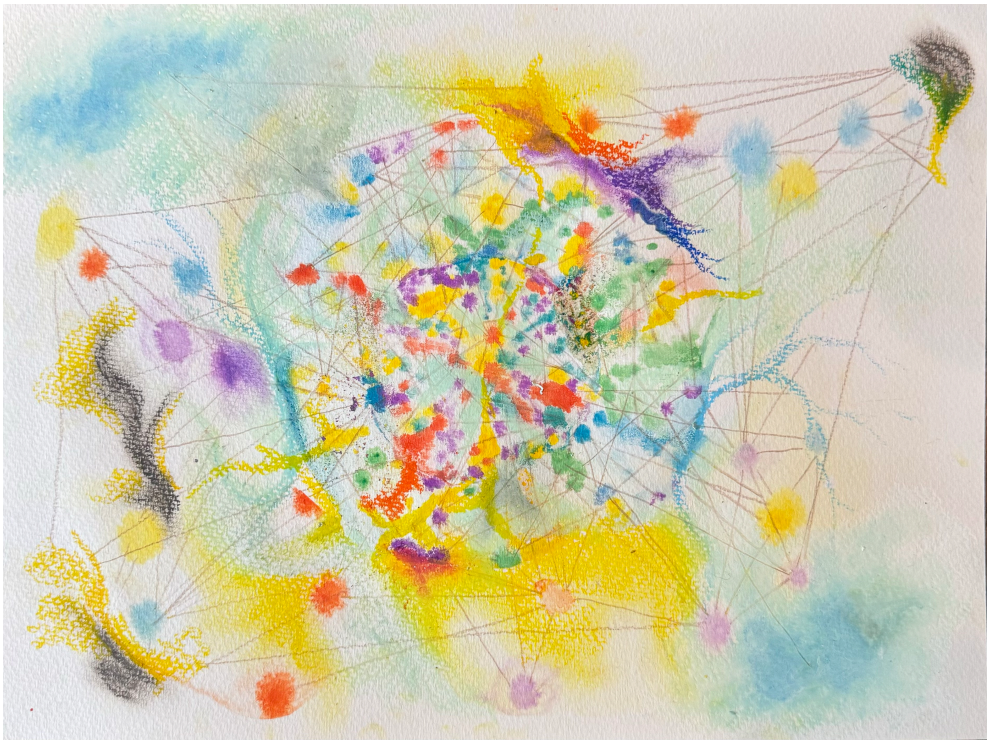

Image 5. *Self within the Larger Picture*

Like the previous directive, the subjectivity of processing results in a wide possibility and variance among possible Jungian principles. Overall, this directive and the general therapeutic area of processing and integration speaks broadly to Jung's concepts and views on unconscious material (both personal and collective), symbolism and symbolic expression, individuation and

self-actualization, and spirituality. In the context of challenging experiences, this directive is incorporative of the Shadow and integration of the shadow.

Closing Mandala

Directive: This directive largely mirrors the first of this protocol, the *Opening Mandala*. The art therapist should again utilize a pre-drawn mandala 8 to 9 inches in diameter to present to the patient. Prior to beginning art-making, the patient's therapeutic course and progress should be reviewed, as this directive is intended to be used at the commencement of treatment. Ask the patient to first take a moment to reflect on their life and self in a holistic sense, which should include attention to key areas of growth, insight or accomplishments gained through the course of treatment. Then, instruct the patient to create an image within the mandala using any materials of their choice.

Purpose: The *Closing Mandala* directive, presented at the commencement of therapy, serves multiple important purposes in the therapeutic process. Firstly, akin to the *Opening Mandala*, it provides a familiar and contained space for the patient to engage in art-making. The patient will recall the *Opening Mandala*, and therefore it serves as a powerful symbol and recognition of conclusion and closure. To reiterate the significance of mandalas, the image created serves as a visual representation of the patient's inner landscape, providing valuable insight into their emotional and psychological state, and sense of self at the end of treatment.

Prior to engaging in the directive, the art therapist and patient review the patient's therapeutic course, highlighting key areas of growth, insight, or accomplishments gained through treatment. This reflective process encourages the patient to acknowledge and integrate their experiences, fostering a sense of closure and empowerment as they prepare to embark on their

future journey following psilocybin-assisted therapy.

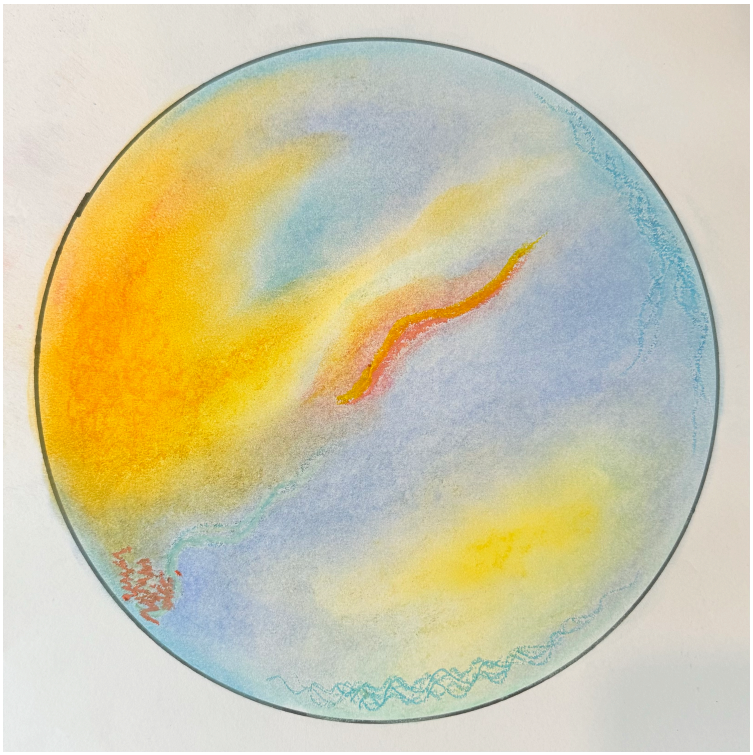

Image 6. *Closing Mandala*

As with all of the previous directives, the creation of the *Closing Mandala* offers an opportunity for non-verbal expression and self-representation, allowing the patient to symbolically capture and represent their experiences and insights gained throughout the course of treatment. Similar to any of the integration-based directives, the patient may view this image as a keepsake—a tangible reminder of their therapeutic journey and accomplishments as they move forward in their lives. Furthermore, the entire series of directives within this protocol can serve as visual representation of the patient's journey through this unique treatment modality.

As I mentioned when discussing the purpose of the *Opening Mandala*, the completion of both mandala directives can be utilized as an informal assessment by allowing both the art therapist and patient to compare pre- and post-treatment mandalas. This comparison can provide valuable information about the patient's progress and development over the course of therapy, offering tangible evidence of their growth and transformation.

While the *Closing Mandala* directive is ideally intended to reflect on and celebrate the patient's therapeutic journey and accomplishments, it remains valuable even for patients who

may not have experienced significant progress or transformation. For these individuals, the act of creating the mandala still provides an opportunity for self-expression and reflection. Despite any perceived lack of progress, the completion of the mandala allows the patient to acknowledge and honor their experiences within the therapeutic space. It serves as a tangible representation of their willingness to engage in the therapeutic process and their commitment to personal growth, regardless of the outcomes. Additionally, the mandala can serve as a starting point for further exploration and areas of focus in a patient's future therapeutic pursuits. Overall, the act of completing the *Closing Mandala* directive holds inherent therapeutic value, regardless of the perceived level of progress.

The Jungian principles inherent to this directive include symbolic self-representation by means of mandala creation, exploration of unconscious material, processes of integration, and one's progression toward individuation and self-actualization.

Opportunities for Amendment

In the facilitation of the art therapy protocol within the context of psilocybin-assisted therapy, the facilitating art therapist exercises discretion to allow patients to create additional images should it be deemed appropriate based on clinical judgment. This discretionary approach acknowledges the uniqueness of each patient's therapeutic journey and enables the therapist to respond effectively to their individual needs and preferences. This may include accommodating patients who express a notable interest in art therapy or a desire to further explore specific elements of their psilocybin experiences through artistic expression, thereby fostering a patient-centered approach to treatment.

Furthermore, the art therapist retains the discretion to amend the protocol as they see fit, ensuring its adaptability to the evolving needs and circumstances of each patient. This flexibility allows the therapist to tailor the therapeutic approach to best suit the patient's therapeutic goals, preferences, and responses to treatment. Such amendments may involve the omission or substitution of certain protocol elements, guided by the therapist's clinical judgment and expertise. By maintaining this adaptive approach, the art therapist can optimize the therapeutic benefits of art therapy within the dynamic context of psilocybin-assisted therapy, promoting personalized and effective treatment outcomes.

Summary

In summary, the integration of art therapy with psilocybin-assisted therapy, based on a person-centered, Jungian-inspired philosophy, offers a holistic approach to healing and personal growth. By incorporating art-based protocols into pre-administration preparation and post-administration integration sessions, this approach aims to enhance therapeutic outcomes and facilitate deeper exploration of the patient's inner world. Through non-verbal expression and symbolic exploration, patients can tap into their creative potential, process psychological material, and foster personal transformation. This integration embraces the interconnectedness of mind, body, and spirit, making psilocybin therapy an ideal modality to incorporate alternative therapeutic approaches such as art therapy rooted in Jungian psychology. Ultimately, this synthesis of ancient wisdom and modern science provides a comprehensive person-centered approach to healing and self-discovery, supporting individuals on their path towards wholeness and integration.

CHAPTER 6: REFLECTIONS & DISCUSSION

In this chapter, I will be presenting my process and reflections regarding the autoethnographic completion of the protocol I have proposed in this professional contribution. A detailed explanation of the methodology used to complete this experiential inquiry can be found in Chapter 3. The inclusion of these reflections is primarily intended to describe the process and address potential strengths and limitations of the individual directives. Personal disclosure has therefore been minimized to maintain focus on the objective and professional goals of my presented work.

Before presenting these reflections, it is essential to address limitations stemming from inherent biases. As the author of the protocol, my perspective may introduce biases that influence the objectivity and interpretation of my findings. Furthermore, as an art therapy graduate student, my background and training, in addition to my propensity for art-making may also shape my perceptions and responses to the autoethnographic process. Acknowledging these potential biases is crucial for maintaining transparency and rigor in the analysis of the presented reflections.

I completed the directives in the order they are intended to be administered, starting with the *Opening Mandala* (Image 1). The pre-drawn mandala is 9 inches in diameter on a 11 x 17 piece of white drawing paper. The image was created using markers, oil pastels and colored pencils. The image was created after dedicating a moment to reflect on the current challenges present in my life at the time of its completion. I found the pre-drawn circle/mandala particularly valuable as it provided a sense of containment. Even as an artist, I occasionally experience anxiety when faced with a blank canvas or paper. This containment is especially significant in treatment settings, where individuals may already be navigating feelings of uncertainty or

anxiety. In the context of integrated psychedelic and art therapy, where both practices may be novel experiences for participants, the containment offered by the pre-drawn mandala can serve as a supportive foundation for managing anxiety and facilitating the therapeutic process.

The artwork for the second directive, *Establishing Connection, Security, and Support* (Image 2), was completed on an 8.5” x 11" piece of white paper using markers, oil pastels and colored pencils. Opting for the smaller paper size (compared to 11” x 17”) was deliberate as I found myself intimidated by the prospect of filling the space of a larger blank piece of paper. This finding is important in that it highlights the importance of presenting patients with option to select paper sizes that align with their comfort levels. The fact that even I, as the author of this protocol, experienced pressure from this self-imposed expectation speaks to its commonality, further emphasizing the importance of considerations to paper size and the way in which art therapy directives are presented to individuals in treatment. This acknowledgment underscores the necessity of fostering an environment that prioritizes individual comfort and autonomy in the therapeutic process, ultimately promoting a more supportive and effective therapeutic experience for all individuals engaged in treatment.

The artwork created for this directive remains among my favorites, as I found both the process and the finished product to be deeply meaningful. This experience illuminated the potential for individuals engaged in this treatment to similarly find meaning and insight through creative expression, even within the art therapy directives which precede the primary treatment of the psychedelic experience itself.

The third directive of this protocol, *Facing Fear*, is the final directive dedicated to preparation sessions for psilocybin-assisted therapy. The image (Image 3) I created for this

directive was completed on 11” x 17” paper using markers, oil pastels, and colored pencils. Given that this directive involves a two-step process utilizing one half of a sheet of folded paper at a time, the administering art therapist may consider encouraging individuals to opt for a larger piece of paper unless this idea is met with resistance.

It is imperative to acknowledge a significant limitation in my analysis regarding this directive. Due to my familiarity with the topic of challenging psychedelic experiences; my knowledge and personal experience regarding Jung's concept of the Shadow; and my completion of this directive in the absence of anxiety preceding psychedelic experience, it is not possible for me to objectively draw any strong predictions pertaining to how an individual undergoing treatment may respond to this particular directive. What I can speak to, however, is the significant personal insight and processing that resulted from depicting the interaction between myself and an ominous-appearing "Shadow" figure. This directive specifies that this interaction be characterized by openness, acceptance, and a sincere desire to understand the presence of the frightening figure and/or scene. This experience was both significant and thought-provoking, highlighting the substantial reframing potential this directive presents in terms of how one perceives and interacts with challenging life material.

Because of the intense nature of the content related to this directive and its broader contextual considerations, great care and consideration must be given to the manner in which this directive and phase of preparatory counseling is approached by clinicians. The potential psychological impact of delving into themes of fear and shadow work within the context of psychedelic therapy necessitates a thoughtful and sensitive approach to ensure the safety and well-being of individuals undergoing treatment.

The first directive dedicated to the processing and integration phase of treatment is *Image of The Psychedelic Experience*. This image (Image 4) was created on 11" x 17" paper using markers, oil pastels, and colored pencils. This directive was designed to provide flexibility in its administration by offering three different means of approach, thereby enhancing an individual's autonomy in choosing how to complete it. This flexibility fosters a sense of ownership over the therapeutic process, empowering individuals to engage with the directive in a way that feels most meaningful and relevant to their own experiences.

I chose to complete this image to reflect the directive's option of "the most significant moment" from the psychedelic experience. I noted in the description that the depiction of the "most significant moment" may also coincide with the "most significant insight" garnered from the psychedelic experience. In my case, the most significant moment of the experience I based this image on differed from my most significant insight; however, the moment I depicted still elicited profound personal insight, illustrating the potential for synergistic interaction between facets of this directive, which may enhance the therapeutic process.

I found this directive personally impactful because it allowed me to create a physical visual representation of a meaningful memory that I have often reflected on. The process of transforming a mental image and its associated meanings and insights into a physical image was powerful and speaks to the unique and isomorphic nature of art therapy.

The fifth directive of this protocol is *Self Within The Larger Picture*, which pertains to existential and mystical-type experiences which are often characteristic of psilocybin-assisted therapy. The artwork for this directive (Image 5) was created on 8.5" x 11" watercolor paper

using watercolor paint, oil pastels, and colored pencils. Similar to that which precedes it, this directive also was intended to provide flexibility in its administration and interpretation.

I found this directive to be the most challenging to approach and complete. This difficulty arises from the abstract and ambiguous nature of existential and mystical-type concepts, which make artistic representation challenging. Furthermore, attempting to convey such “big picture” concepts within the comparatively modest confines of a small sheet of paper can be daunting. This reflection is crucial when considering the application of this directive in a therapeutic setting, as individuals in treatment are likely to encounter similar challenges. However, it is worth noting that the successful navigation of such challenges can yield valuable personal insights and growth. Furthermore, my own approach and completion this directive provided valuable insights into methods of administration which may help to mitigate potential hinderances.

To facilitate the art-making process for this directive, I first took a moment to reflect on the questions and concepts posed within the directive's description. I then identified a significant theme from these reflections: “interconnectedness,” characterized by a strong presence of spirituality. I then created the image to represent this theme. This approach of deconstructing a “big picture” concept into more manageable components was informative on how this directive should be presented to individuals in treatment. It is my position that the administration of this directive should take the form of a person-centered therapeutic discussion between therapist and client, fostering a safe and supportive environment for individuals to explore the experiences and interpretations they wish to express through art.

The final directive of this protocol is the *Closing Mandala*. Similar to the Opening Mandala, the image (Image 6) created for this directive is drawn within a 9 inch diameter, pre-drawn mandala using chalk pastels and oil pastels. Prior to beginning this mandala, I took a moment to reflect on my experiences of progressing through the protocol to this point.

Prior to beginning the art-making process, seeing the pre-drawn mandala reminded me of the *Opening Mandala* directive, which in turn brought a sense of closure to my journey through the protocol. By completing a mandala as both an opening and closing art therapy directive, I couldn't help but notice the comparative shift in my state-of-being and approach when creating this final art piece, which was also reflected through my artwork. Reflecting on my experiences and growth throughout the protocol, I felt a deeper sense of integration and culmination as I expressed my journey within the confines of the mandala. This process served as a symbolic representation of my progression and transformation throughout the therapeutic journey.

The principles observed in my completion of the Closing Mandala directive hold significant implications for individuals engaging in this protocol within a treatment setting. Just as I experienced a sense of closure and reflection upon completing the final mandala, individuals undergoing therapy may similarly find solace and reflection in the culmination of their therapeutic journey through the creation of the Closing Mandala. The use of a pre-drawn mandala as a consistent framework for both the opening and closing directives provides a tangible symbol of recollection, progression, and transformation, serving as a visual marker of the individual's therapeutic journey.

The completion of two mandalas, both at the beginning and end of treatment, offers a unique opportunity for informal assessment within the therapeutic process. By comparing the

opening and closing mandalas, therapists can gain valuable insights into the individual's progress and transformation over the course of therapy. Discrepancies or changes in themes, colors, symbols, or overall composition between the two mandalas may signify shifts in the individual's emotional state, cognitive processing, or personal growth throughout treatment. Additionally, the act of creating the closing mandala can prompt individuals to reflect on their therapeutic journey and the changes they've undergone, fostering greater self-awareness and insight. As such, the completion of these mandalas serves not only as a creative expression but also as a powerful tool for reflection and assessment within the therapeutic process.

CONCLUSION

This professional contribution to the field of art therapy reflects my passionate interest in psilocybin-assisted therapy and my commitment to advancing therapeutic practices by integrating art therapy into this promising modality. Through extensive exploration of literature, theory, and autoethnographic reflection, I have developed an innovative art therapy protocol rooted in a humanistic, insight-oriented therapeutic approach with elements of Jungian Theory. The protocol has been meticulously crafted to address critical aspects of preparation and integration in psilocybin-assisted therapy, while also offering flexibility and adaptability to accommodate the unique needs and experiences of each individual undergoing treatment.

Completing the protocol in its entirety has provided valuable insights into its potential applications within a therapeutic setting. I found each directive to be effective in fostering self-reflection, expression, exploration, and growth. As I progressed through the protocol, I encountered challenges or moments of pause that offered valuable opportunities for refining methods of administration, with particular emphasis on the *Self Within The Larger Picture* directive. Additionally, moments of notable success or positive impact, such as those I experienced during the *Image of The Psychedelic Experience* and the *Closing Mandala*, also provided valuable information on how these successes may extend to the use of this protocol in practice.

I acknowledge my bias as the author of this protocol. I one day hope to see this protocol tested and utilized in vivo to establish qualitative and quantitative findings of its successes and shortcomings, further contributing to its evolution as an effective therapeutic tool. Upon completing and reflecting on this protocol, I am confident in its capacity to facilitate and enrich

preparation, foster profound insights, support emotional processing, and enable symbolic representation. By enabling participants to visually represent their experiences and insights, the directive provides means for exploration and expression that may not be accessible through verbal communication alone. This process of transforming internal experiences into tangible artworks can serve as a powerful tool for integration and healing within the context of psychedelic-assisted therapy.

In essence, the integration of art therapy with psilocybin-assisted therapy through my proposed art therapy protocol represents a powerful synthesis of ancient wisdom and modern science, offering a comprehensive person-centered approach to healing and self-discovery. By embracing the interconnectedness of mind, body, and spirit, the protocol I have set forth offers a unique opportunity for individuals to explore and integrate the profound and ineffable experiences of psilocybin therapy into their healing journey.

REFERENCES

Allan, T. (1995). Archetypal art therapy: Hearing psilocybin in the art & metaphor work of volunteer no. 31. *Multidisciplinary Association for Psychedelic Studies, 1*(1), 23–26. https://maps.org/wp-content/uploads/1995/11/v06n1_25-28_archetypalarttherapy.pdf

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.).

Barrett, F. S., Bradstreet, M. P., Leoutsakos, J. M. S., Johnson, M. W., & Griffiths, R. R. (2016). The challenging experience questionnaire: Characterization of challenging experiences with psilocybin mushrooms. *Journal of Psychopharmacology*, 30(12), 1279–1295. https:// doi.org/10.1177/0269881116678781

Barrett, F. S., Johnson, M. W., & Griffiths, R. R. (2015). Validation of the revised mystical experience questionnaire in experimental sessions with psilocybin. *Journal of Psychopharmacology*, 29(11), 1182–1190. https://doi.org/10.1177/0269881115609019

Beck, A. T., & Steer, R. A. (1987). Beck Depression Inventory (BDI). San Antonio, TX: Psychological Corporation.

Benson, H., MD, & Klipper, M. Z. (2009). *The relaxation response*. Harper Collins.

Blewett, D. B., & Chwelos, N. (1959). *Handbook for the therapeutic use of lysergic acid diethylamide-25: Individual and group procedures*. MAPS.

Carhart-Harris, R. L., Bolstridge, M., Day, C. M., Rucker, J., Watts, R. A., Erritzoe, D., Kaelen, M., Giribaldi, B., Bloomfield, M. a. P., Pilling, S., Rickard, J. A., Forbes, B. C., Feilding, A., Taylor, D., Curran, H. V., & Nutt, D. J. (2017). Psilocybin with psychological support

for treatment-resistant depression: Six-month follow-up. *Psychopharmacology,* 235(2), 399–408. https://doi.org/10.1007/s00213-017-4771-x

Carhart-Harris, R. L., Bolstridge, M., Rucker, J., Day, C. M., Erritzoe, D., Kaelen, M., Bloomfield, M. a. P., Rickard, J. A., Forbes, B., Feilding, A., Taylor, D., Pilling, S., Curran, V., & Nutt, D. J. (2016). Psilocybin with psychological support for treatment-resistant depression: An open-label feasibility study. *The Lancet Psychiatry, 3*(7), 619–627. https://doi.org/10.1016/s2215-0366(16)30065-7

Carod-Artal, F. J. (2015). Hallucinogenic drugs in pre-Columbian Mesoamerican cultures. *Neurología, 30*(1), 42–49. https://doi.org/10.1016/j.nrleng.2011.07.010

Cohen, S. (1964). *The beyond within: The LSD story.* Atheneum.

Corballis, M. C. (2014). Left brain, right brain: Facts and fantasies. *PLOS Biology*, 12(1), e1001767. https://doi.org/10.1371/journal.pbio.1001767

Davis, A. K., Barrett, F. S., May, D. G., Cosimano, M. P., Sepeda, N. D., Johnson, M. W., Finan, P. H., & Griffiths, R. R. (2021). Effects of psilocybin-assisted therapy on major depressive disorder. *JAMA Psychiatry*, 78(5), 481. https://doi.org/10.1001/jamapsychiatry.2020.3285

Doblin, R. (1998). Dr. Leary's Concord Prison experiment: A 34-year follow-up study. *Journal of Psychoactive Drugs*, 30(4), 419-426. https://doi.org/10.1080/02791072.1998.10399715

De Rios, M. D., & Janiger, O. (2003). *LSD, spirituality, and the creative process: Based on the groundbreaking research of Oscar Janiger, M.D.* Inner Traditions / Bear & Co.

De Vos, C. M. H., Mason, N. L., & Kuypers, K. P. C. (2021). Psychedelics and neuroplasticity: A systematic review unraveling the biological underpinnings of psychedelics. *Frontiers in Psychiatry*, 12. https://doi.org/10.3389/fpsyt.2021.724606

Dissanayake, E. (1992). *Homo aestheticus: Where art comes from and why.* Free Press.

Drozdz, S. J., Goel, A., McGarr, M. W., Katz, J., Ritvo, P., Mattina, G. F., Bhat, V., Diep, C., & Ladha, K. (2022). Ketamine assisted psychotherapy: A systematic narrative review of the literature. *Journal of Pain Research,* 15, 1691–1706. https://doi.org/10.2147/jpr.s360733

Gasser, P., Holstein, D. H., Michel, Y., Doblin, R., Yazar-Klosinski, B., Passie, T., & Brenneisen, R. (2014). Safety and efficacy of lysergic acid diethylamide-assisted psychotherapy for anxiety associated with life-threatening diseases. *Journal Nerv Ment Dis,* 202(7), 513–520. https://doi.org/10.1097/nmd.0000000000000113

Griffiths, R. R., Johnson, M. W., Carducci, M. A., Umbricht, A., Richards, W. A., Richards, B. D., Cosimano, M. P., & Klinedinst, M. A. (2016). Psilocybin produces substantial and sustained decreases in depression and anxiety in patients with life-threatening cancer: A randomized double-blind trial. *Journal of Psychopharmacology*, 30(12), 1181–1197. https://doi.org/10.1177/0269881116675513

Griffiths, R. R., Richards, W. G., McCann, U. D., & R, J. (2006). Psilocybin can occasion mystical-type experiences having substantial and sustained personal meaning and spiritual significance. *Psychopharmacology,* 187(3), 268–283. https://doi.org/10.1007/s00213-006-0457-5

Grob, C. S., Danforth, A. L., Chopra, G. S., Hagerty, M., McKay, C. R., Halberstadt, A. L., & Greer, G. (2011). Pilot study of psilocybin treatment for anxiety in patients with advanced-stage cancer. *Archives of General Psychiatry,* 68(1), 71. https://doi.org/10.1001/archgenpsychiatry.2010.116

Grof, S. (1976). *Realms of the human unconscious: Observations from LSD research.* E. P. Dutton.

Grof, S. (2008). *LSD psychotherapy: The healing potential of psychedelic medicine* (4th ed.). MAPS.

Grof, S., & Halifax, J. (1977). *The human encounter with death.* E.P. Dutton.

Guilford, J. P. (1967). *The nature of human intelligence.* McGraw-Hill.

Gukasyan, N., Davis, A. K., Barrett, F. S., Cosimano, M. P., Sepeda, N. D., Johnson, M. W., & Griffiths, R. R. (2022). Efficacy and safety of psilocybin-assisted treatment for major depressive disorder: Prospective 12-month follow-up. *Journal of Psychopharmacology*, 36(2), 151-158. https://doi.org/10.1177/02698811211073759

Gussak, D. E., & Rosal, M. L. (2016). An introduction. In D. E. Gussak & M. L. Rosal (Eds.), *The Wiley Handbook of Art Therapy* (pp. 1–16). John Wiley & Sons.

Hamilton, M. (1960). A rating scale for depression. *Journal of Neurology, Neurosurgery & Psychiatry*, 23(1), 56-62.

Harris, J. C. (2021). Psychedelic-assisted psychotherapy and Carl Jung's Red Book. *JAMA Psychiatry*, 78(8), 815. https://doi.org/10.1001/jamapsychiatry.2021.1207

Hassan, K., Struthers, W. M., Sankarabhotla, A., & Davis, P. J. (2022). Safety, effectiveness and tolerability of sublingual ketamine in depression and anxiety: A retrospective study of

off-label, at-home use. *Frontiers in Psychiatry*, 13. https://doi.org/10.3389/fpsyt.2022.992624

Herman, J. L. (1992). *Trauma and recovery: The aftermath of violence - from domestic abuse to political terror*. Basic Books.

Hill, S. J. (2013). *Confrontation with the unconscious: Jungian depth psychology and psychedelic experience*. Aeon.

Hofmann, A. (1947). LSD-25: Pharmacological observations and research perspectives. *Experientia, 3*(3), 107-111.

Hofmann, A. (1980). *LSD: My problem child*. Multidisciplinary Association for Psychedelic Studies (MAPS).

Hopkins, J. (2021). *Music for psychedelic therapy*. Domino Recording Company.

Husum, C. (2022). *Psychedelic integration for a life transformed* (2nd ed.). https://courses.centreoftheheart.com/p/psychedelic-integration-full-course-modules-1-8

Huxley, A. (1954). *The doors of perception.* Harper & Brothers.

Johnson, M. W., Richards, W. A., & Griffiths, R. R. (2008). Human hallucinogen research: guidelines for safety. *Journal of Psychopharmacology*, 22(6), 603–620. https://doi.org/10.1177/0269881108093587

Johnson, M. (2023, June 9). 24 huge questions about psychedelics | Dr. Matthew Johnson [Video]. *Big Think*. https://www.youtube.com/watch?v=QBA98jHWhoU

Jung, C. G. (1989). *Memories, dreams, reflections* (A. Jaffe, Ed.; R. Winston & C. Winston, Trans.). Vintage Books.

Jung, C. G. (1971). *Psychological types* (Vol. 6, Collected Works of C.G. Jung, R. F. C. Hull, Trans.). Princeton University Press. (Original work published 1921)

Jung, C. G. (2009). *The red book: Liber novus* (S. Shamdasani, Ed.). W. W. Norton & Company.

King, J.L. (2016). Art therapy: A brain-based profession. In D. E. Gussak & M. L. Rosal (Eds.), *The Wiley Handbook of Art Therapy* (pp. 77–89). John Wiley & Sons.

Konopka, L. M. (2014). Where art meets neuroscience: a new horizon of art therapy. *Croatian Medical Journal*, 55(1), 73–74. https://doi.org/10.3325/cmj.2014.55.73

Leary,T.; Metzner, R.; Presnell, M.; Weil, G.; Schwitzgebel, R. & Kinne, S. (1965). A new behavior change pattern using psilocybin. *Psychotherapy: Theory, Research and Practice,* 2(2):61-72. https://doi.org/10.1037/h0088612

Lovell, S. (2001). Loving body is embracing spirit: Coming home stories. In M. Farrelly-Hansen (Ed.), *Spirituality and art therapy: Living the connection*. Jessica Kingsley Publishers.

Lusebrink, V. B. (2004). Art therapy and the brain: An attempt to understand the underlying processes of art expression in therapy. *Art Therapy*, *21*(3), 125–135. https://doi.org/ 10.1080/07421656.2004.10129496

MacCallum, C. A., Lo, L. A., Pistawka, C. A., & Deol, J. K. (2022). Therapeutic use of psilocybin: Practical considerations for dosing and administration. *Frontiers in Psychiatry*, 13. https://doi.org/10.3389/fpsyt.2022.1040217

MacLean, K. A., Leoutsakos, J., Johnson, M. W., & Griffiths, R. R. (2012). Revised mystical experience questionnaire (MEQ-30). *PsycTESTS*. https://doi.org/10.1037/t58579-000

Malchiodi, C. A. (2011). *Handbook of art therapy, second edition.* Guilford Press.

Mason, N. L., Kuypers, K. P. C., Reckweg, J., Müller, F., Tse, D. H. Y., Da Rios, B., Toennes, S. W., Stiers, P., Feilding, A., & Ramaekers, J. G. (2021). Spontaneous and deliberate creative cognition during and after psilocybin exposure. *Translational Psychiatry, 11*(1). https://doi.org/10.1038/s41398-021-01335-5

Maujean, A., Pepping, C. A., & Kendall, E. (2014). A Systematic review of randomized Controlled studies of art therapy. *Art Therapy*, 31(1), 37–44. https://doi.org/10.1080/07421656.2014.873696

McNiff, S. (2011). Artistic expressions as primary modes of inquiry. *British Journal of Guidance & Counselling*, 39(5), 385–396. https://doi.org/10.1080/03069885.2011.621526

Montgomery, S. A., & Asberg, M. (1979). A new depression scale designed to be sensitive to change. *British Journal of Psychiatry*, 134, 382-389.

O'Brien, C. P. (2006). Drug addiction and drug abuse. In L. L. Brunton, J. S. Lazo, & K. L. Parker (Eds.), *Goodman & Gilman's The Pharmacological Basis of Therapeutics* (11th ed., pp. 607-627). New York: McGraw-Hill.

Osmond, H. (1957). A review of the clinical effects of psychomimetic agents. *Annals of the New York Academy of Sciences,* 66, 418-434. https://doi.org/10.1111/j.1749-6632.1957.tb40738.x

Pahnke, WN. *Drugs and mysticism: An analysis of the relationship between psychedelic drugs and the mystical consciousness.* Cambridge, MA: Harvard University Press; 1963.

Phillips, J. L., Norris, S., Talbot, J., Birmingham, M., Hatchard, T., Ortiz, A., Owoeye, O., Batten, L. A., & Blier, P. (2019). Single, repeated, and maintenance ketamine infusions

for treatment-resistant depression: A randomized controlled trial. *American Journal of Psychiatry*, 176(5), 401–409. https://doi.org/10.1176/appi.ajp.2018.18070834

Pollan, M. (2018). *How to change your mind: What the new science of psychedelics teaches us about consciousness, dying, addiction, depression, and transcendence*. Penguin.

Psychedelic Support (2022, August 3). Psychedelic art therapy [Video]. YouTube. https://www.youtube.com/watch?v=g_c64hjtzgY

Reiff, C., Richman, E. E., Nemeroff, C. B., Carpenter, L. L., Widge, A. S., Rodriguez, C. I., Kalin, N. H., & McDonald, W. M. (2020). Psychedelics and psychedelic-assisted psychotherapy. *The American Journal of Psychiatry*, 177(5), 391-410. https://doi.org/10.1176/appi.ajp.2019.19010035

Richards, R. A. (2016). *Sacred knowledge: psychedelics and religious experiences.* Columbia University Press.

Rogers, CR (1959) Toward a theory of creativity. In: Anderson, H.H. (ed), *Creativity and its cultivation*. New York: Harper, pp. 69–82.

Rogers, N (1993). *The creative connection: Expressive arts as healing.* Science & Behavior Books.

Ross, S. L., Bossis, A. P., Guss, J., Agin-Liebes, G., Malone, T., Cohen, B. H., Mennenga, S. E., Belser, A. B., Kalliontzi, K., Babb, J. S., Su, Z., Corby, P., & Schmidt, B. P. (2016). Rapid and sustained symptom reduction following psilocybin treatment for anxiety and depression in patients with life-threatening cancer: A randomized controlled trial. *Journal of Psychopharmacology*, 30(12), 1165–1180. https://doi.org/10.1177/0269881116675512

Ross, S. L. (2018). Therapeutic use of classic psychedelics to treat cancer-related psychiatric distress. *International Review of Psychiatry*, 30(4), 317–330. https://doi.org/10.1080/09540261.2018.1482261

Sandison, R., Spencer, A. M., & Whitelaw, J. D. A. (1954). The therapeutic value of lysergic acid diethylamide in mental illness. *The Journal of Mental Science*, 100(419), 491-507. https://doi.org/10.1192/bjp.100.419.491

Sandmire, D. A., Gorham, S. R., Rankin, N. E., & Grimm, D. R. (2012). The influence of art making on anxiety: a pilot study. *Art Therapy*, 29(2), 68-73. https://doi.org/10.1080/07421656.2012.683748

Sessa, B. (2008). Is it time to revisit the role of psychedelic drugs in enhancing human creativity? *Journal of Psychopharmacology*, 22(8), 821–827. https://doi.org/10.1177/0269881108091597

Shiroma, P., Johns, B. A., Kuskowski, M. A., Wels, J., Thuras, P., Albott, C. S., & Lim, K. O. (2014). Augmentation of response and remission to serial intravenous subanesthetic ketamine in treatment-resistant depression. *Journal of Affective Disorders*, 155, 123–129. https://doi.org/10.1016/j.jad.2013.10.036

Shulgin, A. (2001). The new psychotherapy: MDMA and the shadow. In T Roberts (Ed.), *Psychoactive sacramentals: Essays on entheogen and religion* (pp. 197-204). Council on Spiritual Practices.

Sjoberg, B. M., & Hollister, L. E. (1965). The effects of psychotomimetic drugs on primary suggestibility. *Psychopharmacology,* 8(4), 251–262. https://doi.org/10.1007/bf00407857

Slegelis, M. H. (1987). A study of Jung's mandala and its relationship to art psychotherapy. *The Arts in Psychotherapy*, 14(4), 301-311. https://doi.org/10.1016/0197-4556(87)90018-9

Storr, A. (1983). *The essential Jung: Selected and introduced by Anthony Storr*. Princeton University Press.

Strassman, R. J. (1995). Human psychopharmacology of N,N-dimethyltryptamine. *Behavioural Brain Research*, 73(1-2), 121-124. https://doi.org/10.1016/0166-4328(96)00081-2

Strassman, R. J., Qualls, C., Uhlenhuth, E. H., & Kellner, R. (1994). Dose-response study of N,N-dimethyltryptamine in humans. *Archives of General Psychiatry*, 51(2), 98. https://doi.org/10.1001/archpsyc.1994.03950020022002

Studerus E, Kometer M, Hasler F, et al. (2011). Acute, subacute and long-term subjective effects of psilocybin in healthy humans: A pooled analysis of experimental studies. *J Psychopharmacol*, 25(11), 1434–1452.

Tanne, J. H. (2004, March 3). Humphry Osmond. *PubMed Central (PMC)*. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC381240/

Tripp, T. (2007). A short term therapy approach to processing trauma: art therapy and bilateral stimulation. *Art Therapy*, 24(4), 176–183. https://doi.org/10.1080/07421656.2007.10129476

U.S. Department of Veterans Affairs. (2024, January 5). To improve care for veterans, VA to fund studies on new therapies for treating mental health conditions. VA News Releases. https://news.va.gov/press-room/to-improve-care-for-veterans-va-to-fund-studies-on-new-therapies-for-treating-mental-health-conditions/

Wilkinson, S. T., Wright, D., Fasula, M., Fenton, L. R., Griepp, M., Ostroff, R., & Sanacora, G. (2017). Cognitive behavior therapy may sustain antidepressant effects of intravenous ketamine in treatment-resistant depression. *Psychotherapy and Psychosomatics*, 86(3), 162–167. https://doi.org/10.1159/000457960

Wilmer, H. A. (1987). *Practical Jung: Nuts and bolts of jungian psychotherapy.* Chiron Publications.

Zarate, C. A., Singh, J., Carlson, P. J., Brutsche, N. E., Ameli, R., Luckenbaugh, D. A., Charney, D. S., & Manji, H. K. (2006). A randomized trial of an n-methyl-d-aspartate antagonist in treatment-resistant major depression. *Archives of General Psychiatry*, 63(8), 856. https://doi.org/10.1001/archpsyc.63.8.856

Zimmerman, M., Martinez, J. H., Young, D., Chelminski, I., & Dalrymple, K. (2013). Severity classification on the Hamilton Depression Rating Scale. *Journal of Affective Disorders*, 150(2), 384-388. https://doi.org/10.1016/j.jad.2013.04.028

APPENDIX A

The Revised Mystical Experience Questionnaire (MEQ30)

The following material is supplemental information to the publication:

Barrett, F. S., Johnson, M. W., & Griffiths, R. R. (2015). Validation of the revised Mystical Experience Questionnaire in experimental sessions with psilocybin. *Journal of Psychopharmacology*, 29(11), 1182–1190. https://doi.org/10.1177/0269881115609019

Instructions: Looking back on the entirety of your session, please rate the degree to which at any time during that session you experienced the following phenomena. Answer each question according to your feelings, thoughts, and experiences at the time of the session. In making each of your ratings, use the following scale:

0 – none; not at all

1 – so slight cannot decide

2 – slight

3 – moderate

4 – strong (equivalent in degree to any other strong experience)

5 – extreme (more than any other time in my life and stronger than 4)

_____ 1. Loss of your usual sense of time.

_____ 2. Experience of amazement.

_____ 3. Sense that the experience cannot be described adequately in words.

_____ 4. Gain of insightful knowledge experienced at an intuitive level.

_____ 5. Feeling that you experienced eternity or infinity.

_____ 6. Experience of oneness or unity with objects and/or persons perceived in your surroundings.

_____ 7. Loss of your usual sense of space.

_____ 8. Feelings of tenderness and gentleness.

_____ 9. Certainty of encounter with ultimate reality (in the sense of being able to “know” and “see” what is really real at some point during your experience.

_____ 10. Feeling that you could not do justice to your experience by describing it in words.

_____ 11. Loss of usual awareness of where you were.

_____ 12. Feelings of peace and tranquility.

_____ 13. Sense of being “outside of” time, beyond past and future.

_____ 14. Freedom from the limitations of your personal self and feeling a unity or bond with what was felt to be greater than your personal self.

_____ 15. Sense of being at a spiritual height.

_____ 16. Experience of pure being and pure awareness (beyond the world of sense impressions).

_____ 17. Experience of ecstasy.

_____ 18. Experience of the insight that “all is One”.

_____ 19. Being in a realm with no space boundaries.

_____ 20. Experience of oneness in relation to an “inner world” within.

_____ 21. Sense of reverence.

_____ 22. Experience of timelessness.

_____ 23. You are convinced now, as you look back on your experience, that in it you encountered ultimate reality (i.e., that you "knew" and "saw" what was really real).

_____ 24. Feeling that you experienced something profoundly sacred and holy.

_____ 25. Awareness of the life or living presence in all things.

_____ 26. Experience of the fusion of your personal self into a larger whole.

_____ 27. Sense of awe or awesomeness.

_____ 28. Experience of unity with ultimate reality.

_____ 29. Feeling that it would be difficult to communicate your own experience to others who have not had similar experiences.

_____ 30. Feelings of joy.

Scoring Instructions for the MEQ30

Factor scores are computed by calculating the average response to the following items:

- Mystical: 4, 5, 6, 9, 14, 15, 16, 18, 20, 21, 23, 24, 25, 26, 28
- Positive mood: 2, 8, 12, 17, 27, 30
- Transcendence of time and space: 1, 7, 11, 13, 19, 22
- Ineffability: 3, 10, 29

The MEQ30-total score is computed by taking the average response to all items.

The MEQ30 is freely provided for non-commercial use.

APPENDIX B

Detailed inclusion and exclusion criteria for participation in Griffiths et al. (2016) psilocybin-assisted therapy study involving individuals with terminal cancer diagnoses and comorbid mood or anxiety disorders.

The following material is supplemental information to the publication:

Griffiths, R. R., Johnson, M. W., Carducci, M. A., Umbricht, A., Richards, W. A., Richards, B. D., Cosimano, M. P., & Klinedinst, M. A. (2016). Psilocybin produces substantial and sustained decreases in depression and anxiety in patients with life-threatening cancer: A randomized double-blind trial. *Journal of Psychopharmacology*, 30(12), 1181–1197. https://doi.org/10.1177/0269881116675513

Detailed inclusion and exclusion criteria

Inclusion criteria

- 21 to 80 years old
- Have a high school or equivalent (e.g. GED) level of education. Volunteers without a high school or equivalent education must demonstrate reading literacy and comprehension sufficient for understanding the consent form and study questionnaires, as evaluated by study staff obtaining consent.
- Has or has had a cancer diagnosis that is potentially life-threatening. Patients with an active cancer (e.g. stage III or IV with a poor prognosis) or disease progression or recurrence are eligible. Patients who do not have an active cancer or disease progression or disease recurrence

are only eligible if at least 1 year has elapsed since their diagnosis.

• Have an ECOG performance status of 0, 1, or 2.

• Have a DSM-IV psychiatric diagnosis, as determined by the SCID, of one or more of the following Axis I psychiatric disorders that is judged to have been precipitated by or exacerbated by the psychological stress of the cancer diagnosis: Generalized Anxiety Disorder; Acute Stress Disorder; Posttraumatic Stress Disorder; Major Depressive Disorder (mild or moderate severity); Dysthymic Disorder; Adjustment Disorder with Anxiety; Adjustment Disorder with Depressed Mood; Adjustment Disorder with Mixed Anxiety and Depressed Mood; Adjustment Disorder with Disturbance of Conduct; Adjustment Disorder with Disturbance of Emotions and Conduct. Psychiatric diagnosis are determined by Johns Hopkins staff.

• Patients receiving chemotherapy, hormonal therapy, radiation therapy, biologic therapies may participate while receiving those therapies. Continuing hormonal therapy, chemotherapy, or radiation treatment is acceptable if the patient is tolerating the therapy or treatment in a sufficient fashion to allow administration of oral psilocybin.

• Agree that for one week preceding each psilocybin session, he/she will refrain from taking any nonprescription medication, nutritional supplement, or herbal supplement except when approved by the research team. Exceptions will be evaluated by the research team and will include acetaminophen, non-steroidal anti-inflammatory drugs, and common doses of vitamins and minerals.

• Agree not to use nicotine for at least 2 hours before psilocybin administration, and not again until questionnaires have been completed approximately 7 hours after psilocybin administration.

• Agree to consume approximately the same amount of caffeine-containing beverage (e.g.,

coffee, tea) that he/she consumes on a usual morning, before arriving at the research unit on the mornings of psilocybin session days. If the patient does not routinely consume caffeinated beverages, he or she must agree not to do so on psilocybin session days.

• Agree not to take any PRN medications on the mornings of psilocybin sessions, with the exception of daily opioid pain medication. Non-routine PRN medications for treating breakthrough pain that were taken in the 24 hours before the psilocybin session may result in rescheduling the treatment session, with the decision at the discretion of the investigators.

• Agree to refrain from using any psychoactive drugs, including alcoholic beverages, within 24 hours of each psilocybin administration. As described elsewhere, exceptions include daily use of caffeine, nicotine, and opioid pain medication.

Exclusion criteria

General Medical Exclusion Criteria

• Cancer with known CNS involvement, or other major CNS disease. In addition to diagnostic results provided by the referring physician, patients will undergo a neurological exam at the study site. Any patient with evidence of a focal deficit will be excluded.

• Patients will be excluded if they are in treatment in another clinical trial involving an investigational product for treatment of cancer.

• Hepatic dysfunction as indicated by the following values:

-- GGT > 3 x ULN (upper limit of norm)

-- AST > 3 x ULN

-- ALT > 3 x ULN

-- Tot Bili > 3.0 mg/dl

• Known paraneoplastic syndrome or "ectopic" hormone production by the primary tumor such as the patient could have or be at risk for hypercalcemia, Cushing's syndrome, hypoglycemia, syndrome of inappropriate antidiuretic hormone secretion, or carcinoid syndrome

• Cardiovascular conditions: uncontrolled hypertension, angina, a clinically significant ECG abnormality (e.g. atrial fibrilation), TIA in the last 6 months, stroke, peripheral or pulmonary vascular disease (no active claudication)

• Blood pressure exceeding 140 systolic or 90 diastolic

• Epilepsy with history of seizures

• Renal insufficiency (creatinine clearance < 40 ml/min using the Cockraft and Gault equation)

• Insulin-dependent diabetes; if taking oral hypoglycemic agent, then no history of hypoglycemia

• Females who are pregnant (positive pregnancy test) or nursing, or are not practicing an effective means of birth control

• Currently taking on a regular (e.g., daily) basis: investigational agents, psychoactive prescription medications (e.g., benzodiazepines), medications having a primary pharmacological effect on serotonin neurons (e.g., odansetron), or medications that are MAO inhibitors. Long-acting opioid pain medications (e.g. oxycodone sustained release, morphine sustained release -- which are usually taken at 12 hour intervals) will be allowed if the last dose occurred at least 6 hours before psilocybin administration; such medication will not be taken again until at least 6 hours after psilocybin administration.

• For individuals who have intermittent or PRN use of investigational agents, psychoactive prescription medications, medications having a primary pharmacological effect on serotonin

neurons, or medications that are MAO inhibitors, psilocybin sessions will not be conducted until at least 5 half-lives of the agent have elapsed after the last dose.

- Patients will be excluded if they are currently using any the following of potent metabolic inducers or inhibitors: Inducers - Rifamycin (rifampin, rifabutin, rifapentine), anticonvulsants (carbamazepine, phenytoin, phenobarbital), nevirapine, efavirenz, Taxol, dexamethasone), St Johns Wort; Inhibitors - all HIV protease inhibitors, itraconazole, ketoconazole, erythromycin, clarithromycin, troleandomycin.
- Patients will be excluded if it is a medical requirement that they receive any of the following drugs with low therapeutic index within 12 hours after receiving psilocybin: ergot alkaloids, pimozide, midazolam, triazolam, lovastatin, simvastatin, fentanyl.

Psychiatric Exclusion Criteria

- Individuals with severity of depression or anxiety symptoms warranting immediate treatment with antidepressant or daily anxiolytic medication (e.g., due to suicidal ideation). Patients will be interviewed to determine if referral (e.g., to Community Psychiatry) is necessary. For individuals who are consented and screened, we will notify the referring physician as to: 1) whether the individual enrolled in the study or not, and 2) if disqualified, why the individual was disqualified. If disqualification was based on severe depression or anxiety (e.g., suicidal ideation), this will be included in the information conveyed to the referring physician. Permission for this contact will be obtained from the participant.
- Current or past history of meeting DSM-IV criteria for Schizophrenia, Psychotic Disorder (unless substance-induced or due to a medical condition), or Bipolar I or II Disorder
- Current or past history within the last 5 year of meeting DSM-IV criteria for alcohol or drug

dependence (excluding caffeine and nicotine).

- Have a first or second degree relative with schizophrenia, psychotic disorder (unless substance induced or due to a medical condition), or bipolar I or II disorder.
- Currently meets DSM-IV criteria for Dissociative Disorder, Anorexia Nervosa, Bulimia Nervosa, or other psychiatric conditions judged to be incompatible with establishment of rapport or safe exposure to psilocybin.