Can Art Therapy Be Used as an Integration Modality for Repressed Trauma and Mystical Experiences With Psychedelic-Assisted Psychotherapy Clients?

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With the Psychedelic Renaissance underway, more psychedelic-assisted psychotherapies (PAPs) are on track to become a part of mainstream mental healthcare for clients suffering from post-traumatic stress disorder (PTSD) (Siegel et al., 2023, p. 3). PTSD often causes repressed traumatic memories that can be difficult to access and meaningfully integrate into clients' lives with conventional talk therapy. Art therapy, which utilizes art as a form of non-verbal communication and integration, has the potential to effectively treat clients undergoing PAPs for PTSD (Hogan, 2016, p. 1; Talwar, 2007, p. 22). Other than increased neuronal communication and neuroplasticity, PAP's major mechanisms of action are access to repressed trauma and mystical experiences (MEs), both of which are highly ineffable phenomena (Corpuz, 2022; MacLean et al., 2012, p. 723; Ragnhildstveit et al., 2023; Zhornitsky et al., 2023).

Not only do many psychedelics have dissociative properties that can make speaking difficult, but newly accessed trauma that has been repressed in the lower regions of the brain is nearly inarticulable (van der Kolk, 2015, p. 43). In PAP, post-therapy integration is critical for helping clients to meaningfully process their experiences, emotionally heal, and make lasting behavioral changes (Bathje et al., 2022; Ragnhildstveit et al., 2023). Of the legal clinics that offer ketamine-assisted psychotherapy (KAP), few of them offer integration services (Ryan & Bennett, 2020, p. 19). The ketamine clinics that offer integration services are usually focused on talk therapy, which can be contradictory to the needs of clients who are challenged by the inability to verbalize their MEs and repressed trauma.

In this literature review, relevant research has been collected and organized in order to piece together a valid picture of art therapy integration for repressed trauma and MEs with PAP clients. An effort has been made to ensure that a majority of the research presented has been either peer-reviewed or published in scholarly journals; however, due to the emerging nature of this cutting-edge medical science, one of the major referenced research studies has yet to be peer-reviewed and published. Within each subheading, the most researched or relevant psychedelic medicines are discussed and include ketamine, 3,4-

methylenedioxymethamphetamine (MDMA), psilocybin, and lysergic acid diethylamide (LSD). A total of 31 sources comprised of 21 research studies and reviews, 6 books, and 4 reputable websites were referenced, and ultimately concluded that there is valid research confirming the subjects addressed in the 4 subheadings of this literature review: 1) the high efficacy of psychedelic medicines in the treatment of PTSD, 2) the high prevalence of ineffable healing MEs in PAP experiences, 3) the lack of non-verbal/art therapy integration in PAP contexts, and 4) the high efficacy of art therapy in the treatment of ineffable PTSD symptoms. When viewed holistically, this research supports the need to conduct experiments that determine the efficacy of using art therapy as an integration modality for repressed trauma and MEs with PAP clients.

Literature Review

The Efficacy of Psychedelic Medicines in the Treatment of PTSD

In the treatment of PTSD, research studies examining the efficacy of ketamine and MDMA have been selected. In a study examining the long-term structural and functional neural changes following a single infusion of ketamine in participants with PTSD, it was found that ketamine may lessen the retrieval of original traumatic memories (Duek et al., 2023). Compared

to the control group, follow-up MRI brain imaging revealed that the ketamine group had lower amygdala and hippocampus reactivation to traumatic memories (Duek et al., 2023). Further, these preliminary findings show promise in the capacity to rewrite human traumatic memories and modulate the associated fear response for at least 30 days after they have been extinguished by ketamine (Duek et al., 2023). A recent review of the clinical evidence examining the potential of ketamine treatment for PTSD spanned 26 studies and included a variety of client samples within multiple case reports, chart reviews, open-label studies, and randomized trials (Ragnhildstveit et al., 2023). Overall, findings showed that there is increasing potential for ketamine's therapeutic safety, efficacy, and durability, with a rapidly growing evidence base (Ragnhildstveit et al., 2023).

MDMA-assisted therapy (MDMA-AT) showed similar potential in an emerging preprint of a randomized, double-blind, placebo-controlled, multi-site Phase 3 clinical trial examining MDMA's effects on the self-experience of clients with PTSD (van der Kolk et al., 2022). While this preprint reports new research that has yet to be certified by peer-review, these findings are too promising to exclude from this literature review. 85% of participants in this trial reported early childhood trauma, resulting in deficits in emotional coping skills and altered self-capacities (van der Kolk et al., 2022). At 2 months post-treatment, symptoms were measured at baseline and revealed that the MDMA-AT group demonstrated significantly altered domains of alexithymia, self-compassion, and altered self-capacities compared to the placebo control group (van der Kolk et al., 2022). These findings provide strong evidence that MDMA-AT can greatly improve symptoms associated with poor treatment responses in clients struggling with PTSD (van der Kolk et al., 2022).

The Healing Qualities of MEs

MEs, which are akin to spiritual awakenings, have been recognized as a major mechanism of action in psychedelic medicines (Griffiths et al., 2006, 2008, 2011, as cited in MacLean et al., 2012, p. 722). In order to measure these experiences, psychedelic researchers have utilized the Mystical Experience Questionnaire (MEQ-30), which is a 4-factor structure that includes various dimensions of MEs: F1) unity, noetic quality, and sacredness; F2) positive mood, F3) transcendence of time and space, and F4) ineffability (MacLean et al., 2012). Psychedelic researchers have found that MEs produced by psilocybin are associated with persisting increases in personal well-being, life satisfaction, and positive behavior change (Griffiths et al., 2006, 2008, 2011, as cited in MacLean et al., 2012, p. 722). In an analysis of clinical data conducted by three large ketamine practices, Dore et al. (2019) listed the effects, qualia, and spacious presence that constitute ketamine-induced MEs:

Heightened internal visual experience, reduction of verbal thinking, [and] entering a different reality. ... Transition to a state separate from obsessions, circularity, and dysphoria. Out-of-body experience, [outside] of bounded time [and] space. Ego dissolution [and] non-attachment. Humility, as [if] situating one's self in time and space — a larger view of one's smallness. Cosmic consciousness, love as connectedness, formlessness, [and an] experience of being an energy format. Apprehension of death from the perspective of formlessness. Absence of negative emotions [and] a peaceful presence [constituted by] effortless self-acceptance, [the] possibility for highly positive affect, [and] self-appreciation. (p. 192)

It should be noted that the author of this literature review was a KAP client at one of the three large ketamine practices that took part in conducting this research study. The author's KAP experience was congruent with this published clinical data. Similar reports of MEs have been cited in research on MDMA-AT and LSD (Barone et al., pp. 9-10; Wiessner et al., 2021). While MEs are beneficial components of PAPs, their inherent ineffability may make them difficult to integrate using conventional talk therapy.

Current Integration Modalities in PAP

The most common types of PAP integration currently offered are cognitive-behavioral approaches such as cognitive-behavioral therapy (CBT), dialectical behavioral therapy, and acceptance and commitment therapy (Yaden et al., 2022, p. 5). Cognitive-behavioral approaches utilize talk therapy as a means to better understand and change the maladaptive relationships between thoughts, feelings, and behaviors (Yaden et al., 2022, p. 4). In an analysis of the best theoretical paradigms for European and American PAP sets and settings, it was determined that CBT, for example, can offer adaptive skills, goal setting, homework for behavioral changes, and self-monitoring techniques that are compatible with PAP integration (Yaden et al., 2022, p. 12). However, ineffable repressed trauma and MEs may remain difficult to access using cognitive-behavioral forms of talk therapy.

Psychedelic-assisted eye movement desensitization and reprocessing (PsyA-EMDR) is another form of psychedelic integration that uses eye movement to prevent over-arousal during traumatic memory reprocessing (Raine-Smith & Rose, 2023, p. 1). In their analysis of approaches for PAP integration, Raine-Smith & Rose (2023) promote the trauma-informed Adaptive Information Processing (AIP) model of EMDR that seeks to access repressed trauma throughout all phases of treatment, including pre-and post-session (p. 2). They concluded that this holistic approach may have high efficacy for PAP clients with complex-PTSD (Raine-Smith & Rose, 2023, pp. 1-2). While PsyA-EMDR primarily facilitates the integration of repressed trauma, it may also have the potential to utilize somatic techniques to access ineffable MEs.

Nevertheless, in order to broaden the integration toolbox with more holistic tools, studying art therapy's role in psychedelic integration could lead to fruitful discoveries. This literature review hypothesizes that art therapy's Expressive Therapies Continuum (ETC) may offer multiple kinesthetic-sensory, perceptual-affective, and cognitive-symbolic routes for processing repressed trauma and healing MEs, some of which may be accompanied by visual components such as flashbacks or complex hallucinations (Hinz, 2020, p. 5; Howie, 2015). Despite a history of research showing strong correlations and causal links between psychedelics. creativity, and creative problem-solving, there are currently no published studies on the use of art therapy in PAP contexts (Krippner, 1985, pp. 243-244; Sweat et al., 2016). In a research study conducted by Sweat et al. (2016), it was considered that non-ordinary states of consciousness induced by classical psychedelics involve increased neuroplasticity, which enables communication between areas of the brain that do not normally communicate (p. 4). This may result in "the types of perspective shifts and less rigid thinking that facilitate creative problem solving" (Sweat et al., 2016, p. 4). In his research on psychedelic drugs and creativity, Krippner (1985) insightfully concluded:

If one's sense of self is placed in abeyance and if one's space-time sense dissolves, a mystical experience may occur. If the subject attempts to write about this incident, or draw or paint it, his/her motor functioning may be impaired simply because the usual

flow of information to the hands and fingers is inoperative. What is more typical is that the creative person uses the psychedelic experience as raw material for an eventual painting, composition, poem, or invention (Ebin, 1961). Other individuals may have access to aesthetic information once the experience is over and subsequently demonstrate a greater interest in art or music. (p. 244)

The Efficacy of Art Therapy in the Treatment of PTSD

While there are currently no published studies on the use of art therapy in PAP contexts, there is ample research on art therapy in the treatment of PTSD. This has positive implications for practicing art therapy with PAP clients who may also require effective trauma integration. In her clinical research, Talwar (2007) combines art therapy trauma protocol (ATTP) and AIP modalities to access and integrate the fragmented, non-verbal, and somatic components of trauma (pp. 22-28). ATTP achieves this by allowing clients to work with both hands to stimulate traumatic memories that reside in the right and left sides of the brain. This bilateral process counteracts trauma blocks caused by PTSD by "[engaging] the integrating and planning functions of the prefrontal cortex as the memory is assigned a narrative of beginning, middle and an end by the hippocampus, using left brain functions" (Talwar, 2007, p. 34). In Talwar's (2007) conclusion, clients report positive results in processing speechless traumatic memories (p. 33). Further, in giving clients the tools and control needed to create sensory awareness, they developed greater emotional regulation (Talwar, 2007, p. 34).

Another 2 studies that worked with veterans with combat-PTSD concluded that art therapy increased the overall efficacy of treatment (Antony, 2021, p. 17; Campbell et al., 2016, p. 175). Campbell et al. (2016) found that art therapy helped veterans access and integrate nonverbal components of traumatic memories, in addition to increasing the efficacy of treatment when combined with cognitive processing therapy (pp. 174-175). In her review of research utilizing expressive arts therapy to treat combat-PTSD in veterans, Antony (2021) reported that fine art and expressive writing can help veterans overcome barriers to verbalizing difficult emotions surrounding traumatic memory (p. 12). Including art studio visits and group therapy within the treatment protocols increased community support for veterans sharing these difficult emotions (Antony, 2021, p. 16). Further, Antony (2021) cited several neuroscientific research studies that demonstrated the various mechanisms by which expressive arts therapies can increase the brain's neuroplasticity and post-traumatic growth (p. 13). This critical piece of evidence may also complement integration work with PAP clients who experience the additional benefits of psychedelic-induced neurogenesis and neuroplasticity. Altogether, her review demonstrated that not only did art therapy increase veterans' capacity for meaning-making, but its efficacy ranked higher when compared to the use of CBT and EMDR with the veteran population (Antony, 2021, p. 17). For clients with PTSD, art therapy modalities may increase meaning-making because traumatic memory is often pictorial, and the use of visual imagery is vital to symbolic processing (Howie, 2015).

Methodology and Considerations for an Experimental Design

This literature review proposes an experimental design in order to determine the efficacy of art therapy in integrating repressed trauma and MEs with PAP clients. The experiment would take place within the legal KAP clinical context, where there would be access to larger sample sizes of clients being treated for PTSD. A rationale for which art therapy modalities to administer would need to be determined based on research related to best practices in KAP settings, as well as effectively treating various forms of PTSD. The timeframe for administering art therapy integration within the standard 2-hour ketamine treatment window would also need to be determined (Brown & Arden, 2020). Due to the variety of routes of administration and dosages, the degree of dissociation and subsequent client coherence post-ketamine treatment would vary greatly. For example, some low-dose ketamine clients may benefit from art therapy integration in the second hour immediately following the hour-long effects of ketamine treatment, while other high-dose ketamine clients may feel too drowsy afterward and benefit from doing art therapy within the window of increased neuroplasticity that occurs up to 2 weeks after treatment (Brown & Arden, 2020; Dore et al., 2019, p. 191). Questions remain regarding whether it would be appropriate for the art therapist to be present during the ketamine session with the client. Some might argue that the art therapist should only be involved in the integration post-ketamine treatment in order to avoid the projections and transference that could occur from witnessing the client under the effects of ketamine (Grof, 2008, p. 88). The diverse treatment needs within the KAP client sample could pose a difficulty in determining the duration of the experiment, along with the number and frequency of art therapy sessions per client. In any case, the total number of art therapy sessions would need to match the number of standard KAP sessions within the control group.

Once these preliminary considerations and questions are answered, the experimental group would receive a 1-hour art therapy integration session, while the control group would receive the standard KAP protocol. In order to avoid the ethical dilemma of withholding critical integrative services from participants, the control group would still receive the standard psychotherapy portion of the ketamine treatment. Another approach to this dilemma could be to compare the experimental group with client samples at ketamine clinics that do not offer integrative services; however, variances in the clinical setting and protocols could pose problems in maintaining and measuring consistent variables between the experimental and control groups. Quantitative PCL-5 PTSD questionnaires would be used pre- and post-art therapy integration to measure increases or decreases in symptoms (National Center for PTSD, 2022). The PCL-5 PTSD questionnaire would also be administered to the control group pre- and post-KAP treatment(s) in order to track and compare measures with the experimental group. Additionally, MEQ-30 questionnaires would be utilized to determine whether MEs were present in participants' ketamine treatments in both the experimental and control groups (MacLean et al., 2012).

Both groups would be surveyed with Likert scales (ranging from "I highly disagree" to "I highly agree") in order to gather and assess phenomenological data on their experiences of integrating their ketamine treatments. For example, these surveys could include questions that ultimately assess whether art therapy integration increased participants' ability to make sense of their ketamine experiences, create meaning, and glean insight regarding their repressed trauma and/or MEs (if applicable). If experimental group participants give consent, their art may also be used to collect further qualitative insights and identify possible mechanisms of action for the efficacy of art therapy integration. Finally, the results of all this data would be analyzed and compared to determine whether causal links exist between art therapy integration and an improvement in PTSD symptoms, high MEQ-30 scores, and positive survey responses. Followups after several months may also be necessary to track whether the experimental group was able to sustain longer periods of behavioral change and symptom remission. While the

results of this experiment could not be generalized beyond the context of KAP, they may serve as a springboard for researching art therapy in PAP settings with other psychedelic medicines.

Conclusion

An overview of psychedelic research revealed a primary focus on the safety and efficacy of psychedelic medicines in treating pervasive disorders including but not limited to PTSD, treatment-resistant depression, anxiety, obsessive-compulsive disorder, and substance use disorders (Dore et al., 2019, p. 189; Garel et al., 2022). In the United States, ketamine is the only legal psychedelic medicine, while others like psilocybin, MDMA, LSD, ayahuasca, ibogaine, and mescaline are restricted to either clinical research or indigenous use (Anderson, 2022; Dore et al., 2019, p. 189; Legal Information Institute, n.d.). Since illegal psychedelic medicines are still in the process of obtaining approval for clinical use from the Food and Drug Administration, few research studies have been conducted on post-treatment integration practices (Siegel et al., 2023, p. 3). It is clear that the law has yet to catch up to these breakthroughs in medical science, which has led to a shortage of research on important clinical-methodological considerations in PAP practice. This literature review concluded that there is valid research confirming the subjects addressed in its 4 subheadings: 1) the high efficacy of psychedelic medicines in the treatment of PTSD, 2) the high prevalence of ineffable healing MEs in PAP experiences, 3) the lack of non-verbal/art therapy integration in PAP contexts, and 4) the high efficacy of art therapy in the treatment of ineffable PTSD symptoms. When viewed holistically, this research supports the need to conduct experiments that determine the efficacy of using art therapy as an integration modality for repressed trauma and MEs with PAP clients.

Peer Review

This literature review was peer-reviewed by Abigail Carlin-Le on August 12, 2023, and suggestions for revisions included reformatting the headings and subheadings to reflect American Psychological Association standards, creating separate methodology and conclusion headings, and elaborating on prospective art therapy modalities for use in the proposed experimental design. Further, the acknowledgment of unknown or unpredictable considerations in the experimental design prompted the call for a deeper review of art therapy research in order to determine the best modalities for use in KAP settings, as well as the treatment of PTSD. All of these revisions were made prior to submitting this literature review.

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