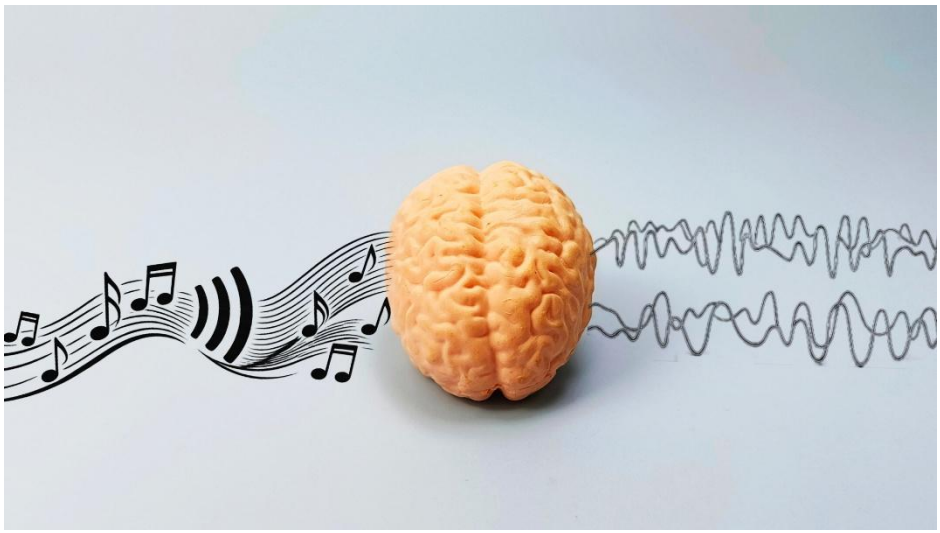
The Background Sound may be more than Music in Psychedelic Therapy

Recently, researchers conducted a narrative review of the existing literature to examine the role of music in psychedelic-assisted psychotherapy (PAP).



Study

A substantial proportion of patients with chronic and potentially severe mental disorders, such as treatment-resistant depression, do not achieve substantial symptom relief with standard pharmacological treatments. This shortfall has sparked interest in alternatives like psychedelic-assisted psychotherapy (PAP), which combines psychedelic substances with structured psychological support. During a PAP session, patients receive a carefully administered psychedelic drug, such as psilocybin, under the supervision of trained therapists.

PAP has shown the potential to rapidly reduce psychiatric symptoms, sometimes after just one session, with improvements associated with changes in a patient's sense of purpose, meaning, and emotional processing. Its effectiveness in larger, real-world trials has yet to be demonstrated, partly due to the complex interplay among psychological support, consciousness-altering substances, and contextual factors such as the environment and music.

Music stands out as a key contextual factor in PAP, often described as a "hidden therapist" that may influence the acute psychedelic experience, which has been closely associated with clinical outcomes. Its effects in PAP remain difficult to characterize and standardize, and clinicians lack clear, evidence-based guidance on its use.

Standardizing music and evaluating its effects in PAP is challenging because psychological support, psychedelics, music, and context interact throughout treatment. Viewing PAP as a complex intervention, with music as an active ingredient, may better reflect how these components work together. The recent review explores music's role in PAP, its effects, challenges, and directions for future research.

Music-based interventions (MBIs), including both music therapy and music medicine, show promise for improving mental health. Music therapy is an individualized, therapist-led process involving active or receptive musical engagement, while music medicine generally involves passive listening to prerecorded, self-selected, or prescribed music without a therapeutic

relationship. A meta-analysis of 55 randomized controlled trials found that both approaches were associated with reductions in depressive symptoms, though the evidence for music medicine was based on fewer studies and the interventions were not directly compared. A separate meta-analysis across diverse clinical populations found that music-based interventions improved health-related quality of life, with music therapy showing the largest pooled estimate for mental health-related quality of life. Inconsistent methods and limited evidence quality have slowed their adoption in psychiatric care.

Mechanistically, music activates an extensive network of brain regions crucial for emotion, memory, and reward, helping explain its powerful influence on mood and mental health symptoms. When someone listens to music, the auditory cortex first processes auditory information, decoding fundamental features like pitch, rhythm, and timbre and organizing them into coherent patterns. This auditory input then reaches higher-order brain regions responsible for emotional processing, including the insula, cingulate cortex, amygdala, and hippocampus. These limbic structures are deeply involved in generating and regulating emotional states, retrieving emotional memories, and attaching significance to musical experiences.

Music also strongly engages the brain's reward circuitry, particularly the striatum and dopaminergic pathways involving the nucleus accumbens and ventral tegmental area. Activity in these regions contributes to the pleasurable, motivating, and even euphoric feelings often associated with music, and helps explain why music can be so emotionally compelling and reinforcing.

Beyond these localized effects, listening to music modulates activity in large-scale brain networks, particularly the default mode network (DMN), which is implicated in self-referential processing, autobiographical memory, and emotional regulation. Music also engages salience, executive, and sensorimotor networks. Repeated musical engagement has been associated with longer-term neuroplastic changes in the brain.

Findings

PAP combines psychedelics, music, therapy, and context. Within PAP, music acts as more than a backdrop. It may actively guide the psychedelic experience. Music may influence emotional, mystical, and other acute subjective experiences during PAP, which have themselves been associated with subsequent clinical outcomes. Early studies suggest that participants' openness to, liking of, and resonance with music are associated with aspects of the psychedelic experience and short-term reductions in depression. Music may also provide temporal structure, emotional containment, and a means of modulating arousal.

Research into music's specific effects in PAP is subject to substantial variability in music selection and delivery. Psychedelic studies can also involve open-label designs, blinding difficulties, small samples, and inadequate controls. Many trials compare outcomes according to the psychedelic treatment participants received rather than the music they heard, making it difficult to estimate music-specific effects, and most tools used to assess musical experience have not been formally validated. Studies differ widely in playlist selection, personalization, timing, and sequencing, making it difficult to compare results or define best practices. Isolating music's unique impact from the effects of the drug, therapist, and treatment context is also inherently challenging.

To address these challenges, mixed-methods research that combines quantitative and qualitative approaches is needed to fully understand how these elements interact to influence outcomes. The review proposes standardizing music interventions based on their intended therapeutic or experiential function, rather than on specific genres, compositions, or playlists.

Clearly describing the functional purpose of each musical selection can make interventions more transparent and reproducible, while still allowing therapists flexibility to tailor music choices to individual needs, cultures, and contexts. This function-based approach could improve transparency and reproducibility while preserving flexibility across different populations and clinical settings.

Conclusion

Music is an important component of PAP, closely interacting with the drug, therapy, and setting to influence the treatment experience and potentially contribute to outcomes. Its effects are deeply shaped by the patient's psychological state and the therapist's guidance, highlighting the complexity of PAP. To address this, the review favors standardizing the intended function of music while allowing its form to vary according to individual needs, therapeutic goals, cultures, and contexts.

Looking forward, research should aim to develop clear models for the functional use of music in PAP and employ mixed methods to better understand how music interacts with other treatment elements. Standardized reporting and a focus on music's intended function could improve transparency, reproducibility, and adaptability. This approach could help researchers and clinicians evaluate, design, and implement music delivery more consistently across settings while accommodating individual and cultural differences.

Source:

https://www.news-medical.net/news/20260916/The-music-in-psychedelic-therapy-may-be-more-than-background-sound.aspx