

Psychedelic science and Indigenous shamanism: an urgent dialogue



The global expansion of the use of ayahuasca and other Indigenous medicines – alongside the rise of psychedelic therapies both covertly and overtly – is rooted in contact with Indigenous cultures and peoples. The surfacing of new ways of using forest medicines in urban areas has awakened diverse interests in the scientific community and the pharmaceutical industry. Together, these therapies are known to enhance neuroplasticity and to improve mood and cognition, relying heavily on setting to shape outcomes^{1–4}. The shift is not just about replacing daily antidepressants with occasional psychedelic use, but rather about psychedelic-assisted therapy (PAT) – personalizing the balance between drug, dose, person, and stimuli during the experience and in subsequent integration.

An emerging controversy involves the part played by the psychedelic experiential journey in determining the clinical outcome of PAT. Experiments in rodents with non-hallucinogenic analogues of psychedelics that enhance neuroplasticity without inducing a trip⁵ have been used to suggest that the therapeutic benefits of psychedelics derive solely from cellular effects, and not from the subjective experience *per se*, whose capacity to produce alterity would thus be considered a nuisance to be avoided.

This reductionist perspective misses the point of the path ahead. To increase neuroplasticity without producing alterity may suffice for mice, but in people this is questionable. The mental changes provided by psychedelics allow one to become one's own psychotherapist or anthropologist; it is an opportunity for self-exploration, and for diving into one's relationships with other human and non-human beings, nature, the cosmos, and the invisible spiritual world. Amerindian healing with sacred plants is grounded in sophisticated cosmologies and rituals that cannot simply be eliminated or sanitized.

For instance, Western society commonly avoids pain and discomfort at all costs. Yet, life inherently involves pain. A belief in using only the active components of therapeutic plants simplifies complex human suffering,

trying to quickly 'medicate' it. This avoids the essential process of self-reflection and facing pain. Western consumerist society seeks instant gratification. In Indigenous traditions, plant medicines are used within rich ritualistic contexts that comprise mental, physical, and spiritual dimensions. Synthesizing non-psychedelic agonists to bypass such discomfort disregards this holistic approach and eludes the sacred. This oversimplification contrasts with the shamanic approach to embrace inner exploration, community, and the sacred for deeper healing.

Increased neuroplasticity is just one component of PAT; an individual's personal history and characteristics (set) and the larger sociocultural context (setting) are equally essential. Simply making the mind malleable is not enough; both therapist and patient need to shape it in a collaborative manner. A well designed setting is fundamental, and not a trivial issue. The setting should be grounded not only in careful intentions but also in a wider sociocultural context that is open to the idea that sacred plants have agency and spirit. Of course, the ontological adoption of Indigenous shamanic cosmologies cannot be 'prescribed', but psychiatry must acknowledge that, by immersing oneself in intricate Indigenous ceremonies and traditions involving sacred plants, one may enhance healing and find a deep sense of belonging and meaning that cannot be disregarded. Also, a proper setting that recognizes the cultural legitimacy and roots of these traditions might help to prevent adverse effects.

Historically, psychiatry viewed shamanism as pathological before recognizing the shaman as a kind of community 'psychiatrist'. However, mental health treatments continue to be largely informed by biomedical understanding; at the same time, we continue to fall short in addressing global mental health challenges. Psychiatry would benefit from engaging more with social sciences, humanities, and Indigenous cultures skilled in therapeutic psychedelic use. Shamans are the world experts on PAT. Mainstream psychiatry would benefit greatly from direct consultation, exchange, and collaboration with shamans

and Indigenous spiritual leadership, unfolding in a horizontal dialogue that is also beneficial to their communities.

As psychedelics rise in global importance, respecting Indigenous communities is essential, and includes recognizing their intellectual property, ensuring fair benefit sharing and cultural visibility, and avoiding cultural appropriation⁶. The Convention on Biological Diversity and the Nagoya Protocol represent steps in the right direction. At present, 128 countries participate in this agreement about fair and equitable benefit sharing derived from genetic and cultural resources. However, major countries such as the USA and China have not joined this commitment to Indigenous rights.

Plant medicines in Indigenous traditions involve culture, history, songs, prayers, ceremonies, diets, environment, and collective subjectivity. Psychiatry must respect Indigenous populations by valuing their knowledge on plant medicines and recognizing traditional healing's holistic nature, involving self, community, and nature. It is essential to try to understand Indigenous cultures, avoid tokenism, genuinely listen, build trust, and foster long-term, collaborative relationships.

Mainstream psychiatrists and scientists would benefit from reading Indigenous leaders' declarations and statements asking for an end to abuse, extractivism, malpractice with sacred plants, and exploitation; for support for their political struggles; and for requests to be heard and consulted with regards to using sacred plants and developing new drugs, therapies, and scientific research^{7,8}.

The psychedelic renaissance must not devalue Indigenous knowledge or treat it as mere anecdote. Those who pioneered psychedelic discovery should be prioritized, fostering collaborations based on epistemological justice⁹. Recognizing that Indigenous knowledge systems are as valuable as biomedical research is crucial. Healing through psychedelics is not solely human-centered; it involves interdependence on each other and our planet. Psychedelic research and science must therefore be viewed politically: scientists need to practise cultural humility and engage in reciprocity with Indigenous peoples¹⁰.

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Competing interests

The authors declare no competing interests.