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## Psilocybin, moralization and psychotherapy: a scoping review and a case report

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### ABSTRACT

The resurgence of interest in psychedelic substances for psychiatric treatment has sparked both excitement and scepticism within the scientific community. This paper addresses the moralisation and hype surrounding psychedelic therapies. Through a systematic review of the literature and a detailed case study, we illustrate that the therapeutic effect of psychedelics is not solely pharmacological but is instead facilitated by their ability to enhance psychotherapy. The paper explores the historical context of psychedelics in psychiatry, their mechanism of action, and evidence of their efficacy in treating depression. We highlight the necessity of integrating psychedelics with psychotherapeutic interventions and emphasise the importance of methodological rigour and ethical standards in psychedelic research and practice. By presenting an informed understanding of psychedelic treatments, we advocate for their consideration as legitimate alternatives alongside traditional therapies, offering a potential paradigm shift in psychiatric care.

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## 1. Introduction

Despite the resources allocated and the availability of interventions, the global prevalence of depression continues to rise, accompanied by an increase in associated suffering and societal burden (Ormel et al., 2022). Critics often point out the lack of progress in the whole field of psychiatric pharmacology since the 1950s (Ghaemi, 2023), and some in the scientific community feel genetics in psychiatry hasn't met expectations (Abi-Dargham et al., 2023). Mental health experts frequently remind us that there are no “magic bullets” for most pathological conditions due to their

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causal complexity (Kendler, 2014), but more than that, diagnostic categories such as treatment-resistant depression (TRD) explicitly suggest the absence of effective treatment options, whether magical or otherwise (Gaynes et al., 2020).

In this context, recent studies and applications of psychedelic substances in psychiatric care are hailed as a revolution by the community of researchers, clinicians, and users. And as it goes with revolutions, they are condemned by others. It's worth noting that the study of these substances isn't new; research was active until the 1970s but was halted due to political concerns about the societal impact of recreational psychedelic use (Giffort, 2020). Therefore, the current interest in psychedelics for psychiatric treatment inherits the baggage of past political and social debates.

This suggests that, beyond the usual epistemological, methodological, and ethical questions posed by the scientific community towards new interventions, psychedelic treatments face additional scrutiny and enthusiasm, potentially affecting the quality of research and consequently of care. This is a common characteristic of scientific hype (Intemann, 2020) and of moralisation in medical research (Lalumera, 2023; Rozin, 1999).

Our agenda in writing this paper is to mitigate the effects of moralisation and hype surrounding psychedelic treatments. We do this in two ways. First, we introduce the concept of “psychedelic paradox,” which highlights that the therapeutic effect of these substances comes not from their direct pharmacological action but from facilitating effective psychotherapy. Recognising this paradox challenges some of the risks associated with psychedelic treatments when viewed through an amoral lens.

Second, we bolster our argument with a detailed case study from the experience of one of our authors as a therapist. This case demonstrates how psilocybin can enhance psychotherapy, illustrating the potential efficacy of psychedelic treatment while ensuring it can be safely integrated into therapeutic contexts, respecting patient autonomy, and offering an alternative to traditional treatments.

The paper is organised as follows: In the first section, we introduce the hypothesis that psychedelic treatment in psychiatry is a case of medical moralisation as well as a case of scientific hype, detailing these notions. In the second section, we summarise the evidence on the mechanism of action of psychedelic molecules on the human brain and on the effectiveness of therapeutic studies. The case study occupies the fourth and longer section. In the fifth section, we conclude with the insights that emerge from the case.

By presenting our case in this structured manner, we aim to encourage an informed understanding of psychedelic treatments and their potential role in psychiatric care. Rather than loosening methodological rigour or ethical

standards, we advocate for considering psychedelics as legitimate alternatives alongside other treatments, both for researchers and patients.

### **1.1. Revolution, moralization and hype**

In science studies and the philosophy of science, numerous scholars have raised concerns about the prevalence of hype. Following a detailed analysis by the philosopher of science Kristen Intemann, here we characterise hype as involving exaggerations regarding research findings, technological promises, and evidence supporting theories. Hype extends beyond the media to encompass grant applications, conference presentations, and even ethical discussions (Intemann, 2020).

The overarching worry is that hype can inflate public expectations beyond what science can deliver. When reality falls short, it erodes trust in science and dampens enthusiasm for technologies or medical interventions. Moreover, hype can lead to misconceptions about treatment efficacy and safety, hindering informed decision-making and potentially resulting in poor health choices and misallocated resources.

There is a considerable consensus on applying the hype concept to psychedelic interventions for mental health conditions (Hauskeller & Schwarz, 2023; Langlitz, 2023). Psychedelics are the new revolution in neuroscience and psychiatry, claims psychiatrist David Nutt in his popular latest book (Nutt, 2023). Psychedelic cures are deemed “revolutionary” and “breakthrough therapies,” but also “a bubble” that is about to burst (Davies et al., 2023; Baechle, 2022; van Elk & Fried, 2023; Yaden et al., 2022).

The current hype surrounding psychedelic therapies is influenced by several factors, including the presence of highly influential scientific and media figures who personalise the debate and tap into the perceived societal need for a radical cure” for psychiatry (Pollan, 2018; Nichols, 2016), an amedical field that suffers from recurrent crises of trustworthiness.

Additionally, unlike other contemporary cases of scientific hype, psychedelic cures have a highly politicised and controversial history, which is worth recalling here.

During the 1950s and 1960s, psychedelics were hailed as breakthrough therapies in the Western world, especially in the United States (Sessa, 2016). They were extensively researched for their potential in treating various psychiatric conditions, including depression, anxiety, and addiction, with over 1,000 papers published and around 40,000 patients tested (Grinspoon & Bakalar, 1998). These studies had serious methodological flaws by our current standards, but they showed promising results, generating excitement within the psychiatric community (Vollenweider & Preller, 2020), which sometimes took the form of partisan advocacy (Hall, 2022).

In the early 1960s, a significant sociological shift occurred: psychedelic drugs transitioned from the confines of psychiatrists' labs and therapists' offices to recreational use by the public (Schwarz-Plaschg, 2022). The so-called "counterculture" movement, which attracted many young people disillusioned by racial segregation, consumerism, and the Vietnam War, quickly embraced these substances (Gair, 2007). Psychedelics were believed to enhance open-mindedness and tolerance, core values of the counterculture (McGlothlin et al., 1970; Ungerleider & Fisher, 1967, p. 40). Seeking their own identity, the younger generation found an appealing means to explore it through mind-altering drugs (Barber, 2018, p. 159).

This trend prompted a strong counterreaction from the political and civil sectors. Some commentators describe the echo of this reaction in the scientific community as "moral panic" (Goode, 2008). Sensationalised media reports magnified scientific studies highlighting adverse side effects (e.g., Abramson, 1967), inciting public fear and political backlash (Lee & Shlain, 1992). Psychedelics were portrayed not only as dangerous but also as immoral and corrupting (Baechle, 2022). Combined with the lack of robust evidence of their efficacy in scientific studies and stricter pharmaceutical regulations following the Thalidomide tragedy, these counteractive forces led to the classification of psychedelics as Schedule I substances under the Controlled Substances Act of 1970. This effectively halted research due to regulatory restrictions and societal stigmatisation worldwide (Hartogsohn, 2020).

Despite the legal barriers and societal stigma, underground research and therapy efforts persisted for decades, albeit on a larger scale, until the recent renaissance, in which, as already noted, they are often hailed as a much-needed remedy to the crisis of clinical psychiatry (Sessa, 2016) (Giffort, 2020). Besides the scientific aspect, this Renaissance comes with a significant sociological shift. Psychedelics are now being reevaluated and promoted mainly by scientists that belong to the mainstream medical research community and are allied with the pharmaceutical industry, and this leads to their medicalisation, gradual reintegration into the social order, and decriminalisation in public perception (Conrad, 2007; Noorani, 2020).

Such a shift from counterculture to mainstream medicine, however, is now provoking significant criticism from sociologists, feminist epistemologists, and other humanities scholars. Some of them argue that the medicalisation of psychedelics represents an illegitimate appropriation of practices that have deep roots in alternative and indigenous cultures (Devenot et al., 2022). Traditionally, many indigenous communities have used psychedelics in spiritual and healing rituals for centuries, viewing them as sacred tools and community healing practices rather than mere pharmaceuticals (Bourzat & Hunter, 2019). The current trend of medicalising these substances, critics claim, strips them of their cultural and spiritual significance,

commoditising them within a Western biomedical framework. This process, they argue, not only undermines the cultural heritage and knowledge systems of indigenous peoples but also reflects broader patterns of cultural appropriation and exploitation (Williams et al., 2022). Other scholars stress the link between the psychedelic renaissance and Big Pharma, considered a harmful expression of neoliberalism or capitalism (Davies et al., 2023).

Our rapid overview shows that psychedelics swung from being good to bad in the last 80 years, with a strong moral connotation to these judgements. This contributes to the hypothesis that, in the case of psychedelic therapies, it's not just hype but also moralisation at play. As psychologist Paul Rozin explained, certain health-related behaviours in society transition from being seen as beneficial or detrimental to health goals (instrumentally good or bad) to being considered inherently moral or immoral, i.e., good or bad *per se*. Examples of moralisation include smoking, meat consumption, vaccination, and even the choice not to vaccinate, depending on the moral stance taken by different groups (Rozin, 1999; Rozin et al., 1997). Objects, medicines, and medical interventions can be moralised, too, becoming either good or bad based on their association with political figures, ideologies, or strongly held identity beliefs (Lalumera, 2023).

The process of moralisation imbues an object or behaviour with significant motivational force, whether in a positive or negative light. Individuals and institutions are more influenced by moral judgements of goodness or badness than by considerations of utility, rationality, or justice—a phenomenon referred to by philosophers as the overridingness of moral reasons (Arhiri et al., 2022). A treatment that is moralised tends to be either excessively or insufficiently prescribed, while an amoralised theme often becomes the subject of hype. Consequently, the moralisation of medical treatments or medications can deeply affect both medical practice and research endeavours (Lalumera, 2023).

There is evidence indicating the moralisation of psychedelic therapies among both their advocates and critics. First-wave users and supporters perceived them as “good” medicines due to their revolutionary nature, anti-establishment stance, natural and traditional origins, indigenous roots, and promotion of an aholistic understanding of human existence. As an example, consider this quote from Humphry Osmond, an American scientist of 1950s research and psychedelics’ name-giver:

I believe that these agents have a part to play in our survival as a species. For that, survival depends as much on our opinions of our fellows and ourselves as on any other single thing. The psychedelics help us to explore and fathom our own nature (Osmond, 1957), 429.

Conversely, as said, detractors traditionally labelled them as “bad” medicines, associating them with anti-scientific beliefs, irresponsibility, and

antisocial behaviour (Johnson, 2021). More recently, as psychedelic therapies are increasingly integrated into the mainstream medical research model, they are viewed as morally bad due to associations with individualism, hedonism, collaboration with Big Pharma interests, appropriation of indigenous practices, and alignment with capitalist agendas (Davies et al., 2023; Hauskeller & Schwarz, 2023; Noorani, 2020).

The moralization and its motivating power within the scientific community and among policymakers may explain both the lack of methodological rigor in several studies (we will discuss this below) and the stigma preventing experimental psychedelic therapies from being presented as viable alternatives for those seeking treatment, even in cases of a desperate condition (compassionate use) (Greif & Šurkala, 2020). In this article, we do not seek to prove the hypothesis of hype and moralization surrounding psychedelic therapies. Instead, we invite conditional acceptance of it and advocate for a deeper understanding of how these therapies work, including the psychedelic paradox and a case study that we will describe later.

## **1.2. Psychedelic drugs and psilocybin for depression**

In this section, we provide a brief overview of preclinical and clinical research on psychedelic drugs, with particular emphasis on psilocybin. We aim to summarise the existing evidence pertaining to three fundamental questions: Firstly, how does psilocybin operate within the human brain? Secondly, what is the relationship between its effects and therapeutic benefits, namely, the mechanism of therapeutic action? Lastly, what do we know about the therapeutic efficacy of psilocybin in treating depression? Our objective is not to furnish an exhaustive review but to provide sufficient groundwork to support our partially conceptual and partially empirical argument regarding the psychedelic paradox.

Originally coined by psychiatrist Humphry Osmond, the term “psychedelic” denotes substances that manifest the mind or soul, irrespective of their biological mechanisms (Osmond, 1957). Under this definition, drugs that directly activate the serotonin 5-HT<sub>2A</sub> receptor (commonly known as classic psychedelics), as well as those that indirectly activate serotonin receptors, do not affect them at all, or operate through a combination of receptors (including glutamatergic, dopaminergic, and opioidergic receptors), would all qualify as psychedelics if they facilitate greater access to the psyche akin to classic psychedelics. This broad definition encompasses various substances such as ibogaine, lysergic acid (LSD), psilocybin, ayahuasca, MDA, mescaline, and ketamine (Mitchell & Anderson, 2024; Nichols et al., 2023).

Psilocybin is an active agent contained in *Psilocybe* mushrooms, used for centuries by Indigenous communities in Central and North America. The



primary mechanism behind its emotional and cognitive effects is the activation of the 5-HT<sub>2A</sub> receptor, but adequate doses of psilocybin also induce broader neurochemical modulations, including changes in glutamate transmission (Nichols & Barker, 2016). Complete consensus on the molecular pathways involved is, however, far from being reached (McCulloch et al., 2023).

At the level that philosophers call "personal," there are many different kinds of subjective experiences that can be achieved with the use of psilocybin, according to the accumulating evidence. These may involve perception (perceptual intensification, hallucinations, intensification of colour, light, and sound, sense of clarity), emotion (fear, but more commonly happiness, awe, wonder, trust, empathy, bonding, closeness, tenderness, and connectedness), and sense of self (Swanson, 2018). This latter domain contains the most discussed of the psychedelic-induced experiences, both for their promising clinical applications and for their philosophical significance: "ego dissolution," subjectively characterised by a more or less complete merging with one's surroundings. More specifically, effects on the sense of self and ego manifest across the adose-dependent spectrum, ranging from subtle to profound. Subtle effects include a sensation as a softening of the ego, accompanied by heightened insight into one's habitual thought patterns, behaviours, personal issues, and past experiences – phenomena often leveraged in traditional psychotherapy (Grof, 2016). On the other hand, profound ego-effects involve the dissolution of the sense of self and "the loss of boundaries between self and world" (Millière, 2017, p. 1). Ego dissolution can also vary from pleasant to unpleasant, depending not on substance or dose but on factors such as personality traits, environment, expectations, and previous experience (Studerus et al., 2012). A closely connected but different experience is termed an 'expanded sense of self', and it is described as a special sensation of proximity to the world, other people, or oneself. It is easy to understand that connectedness facilitates active participation in psychotherapy. Currently, there are scales measuring both ego dissolution and connectedness so that subjective experiences can have a role in quantitative research (Kałużna et al., 2022).

Going back to preclinical studies, researchers' debate on what is the common mechanism that connects the biochemistry of psychedelics (and of psilocybin) to the array of different experiences just mentioned. One of the theories that aim at such a common-factor explanation comes from neuroscience, the so-called "entropic brain theory" of psychedelic effects. In a nutshell, it characterises the difference between psychedelic states and normal states of consciousness in terms of order and disorder, operationalised as an expansion of functional connectivity. Less technically, this means that the substance causes normally anticorrelated neural networks to



become simultaneously active, leading to a temporary rearrangement of neurofunctionality (R.L. Carhart-Harris, 2018; R. Carhart-Harris et al., 2014).

In the case of ego-dissolution, the rearrangement is the temporary disruption of the default mode network (DMN), which plays a crucial role in integrating motivation, emotion, and memory. Recent imaging studies of individuals who assumed moderate-to-high doses of psilocybin reveal a decrease in activity in the anterior cingulate cortex, a key node of the DMN. As DMN overactivity and overconnectivity have been observed in depressed individuals, researchers have formulated a hypothesis on the clinical significance of the ego dissolution experience, which brings us to our second question above: how are the effects of psilocybin (the experiences) connected with its therapeutical benefits? Here, the hypothesis is that depressive rumination correlates with an over-connected DMN, while the intense experience of ego dissolution correlates with a disruption of the DMN, inducing a beneficial shift away from typical neural connections associated with resting states towards alternative neural pathways, which are subjectively beneficial. In psychological terms, ego-dissolution would make it possible to abandon maladaptive beliefs so that the person is relieved from depressive patterns of thought (Nutt, 2023).

Note that here the implicit claim is that the subjective experience of ego-dissolution induced by psilocybin and not just the pharmacokinetics and pharmacodynamics of the molecule are key to its therapeutic effect. More generally, researchers tend to agree that subjective experiences and not just the drug are the healing factor (Noorani & Martell, 2021; Letheby & Gerrans, 2017; Yaden & Griffiths, 2020).<sup>1</sup> Moreover, it has long been acknowledged that the quality and emotional valence of induced subjective experiences crucially depend on site and setting, as mentioned above (Zinberg & Harding, 1979).

Let us now turn to clinical trials assessing the efficacy of psilocybin on clinical outcomes. It's important to note that strong results in clinical trials are generally regarded as solid evidence of efficacy, even in the absence of a complete understanding of the mechanisms underlying therapeutic action. This *prima facie* counterintuitive principle lies at the heart of evidence-based medicine, the dominant methodological paradigm in clinical practice, in spite of some criticisms (Clarke et al., 2013). In essence, if psilocybin is indeed effective in alleviating mental distress, the fact that we may not fully comprehend how it achieves this wouldn't necessarily diminish its value. However, understanding the mechanisms involved can lead to better-designed clinical trials and more robust hypotheses regarding the causal relationship between the substance and its effects (Howick, 2011).

At the time of writing, results are promising. Here, we will mention some of the most recent. A meta-analysis of five trials up to 2020, involving 136

patients with primary and secondary depressive disorder, concludes that psilocybin is well tolerated and has rapid and long-term antidepressant effects, especially in patients with major depression (Li et al., 2022). A pilot study conducted in 2016 showed that administering psilocybin (at doses of 10 mg and 25 mg) to patients suffering from moderate or severe depression seemed to be safe and well received (R.L. Carhart-Harris et al., 2016). Following this, a sponsored phase 2 study using the investigational drug COMP360 (a synthetic psilocybin formulation) enrolled 233 patients with treatment-resistant depression across 22 sites in 10 countries, finding efficacy but some adverse effects (Goodwin et al., 2022). In a randomised trial conducted between December 2019 and June 2022 at 11 research sites in the US, participants who received a single dose of psilocybin versus placebo, both administered with psychological support, had a reduction in depressive symptoms (Raison et al., 2023). Davis et al. (2021) report that in a randomised clinical trial involving 24 participants with major depressive disorder, those who underwent immediate psilocybin-assisted therapy demonstrated improvement in blinded clinician-rated depression severity and self-reported secondary outcomes compared to those who received delayed treatment, with these positive effects sustained up to the 1-month follow-up period. In a Swiss-based double-blind randomised trial with 52 participants with major depressive disorder, those in the psilocybin condition showed a decrease in symptom severity compared to their initial assessment and a significantly larger one than those in the placebo condition (Rotz et al., 2023).

It is acknowledged that limitations abound in the internal and external validity of these studies due to the relatively small number of subjects, the scarcity of multicentre studies, and potential issues arising from participant selection, from the difficulty of “masking” (concealing to participants whether they are receiving psychedelics or placebo), and from the risk of bias in sponsored trials (Aday et al., 2022; Mertens et al., 2022). However, the most pertinent issue —both for our paper and potentially for research on the therapeutic efficacy of psilocybin —is that the assessment of safety and efficacy extends beyond the molecule itself to include the combination of psilocybin with psychotherapeutic treatments or psychological support. This presents a classical case akin to the Duhem-Quine thesis in philosophy of science, where the hypothesis cannot be evaluated in isolation from other factors (Stanford, 2009). In this scenario, determining what is truly safe and effective —the molecule, the treatment, or the synergy of both —remains elusive. The role of “set and setting” and of placebo effects can also be relevant in this context (Hartogsohn, 2020; Noorani & Martell, 2021).

From a methodological standpoint, the situation is further complicated by the fact that “treatment” may stand for a variety of interventions. At a minimum, these include non-drug preparation sessions prior to

administration, medicine sessions in which the psychedelic medicine is administered, and non-drug integration sessions after the time of administration (Horton et al., 2021). Optionally, cognitive behaviour therapy, motivational enhancement therapy, acceptance and commitment therapy —to mention the most salient alternatives only —are also provided, accompanying or closely following the psychedelic experience (McCulloch et al., 2023). This makes it difficult to filter out what the clinical trial evidence is evidence of. This worry is articulated in recent studies:

We continue to ponder what psychedelic treatment really is and can become: a medical treatment with psychological support?; psychotherapy assisted by psychedelic medicine?; or an integrated treatment modality? Such ponderations have been the focus of extensive public debate, highlighting this as a key knowledge gap in psychedelic medicalisation (McCulloch et al., 2023, p. 4)

It is important to recognise that all the included studies were conducted in carefully screened volunteers. All subjects were closely monitored during treatments and had continuing contact with researchers after treatment sessions. Moreover, psychotherapy and relaxing environments, including comfortable nursing with soothing music during the sessions, help mitigate mental distress to some extent, which may have amplified the curative effect of psilocybin. In support of this, previous studies suggested that a combination of medication and psychotherapy results in earlier remission than medication or psychotherapy alone (Li et al., 2022, p. 32)

Any complex interaction with a therapist during the active drug experience clearly complicates interpretation of treatment outcomes; therapist expectations could create conditions ripe for mutual unblinding and the amplification of demand characteristics. Additionally, the harms that can result from the interactions between therapists and patients during a psychotic experience may not be fully appreciated (Goodwin et al., 2024, p. 20)

While recognising that the practical inextricability of drug and therapy in therapeutic psychedelic research may be a methodological problem, we also believe that it may have a positive effect in deflating the moralisation of psychedelic drugs. This is what we are going to argue in the next section and eventually illustrate with our case study.

### **1.3. The “psychedelic paradox” and moralisation**

The methodological problem illustrated at the end of the previous section can be described as a “psychedelic paradox”. Here is our psychedelic paradox: at least for now, we can only ascertain the effectiveness of psychedelic molecules in conjunction with psychotherapeutic treatment (or psychological support in a controlled setting —we will omit this qualification in what follows, for brevity). Therefore, if the results are positive, we still cannot treat people with the drug alone (a result that, in general, one would expect

from a pharmacological trial). Paradoxically, positive clinical trials on the effects of psilocybin on depression would confirm that psychotherapy is indispensable. This is reflected in the recent definition provided by the recently established Psychedelic Access and Research European Alignment (PAREA):

the drug is a catalyst for treatment, not a treatment in itself. ...In other words, psychedelics' novel therapeutic value stems from their role as enhancements to a psychotherapeutic process, grounded in a relationship-centered approach that views mental health through a biopsychosocial lens (quoted in (Goodwin et al., 2024, p. 20)

The concept of the psychedelic paradox revolves around assigning the psychedelic substance the role of a channel drug. Essentially, the transformative experience induced by the psychedelic substance and the threshold needed to induce altered consciousness states are not inherently healing agent. The psychedelic journey itself does not directly cause the promising improvements observed in clinical trials. Unlike most medicines, where the active components directly act on the cause or alleviate symptoms of illnesses, the therapeutic potential of psychedelic therapy does not solely rely on the ingestion of the drug. Instead, as far as we now know, the psychedelic substance acts as a conductor or facilitator, allowing patients (and indirectly therapists) access to a profound emotional dimension with conscious and heightened awareness. This access, facilitated by reduced inhibitions and altered perceptions during the hallucinatory phase, creates enduring pathways of inner knowledge and emotional understanding. In philosophy, a similar position is expressed by Chris Letheby (2015).

We must here note that the psychedelic paradox imposes methodological rigour on psychotherapy and responsibility on the referring community (Holoyda, 2020). The success of psychedelic medicines must not entail the absence of any form of therapeutic assistance. Some authors have already highlighted the potential harm to patients resulting from therapeutic abuses and unprofessional conduct and the risk posed if therapeutic treatments associated with psychedelia are not as closely monitored as the molecule itself (McNamee et al., 2023). To guarantee the safe and responsible clinical application of psychedelics, rigorous ethical and practical standards must be developed and widely disseminated to align with the profound effects these compounds can have on individuals. One solution could be to plan and implement standardised training for psychotherapists who will conduct psychedelic therapy (Gründer & Jungaberle, 2021), while another could be to resort to therapy models already in use in practice, which we know to be safe and effective (although based on a different type of evidence than that required for a drug), in line with the precautionary principle. We will see that our case study belongs to the latter type.

Let's get to our main point: How can the psychedelic paradox deflate the moralisation and hype (that we've hypothesised) surrounding psychedelic therapy research, which plausibly compromises its quality to the detriment of individuals? The concept of the psychedelic paradox prompts us to perceive psychedelic therapies as an evolved form of psychotherapy, or at least as part of the biopsychosocial framework prevalent in contemporary mental health practice. Within this paradigm, substances like psilocybin can be integrated into traditional, ideally personalised, and contextually tailored psychotherapeutic approaches (Noorani & Martell, 2021). They do not embody the "magic bullet" ideal of pharmaceutical companies, nor do they signify a radical departure from conventional medical norms as embraced by anti-medical countercultures.

This portrayal diminishes the revolutionary allure attributed to psychedelic therapies, which underpins much of the hype surrounding them. By the same token, it also mitigates concerns surrounding moralisation. By integrating psychedelic therapies into traditional psychotherapy, they cease to be viewed as rebellious or anarchic forces challenging the established order (bad drugs). Yet, they also shed the mantle of being entirely transformative or rooted in notions of purity and tradition (good drugs). Instead, they represent an innovative addition to the familiar paradigm, with its own merits and limitations. There's a growing acknowledgement of the necessity for multidisciplinary approaches to mental health within this context.

#### **1.4. A case report: Psilocybin and therapy**

This long section contains a case report from the University Hospital of Genève that comes from the experience of one of us as a therapist. All the ethical obligations have been fulfilled.

The patient is 36 years old and of Chinese descent. She has been married for five years and has a two-year-old son. She has a degree in economics and works in the field of businesses related to environmental development. She realised part of her studies were in the United States, where she met her husband, also of Chinese descent but a naturalised American. She currently lives in Geneva, where she has been settled for about 8 years with her husband. She works at 60% after an episode of severe psychiatric illness that occurred with postpartum depression. The patient is a dynamic, moderately sporty, and sociable woman. She has a relationship with her husband that she describes as balanced with moments of relational ups and downs. The birth of their first child is an experience of joy, and the couple plans to have a second child soon. She has contacts with her family in China that she meets regularly, once or twice a year. There are no cases of psychiatric disorders with potential genetic transmission, such as schizophrenia or bipolar syndrome, in her family. She does not use drugs; she tried a few

joints in adolescence, with a potential calming effect, but has not used them since. She has never used psychedelics or similes. Patient has been known to have a GAD (generalised Anxiety Disorder) for many years, for which she has been seeing a mental health specialist since her high school and college years in China.

The patient managed, despite a characteristic structure based on perfectionism and control, to achieve excellent academic results. The disorder further evolved in the form of panic attacks, some of which related to the accumulated stress of exam preparation. The patient then developed a true depressive episode with sad mood, abulia, and anhedonia, of which there is first evidence in 2009, during a phase of professional advancement, and after which she began treatment with serotonergic antidepressants, namely escitalopram 10 mg 1×/j, and hypnotics to stabilise sleep disturbance resulting from the depressive disorder, namely Zolpidem 10 mg 1×/j. The patient does not follow this first treatment regularly and due to poor compliance, she will also discontinue her first psychotherapeutic course. The second depressive episode corresponds to 2014, a date corresponding to several significant events, including love and marriage proposal; in particular, the patient will present a severe panic attack the day before the wedding, which will convince her to resume a course with a psychiatrist. The new therapist begins to follow her regularly, including the period of her pregnancy, where she consults the inpatient psychiatry team of the Geneva Psychiatric Hospital for the first time. The new diagnosis is that of postpartum depression, with feelings of inadequacy with respect to her child and consequently of guilt and frustration leading her to have suicidal thoughts. She begins treatment with Zyprexa 5 mg 1×/day, an antipsychotic with sedative action, during the first weeks of postpartum, aiming for a stabilisation of the thymic episode and a sedative and anxiolytic effect, an antidepressant with combined serotonergic and noradrenergic action; and Venlafaxine 75 mg, whose dosage will increase progressively to 150 mg 1×/day over 2 weeks. Regular ECG checks will be made for QTc and side effects, which the patient does not accuse. Simultaneously, intensive psychotherapeutic treatment begins, with 60 min 2×/week sessions in the attack phase of the first month postpartum, until a reduction to 1 time per week 60 min at 2 months after the moderately severe depressive episode, and thanks to the patient's assiduity and the action of the antidepressant, it will reach a frequency of 1 time every 15 days at 6 months and once every month at 1 year of psychotherapy. The axis of psychotherapy chosen is cognitive-behavioural, with initial sessions aimed at behavioural activation with the formulation of a daily activity diary to target behavioural reactivation and the work of reformulating dysfunctional beliefs, such as those acting on her insecurity and identity fragility: "I will never be good enough to be a mother" or "Being a mother is a task". The patient will assiduously follow psychotherapy and antidepressant treatment

until she reaches a stable phase and remission after 1 year. At 2 years, a psychotherapeutic transition is made aimed at analysing resistance in therapy, as the patient wonders, “Am I advancing enough to deserve a new treatment?” and spontaneously requests to try psychotherapy with psychedelics. The therapist approves her request and formulates the report for the Swiss referral committee, which, after 2 months of analysing the patient's clinical case, accepts the request and gives the go-ahead for treatment with psychedelics. This treatment in Switzerland is chargeable, and there are specific costs in every centre licenced to perform this treatment. No preparatory examinations are required except for an ECG and routine tests to detect pregnancy status. There are no medical contraindications. Psychiatric contraindications such as a possible psychotic state have been ruled out, as has the risk of manic episode, given the absence of a diagnosis of bipolarism. For this specific case, the diagnostic indication for treatment was postpartum depression being treated but with a phase of resistance in psychotherapy.

#### *1.4.1. Treatment with psychedelics*

The patient had two sessions with psilocybin: a first attempt in December 2023 and a second in January 2024, with a progressive increase in dose from 15 mg to 25 mg of psilocybin. Each experience consists of two different sessions. During the first one, there is drug administration under nursing observation. The patient is invited to lie on a couch, using headphones with music or eye covers to facilitate isolation and the experience. The patient describes her first experience as a general failure; she is not sure of the effects felt whether she had dozed off or not. The session lasted 1 hour 30 minutes with accompaniment by an at-risk nurse, which was followed by a debriefing session with a psychotherapist, a referral psychiatrist and an expert in psychedelics. It appears from the joint discussion with the patient that this initial failure may be the phenomenological implication of the resistances felt lately in psychotherapy, where the patient set as her only goal to advance through psychedelics, equally coming into conflict with herself by feeding expectations and ambitions, thus applying the dysfunctional pattern known to her of negative control and anticipation. “Only with psychedelic therapy will I be able to advance; I have already tried everything”. This strong failure, together with the solid and compassionate psychotherapeutic bond, granted the patient the ability to want to trust herself more and to be able to finally reconsider her psychotherapeutic position and “let go the control”. Initially, the psychotherapeutic strategy was chosen to suggest and validate the patient's proposal to increase the dose of psychedelic, thus determining both a therapeutic contract and the mobilization of a momentaneous frustration on an external object, namely the psychedelic. Note that in this first experience, the patient was on



antidepressant 150 mg 1×/day treatment. Although there is no evidence of direct interaction between SNRI antidepressants (Serotonin and norepinephrine reuptake inhibitors) and psychedelics, applying the good practice of treatment simplification, it is suggested to avoid the co-administration of psychotropics. So, to gain more experience with psychedelics, it is suggested in the second experience to progressively reduce the drug with decreasing doses of 50 mg each, with a complete wash-out 1 week after treatment.

The report of the second debriefing is then described: the patient had a session with 25 mg psilocybin this time with greater effects; she describes a strange space-time feeling” in which she would “lose control of herself”. She neither fainted nor had episodes of vomiting; she would experience mild nausea, which was probably attributed to her lactose intolerance. Moreover, the patient did not fall asleep. She performed the session with headphones and background music, which she freely chose. The patient reiterates that this strange sensation of space-time leavening, in which she would lose control, would be difficult to describe; she explains that in the peak of the effect occurring at about 40 minutes after administration, she would recall the voices of her son and husband, in the form of auditory memories in which she would call their names, but without alarm. The patient does not rephrase nightmares, let alone intrusive or fearful thoughts. She describes the experience, in her own words, as “captivating”.

#### *1.4.2. Discussion: Patient transference and experience*

Later, the patient spontaneously evokes other reflections that would have been generated during the psilocybin experience phase, that is, moments of confusion, in which she would even ask herself, “Where am I? Who am I?”. These questions were reanalyzed in session with the patient in the debriefing, and thanks to previous psychotherapy and improved self-awareness of illness, the patient was able to highlight how her mood disorder, i.e., a postpartum depressive disorder, was such that it also called into question her identity, going, on the one hand, to question the more intimate personal cores, i.e., in her case related to the pattern of personal insecurity, as well as those more structured with her experience in the form of identity crisis. The patient considers herself globally satisfied with the treatment: although she did not achieve an outcome as imagined, that is, with more intense ideobehavioral dissociation, including psychedelic scenarios and imagery, she reports moderate satisfaction at having “experienced” some questions fundamental to her psychotherapeutic progression, including the first related to loss of control experienced as a need as well as the more purely existential questions about underlying fragile identity.

During the debriefing session, the psychotherapists engage in reconstructing the session by helping the patient reconstruct her experiential experience. An initial reference is made to the sense of “loss of control”

that would have aroused in the patient; in fact, the psychotherapist evokes how this feeling is more of a true experiential need for her than a mere sensation, if one considers that her fundamental psychiatric disorder, i.e., the generalised anxiety disorder that has plagued her for more than 20 years, manifests itself in dysfunctional coping with control and anxious anticipations. The patient, who for years has in fact been permeable to the reflections of psychotherapy, turns out, however, to be more interested in this common experience, which, having been achieved through the utilisation of psychedelics, can be a new personal tool to enlarge her insight.

## 2. Conclusion

The conclusion of the article underscores the intricate relationship between psychedelic treatment and psychotherapy, encapsulated in what can be termed the “psychedelic paradox.” This paradox highlights a fundamental conundrum: the efficacy of psychedelic treatment cannot be accurately assessed without concurrent psychotherapy. Consequently, evidence supporting the benefits of psychedelic treatment also inherently supports the efficacy of psychotherapy. Moreover, this symbiotic relationship diminishes the revolutionary potential of psychedelic therapy.

By acknowledging this paradox, we can deflate the hyperbolic narratives and moralising tendencies often associated with psychedelic treatments. It becomes clear that drawing striking conclusions from individual case reports is premature. Instead, such cases serve to illustrate the role of substances like psilocybin as adjuncts within a therapeutic framework rather than standalone revolutions or magical solutions.

The featured case study exemplifies this concept, showcasing the successful integration of psychedelic therapy as an alternative approach for postpartum depression. Acting as a therapeutic bridge, it facilitated the gradual discontinuation of antidepressants while offering profound insights into the patient’s psyche. Importantly, this innovative therapy does not aim to supplant conventional treatments for mood disorders but rather to complement them.

Even in conditions like postpartum depression and generalised anxiety disorder, where antidepressants are the primary treatment, this case study demonstrates how innovative approaches can pave new paths for psychotherapeutic exploration. It also challenges the notion of therapeutic stability as an absolute requirement for progress in psychotherapy.

Ultimately, the psychedelic paradox emphasises the need for an informed understanding of psychedelic therapies within psychiatric care. Rather than viewing them as revolutionary panaceas, they should be seen as valuable tools within the international therapeutic toolkit. This calls for responsible

integration alongside established treatments, encouraging a balanced approach that prioritises patient well-being over sensationalism.

## Note

1. There are dissenting voices; see Goodwin et al., 2024.

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No potential conflict of interest was reported by the author(s).

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