Psychedelic Mystical Experience: A New Agenda for Theology

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Abstract: When the link between psychedelic drugs and mystical states of experience was first discovered in the 1960s, Huston Smith challenged scholars in religion and philosophy to consider the implications. Very few took up his challenge. Beginning in 2006, hundreds of studies have linked psychedelics not just to mystical states of experience but to potential treatments for many mental health disorders. Regulatory approval for therapies is on the horizon, and hundreds of millions of people worldwide could be treated. Research findings challenge the underlying rationale of the War on Drugs, leading to decriminalization of specific psychedelic drugs or to authorization of their use in mental health contexts. Religious institutions are slowly adapting, with some referring to psychedelics as sacraments or as pathways to deeper spirituality. Religious leaders are also beginning to speak out publicly in support of careful use of these drugs, and some are training to become “psychedelic chaplains” to work alongside mental health professionals administering these drugs. Scholars in theology and religion are encouraged to engage these trends, to explore challenging philosophical and theological issues surrounding mystical states of experience in general, and to consider the long-term cultural impact of the most recent psychedelic research.

Keywords: psychedelic drugs; mystical experience; psychedelic therapy; Huston Smith; psychedelic spirituality; psychedelics and religion; psychedelics and theology; psychedelic churches

1. Introduction

In 1964, when it was first being discovered that psychedelic drugs were somehow linked to mystical experiences, Huston Smith posed a simple question: Do drugs have religious import? (Smith 1964). Writing in the Journal of Philosophy, Smith argued that when people take LSD or psilocybin, their experience can be profound, deeply meaningful, and religiously significant. He cited the available evidence, which was largely anecdotal and meager by today’s standards.

We know enough, he said. It is time for scholars in philosophy and theology to pay attention. Reciting the evidence that drugs such as LSD and psilocybin are associated with mystical experiences, Smith laments that “students of religion appear by and large to be dismissing the psychedelic drugs . . . as having little religious relevance” (Smith 1964, p. 517).

Some might argue that psychedelics experiences are no more spiritually profound than a coffee buzz or a beer keg hangover. But if, as Smith believed, the experiences they seem to induce are phenomenologically indistinguishable from the deepest experiences of the greatest mystics, then how can scholars in theology and religion simply dismiss or ignore them? Is that not willful ignorance of reality?

He asks himself whether we are witnessing a new round or “a reenactment of the age-old pattern in the conflict between science and religion. Whenever a new controversy arises, religion’s first impulse is to deny the disturbing evidence science has produced”. How else can we understand the “refusal to admit that drugs can induce experiences descriptively indistinguishable from those which are spontaneously religious”? Perhaps
what we are witnessing in this refusal is a modern-day “counterpart of the seventeenth-century theologians’ refusal to look through Galileo’s telescope or, when they did, their persistence on dismissing what they saw as machinations of the devil” (Smith 1964, p. 524).

Smith continues by claiming that “the fact that drugs can trigger religious experiences” is now “incontrovertible”. In 1964, “incontrovertible” might have been a slight exaggeration. But today, the word is too weak to describe clear evidence that cannot be discounted or denied. Smith dared his colleagues to “move to the more difficult question of how this new fact is to be interpreted” (Smith 1964, p. 524). His challenge, still unmet, is long overdue.

If theologians in 1964 had the equivalent of Galileo’s telescope, we have the Hubble. Just consider where we are today. Study after study from research laboratories confirms that psychedelic drugs such as LSD and psilocybin reliably induce or “occasion” intense subjective experiences that research volunteers see as mystical. These intense subjective experiences are linked to promising new treatment strategies for a wide range of mental health disorders, from major depression to traumatic stress to existential distress in facing life-threatening illness. Clinical trials are advancing steadily through the regulatory approval process. Not only do psychedelics induce intense mystical experiences. Current evidence seems to suggest that psychedelics have the potential to treat a range of mental health disorders because they induce such mystical experiences.

Various cities across the United States have decriminalized possession of many of these substances, part of a wider national and international movement involving legalization of cannabis, growing cries for a reversal on the War on Drugs, and rising outrage over the ongoing racial injustice of mass incarceration. Michael Pollan’s bestselling book, How to Change Your Mind, has generated a national conversation reaching across cultural and political boundaries (Pollan 2019).

Canada has already approved access to psilocybin under compassionate use regulation by those with life-threatening illnesses. Twice now, the United States Food and Drug Administration has granted a “Breakthrough Therapy” designation for potential psychedelic therapies. The state of Oregon has approved a plan to make psilocybin available as part of psychotherapy, with clinics and retreat centers already being organized.

Religious communities or churches, some with deep roots in traditional cultures and some newly conceived, are emerging especially in the US under the religious freedom clause of the Constitution. Leaders in Judaism and in traditional Christian churches are beginning to become more vocal in supporting the idea that these drugs and the mystical experiences they induce can play a positive role in the future of organized religion.

Smith’s 1964 article went on to become the most reprinted paper in the history of the Journal of Philosophy (Walsh and Grob 2005, p. 224). In an interview published in 2005, Smith looked back across the divide imposed by the War on Drugs, still confident in what he calls “occasions when the validity of this exuberance breaks through on people in unmistakable, undeniable, and life-transforming ways” (Smith et al. 2004, p. 225).

Our focus here is on what are sometimes called “classic psychedelics”, especially psilocybin, LSD, and dimethyltryptamine (DMT), which is present in the South American sacramental beverage ayahuasca. Other drugs such as MDMA work differently but are often included in some of the studies that will be considered. We begin by summarizing some of the research that shows the potential of psychedelics for mental health. Attention then shifts to the idea that these drugs induce mystical states of experience and what that might imply for the future of religion.

2. Psychedelic-Assisted Mental Health Therapy

Around the world, there is a growing awareness of a crisis of failure in dealing with the challenges of mental health. Despite massive spending, standard approaches in pharmaceutical research have produced very few successful new mental health therapies. By most accounts, the mental health crisis has been made worse by the COVID-19 pandemic. One possible bright spot on the horizon, however, lies in the direction of psychedelic-assisted mental health therapy. Clinical trials using a variety of psychedelic substances are under-
way at universities and pharmaceutical laboratories around the world. Publication after publication supports the claim that when used carefully, often together with psychotherapy, psychedelics have the potential to change fundamentally our ability to treat various mental disorders.

Biomedical research moves slowly through various stages or phases, each with clear limits and objectives regarding the safety and effectiveness of a candidate drug. Research involving psychedelic substances is no exception. Psychedelic substances are being studied in relation to various disorders, with work being conducted at all phases of research that range from the earliest “pilot studies” to Phase 3 clinical trials. Some substances being studied, such as MDMA (commonly known as “ecstasy”), are not usually considered “classic psychedelics”, but they are often included as part of a wider effort to look medically at drugs that have been dismissed as having no medical value. Research is most often funded by private philanthropy or by commercial interests. In October 2021, however, the National Institutes of Health in the United States made its first psychedelic research grant in fifty years with an award of approximately US$4 million to Johns Hopkins University for a double-blind, randomized trial to study the use of psilocybin to help smokers quit the use of tobacco.

If today’s research is any predictor of tomorrow’s treatments, we might expect that psychedelic treatments will be approved perhaps by the middle of the 2020s. The list of mental health disorders that may someday be treated by psychedelic-assisted therapy is long, and it includes widely diagnosed conditions such as “clinical depression” or major depressive disorder (MDD), substance addictions, post-traumatic stress disorder (PTSD), and obsessive-compulsive disorder (OCD). Research programs usually begin with exploratory or pilot studies that involve just a handful of research volunteers. Exploratory studies underway as of 2022 already “suggest potential benefits of psilocybin therapy in OCD, eating disorders and migraine suppression” (Kelly et al. 2021, p. 1). When a pilot study points to a promising therapeutic strategy, the work of research advances to randomized clinical trials. As of 2021, clinical trials are ongoing for “psilocybin therapy in MDD, bipolar disorder type II depression, alcohol use disorder, smoking cessation, cocaine addiction, opioid addiction, anorexia nervosa, depression in Mild Cognitive Impairment, OCD and various types of headaches” (Kelly et al. 2021, p. 1).

The sheer number of individuals who might someday be helped by psychedelic-assisted therapy is staggering. “Major depressive disorder (MDD) is a substantial public health concern, affecting more than 300 million individuals worldwide. Depression is the number one cause of disability, and the relative risk of all-cause mortality for those with depression is 1.7 times greater than the risk for the general public”(Davis et al. 2021, p. 482). In the United States, it is estimated that “10% of the adult population has been diagnosed with MDD in the past 12 months” with an annual economic burden of more than $210 billion (Davis et al. 2021, p. 482).

Numbers like that tend to attract attention from commercial enterprises and their investors. The personal finance magazine, Forbes, estimates that “prescription sales for depression is estimated to be $50 billion a year globally, while the mental health market is worth about $100 billion in annual sales. Biotech analysts say that FDA-approved psychedelic-assisted therapy could seize billions in annual sales if approved by the FDA” (Yakovicz 2021).

Commercial prospects aside, this research suggests that millions of people who are suffering from the debilitating despair of MDD will be helped. Researchers are summarizing the findings in words like these: “Our search documented robust positive and enduring effects of psychedelic treatment on measures of depression across several studies and research groups” (Aday et al. 2020, p. 183). The benefits are both dramatic and lasting. Another group reports: “These findings demonstrate that the substantial antidepressant effects of psilocybin-assisted therapy may be durable at least through 12 months following acute intervention in some patients” (Gükasyan et al. 2022).
In the 1960s, evidence was beginning to show that these drugs might offer help to those who face unusual anxiety or distress when diagnosed with a life-threatening illness. More recently, two separate studies reexamined the question and reported their findings in 2016. Between them, they found that approximately 85% of the “patients with life-threatening cancer reported increased life satisfaction or well-being six months post-psilocybin treatment. Many indicated that the experience was cathartic, led to a greater appreciation of life, and helped them come to terms with their own mortality”. These findings suggest that in the not-too-distant future, drugs such as psilocybin may play a healing role, not in treating cancer, but in helping patients cope as they live with it through the final stages of life. A summary of these studies continues with words that almost suggest that these drugs possess a kind of spiritual power. “Psychedelic treatment’s unique capacity to assuage distress related to dying has been demonstrated in several studies as researchers have found increased sense of continuity after death and death acceptance, as well as 77% of participants reporting less fear of death in another study” (Aday et al. 2020, p. 185).

Another study suggests that the distress-reducing effect holds up over time, not just for months but for years. Researchers found that “psilocybin-assisted psychotherapy was associated with large and significant reductions in anxiety, depression, hopelessness, demoralization, and death anxiety, as well as improvements in spiritual well-being at an average of 3.2 and 4.5 years following psilocybin administration” (Agin-Liebes et al. 2020, p. 161).

Remarkably, the psychedelic treatment seems to become more effective as time went on. “It is interesting to consider that certain domains of cancer-related distress, particularly certain key domains of existential distress, could continue to improve rather than diminish over time in relation to a single psilocybin session” (Agin-Liebes et al. 2020, p. 163). The report continues: “After 3 years, there were still reductions in anxiety, depression, hopelessness, and demoralization, death anxiety was significantly lower, and spiritual well-being was improved compared to baseline. After 4 years, 60–80% of the patients still showed significant reductions in depression and anxiety compared to baseline (Agin-Liebes et al. 2020).

What is it about psychedelic treatment, compared to all the other anti-anxiety treatments that have been tried, that gives it such unexpected and transformative potential? At least on the face of it, the evidence seems to suggest that the therapeutic power of psychedelics is mediated by the intense subjective or mystical experience that is commonly reported by those undergoing therapy. Leading psychedelic researchers are actively debating whether intense subjective experiences are necessary for effective therapy. Some argue that psychedelics are therapeutic because of the way they affect the brain at the level of neurons and networks, perhaps by stimulating neuroplasticity (Olson 2021; Sanders and Zijlmans 2021). Others insist that intense subjective experiences, however they might be defined, are a necessary component of therapy (Yaden and Griffiths 2021; Jylkkä 2021). A summary report on distress reduction notes that “participants overwhelmingly (71–100%) attributed subjective experiences of positive changes to the psilocybin-assisted psychotherapy experience, reporting improved well-being or life satisfaction, and rating it among the most personally meaningful and spiritually significant experiences of their lives” (Agin-Liebes et al. 2020, pp. 162–63). Another review of this research ends with this sentence: “Given the importance of spiritual and existential well-being in palliative care, psychedelics may play a unique role in enabling patients to address these critical issues in the last stage of their lives” (Schimmel et al. 2022, p. 30).

Other research teams are exploring even more possibilities for psychedelic-assisted mental health treatments. Future treatments for obsessive-compulsive disorder (OCD) seem promising (Moreno et al. 2006). Substance use disorders, such as excessive alcohol consumption, are also promising areas for research (Bogenschutz et al. 2015). Particularly interesting is the use of psilocybin in helping smokers quit the use of tobacco. A pilot study involving 15 volunteers reported that 12 of them, or 80%, were able to quit smoking, a success rate far higher than any other smoking cessation therapy (Johnson et al. 2014). Participants completed a survey called the Mystical Experience Questionnaire (MEQ), and
many of them (73%) rated their experiences with psilocybin as among the top five most meaningful experiences of their lives.

What was striking is that the higher the score on mystical experience, the greater the likelihood that they stopped smoking. In a follow-up study, the team of researchers reported that scores on the MEQ “correlated strongly, negatively, and significantly with a validated measure of cigarette craving . . . This suggests a link between strength of mystical experience during psilocybin sessions and clinical change in subjective effects that drive addictive behavior” (Barrett and Griffiths 2018, p. 14).

In the 2015 report, the team teased apart the mystical experience component from the general intensity of the psychedelic subjective experience. They claimed that the overall “intensity of psilocybin session experiences was not significantly associated with smoking cessation treatment outcomes, suggesting that mystical-type effects specifically, rather than general intensity of subjective drug effects, are associated with long-term abstinence” (Garcia-Romeu et al. 2015). They also suggested that the dramatic success rate in their pilot study hinted that psilocybin might prove to be useful in treating other substance use disorders: “Perhaps the most exciting implication is that this drug class could be used to treat a wide variety of drug addictions, including smoking, alcoholism, and opioid dependence, as well as non-drug addictions (e.g. gambling addiction)” (Garcia-Romeu et al. 2015).

One intriguing proposal for psychedelic therapy is to treat autism spectrum disorder. It has been shown that classic psychedelics can increase empathy and social connection. “These findings suggest a therapeutic potential of psychedelic compounds for some of the behavioural traits associated with autism spectrum disorder (ASD), a neurodevelopmental condition characterized by atypical social behaviour”. If so, can this approach help those who suffer from features of autism spectrum disorder, such as “reduced social behaviour and highly co-occurring anxiety and depression” (Markopoulos et al. 2021)? Obviously, more study is needed.

In view of these studies and of many others like them, we can say that we know that psychedelics have the potential to treat a wide range of mental health disorders. We do not yet know why. What is it about psychedelics that give them such wide-ranging potential? Researchers refer to this as a “transdiagnostic mechanism of action”, the capacity of these drugs to do something that helps people suffering from various disorders. One recent summary of research puts it this way: “The mounting evidence of the use of psilocybin as an adjunct to treatment of a variety of psychiatric conditions . . . suggests a transdiagnostic mechanism of action”.

As of 2022, the leading candidate for the “transdiagnostic mechanism” is the intense mystical experience so often associated with psychedelics such as psilocybin. The report continues by pointing out that in study after study, “the intensity of mystical-type experiences reported after psilocybin sessions was associated with favorable outcomes. Furthermore, cross-sectional studies have suggested that mystical-type and psychologically insightful experiences during a psychedelic session predict positive therapeutic effects” (Davis et al. 2021, pp. 486–87).

Not only do psychedelics offer new possibilities in the treatment of a range of mental health disorders, but the underlying reason for their effectiveness may rest in their capacity to induce mystical experience. Across the board, researchers in the field agree about the potential effectiveness of psychedelics. Disagreement and debate, however, surrounds the idea that mystical experience is the essential mediating factor, the “transdiagnostic mechanism of action”, that makes these substances so full of wide-ranging possibilities for therapy.

Before taking up that debate, we consider more fully what we are learning from research about the link between psychedelics and mystical experiences.
3. Psychedelics and Mystical Experiences

The concept of “mystical experiences” is a modern creation and is hard to define, but the central idea goes back at least for millennia. Such experiences may not happen every day, and often people who have them are reluctant to talk about them. But intense experiences with a religious or spiritual nature are common enough, and written reports of them are widely known.

In 1902, William James offered one of the first systematic accounts of mystical states of experience (James 2004). While James does not define mystical states, he does identify four qualities that they tend to have. Mystical states are ineffable, beyond description even by the person who has the experience. They have a noetic quality that makes them feel like “states of knowledge” that “carry with them a curious sense of authority” (James 2004, p. 210). For James, these two qualities are the essential features of mystical experiences, but he completes his list of four qualities by saying that these experiences also tend to feature transiency and passivity (Cole-Turner 2021).

A half century later, and just at the time when psychedelic drugs were becoming widely known, W. T. Stace expanded on what James had written. Stace added to the list of the features of mystical experiences (Stace 1960). His work was put to use almost immediately by Walter Pahnke in 1962 in what is known as the “Marsh Chapel” experiment. In the first scientific attempt to link psychedelics with mystical experience, Pahnke administered psilocybin and a placebo to a group of mostly theology graduate student volunteers. Huston Smith was present as a guide.

Wanting to find out whether his research volunteers underwent a mystical experience, Pahnke drew on Stace’s work to create a questionnaire. He devised questions that asked individuals to rate how their experience met the key features or categories of mystical experience. “The categories include (1) sense of unity, (2) transcendence of time and space, (3) sense of sacredness, (4) sense of objective reality, (5) deeply felt positive mood, (6) ineffability, (7) paradoxicality and (8) transiency” (Doblin 1991, p. 7). While the research design was not up to today’s standards, the results clearly showed the power of psilocybin to induce or to “occasion” mystical experiences, at least as they were described by Stace and measured by Pahnke. Any response that scored a strong positive response in each category was defined as “a complete mystical experience”, meaning that it is “complete” in the sense that each defined quality of mystical experience is present.

Pahnke’s work was derailed when governments regulated these drugs in the 1960s and by his own untimely death in 1971. The question of the link between psychedelics and mystical experience, however, was not forgotten. In 2006, a research report from the laboratory of Roland Griffiths and Johns Hopkins University marked the rebirth of scientific explorations regarding the connection between psilocybin and mystical states of experience. The main questionnaire used to measure mystical experience is known as the “Mystical Experience Questionnaire” (MEQ). It is based on Pahnke’s work, although it has been modified several times. In its most recent version, it includes 43 questions and is called the MEQ43. The MEQ used in the 2006 study asks volunteers whether they think their own experience matches any of the various qualities or features of mystical experiences as described by Stace and Pahnke.

According to the 2006 report, “Thirty-three percent of the volunteers rated the psilocybin experience as being the single most spiritually significant experience of his or her life, with an additional 38% rating it to be among the top five most spiritually significant experiences” (Griffiths et al. 2006, p. 11). Perhaps the most astounding finding is that “22 of the total group of 36 volunteers had a ‘complete’ mystical experience after psilocybin” (Griffiths et al. 2006, p. 9). If Huston Smith believed in 1964 that Pahnke’s findings demanded attention from scholars in theology and religion, how much more so do the findings of the Johns Hopkins team, beginning with the 2006 report.

At the end of their report, the researchers claim to have shown that under the right conditions, “psilocybin occasioned experiences similar to spontaneously occurring mystical experiences and which were evaluated by volunteers as having substantial and sustained
personal meaning and spiritual significance”. They follow this with another claim, stated in the dry language of a medical journal but profoundly significant for the future of religion: “The ability to prospectively occasion mystical experiences should permit rigorous scientific investigations about their causes and consequences, providing insights into underlying pharmacological and brain mechanisms, nonmedical use and abuse of psilocybin and similar compounds, as well as the short-term and persisting effects of such experiences” (Griffiths et al. 2006, p. 15).

Research continues, of course, in hopes of learning more about the potential uses of psychedelics for mental health but also as tools for understanding the human brain. New techniques in brain imaging offer highly precise ways of seeing what happens in various brain networks while LSD or psilocybin is active in the brain. In other words, how do the phenomenological states of subjective experience correlate with an objective view of brain states as seen through neuroimaging? Some are hopeful that by combining the use of psychedelics with brain imaging, new insight into the mystery of human consciousness might emerge. Other researchers are asking how psychedelic-occasioned mystical states compare with states attained by various forms of meditation.

One area of particular interest is to compare psychedelic-occasioned mystical states with “near death experiences” or NDEs. A recent study of NDEs noted how the descriptions of the experience compare to the findings reported by researchers studying psychedelics. According to the report, “the experience of ego dissolution retrospectively reported by our participants is rather intense . . . and comparable to what is reported after ingestion of psychedelics”. The report notes that “no direct comparison regarding the experience of ego dissolution between NDE and drug-induced psychedelic experiences has been carried out yet. As a matter of fact, it would be interesting to directly compare the sense of self experienced in NDEs and psychedelic experiences using a sample of people who experienced both types of experiences” (Martial et al. 2021, p. 8).

Not only are the experiences similar, but so are the long-term changes. “The most frequently reported changes after a classical NDE correspond to a more altruistic and spiritual attitude, an important personal understanding of life and self, decreased fear of death, as well as a trend towards less materialist values”, consistent with what is observed in studies involving psychedelics. What lies ahead for research? “Interesting questions to investigate include: what are the underlying neurobiological mechanisms potentially linking the two experiences? Do NDEs and psychedelic states reflect closely related brain states albeit via different means of induction?” (Martial et al. 2021, p. 9).

At the moment, any comparison between NDEs and psychedelic experiences offers more questions than answers. Given that psychedelic research can be induced in the laboratory, what light will it shed on NDEs? What is it about each, neurologically, that makes them similar phenomenologically? How is it that they are similar phenomenologically and in terms of the long-term consequences? Over time, how will theologians and scholars of religion come to think about the similarities and the differences between psychedelic experiences and NDEs?

4. Mystical Experiences by Many Names

Based on the research reported so far, there seems to be no getting around the fact that an intense subjective experience is necessary for most if not all forms of psychedelic-assisted therapy. If anything, it seems clear that the more intense the experience, the more likely the therapy will work at its highest level. “A guiding principle of psychedelic psychotherapy is that the occurrence of a profound, potentially transformative psychological experience is critical to the treatment’s efficacy” (Roseman et al. 2018, p. 2). Another team, reporting specifically on psilocybin therapy to stop smoking, has this to say: “Those participants who had stronger mystical experiences in psilocybin sessions were more likely to be successful in quitting smoking (Johnson et al. 2019, p. 92).

Across the board, there seems to be general agreement among researchers that for psychedelic therapy to work, intense subjective experience is necessary. “Regardless of the
terms chosen to define them, evidence suggests that profound psychological experiences can be predictive of subsequent psychological health” (Roseman et al. 2018, p. 2). But as this report intimates, perhaps we should not label the experience as mystical. The authors continue: “The so-called ‘mystical’ experience has been a classic problem area for mainstream psychology—if not science more generally. The term ‘mystical’ is particularly problematic, as it suggests associations with the supernatural that may be obstructive or even antithetical to scientific method and progress (Roseman et al. 2018).

It is entirely fair to say that the term “mystical” is often associated with religious experience or with claims about a supernatural realm. After all, the discussion of “mystical states” by William James appears in a book entitled *The Varieties of Religious Experience* (James 2004). It is also fair, however, to point out that this concern does not do justice to the idea of mystical states of experience as understood by James. He was not exactly a fan of organized religion. His view of mystical experience was widely inclusive, centered by familiarity of course in the Christianity of the West, especially Protestantism, but with examples drawn from other traditions, including what we might see as a kind of nature mysticism. James devotes considerable attention to Walt Whitman, noting with approval that the poet was often called a “pagan” but who for James is better seen as “the restorer of the eternal natural religion” (James 2004, p. 49). Mystical states, James says, are not the property or the protector of any religion or culture, having “neither birthday nor native land” (James 2004, p. 228).

More recently it has been suggested that we need to find a way to “naturalize” mysticism, to acknowledge its intensity and transformational powers while tamping down its religious connotations, perhaps by seeing them as simply one flavor among many that might be used to describe these experiences. For example, it has been proposed that mysticism be redefined in a way that is acceptable for those who object to going beyond the natural world in ways that are supernaturalistic or theistic. Instead of “supernaturalistic mysticism”, they advocate “naturalistic mysticism”, suggesting that the problem is not with the word mysticism but with its religious implications. What they advocate is the view that “... naturalistically acceptable religious and spiritual experiences induced by psychedelics centrally involve transcendence of the sense of self and feelings of interconnection with nature” (Letheby and Mattu 2022, p. 8).

If James considered Whitman a mystic, then maybe the advocates of “naturalistic mysticism” are on to something with their proposal. It is hard to imagine, however, that in today’s cultural setting, the word “mystical” can be severed so cleanly from religion that it will be acceptable to those who find religion objectionable. If “mystical experience” is not the most useful term for the intense subjective experience so often induced by psychedelics, however, then what words or phrases might be used? Some suggest words such as “awe” or “insight”. “Gaining insight into one’s thoughts, behaviours and experiences is thought to help reduce symptoms by enabling individuals to first understand their difficulties, reduce distorted negative beliefs and, eventually act on, and master these difficulties through conscious cognitive and behavioural changes” (Peill et al. 2022, p. 2). If mystical experience, as defined by the MEQ, tends to focus on what is beyond the individual, “our definition of psychological insight places greater focus on subjective personal insight bearing relevance to one’s own self and life, as opposed to insight of a transpersonal nature, related to such things as the nature of consciousness, life and existence” (Peill et al. 2022, p. 11).

The term “cognitive flexibility” to identify the “transdiagnostic mechanism” has also been suggested. One team proposes that “a potential transdiagnostic neuropsychological mechanism that may be targeted by psychedelic therapy is cognitive flexibility. Cognitive flexibility is broadly defined as the ability to adaptively switch between different cognitive operations in response to changing environmental demands” (Doss et al. 2021, p. 1). It is widely accepted that psychedelics have the power to shake up cognitive rigidity and to bring about cognitive flexibility. But can they do so apart from some sort of intense subjective experience more broadly defined?
Another term for the “transdiagnostic mechanism” proposed recently in the psychedelic research literature is “quantum change experiences”. We read that “quantum change is a more recently introduced concept that has significant overlap with mystical experience, but in addition to the phenomenology of the experience itself, quantum change emphasizes the persisting consequences caused by the experience. More specifically, quantum change experiences refer to sudden, distinctive, benevolent, and often profoundly meaningful experiences that are said to result in personal transformations that affect a broad range of personal emotions, cognitions, and behaviors” (Johnson et al. 2019, p. 92).

The term “quantum change” avoids any whiff of religion. For some it may stir up a faint memory of high school physics or chemistry or sound like a high-tech fix. Replacing “mystical states of experience” with “quantum change experience” shifts the semantic field in which the key phrase is embedded. It also shifts the emphasis from the intensity of the subjective experience to the suddenness of the change in outlook and behavior. The experience itself seems to recede if not disappear entirely in favor of behavioral change. Whether that is intended here is not clear, but it seems that a tilt from a humanistic to a behavioral approach is at stake.

It is true that no one will confuse “quantum change experience” with “mystical experience”. Not even James would link the two. He would, however, probably see an affinity between “quantum change” and “conversion”, a topic he addresses at length. If anything, “conversion” is even more tangled up with religion than is mysticism, at least as James sees it (James 2004, pp. 106–43). More than that, the term has been widely used, especially in Protestantism over the past 250 years, to identify the key religious moment in a person’s life. “Quantum change experience” has all the marks of a conversion experience and is even defined as such by its advocates. For example, we read that “such experiences, which have been described in anecdotal reports dating back centuries, have been variously labeled as mystical experiences, conversion experiences, religious experiences, peak experiences, transcendental experiences, transforming moments, or epiphanies” (Griffiths et al. 2018, p. 49).

Compared to the term “mystical states of experience”, the switch to “quantum change” and its link to “conversion” has the odd effect of bending the interpretation of this research in a peculiarly Protestant direction, specifically along the lines of classic American Evangelicalism. It tilts the focus away from the content of the experience, pointing instead to a dramatic change in an individual’s behavior. If the term “quantum change” is used, and if it is linked to the idea of conversion, Evangelical Christians will see this as a kind of “born again” experience. Some will probably embrace their psychedelic mystical encounter, acknowledging that it changed their lives and brought them to their faith even if they do not feel free to say so publicly.

On the whole, there seems to be no easy escape from the semantic challenge of finding the right name for the experience that has the full transformative heft to serve as the “transdiagnostic mechanism”. Anything short of “mystical experience” seems too weak, while anything vaguely mystical seems too religious. If James got it right by advocating a very wide meaning for the term, perhaps we can too. Naturalistic mysticism is clearly on the right track conceptually, but will it work in practice?

5. Psychedelics as a Pathway toward Spiritual Health

The potential for psychedelic-assisted therapy has attracted widespread attraction among researchers, drug companies, and investors. Little attention has been given to the capacity for these drugs to improve an overall sense of well-being. In the seminal 2006 report, we find this claim: “Seventy-nine percent of the volunteers rated that the psilocybin experience increased their current sense of personal well-being or life satisfaction ‘moderately’ (50%) or ‘very much’ (29%)” (Griffiths et al. 2006, p. 11). Looking back over a decade and a half of research, a recent report offers this conclusion: “Increased well-being is one of the most reliable psychological changes following a psychedelic experience” (Peill et al. 2022, p. 12).
Increased overall well-being is consistent with reduced depression or alleviation of distress in situations of life-threatening disease. As a concept, however, the idea of overall well-being is broader than the benefits of therapy. It calls attention to health in its broadest meaning, not only as treatment of disease but more akin to overall human flourishing or “spiritual health”. Therapy is included, of course, but the potential increases in well-being brought about by the careful use of psychedelics go to the core of the person. At the same time, they also radiate outward in the sense that they change social relationships with other human beings, with life in general, and with the natural world.

We read, for example, that “changes in personality and attitudes are among the most commonly studied long-term changes related to psychedelic use” (Aday et al. 2020, p. 185). It has been shown that the personality trait of “openness” increases significantly as a result of participation in a single psilocybin trial (Griffiths et al. 2011). This has been linked to “lasting improvements in mood and positive attitudes”, with “increased optimism and mindfulness” and with “nature connectedness”. One summary continues by noting that “these increases in connection seem to be broad and generalizable as studies also noted sustained improvements in social relations and altruism” (Aday et al. 2020, p. 185). Taken together, research using psychedelics points to “long-term changes in wellbeing and quality of life” (Aday et al. 2020, p. 185).

In the short term, psychedelics induce intense subjective experience. On a longer timescale, the intense experience seems to lead not just to specific forms of therapy but to an increase in overall well-being. More research is needed, of course, but already the evidence seems strong enough to support the conclusion that there can be a lasting, generalized increase in human well-being through the careful use of these drugs.

For decades now, researchers in the field have used the phrase “set and setting” to describe the two key dimensions of careful use. “Set” refers to what the individual brings to the experience, and “setting” refers to the context in which the experience occurs. Exploring more deeply the meaning of each term, we see that “set refers to an individual’s disposition and is broken up into two categories: long-range and immediate. The long-range set is composed of a person’s general personality characteristics and individual history, while the immediate set refers to a person’s expectations for using the drug and is heavily influenced by the motivation for using” (Neitzke-Spruill and Glasser 2018, p. 315).

What a person brings to the psychedelic experience influences what the person gets out of it. Because of the centrality of personal subjective experience in psychedelic sessions, expectations play a role here even more significant than the usual placebo effect common to all therapies. One way to think about this is to consider whether a person with some form of religious faith is likely to experience a psychedelic session in a way that is different from the experience of a convinced agnostic. Religious expectations can take many shapes, of course, and one way to define it is in terms of a generalized trust that leads to an open-minded sense of surrender to whatever may happen in the session. “Higher ratings of willingness to surrender are associated with stronger mystical type experience in both psychedelic experiences” (Millière et al. 2018, p. 20). Obviously, research into the role of religious expectation as a component of experimental “set” is challenging.

One study tries to ask whether religious expectations as a “set” variable have consequences in the quality or profile of the psychedelic experience. “We used whether or not a person identified as religious to measure long-range set and whether psychedelics are used with a spiritual intent to measure immediate set” (Neitzke-Spruill and Glasser 2018, p. 317). The study found that a “religious set” played a role:

“The present study examined whether there is a relationship between having a religious set (both identifying as religious and taking psychedelics with religious intent) and having mystical experiences when using psychedelics. We found a positive and significant relationship between a person’s religious set and having mystical experiences when using psychedelic drugs. As hypothesized, being religious and taking psychedelic drugs with religious intent were significantly related to having stronger mystical experiences when using psychedelic drugs.
Identifying with a religion significantly increased scores on the mysticism scale”.
(Neitzke-Spruill and Glasser 2018, p. 319)

The “religious set”—the general religious frame of mind and a willingness to enter into the experience with a sense of openness and surrender—plays a role in shaping the intensity and the quality of the subjective experience.

Just as “set” can be thought of in terms of short-term expectations and long-term personality characteristics, so “setting” can be thought of in terms of the immediate context and the broader cultural matrix. “Setting refers to the physical and social environment in which the drugs are being ingested, as well as cultural attitudes surrounding the use of such drugs”. Particularly worrisome in that respect are the lingering reverberations of the War on Drugs, especially the fact that “the U.S. does not maintain a cultural tradition accepting the use of psychedelics and is much more individualistic; thus, a person’s psychedelic experience will be largely shaped by individual values and beliefs” (Neitzke-Spruill and Glasser 2018, p. 315).

One key feature of the general cultural apprehension about psychedelics is the fear of the “bad trips”. No one is disputing the fact that sometimes, psychedelic experiences can be intensely difficult. They can bring to mind hidden emotions and memories, including trauma, that are ordinarily suppressed at lower levels of awareness, even to the point having been “forgotten”. A session with psilocybin, for instance, can include feelings of intense fear. In one study, “39% of participants (7 of 18) had extreme ratings of fear, fear of insanity or feeling trapped at some time during the session”. The same study reported that “forty-four percent of participants (8 of 18) reported delusions or paranoid thinking sometime during the session”. Difficult experiences during the session, however, did not seem to diminish the positive spiritual value of the experience when described after the session. According to the report, “these psychological struggles did not affect the overall rate of having ‘complete’ mystical experiences as rated by volunteers at the end of the session day” (Griffiths et al. 2011, p. 10).

Such experiences can be truly challenging. “An adverse reaction to psychedelics can include a ‘bad trip’ (in lay language) or a ‘challenging experience’ (in therapeutic language). Although there is no exact definition of such an experience, most involve feelings of fear, anxiety, dysphoria and/or paranoia, making it essential that the experience is prepared for, supervised and followed by extensive integration. These experiences are usually short-lived, that is, lasting the time of the experience, and are often found to be cathartic” (Schlag et al. 2022, p. 5). Studies so far seem to suggest that even a “challenging experience” can be beneficial in the long run, leading to the mental health or the spiritual insight benefits in much the same way as the more commonly reported blissful experiences. The presence of a skilled companion to guide the experience is important. Even in less formal or “recreational” settings, a responsible “trip sitter” is an essential element of safety.

Because psychedelics are powerful substances, general precautions must be kept in mind by anyone thinking of using them. Often, however, the fear generated by the War on Drugs exceeds the actual danger. Thanks to years of careful study, “research has repeatedly shown that psychedelics do not cause dependence or compulsive use” (Schlag et al. 2022, p. 4). Some believe that psychedelics are addictive. Based on research, however, it is more accurate to see them not as addictive substances but as treatments for addiction to other substances such as nicotine or alcohol, which are far more dangerous drugs than psychedelics (Schlag et al. 2022, p. 4). Special concerns about psychedelics remain, however, for anyone with a history of “psychotic illnesses such as schizophrenia, schizoaffective disorder, bipolar affective disorder, delusional disorder and severe depression” (James et al. 2020, p. 5).

Because of the pace of today’s research, our cultural “setting” is changing. Medical legitimation is leading to legalization or at least to decriminalization for personal uses. Licensed use by mental health professionals, working with individuals, groups, or in retreats, will change the way these drugs are regarded.
The future use of psychedelics for religious purposes remains unclear. Over the next decade, however, we will see expanded use in three contexts, each having religious dimensions. The first is personal use, sometimes called “recreational” but often with the intention of personal growth and spiritual enrichment. Second is the medical, psychiatric, and psychotherapeutic setting, which will expand rapidly when psychedelic-assisted therapies receive regulatory approval. In those settings, specially trained “psychedelic chaplains” should be available as desired by patients to help them with the spiritual dimensions of preparation and integration. The third context is that of religious institutions, including the role played by religious professionals, whether in congregational settings or in other forms of religious gatherings. Those who have used psychedelics are already in our houses of worship, even if they feel they must keep quiet about the most spiritually meaningful experience of their lives.

Working in the context of medical or psychiatric institutions, the challenge ahead for specially trained chaplains arises because of two factors. First, for many patients, the drug treatment experience will be intensely spiritual in its meaning. Second, the medical professionals need to stand back from the role of actively encouraging the patient to find spiritual meaning in the experience. Medical professionals can support their patients but cannot be seen as guiding them in their interpretation of religious, spiritual, or mystical dimensions of the experience. “The goal of the clinician should be a create an open and supportive environment where the patient can make her or his own meaning, if any, from such experiences” (Johnson 2021, p. 580).

In practical terms, what does this mean? Will we leave millions of patients all alone to “make their own meaning”? Surely some of them at least will want help in the work of interpreting what they will see as the most salient features of one of the top five experiences of their lives. Will secular medical institutions hire appropriately trained chaplains? Will there be enough of them to meet the need?

The notion of spiritual health is complex and multi-faceted. With the right kind of support in strengthening the cultural “setting” in which the psychedelic future of humanity unfolds, we can be hopeful that these developments will play a modest but useful part in the wider pursuit of spiritual health for individuals, communities, and humanity’s relationship with the natural world.

6. Psychedelics and Theology

The word “psychedelic” was introduced in 1956 by Humphrey Osmond, a pioneer in psychedelic therapy. In a letter to Aldous Huxley, Osmond writes a playful couplet: “To fathom Hell or soar angelic, Just take a pinch of psychedelic” (Grob and Bravo 2005, p. 7). Ordinarily the etymology of Osmond’s new word is explained by saying that the two parts of the word might be translated as “mind-manifesting”. The Greek word psyche, however, is more commonly translated as “soul”. What Osmond himself may have meant by psyche is unknowable, but his references to hell and angels suggests that religious connotations are not too far from his view. If psyche is taken to include “soul”, then perhaps we might wonder whether the word “psychedelic” means “soul-manifesting” as much as “mind-manifesting”. Do these drugs have the power to reveal the soul, the innermost center of the human person? Are they not tools for spiritual as well as psychological discovery? We know they have the power to reveal memories and thoughts hidden at deep levels of the mind. But what about the heart of the person, the essence, the “soul” not in a dualistic sense but as referring to the very core of the person? Everything we have seen so far from today’s psychedelic research suggests that “soul-manifesting” is a fair account of what is going on here.

In this final section, we ask what it would mean for scholars in religion and theology to take up seriously the challenge put in front of us in 1964 by Huston Smith, to view these drugs in their formidable “soul-manifesting” potential, and to reflect on the religious significance of their capacity to induce states of mystical experience. In his forty-year retrospective interview, Smith is asked why many of the hopes for psychedelics in the 1960s
ended in disappointment. One reason, he says, “may have been due to context, or the lack thereof. By ignoring the religious context of these substances, one failed to create genuinely holy experiences” (Smith et al. 2004, p. 232). Past failures aside, our question now is how religious leaders and institutions should respond to the newest research. How should clergy, whether congregational leaders or chaplains, prepare and lead in a new context? How should theological scholars contribute?

Institutional change needs to begin by updating official policy statements. At the moment, one of the largest Protestant denominations in the United States, the United Methodist Church, has this to say about psychedelics: “Psychedelics or hallucinogens, which include LSD, psilocybin, mescaline, PCP, and DMT, produce changes in perception and altered states of consciousness. Not only is medical use of psychedelics or hallucinogens limited, if present at all, but the use of these drugs may result in permanent psychiatric problems” (Book of Resolutions: Alcohol and Other Drugs 2016). This is pure War on Drugs rhetoric wholly unaffected by the past 15 years of research.

The Presbyterian Church (USA) has expressed its opposition to the War on Drugs and to the racially unjust mass incarceration that follows from it. In its most recent document, however, the church warns its followers about the dangers of these drugs. “Psychoactive drugs can mask emotional pain, preventing us from squarely facing the truth of our lives. They can distract and demotivate. They can promise the rewards of pleasure without summoning achievement or transformation. This, coupled with the human propensity to self-deception, is what makes some drugs so attractive, insidious, and disorienting” (Presbyterian Church (USA) 2018).

For religious leaders, what is needed most right now is to speak freely and openly about the healing potential and the spiritual significance of these substances, whether based on first-hand experience, second-hand knowledge, or on a careful study of the research. Today, some are ready to speak but are afraid to do so, knowing that they might suffer professional consequences. Others, however, have begun to speak and to organize their efforts to change the religious culture surrounding the use of psychedelics.

Two such organizations are Ligare, which calls itself “a Christian Psychedelic Society” (ligare.org accessed on 11 April 2022), and Shefa, which offers “Jewish psychedelic support” (shefaflow.org accessed on 11 April 2022). The founding core of both organizations were participants in psychedelic studies based at major medical research institutions. Although the results of those studies are not yet published, participants have begun to organize, expand, and mobilize for a future that may include religious retreats, depending of course on where and how drug laws will change.

In 2021, the Jewish Psychedelic Summit was held online, with recordings available on its YouTube channel at https://www.youtube.com/channel/UCc1wZmb0tbf96wq2LQth9g/videos. (accessed on 11 April 2022) Topics range from ending the War on Drugs to the role of psychedelics in religious history to the role they may play in the revitalization of mystical or religious experience today.

Alongside the traditional religious communities of Christianity and Judaism, new communities calling themselves “churches” are organizing in many places, particularly where decriminalization is occurring. By presenting themselves as religious organizations, these communities claim religious freedom to use psychedelics as sacraments, and courts have tended to support these claims. It remains to be seen how these new communities will relate to their more traditional counterparts.

In addition, the sacramental use of psychedelics is a defining feature of the “Native American Church”, which uses peyote routinely in religious ceremonies. Ayahuasca, a drink that contains several psychoactive substances, is regarded as a sacrament by followers of Santo Daime, which originated in Brazil but now is present in North America. Taken together, the new emerging communities and these older indigenous traditions create even greater complexity to the psychedelic religion landscape. Religious groups or churches that offer a sacramental psychedelic experience may seem far-fetched to most of today’s religious leaders, but not to Huston Smith: “I have entertained the possibility of an experimental
situation in which an established religious group—let’s just say a church, if it had interest in this direction—could include an entheogen” or psychedelic substance on a regular basis (Smith et al. 2004, p. 234).

Retreats that offer a religious context for a safe psychedelic spiritual journey are already clearly envisioned. William Richards foresees new possibilities for “retreat and research centers, staffed by professionals with both medical and religious training”. He acknowledges that “it may be a long time before psychedelic sacraments are incorporated into worship experiences” at the local level. But retreat centers, perhaps initially in states such as Oregon, could offer “individual and group support for the initial integration of psychedelic experiences” (Richards 2015, p. 177).

If today’s advances in psychedelic-assisted therapy lead to regulatory approval and widespread use of these drugs in mental health, if decriminalization continues to gain ground and triggers any significant increase among the cautious but curious members of the public, and if religious institutions old or new begin to weave the use of psychedelics into their spiritual practices, the result will be a significant, possibly profound cultural shift. This shift will not happen in isolation. The changes it brings will play out in a culture that increasingly sees itself as hostile to organized religion. Identification with traditional religion is already declining, but spirituality by any number of definitions seems to be gaining ground. Psychedelics offer a safe and powerful pathway to spiritual growth, almost as if these drugs were custom-made for a culture that sees itself as “spiritual but not religious”.

What should we think, then, about the future of spirituality and religion? Are we witnessing a kind of evolutionary step in the long history of human consciousness of a holy or transcendent dimension? Smith observed that “the phenomenon of religious awe . . . seems to be declining sharply” (Smith 1964, p. 530). He asks whether psychedelics have the potential to reverse that trend, to counter a centuries-long process of disenchantment in our view of nature and of anything that might transcend it. Stretching out the timeframe, we can wonder whether the discovery of the spiritual significance of psychedelic drugs will enable the next step in human exploration, not of distant planets or ocean depths but of the mysteries of human consciousness.

What, then, of the role of scholars in religion and theology? One immediate task is to interpret the latest research for wider audiences, not as journalists but as cultural interpreters who can make sense of the spiritual possibilities of our moment in time. How are we to understand the meaning of these psychedelic-induced mystical experiences? What role have mystical experiences, induced by drugs intentionally or accidently, played in the history of the world’s religions (Muraresku 2020)? What place can these experiences have among other disciplines and practices that people use to cultivate richly spiritual lives?

Psychedelic researchers often speak of the importance of personal “integration”, the process by which the individual participant tries to make some sense of a disruptive, intense experience within a longer narrative of one’s life. When it comes to the broader culture, confronted as we are now by a disruptive set of claims about the human mind and soul, who will help with the cultural “integration” process by trying to make a little sense of these findings within the longer narrative of the human adventure?

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References

Aday, Jacob S., Caity M. Mitzkovitz, Emily K. Bloesch, Christopher C. Davoli, and Alan K. Davis. 2020. Long-Term Effects of Psychedelic Drugs: A Systematic Review. *Neuroscience & Biobehavioral Reviews* 113: 179–89. [CrossRef]

Agin-Liebes, Gabrielle I., Tara Malone, Matthew M. Yalc, Sarah E. Mennenga, K. Linnae Ponté, Jeffrey Guss, Anthony P. Bossis, Jim Grigsby, Stacy Fischer, and Stephen Ross. 2020. Long-Term Follow-up of Psilocybin-Assisted Psychotherapy for Psychiatric and Existential Distress in Patients with Life-Threatening Cancer. *Journal of Psychopharmacology* 34: 155–66. [CrossRef] [PubMed]

Barrett, Frederick S., and Roland R. Griffiths. 2018. Classic Hallucinogens and Mystical Experiences: Phenomenology and Neural Correlates. *Current Topics in Behavioral Neurosciences* 36: 393–430. [CrossRef] [PubMed]

Bogenschutz, Michael P., Alyssa A. Forchheimer, Jessica A. Pommy, Claire E. Wilcox, Paolo C. R. Barbosa, and Rick J. Strassman. 2015. Psilocybin-Assisted Treatment for Alcohol Dependence: A Proof-of-Concept Study. *Journal of Psychopharmacology (Oxford, England)* 29: 289–99. [CrossRef]

Book of Resolutions: Alcohol and Other Drugs. 2016. The United Methodist Church. Available online: https://www.umc.org/en/content/book-of-resolutions-alcohol-and-other-drugs (accessed on 11 April 2022).

Cole-Turner, Ron. 2021. Psychedelic Epistemology: William James and the ‘Noetic Quality’ of Mystical Experience. *Religions* 12: 1058. [CrossRef]

Davis, Alan K., Frederick S. Barrett, Darrick G. May, Mary P. Cosimano, Nathan D. Sepeda, Matthew W. Johnson, Patrick H. Finan, and Roland R. Griffiths. 2021. Effects of Psilocybin-Assisted Therapy on Major Depressive Disorder: A Randomized Clinical Trial. *JAMA Psychiatry* 78: 481–89. [CrossRef]

Doblin, Rick. 1991. Pahnke’s ‘Good Friday Experiment’: A Long-Term Follow-up and Methodological Critique. *Journal of Transpersonal Psychology* 23: 1–28.

Doss, Manoj K., Michal Považan, Monica D. Rosenberg, Nathan D. Sepeda, Alan K. Davis, Patrick H. Finan, Gwenn S. Smith, James J. Pekar, Peter B. Barker, Roland R. Griffiths, and et al. 2021. Psilocybin Therapy Increases Cognitive and Neural Flexibility in Patients with Major Depressive Disorder. *Translational Psychiatry* 11: 574. [CrossRef]

Garcia-Romeu, Albert, Roland R. Griffiths, and Matthew W. Johnson. 2015. Psilocybin-Occasioned Mystical Experiences in the Treatment of Tobacco Addiction. *Current Drug Abuse Reviews* 7: 157–64. [CrossRef]

Griffiths, Roland R., Matthew W. Johnson, William A. Richards, Brian D. Richards, Una McCann, and Robert Jesse. 2011. Psilocybin Occasioned Mystical-Type Experiences: Immediate and Persisting Dose-Related Effects. *Psychopharmacology* 218: 649–65. [CrossRef]

Griffiths, Roland R., Matthew W. Johnson, William A. Richards, Brian D. Richards, Robert Jesse, Katherine A. MacLean, Frederick S. Barrett, Mary P. Cosimano, and Maggie A. Klinedinst. 2018. Psilocybin-Occasioned Mystical-Type Experience in Combination with Meditation and Other Spiritual Practices Produces Enduring Positive Changes in Psychological Functioning and in Trait Measures of Prosocial Attitudes and Behaviors. *Journal of Psychopharmacology* 32: 49–69. [CrossRef] [PubMed]

Griffiths, Roland R., William A. Richards, Una McCann, and Robert Jesse. 2006. Psilocybin Can Occasion Mystical-Type Experiences Having Substantial and Sustained Personal Meaning and Spiritual Significance. *Psychopharmacology* 187: 268–83. [CrossRef] [PubMed]

Grob, Charles S., and Gary Bravo. 2005. The High Road: History and Hysteria. In *Higher Wisdom: Eminent Elders Explore the Continuing Impact of Psychedelics*. Albany: State University of New York Press.

Gukasyan, Natalie, Alan K. Davis, Frederick S. Barrett, Mary P. Cosimano, Nathan D. Sepeda, Matthew W. Johnson, and Roland R. Griffiths. 2022. Efficacy and Safety of Psilocybin-Assisted Treatment for Major Depressive Disorder: Prospective 12-Month Follow-Up. *Journal of Psychopharmacology* 36: 151–58. [CrossRef]

James, Edward, Thomas L. Robertshaw, Mathew Hoskins, and Ben Sessa. 2020. Psilocybin Occasioned Mystical-Type Experiences. *Human Psychedelics Psychology: Clinical and Experimental* 35: e2742. [CrossRef] [PubMed]

James, William. 2004. *The Varieties of Religious Experience*. Overland Park: Digireads.com.

Johnson, Matthew W. 2021. Consciousness, Religion, and Gurus: Pitfalls of Psychedelic Medicine. *ACS Pharmacology & Translational Science* 4: 578–81. [CrossRef]

Johnson, Matthew W., Albert Garcia-Romeu, Mary P. Cosimano, and Roland R. Griffiths. 2014. Pilot Study of the 5-HT2AR Agonist Psilocybin in the Treatment of Tobacco Addiction. *Journal of Psychopharmacology* 28: 983–92. [CrossRef] [PubMed]

Johnson, Matthew W., Peter S. Hendricks, Frederick S. Barrett, and Roland R. Griffiths. 2019. Classic Psychedelics: An Integrative Review of Epidemiology, Therapeutics, Mystical Experience, and Brain Network Function. *Pharmacology & Therapeutics* 197: 83–102. [CrossRef]

Jylkkä, Jussi. 2021. Reconciling Mystical Experiences with Naturalistic Psychedelic Science: Reply to Sanders and Zijlmans. *ACS Pharmacology & Translational Science* 4: 1468–70. [CrossRef]

Kelly, John R., Claire M. Gillan, Jack Prendergill, Clare Kelly, Andrew Harkin, Gerard Clarke, and Veronica O’Keane. 2021. Psychedelic Therapy’s Transdiagnostic Effects: A Research Domain Criteria (RDoC) Perspective. *Frontiers in Psychiatry* 12: 800072. [CrossRef]

Letheby, Chris, and Jaipreet Mattu. 2022. Philosophy and Classic Psychedelics: A Review of Some Emerging Themes. *Journal of Psychedelic Studies* 5: 166–75. [CrossRef]

Markopoulou, Athanasios, Antonio Inserra, Danilo De Gregorio, and Gabriella Gobbi. 2021. Evaluating the Potential Use of Serotonergic Psychedelics in Autism Spectrum Disorder. *Frontiers in Pharmacology* 12: 749068. [CrossRef] [PubMed]
Martial, Charlotte, Géraldine Fontaine, Olivia Gossières, Robin Carhart-Harris, Christopher Timmermann, Steven Laureys, and Hélène Cassol. 2021. Losing the Self in Near-Death Experiences: The Experience of Ego-Dissolution. *Brain Sciences* 11: 929. [CrossRef] [PubMed]

Millière, Raphaël, Robin L. Carhart-Harris, Leor Roseman, Fynn-Mathis Trautwein, and Aviva Berkovich-Ohana. 2018. Psychedelics, Meditation, and Self-Consciousness. *Frontiers in Psychology* 9: 1475. [CrossRef] [PubMed]

Moreno, Francisco A., Christopher B. Wiegang, E. Keolani Taitano, and Pedro L. Delgado. 2006. Safety, Tolerability, and Efficacy of Psilocybin in 9 Patients with Obsessive-Compulsive Disorder. *The Journal of Clinical Psychiatry* 67: 1735–40. [CrossRef] [PubMed]

Muraretsku, Brian C. 2020. *The Immortality Key: The Secret History of the Religion with No Name*. New York: St. Martin’s Publishing Group.

Neitzke-Spruill, Logan, and Carol Glasser. 2018. A Gratitudeful Grace: The Influence of Religious Set and Intent on the Psychedelic Experience. *Journal ofPsychoactive Drugs* 50: 314–21. [CrossRef]

Olson, David E. 2021. The Subjective Effects of Psychedelics May Not Be Necessary for Their Enduring Therapeutic Effects. *ACS Pharmacology & Translational Science* 4: 563–67. [CrossRef]

Peill, Joseph M., Katie E. Trinci, Hannes Kettner, Lea J. Mertens, Leor Roseman, Christopher Timmermann, Fernando E. Rosas, Taylor Lyons, and Robin L. Carhart-Harris. 2022. Validation of the Psychological Insight Scale: A New Scale to Assess Psychological Insight Following a Psychedelic Experience. *Journal of Psychopharmacology* 36: 31–45. [CrossRef]

Pollan, Michael. 2019. *How to Change Your Mind: What the New Science of Psychedelics Teaches Us about Consciousness, Dying, Addiction, Depression, and Transcendence*. New York: Penguin.

Presbyterian Church (USA). 2018. Report on Drug Policy Reform: Putting Healing before Punishment. z. Available online: https://www.pc-biz.org/#/search/3000283 (accessed on 11 April 2022).

Richards, William. 2015. *Sacred Knowledge*. New York: Columbia University Press, Available online: https://www.degruyter.com/document/doi/10.7312/rich17406/html (accessed on 11 April 2022).

Roseman, Leor, David J. Nutt, and Robin L. Carhart-Harris. 2018. Quality of Acute Psychedelic Experience Predicts Therapeutic Efficacy of Psilocybin for Treatment-Resistant Depression. *Frontiers in Pharmacology* 8: 974. [CrossRef]

Sanders, James W., and Josjan Zijlmans. 2021. Moving Past Mysticism in Psychedelic Science. *ACS Pharmacology & Translational Science* 4: 1253–55. [CrossRef]

Schimmel, Nina, Joost J. Breckasma, Sanne Y. Smith-Apliedorn, Jolien Veraat, Wim van den Brink, and Robert A. Schoevers. 2022. Psychedelics for the Treatment of Depression, Anxiety, and Existential Distress in Patients with a Terminal Illness: A Systematic Review. *Psychopharmacology* 239: 15–33. [CrossRef]

Schlag, Anne K., Jacob Aday, Iram Salam, Jo C. Neill, and David J. Nutt. 2022. Adverse Effects of Psychedelics: From Anecdotes and Misinformation to Systematic Science. *Journal of Psychopharmacology* 36: 258–72. [CrossRef] [PubMed]

Smith, Huston, Charles Grob, Robert Jesse, Gary Bravo, Alise Agar, and Roger Walsh. 2004. Do Drugs Have Religious Import? A 40-Year Retrospective. *Journal of Humanistic Psychology* 44: 120–40. [CrossRef]

Smith, Huston. 1964. Do Drugs Have Religious Import? *The Journal of Philosophy* 61: 517–30. [CrossRef]

Stace, Walter Terence. 1960. *Mysticism and Philosophy*, 1st ed. Philadelphia: Lippincott.

Walsh, Roger N., and Charles S. Grob. 2005. *Higher Wisdom: Eminent Elders Explore the Continuing Impact of Psychedelics*. Albany: SUNY Press.

Yaden, David B., and Roland R. Griffiths. 2021. The Subjective Effects of Psychedelics Are Necessary for Their Enduring Therapeutic Effects. *ACS Pharmacology & Translational Science* 4: 568–72. [CrossRef]

Yakowicz, Will. 2021. How Seeing God Might Be the Secret to the Most Cutting-Edge Mental Health Treatments. *Forbes*. Available online: https://www.forbes.com/sites/willyakowicz/2021/12/23/how-seeing-god-might-be-the-secret-to-the-most-cutting-edge-mental-health-treatments/ (accessed on 11 April 2022).