

Mind-Manifesting Hypnosis:

Phenomenological Similarities and Differences in Hypnotic and Psychedelic Contexts

Cardeña, Etzel

Published in:

International Journal of Clinical and Experimental Hypnosis

DOI:

10.1080/00207144.2025.2554069

2025

Document Version:

Version created as part of publication process; publisher's layout; not normally made publicly available

Link to publication

Citation for published version (APA):

Cardeña, E. (2025). Mind-Manifesting Hypnosis: Phenomenological Similarities and Differences in Hypnotic and Psychedelic Contexts. International Journal of Clinical and Experimental Hypnosis. Advance online publication. https://doi.org/10.1080/00207144.2025.2554069

Total number of authors:

Creative Commons License:

CC BY

General rights

Unless other specific re-use rights are stated the following general rights apply:
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.

 • You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

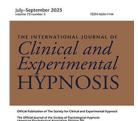
Read more about Creative commons licenses: https://creativecommons.org/licenses/

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117 221 00 Lund +46 46-222 00 00



International Journal of Clinical and Experimental Hypnosis



Routledge

ISSN: 0020-7144 (Print) 1744-5183 (Online) Journal homepage: www.tandfonline.com/journals/nhyp20

Mind-Manifesting Hypnosis: Phenomenological Similarities and Differences in Hypnotic and Psychedelic Contexts

Etzel Cardeña

To cite this article: Etzel Cardeña (08 Oct 2025): Mind-Manifesting Hypnosis: Phenomenological Similarities and Differences in Hypnotic and Psychedelic Contexts, International Journal of Clinical and Experimental Hypnosis, DOI: 10.1080/00207144.2025.2554069

To link to this article: https://doi.org/10.1080/00207144.2025.2554069

9	© 2025 The Author(s). Published with license by Taylor & Francis Group, LLC.
	Published online: 08 Oct 2025.
	Submit your article to this journal 🗷
Q	View related articles 🗹
CrossMark	View Crossmark data 🗹









Mind-Manifesting Hypnosis: Phenomenological Similarities and **Differences in Hypnotic and Psychedelic Contexts**

Etzel Cardeña (1)

Thorsen Professor of Psychology, Lund University, Sweden

ABSTRACT

In the 1970s, researchers and theoreticians of states of consciousness jointly discussed hypnosis and psychedelic alterations of consciousness, but recent research has mostly kept these topics apart. This paper discusses the similarities and differences of hypnosis and psychedelic alterations of consciousness, stressing that states of consciousness should not be defined by their preceding contexts. Predictors of positive responses to psychedelics (e.g. absorption and openness to experience) also predict hypnotic responsiveness. Most experiential changes (e.g. changes in bodily sensations and image, increased simple and complex imagery, and transcendent phenomena) produced by psychedelics are also reported within minimal suggestion hypnosis by highly responsive participants. Yet, there are differences in single sessions in that, as compared with hypnosis, psychedelic experiences typically last longer, are less controllable but more intense, and might produce more negative outcomes but also have a greater potential for positive long-term effects. Hypnosis, psychedelic research, and clinical work can enrich each other and should be more integrated than has been the case recently.

ARTICLE HISTORY

Received 28 March 2025 Revised 22 May 2025 Accepted 2 June 2025

KEYWORDS

Altered state of consciousness; anomalous experience; hypnosis; psychedelics

Introduction

It is common to read scientific papers that both equate a state of consciousness with its induction or trigger and propose that there are distinct hypnotic and psychedelic states of consciousness. This conceptualization is problematic for many reasons (Cardeña et al., 2025), one of them being that different triggers can elicit very similar states of consciousness. This paper compares the spontaneous and minimal-suggestion phenomenology of very highly hypnotizable individuals with common reports from the psychedelic literature, showing that, overall, they are similar.

A second argument that has been made (e.g., Zahner, 1972) is that the experiences occasioned by psychedelics are pathological or "artificial," in contrast with the notion that such substances reveal general human modes of experiencing that may occur without exogenous substances and are the product of complex interactions among many variables. The pioneer in the study of psychedelics, Canadian psychiatrist Humphry Osmond, disagreed with a proposal to call certain substances, such as LSD and mescaline, psychotomimetic or inducers of psychotic experiences. While he thought that these substances might induce such experiences, he also stated that "they do much more" (Osmond, 1957, p. 429). Osmond offered seven other potential names, of which psychedelic, or mind-manifesting, was his favorite, and carried the day. For Osmond, psychedelics "help us to explore and fathom our own nature" (Osmond, 1957, p. 429).

His statement is congenial with the idea of William James that we restrict our mental and physical capacities unnecessarily, but we can overcome such limits depending on the context and the use of physical, psychological, and psychopharmacological techniques (James, 1907). Various studies in the 1960s and 1970s combined hypnosis and psychedelics in different ways (for a review see Lemercier & Terhune, 2018). These studies included comparing both procedures (e.g., Aaronson, 1970), as well as a "hypnodelic treatment" in which patients with drug addiction were hypnotized to calm them before receiving a dose of LSD (e.g., Levine & Ludwig, 1966), with promising results that were derailed by the legal prohibition of psychedelics. Additionally, at that time and more recently, suggestive techniques have been used to reproduce the effect of psychoactive substances (e.g., Amigó, 1999), yet during the most recent renaissance of interest in alterations of consciousness in the last two decades, the literatures on psychedelics and hypnosis (and other related procedures) have remained insular despite their relevance to each other. My contention in this paper is that the experiential effects of that very complex context called hypnosis can be readily compared with those of psychedelic substances. Before doing that, though, some historical and conceptual clarifications are in order.

An Alternate State of Consciousness is Not the Same as Its Trigger

When comparing alternate states occasioned by hypnotic and psychedelic contexts, one should heed Tart's (1975) contention that a trigger/antecedent/inductor of potential alterations of consciousness should not be equated with the ensuing alterations. Instead, one should consider additional factors, including major individual differences in how people respond (or not respond) to specific triggers. The same hypnotic induction may produce substantial phenomenological and neurophysiological changes in individuals responsive to hypnotic procedures, have middling effects in those of moderate responsiveness, and produce none or even opposite reactions from those who are not responsive (Cardeña et al., 2013). There are other reasons to avoid using a trigger as the descriptor of a state (e.g., the "hypnotic state"). An important one is that different procedures can bring about comparable changes in states of consciousness, which is why a new taxonomy of states of consciousness is based on phenomenological resemblance rather than procedures or triggers (Cardeña, 2025). This paper is an example of the latter point, as it will discuss the substantial phenomenological overlap between phenomena occurring within hypnotic and psychedelic contexts.

Some authors and hypnosis course leaders discuss hypnosis as having immutable properties, albeit skirting the issue of what those properties are or using questionable terms such as the "hypnotic state." This stance hides distinctions between procedures called hypnotic (e.g., direct vs. indirect suggestions; relaxation versus physically active procedures) and the ensuing effects. This presumed essentialism also hides the fact that procedures with different labels may be mostly or completely the same. To give an example, what distinguishes a "guided meditation" in which there is initial relaxation verbiage followed by



suggestions for imagery from hypnotic procedures that do the same, other than the former being called guided meditation and the latter hypnosis (Cardeña, 2016)?

In addition, the effect of a hypnotic (or any) procedure depends on many short- and long-term personal, sociocultural, and contextual factors (see below). The same is true of the effects of psychedelic substances, which vary according to what has been called set and setting, a term that is really shorthand for many factors (cf. Hartogsohn, 2017). Thus, rather than a loose use of the term hypnosis, I will describe precisely the types of hypnotic procedures whose effects I refer to. Similarly, the effects of specific psychedelics should be assumed to interact with many other factors (barring, of course, extremes such as lethal dosages).

"Neutral" Hypnosis

I will first discuss spontaneous, non-suggested experiences in a hypnosis context by individuals who are very responsive to hypnosis (also called high hypnotizables, high suggestibles, or hypnotic virtuosos). Second, I will review a procedure called "neutral" or "minimal suggestion" hypnosis that seeks to minimize specific suggestion and focus on spontaneous experiences within a hypnotic context. With respect to the first, from its inception as animal mesmerism (Ellenberger, 1970) and in the modern era of hypnosis, authors of different theoretical persuasions have reported various unsuggested alterations including changes in: body image and sensations (e.g., Erickson, 1965; Gill & Brenman, 1959; Hilgard, 1986; Ludwig & Levine, 1965; Pekala, 1991), and in time sense, perception, imagery, and meaning (e.g., Ludwig & Levine, 1965; Pekala, 1991), with greater alterations in consciousness occurring in the context of greater "depth" or "trance" of hypnosis (Ås & Ostvold, 1968; Cardeña, 2005; Cardeña et al., 2013; Kahn et al., 1989). Consequently, a model of hypnotic experience proposed three common experiential factors: absorption in the experience, a sense of dissociation from one's actions, and experienced alterations of consciousness (Cardeña & Spiegel, 1991).

"Neutral" hypnosis techniques may have their modern roots in various papers by William Edmonston Jr., particularly in the 1970s, evaluating hypnosis through an induction without further suggestions (for a review see Kihlstrom & Frischholz, 2010), whereas a focus on spontaneous phenomenology during "deeper" hypnosis may be traced to papers by Milton Erickson (e.g., Erickson, 1952, 1965), who sought to elucidate the nature of a plenary or very deep hypnosis state. Erickson wrote that such a state was characterized by spontaneous synesthesia and loss of personal identity and mental content, without any suggestions to that effect (Erickson, 1965).

Charles Tart (1970) evaluated systematically the spontaneous phenomenology of a highly hypnotizable individual, avoiding specific suggestions although asking the person to go into a deep state and using a scale of hypnotic depth that included experiential landmarks. Phenomena reported included decreased body awareness, timelessness, and an experience of oneness with the universe. Two studies (Feldman, 1976; Sherman, 1971) replicated and extended Tart's finding using groups of highly hypnotizable individuals. Also, worthy of mention is the series of studies by Erika Fromm and collaborators on experiential aspects of self-hypnosis (e.g., Fromm et al., 1981).

Cardeña (2005) extended Tart's methodology by eliminating the experiential landmarks of the measure of hypnotic depth and testing three different physically active conditions.

Overall, he replicated Tart's findings with some minor changes depending on the physical condition (e.g., greater body image changes during a quiescent condition versus two stationary pedaling conditions). He and collaborators further extended this research by investigating the whole range of hypnotizability, not only very responsive individuals, and matching EEG measures to specific experiences (Cardeña et al., 2013). Of related interest is that a procedure almost completely neglected, mutual hypnosis (in which two hypnotically responsive persons alternate providing an induction and suggestion), also produced similar alterations in consciousness to deep hypnosis (Tart, 1967). It is important to indicate that the term neutral hypnosis is relative. First, there have been different ways of evading specific suggestions. For instance, researchers have used a rapid induction signal following previous experience with a longer induction (e.g., Kihlstrom & Edmonston, 1971), whereas others employed a number count, also after previous hypnosis experiences (e.g., Cardeña, 2005; Cardeña et al., 2013; Tart, 1970).

Although these and similar procedures avoid giving specific suggestions to, for instance, have a mystical experience (such as Lynn & Evans, 2017 do), it cannot be ignored that they occur within a hypnosis context, which carries various consequences. First, participants have already been exposed to previous hypnotic suggestions during at least tests of hypnotizability, and the use of even a simple induction communicates that the participant is in a procedure in which alterations of context may be expected. In an astute commentary on the never-ending discussion of how to define hypnosis, Wagstaff (2014) wrote that the use of the term communicates to the participant (in typical Western formally educated groups) that they may enter an altered state, which may "a) justify the attribution that an *altered state* has occurred, thus raising motivation and expectancies, and b) facilitate a redirection of focus that may aid the strategic enactment of some suggestions" (Wagstaff, 2014, p. 100; see also Cardeña, 2014). A study showing that just using the term "hypnosis" has a bigger effect than calling the same procedure "meditation" supports his point (Gandhi & Oakley, 2005).

Thus, while responsiveness to specific hypnotic suggestions is a central aspect of hypnosis, the phenomena occurring spontaneously in the context of other suggestions, after a general induction, or in a "deep hypnosis" procedure need to be taken into consideration, particularly when comparing them to experiences following the ingestion of psychedelics.

The Hypnosis and Psychedelic Cocktails

In addition to the terms, we use and the mind-sets evoked therein, there are many other variables that have an impact on the phenomenological, behavioral, and physiological responses to techniques that aim to induce alterations in consciousness. Tart (1975) listed a plethora of long-term, immediate, situation, or experiment factors that interact in shaping the response to a psychoactive drug. The long-term factors included culture, personality, physiology, and learned drug skills; the immediate factors were mood, expectations, and desires; and the situation or experiment factors included physical setting, social events, formal instructions, and implicit demands. The same list is relevant to hypnosis, meditation, and other contexts in which alterations of consciousness may ensue.

Each of these factors can be described in greater detail. Just with respect to cultural processes, E. F. Kelly and Locke (2009) list ethnoepistemology (metaphysical and epistemological assumptions), predisposing factors such as socialization, and situational factors

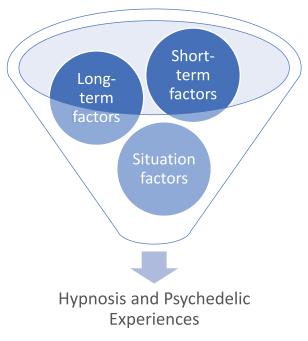


Figure 1. The Altered State of Consciousness Cocktail

such as ritual practices. Figure 1 shows a state-of-consciousness cocktail that figuratively shows that the final product/state will depend on the mixture of various ingredients. To introduce my next sections, let me propose that the hypnosis and psychedelic cocktails I will compare likely have in common participants who 1) score high in traits such as absorption that predict switching into altered states, 2) have had previous positive experiences in those states or at least have positive expectations for the current one, and 3) are in a supportive environment. In those circumstances, although one cocktail may include, say, a substance such as psilocybin and the other just the words of a hypnotist, the tastes will be similar in many ways, but will typically be more intense, linger longer, and have stronger effects in the psychedelic cocktail.

Predictors of Responsiveness to Psychedelics and Hypnosis

In a review of 14 studies with predictors of responses to psychedelics, Aday et al. (2021) mentioned four traits/processes, three of which also relate to hypnotic responsiveness, with the fourth having anecdotal support, and a fifth not having a parallel in hypnosis (Table 1). The variables that predicted positive and unitive-type experiences were absorption,

Table	1.	Predictors	of	Response
-------	----	------------	----	----------

Psychedelics (Aday et al., 2021)	Hypnosis
Absorption	Absorption (Roche & McConkey, 1990)
Openness to experience	Openness to experience (Glisky et al., 1991)
Acceptance/surrender	Attitude toward hypnosis (Koep et al., 2020)
Preoccupied/apprehensive/confused (-)	Low ego strength (Cardeña, 2005)
Increased age/experience = less intensity	Х

openness to experience, and a state of acceptance/surrender, with low scores in those variables predicting negative responses.

Absorption refers to the propensity to deploy one's attention fully on perceptual or other mental contents, have an experiential rather than conceptual stance, and have unusual experiences (Tellegen, 1992). It has a low to moderate correlation with hypnotizability (Roche & McConkey, 1990), more so when measured experientially rather than behaviorally (Cardeña & Terhune, 2014). To be high in hypnotizability is not the same as having a positive experience of hypnosis, although it is not a long leap to hypothesize that those finding the hypnotic experience positive will be more likely to respond accordingly. Absorption is a predictor of diverse unusual but not necessarily pathological experiences (Cardeña et al., 2014; Van Eyghen & Cardeña, in press).

Openness to experience is one of the "The Big Five" personality traits describing different facets of accepting or searching for new experiences or ideas; openness to experience is related to imagination, sensitivity, liberalism, and similar processes (McCrae & John, 1992). It is not surprising that this trait predicts positive responses to psychedelics and correlates with hypnotizability, particularly the facets related to absorption (Glisky et al., 1991). A third factor, acceptance of and surrender to the experience were predictors of positive psychedelic experience, a similar result to the moderate positive correlation between attitudes toward and responsiveness to hypnosis (Koep et al., 2020). In Aday et al. (2021), apprehensive or preoccupied psychological states predicted negative responses to psychedelics. I am not aware of a systematic study on this issue in hypnosis, but anecdotally the two individuals who had negative spontaneous imagery in Cardeña (2005) were the ones who had noticeably lower scores in Barron's Ego Strength Scale, which is a measure of low self-esteem and distress (W. E. Kelly & Daughtry, 2018). Low ego strength may also predict negative responses to near-death experiences (Cardeña, 2024). Relatedly, research in hypnosis (Terhune et al., 2011) shows that individuals high in both hypnotizability and dissociation (which relates to distress) are more likely than their non-dissociative counterparts to exhibit cognitive deficits and distressing fantasy. In an experience sampling study, those high in both hypnotizability and dissociation reported less control/awareness of their mental content while daydreaming (Cardeña & Marcusson-Clavertz, 2016), which might translate into less self-control following psychedelic ingestion or a hypnotic induction.

In Aday et al. (2021), a final factor is that older age and more experience with psychedelics being associated with less intense response to psychedelics does not seem to have an obvious parallel in hypnosis (for instance, note the remarkable consistency of hypnotizability across decades; Piccione et al., 1989). Rather than diminishing the intensity of the experience, previous experiences with hypnotic procedures may facilitate finding out what cognitive processes work best to elicit a response.

Phenomenological Similarities of Exposure to Psychedelics and Deep Hypnosis

Table 2 and 3 compares the phenomenological effects of psychedelics – mostly based on an overview paper by Preller and Vollenweider (2018)—and corresponding effects from a study on deep hypnosis (Cardeña, 2005, 2010). I am using the latter because it produced ongoing extensive personal reports of experience following two unsuggestive probes ("How deep in hypnosis are you" on a scale of 1-100; "Experience?" short for "what have you been experiencing before this question?"), which were recorded and later transcribed. The room



Table 2. Phenomenological Similarities of Exposure to Psychedelics and "Deep Hypnosis"

Psychedelics (Preller & Vollenweider, 2018)	Hypnosis (Cardeña 2005)
Changes in bodily sense	Changes in bodily sense
Reduced analytical mind	Reduced analytical mind
Simple/complex imagery (Siegel, 1977)	Simple/complex imagery
Synesthesia	Synesthesia
Changes in the sense of time/space	Changes in the sense of time/space
Intense emotions	Intense emotions
Transcendent phenomena	Transcendent phenomena

Table 3. Compared with "Deep Hypnosis," Psychedelic Effects...

Hypnosis," Psychedelic Effects				
Last longer				
Are less controlable				
Are more intense				
Produce more negative outcomes				
Produce more long-term positive effects				

in which the sessions occurred was dark and silent except for the questions, answers, and, in the conditions of pedaling on a stationary bike, the sound of the pedaling.

Changes in Bodily Sense

Preller and Vollenweider mention sensations such as tingling, arms and legs changing in size, and a sense of separation of the self from the body. For hypnosis, during the self-assessed (as per their ratings) light and medium hypnosis, participants initially commented on unusual body sensations such as tingling and relaxation, which eventually became lack of sensations in the body and the self not being located in the body, even floating or flying in a phenomenal body (e.g., "It's just sort of me floating" or another participant, "I don't have a physical body anymore"; Cardeña, 2010, p. 98).

Reduced Analytical Mind

A decrease in task orientation and working memory, with sudden appearance of autobiographical memories, are features of psychedelic experience according to Preller and Vollenweider. Similarly, participants who experienced deep hypnosis discussed their thoughts transitioning from conceptual thoughts to mentation characterized by spontaneous imagery and sudden recall of forgotten episodic memories (Cardeña, 2005; see; Pekala, 1991 also).

Simple/Complex Imagery

In his foundational paper on hallucinations produced by psychedelics (also called hallucinogens) and other triggers, Siegel (1977) described a process in which the initial simple imagery of kaleidoscopes, geometric figures, and so on, becomes more complex imagery of personal significance to the person. Preller and Vollenweider also give

a central role to imagery. For deep hypnosis, participants described geometric designs such as prisms, grids, and tunnels which later become complex imagery (e.g., "walking down in a spiral staircase") and sudden bright lights (e.g., "brightness," Cardeña, 2010, p. 99).

Synesthesia

Preller and Vollenweider describe audiovisual synesthesia as characteristic of psychedelic experience. This phenomenon also occurred spontaneously in deep hypnosis (e.g., "lines of different colors that stretch infinitely ... making music that I have never heard before," "imagery not referrable to a sensory modality"; Cardeña, 2010, p. 99).

Changes in the Sense of Time/Space

A striking characteristic of psychedelic experiences is what Preller and Vollenweider refer to as an experience of transcendence of time and space. The hypnosis participants gave specific examples such as "no sense of time" or "things not happening" in that state (Cardeña, 2005, p. 47).

Intense Emotions

Preller and Vollenweider mention very positive feelings, such as euphoria, connected to psychedelic experiences. In deep hypnosis, there were also similar reports such as "All the feelings that are good just surround me," and "being in the best place to be," along with mentions of love, awe, and freedom, although there were also reports of fear about the unusual experiences (Cardeña, 2010, p. 99). Transient fear and anxiety can also accompany unusual psychedelic experiences (almost a third of carefully selected participants in a psilocybin experiment mentioned it; Griffiths et al., 2006).

Transcendent Phenomena

Transcendent or transpersonal experiences refer to moments in which the person feels an intimate connection with a much larger reality of which they are a part (Cardeña & Lindström, 2021; Wulff, 2014). Preller and Vollenweider describe typical ways in which they are described, including an awareness of oneness and unity with everything, often perceived as the ultimate nature of reality. A classification of such experiences includes exalted sensory experiences of unity or the experience of contentless pure consciousness (Wulff, 2014). Deep hypnosis participants gave many precise descriptions, including "merging with pure light" and "merging with everything" for the first type, and "I was just total nothing" for the second (Cardeña, 2010, p. 99). In addition to an ontological and total sense of unity, mystical experiences entail a diminution of the importance and/or personal history of the self (Yaden & Newberg, 2022). Although the term "dissolution of the self" has become common when discussing this experience in the psychedelic literature (e.g., Nour et al., 2016), it is not a particularly clear or illuminating concept (Lindström et al., 2022). Hypnosis participants gave precise descriptions of related phenomena including "being in touch with one's inner self," "loss of identity," and "profound personal insight" (Cardeña, 2010, p. 99).



Differences Between Exposure to Deep Hypnosis and Psychedelics

Despite the substantial phenomenological overlap between experiences produced by psychedelics and deep hypnosis among predisposed individuals, there are also differences between the two contexts, with the caveat that what I will state represents my best guesses, knowing the corresponding literatures, rather than conclusions from systematic comparisons of deep hypnosis and psychedelics contexts. Given this knowledge, compared with deep hypnosis, psychedelic effects last longer, are less controllable, are more intense, produce more negative outcomes, and produce more long-term positive effects.

Typically, the effects of a single session of psychedelics – depending on the substance and dose – can last hours or even days. In contrast, even among highly responsive individuals, the effects of hypnosis will dissipate much more quickly. In the deep hypnosis procedure, the sessions were of open duration, meaning the session could go as long as the participant wanted. Despite very positive experiences, all participants started to transition back to their ordinary state of consciousness consistently after around 45–60 minutes. Whether this may be explained by an ultradian rhythm along the lines of the REM cycles deserves investigation (cf. Cajochen et al., 2024).

Psychedelic effects are less controllable than hypnotic ones and may require ingesting another substance to fade away more rapidly. In contrast, for hypnosis, alerting procedures are usually very effective at restoring people to their ordinary state in a matter of seconds or minutes even for people who do not initially feel completely out of hypnosis after the previous alerting procedure.

Psychedelic effects are also more likely to be experienced as overwhelming. At least partly because of the intensity and lack of controllability, psychedelics may be more likely to produce more negative outcomes, acute or chronic. This is not to say that hypnotic contexts – either experimental (e.g., Cardeña & Terhune, 2009), clinical, or forensic (MacHovec, 1986) – may not produce negative effects, but they are likely less frequent than those encountered with the use of psychedelics, given that the latter last longer and are more intense and less controllable.

The counterpart to this is that, as far as I can tell, if a single psychedelic experience is positive (cf. Griffiths et al., 2006), it will probably produce more enduring positive effects than a single hypnotic session, at least how the latter is typically practiced. Of course, this does not deny the proven efficacy of treatments using hypnotic techniques for a variety of medical and psychological conditions (e.g., Lynn et al., 2000); however, for the purpose of this paper I focused on single experiences rather than full treatments using hypnosis and/or psychedelics.

Implications

This paper shows Osmond's accuracy in calling psychedelics mind manifesting, as they seem to bring forth mental processes or states that, at least for some people, occur spontaneously or in a variety of circumstances including meditation (Gifford-May & Thompson, 1994), being close (or believing that one is close) to dying (Greyson, 2014; Yaden & Newberg, 2022), and others. In other words, psychedelics seem to reveal potential modes of human experiencing, rather than creating artificial experiences *ex nihilo*. A whole paper could be written about the potential advantages and disadvantages of the use of

hypnosis as compared with psychedelics and how we might seek to integrate them for theoretical, research, and therapeutic uses.

To initiate this needed conversation, I will outline three strategies commonly used in hypnosis research that can enrich the ongoing work on psychedelics: 1) measure and/or manipulate the subtle suggestions and demand characteristics of the psychedelic setup (an area owing much to hypnosis researcher Martin T. Orne and other hypnosis researchers; see Corneille & Lush, 2022); 2) measure and/or manipulate conscious and unconscious expectations or expectancies before a psychedelic experience (here the work of hypnosis author Irving Kirsch and collaborators is indispensable, e.g., Lynn et al., 2023); 3) develop and integrate multifactorial models of responsiveness to psychedelics that include considerations of the individual propensity to experience alterations of consciousness (Cardeña & Terhune, 2009), as well as the sociocultural framing of such experiences and relational aspects of the interaction with the experimenter or therapist (e.g., Shor, 1979).

For both contexts, we need far more research on the "cocktail" ingredients that interact in different clinical and research contexts. To give but two examples, the characteristics of the experimenter or researcher - such as style of behavior, gender, and authority role make a difference in psychological responses, yet nothing or almost nothing is mentioned about them in most studies (for a review see Cardeña & Pekala, 2014), including those relating to hypnosis and psychedelics. And even the physical posture and activity of participants can make a difference in their experience (e.g., Cardeña, 2005; Pope, 1978; Roche & McConkey, 1990), yet they are typically ignored. To conclude, Williams James's (1907) mapping of states of consciousness has been barely restarted after decades of neglect and will require greater ingenuity, communication between, and integration of areas that have been mostly estranged.

Disclosure Statement

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

ORCID

Etzel Cardeña (b) http://orcid.org/0000-0001-6775-8017

Data Availability Statement

No new data were generated by this paper.

References

Aaronson, B. S. (1970). Some hypnotic analogues to the psychedelic state. In B. S. Aaronson & H. Osmond (Eds.), Psychedelics: The uses and implications of hallucinogenic drugs (pp. 279-295).

Aday, J. S., Davis, A. K., Mitzkovitz, C. M., Bloesch, E. K., & Davoli, C. C. (2021). Predicting reactions to psychedelic drugs: A systematic review of states and traits related to acute drug effects. ACS Pharmacology and Translational Science, 4(2), 424-435. https://doi.org/10.1021/acsptsci.1c00014



- Amigó, S. (1999). Self-regulation therapy: Suggestion without hypnosis. In I. Kirsch, A. Capafons, E. Cardeña-Buelna, & S. Amigó (Eds.), *Clinical hypnosis and self-regulation: A cognitive-behavioral perspective* (pp. 311–330). American Psychological Association.
- Ås, A., & Ostvold, S. (1968). Hypnosis as subjective experience. *Scandinavian Journal of Psychology*, 9 (1), 33–38. https://doi.org/10.1111/j.1467-9450.1968.tb00515.x
- Cajochen, C., Reichert, C. F., Münch, M., Gabel, V., Sefani, O., Chellappa, S. L., & Schmidt, C. (2024). Ultradian sleep cycles: Frequency, duration, and associations with individual and environmental factors-a retrospective study. *Sleep Health*, 10(1), S52–S62. 1. https://doi.org/10.1016/j.sleh.2023.
- Cardeña, E. (2005). The phenomenology of deep hypnosis: Quiescent and physically active. *The International Journal of Clinical and Experimental Hypnosis*, 53(1), 37–59. https://doi.org/10.1080/00207140490914234
- Cardeña, E. (2010). Anomalous experiences during deep hypnosis. In M. D. Smith (Ed.), *Anomalous experiences essays from parapsychological and psychological perspectives* (pp. 93–107). McFarland. Cardeña, E. (2014). Spinning in circles. *The Journal of Mind-Body Regulation*, (2), 121–123.
- Cardeña, E. (2016). Towards a comprehensive neurophenomenological research in hypnosis and meditation. In A. Raz & M. Lifshitz (Eds.), *Hypnosis and meditation: Towards an integrative science of conscious planes* (pp. 281–301). Oxford University Press.
- Cardeña, E. (2024). Commentary on near death experiences: Greyson (2023). *Journal of Scientific Exploration*, 38(1), 175–176. https://doi.org/10.31275/20243347
- Cardeña, E. (2025). More than "somnambulism": Hypnosis and transcendent experiences. In D. Yaden & M. van Elk (Eds.), *The Oxford handbook of psychedelic, religious, spiritual*, and mystical experiences. https://doi.org/10.1093/oxfordhb/9780192844064.013.33
- Cardeña, E., Berkovich-Ohana, A., Valli, K., Bartfeld, P., Gómez-Marín, A., Greyson, B., Kumar, V. K., Laureys, S., Luhrman, T. M., Newberg, A., Preller, K. H., Putnam, F. W., Tagliazucchi, E., Walsh, R., Carter, O., & Yaden, D. (2025). Bringing order to multiplicity: A consensus taxonomy of non-ordinary states of consciousness. *Psychology of Consciousness: Theory, Research, and Practice*. Advance online publication. https://doi.org/10.1037/cns0000431
- Cardeña, E., Jönsson, P., Terhune, D. B., & Marcusson-Clavertz, D. (2013). The neurophenomenology of neutral hypnosis. *Cortex*, 49(2), 375–385. https://doi.org/10.1016/j.cortex.2012.04.001
- Cardeña, E., & Lindström, L. (2021). The light and the bulb: The psychology and neurophysiology of mystical experience. In A. Moreira-Almeida, B. P. Mosqueiro, & D. Bhurgra (Eds.), *Spirituality and mental health across cultures* (pp. 95–113). Oxford University Press. https://doi.org/10.1093/med/9780198846833.003.0007
- Cardeña, E., Lynn, S. J., & Krippner, S. (Eds.). (2014). Varieties of anomalous experience: Examining the scientific evidence (2nd ed.). American Psychological Association. https://doi.org/10.1037/14258-000
- Cardeña, E., & Marcusson-Clavertz, D. (2016). The relation of hypnotizability and dissociation to everyday mentation: An experience-sampling study. *Psychology of Consciousness: Theory, Research, & Practice*, 3(1), 61–79. https://doi.org/10.1037/cns0000080
- Cardeña, E., & Pekala, R. J. (2014). Researching states of consciousness and anomalous experiences. In E. Cardeña, S. J. Lynn, & S. Krippner (Eds.), *Varieties of anomalous experience: Examining the scientific evidence* (2nd ed.). American Psychological Association.
- Cardeña, E., & Spiegel, D. (1991). Suggestibility, absorption, and dissociation: An integrative model of hypnosis. In J. F. Schumaker (Ed.), *Human suggestibility: Advances in theory, research and application* (pp. 93–107). Routledge.
- Cardeña, E., & Terhune, D. B. (2009). A note of caution on the Waterloo-Stanford group scale of hypnotic susceptibility: A brief communication. *The International Journal of Clinical and Experimental Hypnosis*, 57(2), 222–226. https://doi.org/10.1080/00207140802665484
- Cardeña, E., & Terhune, D. B. (2014). Hypnotizability, personality traits, and the propensity to experience alterations of consciousness. *Psychology of Consciousness: Theory, Research, & Practice*, 1(3), 292–307. https://doi.org/10.1037/cns0000026



Corneille, O., & Lush, P. (2022). Sixty years after Orne's American psychologist article: A conceptual framework for subjective experiences elicited by demand characteristics. Personality and Social Psychology Review, 27(1), 83–101. https://doi.org/10.1177/10888683221104368

Ellenberger, H. F. (1970). The discovery of the unconscious. Basic Books.

Erickson, M. H. (1952). Deep hypnosis and its induction. In L. M. LeCron (Ed.), Experimental hypnosis (pp. 70-114). Macmillan.

Erickson, M. H. (1965). A special inquiry with Aldous Huxley into the nature and character of various altered states of consciousness. The American Journal of Clinical Hypnosis, 8(1), 17-33. https://doi. org/10.1080/00029157.1965.10402455

Feldman, B. E. (1976). A phenomenological and clinical inquiry into deep hypnosis. [Unpublished doctoral dissertation]. University of California.

Fromm, E., Brown, D. P., Hurt, S. W., Oberlander, J. Z., Boxer, A. M., & Pfeifer, G. (1981). The phenomena and characteristics of self-hypnosis. The International Journal of Clinical and Experimental Hypnosis, 29(3), 189-246. https://doi.org/10.1080/00207148108409158

Gandhi, B., & Oakley, D. A. (2005). Does "hypnosis" by any other name smell as sweet? The efficacy of "hypnotic" inductions depends on the label "hypnosis". Consciousness and Cognition, 14(2), 304-315. https://doi.org/10.1016/j.concog.2004.12.004

Gifford-May, D., & Thompson, N. L. (1994). "Deep states" of meditation: Phenomenological reports of experience. The Journal of Transpersonal Psychology, 26(2), 117–138.

Gill, M., & Brenman, M. (1959). Hypnosis and related states. International Universities Press.

Glisky, M. L., Tataryn, D. J., Tobias, B. A., Kihlstrom, J. F., & McConkey, K. M. (1991). Absorption, openness to experience, and hypnotizability. Journal of Personality & Social Psychology, 60(2), 263–272. https://doi.org/10.1037/0022-3514.60.2.263

Greyson, B. (2014). Near-death experiences. In C. E, S. J. Lynn, & S. Krippner (Eds.), Varieties of anomalous experience: Examining the scientific evidence (2nd ed., pp. 333-367). American Psychological Association.

Griffiths, R. R., Richards, W. A., McCann, U., & Jesse, R. (2006). Psilocybin can occasion mystical-type experiences having substantial and sustained personal meaning and spiritual significance. Psychopharmacology, 187(3), 268-292. https://doi.org/10.1007/s00213-006-0457-5

Hartogsohn, I. (2017). Constructing drug effects: A history of set and setting. Drug Science, Policy and Law, 3. https://doi.org/10.1177/2050324516683325

Hilgard, E. R. (1986). Divided consciousness (Expanded ed.). Wiley.

James, W. (1907). The energies of men. The Philosophical Review, 16(1), 1-20. https://doi.org/10. 2307/2177575

Kahn, S., Fromm, E., Lombard, L., & Sossi, M. (1989). The relation of self-reports of hypnotic depth in self-hypnosis to hypnotizabilty and imagery production. The International Journal of Clinical and Experimental Hypnosis, 37(4), 290-304. https://doi.org/10.1080/00207148908414484

Kelly, E. F., & Locke, R. G. (2009). Altered states of consciousness and psi: An historical survey and research prospectus Parapsychology Monograph Series No. 18. Parapsychology Foundation.

Kelly, W. E., & Daughtry, D. (2018). A shorter version of Barron's ego strength scale. College Student *Journa*, 52(2), 227–231.

Kihlstrom, J. F., & Edmonston, W. E. (1971). Alterations in consciousness in neutral hypnosis: Distortions in semantic space. The American Journal of Clinical Hypnosis, 13(4), 243-248. https://doi.org/10.1080/00029157.1971.10402120

Kihlstrom, J. F., & Frischholz, E. (2010). William E. Edmonston, Jr.: Editor, 1968-1976. The American Journal of Clinical Hypnosis, 53(2), 79-89. https://doi.org/10.1080/00029157.2010.10404330

Koep, L. L., Biggs, M. L., Rhodes, J. R., & Elkins, G. R. (2020). Psychological mindedness, attitudes toward hypnosis, and expectancy as correlates of hypnotizability. The International Journal of Clinical and Experimental Hypnosis, 68(1), 68-79. https://doi.org/10.1080/00207144.2020.1682255

Lemercier, C., & Terhune, D. B. (2018). Psychedelics and hypnosis: Commonalities and therapeutic implications. Journal of Psychopharmacology, 32(7), 732-740. https://doi.org/10.1177/ 0269881118780714

Levine, J., & Ludwig, A. M. (1966). The hypnodelic treatment technique. The International Journal of Clinical and Experimental Hypnosis, 14(3), 207-215. https://doi.org/10.1080/00207146608412963



- Lindström, L., Kajonius, P., & Cardeña, E. (2022). Dissolution of what? The self lost in self-transcendent experiences. *Journal of Consciousness Studies*, 29(5–6), 75–101. https://doi.org/10.53765/20512201.29.5.075
- Ludwig, A. M., & Levine, J. (1965). A controlled comparison of five brief treatment techniques employing LSD, hypnosis, and psychotherapy. *American Journal of Psychotherapy*, 19(3), 417–435. https://doi.org/10.1176/appi.psychotherapy.1965.19.3.417
- Lynn, S. J., & Evans, J. (2017). Hypnotic suggestion produces mystical-type experiences in the laboratory: A demonstration proof. *Psychology of Consciousness: Theory, Research, & Practice*, 4 (1), 23–37. https://doi.org/10.1037/cns0000105
- Lynn, S. J., Green, J. P., Zahedi, A., & Apelian, C. (2023). The response set theory of hypnosis reconsidered: Toward an integrative model. *The American Journal of Clinical Hypnosis*. https://www.tandfonline.com/doi/abs/10.1080/00029157.2022.2117680
- Lynn, S. J., Kirsch, I., Barabasz, A., Cardeña, E., & Patterson, D. (2000). Hypnosis as an empirically supported clinical intervention: The state of the evidence and a look to the future. *The International Journal of Clinical and Experimental Hypnosis*, 48(2), 239–259. https://doi.org/10. 1080/00207140008410050
- MacHovec, F. J. (1986). *Hypnosis complications: Prevention and risk management*. Charles C. Thomas Publishers.
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60(2), 175–215. https://doi.org/10.1111/j.1467-6494.1992.tb00970.x
- Nour, M. M., Evans, L., Nutt, D., & Carhart-Harris, R. L. (2016). Ego-dissolution and psychedelics: Validation of the ego-dissolution inventory (EDI). *Frontiers in Human Neuroscience*, 10, 269. https://doi.org/10.3389/fnhum.2016.00269
- Osmond, H. (1957). A review of the clinical effects of psychotomimetic agents. *Annals of the New York Academy of Sciences*, 66(3), 418–434. https://doi.org/10.1111/j.1749-6632.1957. tb40738.x
- Pekala, R. (1991). Quantifying consciousness: An empirical approach. Springer.
- Piccione, C., Hilgard, E. R., & Zimbardo, P. G. (1989). On the degree of stability of measured hypnotizability over a 25-year period. *Journal of Personality & Social Psychology*, 56(2), 289–295. https://doi.org/10.1037/0022-3514.56.2.289
- Pope, K. S. (1978). How gender, solitude, and posture influence the stream of consciousness. In K. S. Pope & J. L. Singer (Eds.), *The stream of consciousness* (pp. 259–299). Plenum Press.
- Preller, K. H., & Vollenweider, F. X. (2018). Phenomenology, structure, and dynamic of psychedelic states. *Current Topics in Behavioral Neurosciences*, 36(1), 221–256. https://doi.org/10.1007/7854_2016_459
- Roche, S. M., & McConkey, K. M. (1990). Absorption: Nature, assessment, and correlates. *Journal of Personality & Social Psychology*, 59(1), 91–101. https://doi.org/10.1037/0022-3514.59.1.91
- Sherman, S. E. (1971). Very deep hypnosis: An experiential and electro-encephalographic investigation [Unpublished doctoral dissertation]. Stanford University,
- Shor, R. E. (1979). A phenomenological method for the measurement of variables important for an understanding of the nature of hypnosis. In E. Fromm & R. E. Shor (Eds.), *Hypnosis: Developments in research and new perspectives* (2nd ed., pp. 105–135). Aldine.
- Siegel, R. K. (1977). Hallucinations. *Scientific American*, 237(4), 132–140. https://doi.org/10.1038/scientificamerican1077-132
- Tart, C. T. (1967). Psychedelic experiences associated with a novel hypnotic procedure, mutual hypnosis. *The American Journal of Clinical Hypnosis*, 10(2), 65–78. https://doi.org/10.1080/00029157.1967.10401952
- Tart, C. T. (1970). Transpersonal potentialities of deep hypnosis. The Journal of Transpersonal Psychology, 2(1), 27–40.
- Tart, C. T. (1975). States of consciousness. E. P. Dutton.
- Tellegen, A. (1992). *Note on the structure and meaning of the MPQ absorption scale.* [Unpublished manuscript]. University of Minnesota.



Terhune, D. B., Cardeña, E., & Lindgren, M. (2011). Dissociative tendencies and individual differences in high hypnotic suggestibility. Cognitive Neuropsychiatry, 16(2), 113-135. https://doi.org/ 10.1080/13546805.2010.503048

Van Eyghen, H., & Cardeña, E. (in press). Trait absorption relates to experiences of spirit communication. Mental Health Religion & Culture.

Wagstaff, G. F. (2014). On the centrality of the concept of an altered state to definitions of hypnosis. The Journal of Mind-Body Regulation, 2(2), 90-108.

Wulff, D. M. (2014). Mystical experiences. In E. Cardeña, S. J. Lynn, & S. Krippner (Eds.), Varieties of anomalous experience: Examining the scientific evidence (2nd ed., pp. 369-408). American Psychological Association. https://doi.org/10.1037/14258-013

Yaden, D., & Newberg, A. (2022). The varieties of spiritual experience: 21st century research and perspectives. Oxford University Press.

Zahner, R. C. (1972). Zen, drugs, and mysticism. Pantheon.



Bewusstseinsmanifestierende Hypnose: Phänomenologische Ähnlichkeiten und Unterschiede im hypnotischen und psychedelischen Kontext

ETZEL CARDEÑA, PH.D.

Zusammenfassung: In den 1970er Jahren diskutierten Forscher und Theoretiker des Bewusstseinszustands gemeinsam über Hypnose und psychedelische Bewusstseinsveränderungen, aber in der jüngeren Forschung wurden diese Themen meist getrennt behandelt. Dieser Artikel diskutiert die Ähnlichkeiten und Unterschiede zwischen Hypnose und psychedelischen Bewusstseinsveränderungen und betont, dass Bewusstseinszustände nicht durch ihren vorhergehenden Kontext definiert werden sollten. Prädiktoren für positive Reaktionen auf Psychedelika (z. B. Absorption, Offenheit für Erfahrungen) sagen auch die hypnotische Reaktionsfähigkeit voraus. Die meisten durch Psychedelika hervorgerufenen Erfahrungsänderungen (z. B. Veränderungen der Körperempfindungen und des Körperbildes, vermehrte einfache und komplexe Bilder und transzendente Phänomene) werden auch bei minimaler Suggestionshypnose von hochreaktiven Teilnehmern berichtet. Dennoch gibt es Unterschiede zwischen einzelnen Sitzungen, da psychedelische Erfahrungen im Vergleich zur Hypnose in der Regel länger andauern, weniger kontrollierbar, aber intensiver sind und möglicherweise negativere Ergebnisse hervorrufen, aber auch ein größeres Potenzial für positive Langzeitwirkungen haben. Hypnose, psychedelische Forschung und klinische Arbeit können sich gegenseitig bereichern und sollten stärker integriert werden, als dies in letzter Zeit der Fall war.

Hypnose manifestant l'esprit : similitudes et différences phénoménologiques dans les contextes hypnotiques et psychédéliques

ETZEL CARDEÑA, PH.D.

Résumé: Dans les années 1970, les chercheurs et théoriciens des états de conscience ont discuté conjointement de l'hypnose et des altérations psychédéliques de la conscience, mais les recherches récentes ont généralement traité ces sujets séparément. Cet article examine les similitudes et les différences entre l'hypnose et les altérations psychédéliques de la conscience, en soulignant que les états de conscience ne doivent pas être définis par leur contexte préalable. Les prédicteurs de réponses positives aux psychédéliques (par exemple, l'absorption, l'ouverture à l'expérience) prédisent également la réactivité hypnotique. La plupart des changements expérientiels (par exemple, les changements dans les sensations et l'image corporelles, l'augmentation des images simples et complexes, et les phénomènes transcendants) produits par les psychédéliques sont également rapportés dans le cadre d'une hypnose à suggestion minimale par des participants très réactifs. Il existe toutefois des différences entre les séances uniques en ce sens que, par rapport à l'hypnose, les expériences psychédéliques durent généralement plus longtemps, sont moins contrôlables mais plus intenses, et peuvent produire des résultats plus négatifs, mais aussi avoir un plus grand potentiel d'effets positifs à long terme. L'hypnose, la recherche psychédélique et le travail clinique peuvent s'enrichir mutuellement et devraient être davantage intégrés qu'ils ne l'ont été récemment.

Hipnosis que manifiesta la mente: similitudes y diferencias fenomenológicas en contextos hipnóticos y psicodélicos

ETZEL CARDEÑA, PH.D.

Resumen: En la década de 1970, investigadores y teóricos de los estados de conciencia debatieron conjuntamente sobre la hipnosis y las alteraciones psicodélicas de la conciencia, pero las investigaciones recientes han mantenido estos temas separados en su mayoría. Este artículo analiza las similitudes y diferencias entre la hipnosis y las alteraciones psicodélicas de la conciencia, haciendo hincapié en que los estados de conciencia no deben definirse por sus contextos precedentes. Los

predictores de respuestas positivas a los psicodélicos (por ejemplo, la absorción, la apertura a la experiencia) también predicen la capacidad de respuesta hipnótica. La mayoría de los cambios experienciales (por ejemplo, cambios en las sensaciones y la imagen corporales, aumento de las imágenes simples y complejas y fenómenos trascendentales) producidos por los psicodélicos también se observan en la hipnosis con sugestión mínima en participantes altamente receptivos. Sin embargo, existen diferencias en las sesiones individuales en el sentido de que, en comparación con la hipnosis, las experiencias psicodélicas suelen durar más, son menos controlables pero más intensas, y pueden producir resultados más negativos, pero también tienen un mayor potencial de efectos positivos a largo plazo. La hipnosis, la investigación psicodélica y el trabajo clínico pueden enriquecerse mutuamente y deberían estar más integrados de lo que lo han estado recientemente.

Translation acknowledgements: The Spanish, French, and German translations were conducted using DeepL Translator (www.deepl.com/translator)