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Psychedelic-Assisted Psychotherapy for Existential Suffering: Facilitating Self-Transcendence at the End-of-Life

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Although existential suffering is amongst the most devastating forms of distress experienced by many patients nearing the end-of-life, it is often unsatisfactorily addressed due to a paucity of effective interventions. However, both historic and recent studies of psychedelic-assisted psychotherapy have reported marked alleviation of this suffering. As such, this article seeks to advance the rationale for the use of psychedelic substances in the provision of psychedelic-assisted psychotherapy for patients nearing the end-of-life. It begins with an overview of the classic psychedelics and their application in psychotherapy, highlighting recent studies. This is followed with a conceptual overview of existential suffering at the end-of-life and the process of self-transcendence. These sections are then integrated in a theoretical rationale for psychedelic-assisted mystical states as a means of facilitating the development of self-transcendence and, through it, the remediation of existential suffering. The paper concludes with a discussion of practical and philosophical considerations germane to the safe and ethical application of psychedelics in healthcare. In particular, developmental considerations for assessing both therapist and patient applicability in utilizing this modality are proposed.

Keywords: *psychedelics, existential suffering, end-of-life care, self-transcendence, positive adult development*

Existential concerns have received increased attention over the past few years due to growing awareness of their central relevance to patient well-being (Boston, Bruce, & Schreiber, 2011; Le May & Wilson, 2008). In fact, severe *existential suffering* is amongst the most devastating forms of distress experienced by many patients nearing the end-of-life (Cassel & Field, 1997; Greisinger et al., 1996). However, despite both its severity and key importance to patients' quality of life (McClain, Rosenfeld, & Breitbart, 2003), existential suffering is rarely adequately addressed due to a paucity of effective interventions (Gasser, Kirchner, & Passie, 2015). To date, there are no well-established pharmacotherapies or psychosocial interventions, and those commonly used demonstrate limited efficacy (see Boston et al., 2011). However, recent and historic studies exploring the utility of

psychedelic-assisted psychotherapy have found that this modality can markedly alleviate existential suffering in those approaching death.

Consequently, this article seeks to advance the rationale for the provision of psychedelic-assisted psychotherapy amongst patients experiencing existential distress at the end-of-life. To do so, it begins with an overview of the classic psychedelics to first provide the reader with a basic orientation to their history of use, neuropsychological features, and method of application in psychotherapy. Next, a conceptual outline of existential suffering at the end-of-life and its relationship with the developmental process of self-transcendence is provided (in accordance with Boston et al., 2011, this article uses the terms existential suffering and existential distress interchangeably). It is argued that psychedelic-induced mystical states may function

to alleviate existential suffering by catalyzing self-transcendence, thus aiding the resolution of life's final developmental crisis. Finally, given that psychedelic-assisted psychotherapy is being revisited as a treatment modality for a wide range of psychological disturbances (Emerson et al., 2014), this article concludes by addressing some of the practical and philosophical considerations germane to this approach more broadly. In particular, guidelines to ensure patient safety will be paramount for this approach to be more widely accepted. Considerations for screening patients and training psychedelic therapists based upon the tenets of adult developmental and transpersonal psychology are proposed.

The Classic Psychedelics

The use of psychedelic compounds for spiritual and healing purposes dates back thousands of years (Merlin, 2003). Psychedelic plants were—and continue to be—venerated as sacraments fostering social cohesion, healing, and spirituality (Ludwig, 1972). In contemporary society, the term psychedelic—deriving from the Greek roots *psyche* (mind or soul) and *delos* (visible or manifest)—is usually interpreted as mind manifesting. The number of drugs that hold psychedelic properties includes a range of substances with varying pharmacological profiles. However, the drugs typically known as *classic* psychedelics, such as psilocybin, lysergic acid diethylamide (LSD), and mescaline, share a chemical structure similar to the neurotransmitter serotonin (5-HT), and are distinguished by their action as potent serotonin agonists (Halberstadt, 2015).

Carhart-Harris and Nutt (2017) advanced a bipartite model of the serotonergic system to distinguish the neuropsychological effects of the classic psychedelics from other drugs that modulate serotonin receptors. In this model, serotonin functions through two, distinct pathways. The first is thought to modulate passive coping (stress moderation) via the 5-HT_{1A} receptor. This pathway is enhanced by conventional antidepressants, such as selective serotonin reuptake inhibitors (SSRIs), as the 5-HT_{1A} receptor is their principal site of action. In such a way, conventional antidepressants may be conceptualized as *assimilative aids*, in the Piagetian sense, meant to help stabilize an

individual through periods of adversity. Conversely, Carhart-Harris and Nutt (2017) have suggested that the second pathway modulates active coping (neuropsychological plasticity/change in response to stress) via the 5-HT_{2A} receptor. This pathway is believed to be enhanced by the classic psychedelics, as they exert their primary effects via the 5-HT_{2A} receptor (Halberstadt, 2015). Accordingly, the classic psychedelics may be conceptualized as *accommodative aids* meant to help an individual adapt by changing in response to adversity.

Phenomenologically, the classic psychedelics, like other psychoactive drugs, function to induce a temporary non-ordinary state of consciousness (Tart, 1975). In other words, they may be thought of as a chemical key or nonspecific amplifier of experience (Leary, Metzner, & Alpert, 2007). The description offered by Jaffe (1990) is particularly illustrative of their effects, “the feature that distinguishes the psychedelic agents from other classes of drug is their capacity reliably to induce states of altered perception, thought, and feeling that are not experienced otherwise except in dreams or at times of religious exaltation” (pp. 563–564).

However, because psychedelic compounds serve to induct the user into a non-ordinary state of consciousness, the content—and outcome—of the experience greatly depends on the *set*, *setting*, and *matrix* of the user (Eisner, 1997; Leary et al., 1963). *Set* includes such factors as the intention, personality, intelligence, and emotional state of the individual, while *setting* includes the physical, social, and symbolic parameters under which the drug is taken. Finally, *matrix* includes the broader environmental context from which the individual comes from, and will return to, following the drug experience. It must be strongly emphasized that these non-pharmacological variables are primary, rather than secondary, to understanding both the nature of the psychedelic experience itself, as well as its impact on a given user (see Hartogsohn, 2017).

Although knowing that someone has taken a psychedelic tells you little about the explicit content of the experience itself, these drugs, nonetheless, often induce a certain array of psychological changes. These include: alterations in sensation, cognition, and the perception of time

and space, novel interpretations of stimuli, changes in language perception, increased associative thinking, facilitation of novel insights and emotional release, greater suggestibility, enhanced access to unconscious memories and archetypal imagery, and weakening ego boundaries (Masters & Houston, 1966).

It has been proposed that because psychedelics cause profound changes in one's experience of self, they may modulate the neural systems currently believed to be associated with self-referential processing—the default-mode network (DMN; Carhart-Harris et al., 2014). Research suggests that the classic psychedelics impact the DMN in a reversible, dose-dependent manner, and these changes appear to correlate with experiences of self-dissolution (e.g., Carhart-Harris et al., 2016; Nour & Carhart-Harris, 2017).

The History of Psychedelic-Assisted Psychotherapy

Throughout the 1950s and into the 1960s, psychedelic drugs were widely available to researchers and clinicians in Europe and North America, and initial studies reported promising findings (Grinspoon & Bakalar, 1979). However, by the late 1950s concerns began to grow due to lax research ethics, questionable scientific methodology, and media sensationalization (see Novak, 1997). By the mid-1960s recreational psychedelic use burgeoned, eventually leading to their association with the growing counterculture movement and anti-war sentiment. Taken together, these factors culminated in the implementation of harsh legal restrictions, which greatly curtailed further study (Dyck, 2008).

However, although routine clinical use of these compounds remains largely prohibited, there has been a gradual re-emergence of both experimental and clinical research in recent years as regulations have begun to loosen (Johnson et al., 2008). This new phase of contemporary research, which employs more stringent ethics and research protocols, supports the notion that these compounds hold remarkable potential when carefully utilized. Recent studies have reported promising findings of their usefulness in palliative care (e.g., Griffiths et al., 2016), addictions (e.g., Bogenschutz & Johnson, 2016), pain medicine (e.g., Froad, 2006), psychiatry

(e.g., Johnson & Griffiths, 2017), and criminology (e.g., Hendricks et al., 2014).

Psychedelic-Assisted Psychotherapy

In contrast to most psychopharmaceuticals the primary therapeutic utility of the psychedelic drugs is not presumed to be a direct outcome of their pharmacological action (Grinspoon & Bakalar, 1979; Richards, 2009). Rather, they modulate neurological functioning to produce changes in conscious awareness that—with the proper set, setting, and guidance—can be highly conducive to self-reflection, emotional catharsis, insight into one's existential situation, and transformative mystical states (Sessa, 2017). In comparison to pharmacotherapy, then, wherein drugs are often meant to be taken repeatedly and continuously over extended periods, psychedelics are typically used sparingly to augment psychotherapy.

Historically, two major approaches to the use of psychedelics were developed, psycholytic and psychedelic psychotherapy (Grinspoon & Bakalar, 1979). *Psycholytic psychotherapy* is usually conceptualized from a psychodynamic perspective, and utilizes smaller doses to augment the enhanced, though gradual, release of unconscious material over the course of numerous therapy sessions. In comparison, *psychedelic psychotherapy* is usually brief and aimed to induce a transformative mystical experience in one, or a few, high dose therapy sessions. A third approach, which is a combination of the aforementioned methods, came to be known as *psychedelytic psychotherapy* (Passie, 2007). Recent, contemporary clinical trials often utilize either an analytic/psycholytic approach or a humanistic/client-centered approach in the application of these substances (see Phelps, 2017).

Although a variety of psychedelic-assisted psychotherapy approaches and protocols have now been developed, they typically involve three phases of treatment: preparation for the psychedelic-assisted session, the psychedelic session itself, and follow-up integration sessions (Mithoefer, 2015; Passie, 2007). A brief overview of some of the general, overarching principles designed to ensure patient safety and maximize beneficial outcomes is as follows (see also Griffiths et al., 2016; Grob et al., 2011; Mithoefer, 2015; Pahnke, 1969; Richards et al., 1977).

Typically, before the drug is administered, the patient meets with two therapists over the course of several sessions to establish rapport and trust to prepare for the psychedelic session or sessions (Mithoefer, 2015). Following this phase, the individual is administered the drug in a pleasant and welcoming environment with both therapists present. Patients may be encouraged to lie down, wear an eyeshade, use headphones to listen to instrumental music, and focus their attention on their arising inner experience. However, the patient may decline to use the eyeshades and/or headphones at any time. Tremendous care is placed on creating a therapeutic set and setting, as these factors are critical in shaping the experience and its outcomes (Mithoefer, 2015).

The therapists are present throughout the session to ensure safety; however, they typically act supportively and non-directively, encouraging participants to be trusting and fully open to their experience (Phelps, 2017). As such, therapists adopt a stance as empathic listeners, guides, facilitators of emotional catharsis, and supporters of the patient's own inner healing agency. At times the therapists may intervene by carefully inviting, rather than directing, the patient back to his or her internal experience (Mithoefer, 2015). Therapists follow, rather than guide, the patient.

Integration sessions following the drug session are considered essential for the psychedelic experience to be most therapeutically impactful. During non-drug follow-up sessions, the therapists address any problems or concerns that may have arisen following the drug-assisted sessions, and help the patient to ground and conceptualize any insights, such that they can be integrated into daily functioning (Mithoefer, 2015).

Masters and Houston (1966) and Grof (1980) both proposed that a given psychedelic experience may be conceptualized as reaching four major depths. The first, or sensory-aesthetic stratum, involves changes in perception of sensory stimuli. Normally unnoticed aspects of the environment capture attention, and people and objects take on a wondrous, fascinating quality. The second, or psychodynamic stratum, involves revisiting unresolved intra- and interpersonal conflicts,

repressed memories, and emotional catharsis. Deeper yet is the archetypal stratum, which involves a sense of being a participant in the symbolic or mythological drama of one's life. Finally, at the transpersonal or mystical stratum, one may have a mystical experience, which entails self-dissolution and a feeling of unity with something sensed to be eternal, infinite, or sacred. Each of these experiential depths may have clinical importance; however, the mystical form may be especially therapeutic for those nearing the end-of-life (Richards, 2016).

Adverse Effects and Contraindications

Substantial pharmacological, experimental, and public health research has established that the classic psychedelics are amongst the safest known psychoactive substances, as they exhibit remarkably low toxicity and are widely regarded to be non-addictive (see Canal & Murnane, 2017; Gable, 2004; Passie et al., 2002, 2008). However, the classic psychedelics can moderately increase pulse rate and blood pressure; thus, use by individuals with cardiovascular disease may be contraindicated (see Johnson et al., 2008). In addition, medications and over-the-counter products which modulate serotonin (e.g., tricyclic antidepressants, SSRIs, St. John's Wort), as well as lithium and haloperidol, have been shown to potentiate psychedelic effects, rendering their concomitant use a potential safety concern (Johnson et al., 2008).

Nonetheless, since the early 1990s approximately 2000 doses of psilocybin (ranging from low to high doses) have been safely administered in the United States and Europe in controlled settings, with no reports of any serious adverse effects (Studerus et al., 2011). Any potential for harm or abuse is heavily constrained by the supervised nature of their administration, which is limited to one or a few occasions, eliminating concerns about abuse and/or adverse effects resulting from chronic use (Shelton & Hendricks, 2016).

However, despite the limited nature of adverse effects—particularly when used in a therapeutic setting—confrontation with intensified thoughts and emotions that often arise with the use of these compounds may be upsetting for patients (Gasser et al., 2015). Even in highly controlled settings, high-dose psychedelics can produce very

strong psychological effects, including pronounced feelings of anxiety, fear, paranoia, confusion, and psychotic-like reactions (Griffiths et al., 2006; Johnson et al., 2008; Strassman, 1984). Studerus et al. (2011) further noted that an extremely small minority of research participants who received psilocybin in a therapeutic context experienced transient anxiety and depression in the weeks following administration. However, these adverse effects were resolved within a month. Ultimately, very limited harm has been reported in the contemporary era of psychedelic research; when dosage, set, and setting are carefully controlled, patients can typically manage any challenging thoughts, emotions, or memories that may arise. Importantly, research suggests that even many elderly and ill patients can safely manage the strong emotions evoked by psychedelic compounds (see Richards, 2016).

Importantly, distressing psychedelic experiences are typically transient and have not been shown to be causative of more enduring psychological disturbances. For example, an epidemiological study by Johansen (2013) found that psychedelic use was not associated with psychosis or hallucinogen persisting perceptual disorder (flashbacks). Similarly, Krebs and Johansen (2013), using data from 2001 to 2004 from the *National Survey on Drug Use and Health*, found that psychedelic use was associated with a decreased likelihood of psychiatric symptoms. However, although psychedelics do not appear to evoke spontaneous mental illness or psychoses in otherwise healthy individuals, it has been proposed that they may precipitate these problems in predisposed individuals (Nichols, 2016; Vardy & Kay, 1983). Accordingly, the use of psychedelics with those who have a psychotic disorder or are at risk of developing one is typically considered one of their major contraindications (Cohen, 1985; Johnson et al., 2008).

Psychedelic-Assisted Psychotherapy at the End of Life

Beginning in the 1960s, it was found that psychedelic-assisted psychotherapy could help improve mood, quality of life, and interpersonal openness, and reduce depression, anxiety, and fear of death in patients with life-limiting illnesses (e.g., Grof et al., 1973; Kast, 1966; Richards et al.,

1977). Through the use of psychedelics, patients' thoughts and feelings surrounding death could be more fully experienced and explored, thus helping patients achieve a sense of meaning and acceptance (Pahnke, 1969). This approach thus differs from the use of psychoactive substances for palliative sedation, such as potent benzodiazepines, which are meant to relieve suffering by decreasing patients' conscious awareness (Maltoni et al., 2012).

Corroborating the initial phase of research conducted in the mid-20th century, recent trials of psychedelic-assisted psychotherapy for the treatment of existential suffering have also reported promising results. For example, Grob et al. (2011) found that psychedelic-assisted psychotherapy could help attenuate existential distress in 12 patients with advanced-stage cancer. The researchers noted statistically significant reductions in symptoms of depression and anxiety at 1 and 3 months post-treatment and reported no serious adverse events. Similarly, Gasser et al. (2014) evaluated the safety and efficacy of psychedelic-assisted psychotherapy in 12 patients with existential suffering due to a life-threatening illness. They found significant reductions in symptoms of anxiety and reported no serious adverse events.

More recently, Griffiths et al. (2016) evaluated psychedelic-assisted psychotherapy for the treatment of existential distress in 51 patients with life-threatening cancers. The researchers noted significant decreases in symptoms of depression and anxiety, increases across various indices of well-being, and reported no serious adverse events. Comparably, Ross et al. (2016) found that a single, psychedelic-assisted psychotherapy session produced significant reductions in end-of-life anxiety and depression in 29 patients with life-threatening cancers and reported no occurrences of serious adverse events.

The promising recent findings of Grob et al. (2011), Gasser et al. (2014), Griffiths et al. (2016), and Ross et al. (2016) serve to further bolster the initial phase of research implicating the utility of psychedelic-assisted psychotherapy for those experiencing psychological and existential suffering at the end-of-life. The studies conducted by Griffiths et al. (2016) and Ross et al. (2016) are particularly

significant in that they are the largest, randomized controlled trials of psilocybin to date. Critically, these studies demonstrate that remarkable benefits can be achieved from even a single administration. The efficiency of this treatment modality is thus particularly relevant for patients with life-threatening illnesses who may not have the time to devote to a lengthy course of therapy. However, perhaps most importantly these studies demonstrate the safety of using psilocybin in this patient population.

What is particularly interesting about these studies is the significant association between the occurrence of a psychedelic-induced mystical experience and the most pronounced therapeutic outcomes (Griffiths et al., 2016; Ross et al., 2016). In fact, the participant-rated intensity of the mystical experience statistically mediated therapeutic improvements in both the Griffiths et al. (2016) and Ross et al. (2016) studies. These findings correspond with contemporary research using healthy volunteers in which psychedelic-induced mystical experiences predicted lasting positive changes in attitudes, mood, behavior, and spirituality (Griffiths et al., 2011; MacLean et al., 2011). They also parallel historic findings in which palliative patients who had a psychedelic-induced mystical experience reported reduced despair, anxiety, and fear of death, deepened relationships, and enhanced well-being (e.g., Grof & Halifax, 1977; Kurland, 1985; Pahnke, 1967, 1969; Richards et al., 1977). To better understand the salubrious effects of mystical states and the role for psychedelic substances at the end-of-life, we now turn to an overview of existential suffering and self-transcendence.

Psychedelic-Assisted Self-Transcendence and the Alleviation of Existential Suffering

Although suffering is often simply equated with physical pain, the term does not connote strictly physical determinants. Instead, suffering may also stem from psychological, social, and existential sources (Saunders, 1988). Suffering can thus be viewed as a complex phenomenon involving an aversive emotional state resulting from the loss, or threatened loss, of the integrity of the individual (see LeMay & Wilson, 2008). For example, Cassel (1982) defines suffering as “the state of severe distress associated with events that threaten the intactness

of the person” (p. 640), while Kearney (2000) views suffering as “the experience that results from damage to the whole person” (p. 5).

Perhaps unsurprisingly, research suggests that existential suffering is amongst the most devastating forms of distress experienced by many patients nearing the end-of-life, with some studies indicating it is of patients’ greatest concern (Cassel & Field, 1997; Greisinger et al., 1996). Indeed, given that suffering occurs upon the experienced or anticipated loss of part of one’s self or life, awareness of approaching death—and with it the ultimate loss of self—frequently evokes tremendous despair (Yalom, 2008). Paul Tillich (1952) described this awareness of one’s future non-existence as ontological anxiety—the terror of death and the loss of being. This distress is particularly evident amongst individuals approaching end-of-life for whom death is developmentally/normatively off-time (Weenolsen, 1988).

Due to growing awareness of its clinical importance at the end-of-life, existential suffering has garnered increased consideration over the past few years (see LeMay & Wilson, 2008). In a comprehensive review of the literature, Boston et al. (2011) identified numerous conceptualizations of existential suffering/existential distress, which they view as a single conceptual entity. These include existential pain (Strang et al., 2004), spiritual despair (Edwards et al., 2010), existential distress (Kissane, 2000), demoralization syndrome (Clarke & Kissane, 2002), and spiritual distress (Caldeira et al., 2013). Although these are not strictly analogous constructs, Boston et al. (2011) noted that the core symptom profile of this overarching syndrome include the loss of meaning in life, hopelessness, depression, a sense of being a burden, disturbance in one’s connection to self, others, the world, or the transcendent, isolation, anticipatory grief, and death anxiety. Chochinov (2006) likewise suggested that differentiating between these various terms and conceptualizations is less critical than appreciating the shared domain they address—the human need to find a deep sense of meaning, connection, and hope at the end-of-life.

Research has demonstrated that addressing existential distress is crucial to enhancing quality

of life and well-being (Le May & Wilson, 2008). For example, existential suffering can manifest in debilitating physical symptoms, such as acute pain (e.g., Chochinov, 2006), and may increase the desire for a hastened death, even when physical symptoms are effectively managed (Moss & Dobson, 2006). Thus, Cohen et al. (1996) have argued that the role of existential factors in patient well-being cannot simply be reduced to physical or even psychosocial determinants.

Yet, despite its relevance to end-of-life, existential suffering remains a neglected area of care, largely due to a lack of effective treatments (Boston et al., 2011). Interestingly, Acton and Wright (2000) and Cassel (1982) have argued that an intervention designed to promote self-transcendence may help to assuage existential suffering/distress. Indeed, growing research in gerontology and palliative care indicates that self-transcendence can help patients achieve a sense of equanimity and acceptance by adopting a broader transpersonal or cosmic perspective towards life and death (see Reed, 2003; Tornstam, 1989).

Conceptualizing Self-Transcendence

The field of transpersonal psychology has long been concerned with personal transformation and the important role of self-expansive, spiritual, and mystical states of consciousness in human well-being and development (Hartelius et al., 2013). Transpersonal psychology has explicit origins in the writings of William James (1902), who noted that our ordinary, waking state of consciousness is but one of many that we are capable of experiencing. In addition to this waking state, various non-ordinary states of consciousness can be obtained (Tart, 1975). Of these, *self-transcendent* states involve a temporarily decreased awareness of self and, simultaneously, increased feelings of connectedness, belonging, and unity (Yaden et al., 2017).

Self-transcendent states are believed to exist on a spectrum of intensity described as the unitary continuum (Newberg & d'Aquili, 2000). At the low end of the spectrum are positioned states such as mindful awareness and flow, whereas in the midrange fall the self-transcendent emotions, such as awe. At the furthest end lies the mystical experience which, as the most potent form of self-

transcendent state, usually involves complete self-dissolution, leaving the person feeling a sense of unity with something greater than their personal self (Hood, 2016).

Mystical experiences are typically felt to be profoundly religious/spiritual in nature and are a common component of numerous religious traditions (Newberg & d'Aquili, 2000). In fact, it has been argued that the mystical experience may form the basis of human religion/spirituality (Maslow, 1971). In such a way, religion/spirituality is thought to be largely rooted in the natural, human capacity for self-transcendent states of consciousness (MacDonald et al., 2015), regardless of the innumerable ways in which they may be experienced and interpreted (Ferrer, 2011).

However, although the term self-transcendence has been used to describe temporary mental states involving a decreased sense of self and increased feelings of connectedness, the term has also been used to describe a personality trait or disposition (Yaden et al., 2017). In this regard, self-transcendence may be defined as one's general sense of "connection to something higher—the belief that there is meaning or purpose larger than ourselves" (Peterson & Seligman, 2004, p. 48). Self-transcendence as a trait involves feelings of awe, hope, and gratitude; it reminds us of how small we are and gives us a sense of significance via our inclusion within something larger (Peterson & Seligman, 2004). Like self-transcendent states, self-transcendence as a trait is similarly intrinsic to human nature and is not incumbent upon metaphysical beliefs or dogmas of any kind (Elkins et al., 1988; Streib & Hood, 2013). In other words, although self-transcendence is often expressed in religious or spiritual terminology, it is universally accessible in the awe-inspiring feeling of oneness and connection with something beyond one's personal self, such as nature or the cosmos (Cassel, 1982).

Self-Transcendence as a Developmental Process

Although self-transcendence may be viewed as a static trait, it can also be understood developmentally, as a trait that steadily increases over the course of adulthood (Levenson et al., 2005). In such a way, self-transcendence entails a gradual expansion of self-boundaries as well as the mature

perspective that develops through this process (for a review of self-transcendence, see Garcia-Romeu, 2010). Maslow (1971) argued that self-transcending individuals have reached “the very highest and most inclusive or holistic level of human consciousness, behaving and relating, as ends rather than means, to oneself, to significant others, to human beings in general, to other species, to nature, and to the cosmos” (p. 269).

Levenson et al. (2001) noted that experiences of loss are integral to the developmental process of self-transcendence. For example, normative transitions from one “season” of life to another require change, which invariably entails loss of a former self-concept or identity (Marcia, 2010). Similarly, with increasing age one gradually faces the loss of friends, family, career, bodily functioning, and so on. Although distressing, the experienced loss of part of one’s self or life may foster hypo-habitation and self-reflection, which can lead to potential liberation from the constraints of a former self-concept. This allows one sense of self to expand in identification with a frame that goes beyond one’s current self-boundaries (Levenson et al., 2001). Thus, inasmuch as an individual is *able* to transcend a loss by expanding his or her sense of self, a crisis can be an opportunity for growth. Reed (2009) argued that self-transcendence is the underlying process mediating between an existential crisis—whether the normative loss of a life transition or the traumatic loss of some aspect of one’s life or self—and well-being.

As such, self-transcendence will—under normative conditions—increase as one sustains, mourns, and transcends losses over the course of adulthood, thus slowly preparing the individual to surmount the ultimate loss of self—one’s death (Weenolsen, 1988). According to Erikson (1997), without resolving this final developmental crisis, an individual will experience existential suffering. However, although Erikson (1997) believed that resolution of this crisis required the development of ego-integrity, Tornstam (1989) argued that it in fact entails a heightened degree of self-transcendence. Following Tornstam, Joan Erikson (1997) expanded her husband’s eight-stage model by proposing that there is indeed a ninth, self-transcendent stage of development, entailing a shift from a rational and

materialist perspective to a cosmic and transcendent one. As one develops towards an ever more pronounced degree of self-transcendence:

An impression of being One all together becomes dominant. As a consequence, the degree of self-centeredness will diminish. To a certain extent, the enclosed self is disaggregated and substituted with a cosmic self. Individuals no longer look upon themselves as especially important. They may perceive themselves as part of a cosmic flow of energy, in which the flow of energy, and not its parts is the important thing. This also involves a redefinition of the perception of life and death. It is not the individual but rather the total flow of life that is important. It is only logical then that the fear of death will decrease while feelings of affinity with past, present and future generations will be enhanced. (Tornstam, 1989, p. 60)

Thus, in order to resolve the final developmental crisis of death, one must transcend his or her separate, personal self—one must experience a sense of identification and oneness with that which endures beyond death, whether that be conceptualized as nature, the cosmos, God, or some other transpersonal reality. Although this maturation towards greater levels of self-transcendence typically develops over the course of adulthood, it is not contingent upon age, and may be accelerated (Reed, 1991; Tornstam, 1989). For example, this might apply to a young woman who finds herself with a terminal cancer diagnosis at the age of 35. She must now prematurely resolve the developmental crisis of death at an age that is normatively off-time. Although this is a very heavy burden, Marcia (2010) emphasized that premature resolution of what are normatively later developmental crises is possible.

Tomer and Eliason (2008) proposed that the ideal therapeutic approach to existential suffering associated with the crisis of death is a direct experience of self-transcendence—a state of mystical consciousness. As the most potent form of self-transcendent state, during a mystical experience the individual entirely loses personal individuality in the experience of ego-death, though *retains* conscious

awareness in an experience of being part of a reality greater than self (Pahnke, 1969). Through the experienced loss of bodily, egoic, and social aspects of identity, though retention of conscious awareness, the person is enabled to directly experience him or herself as a small facet of something much more enduring that will continue beyond his or her death (Hood & Morris, 1983). In other words, in the mystical state it is possible to experience non-separation and oneness with the fundamental ground of being, regardless of how it is interpreted (Levenson et al., 2001). Cassell (1982) noted that:

When experienced, transcendence locates the person in a far larger landscape. The sufferer is not isolated by pain but is brought closer to a transpersonal source of meaning and to the human community that shares those meanings. Such an experience need not involve religion in any formal sense; however, in its transpersonal dimension, it is deeply spiritual." (p. 644)

Thus, the ultimate fear is not of death itself, but the sense of meaninglessness, disconnection, and hopelessness it engenders (Weenolsen, 1991). Yet, one need no longer despair after having directly experienced him or herself as a part of a vaster and more enduring reality. This is what Lifton (1976) described as experiential transcendence in the service of symbolic immortality. This sense of immortality requires neither the denial of death nor the belief in a personal afterlife, but rather the maintenance of a sense of connection and continuity with that which transcends death. This, in turn, serves to buffer against death anxiety, hopelessness, and meaningless (i.e., existential suffering). Crucially, numerous studies have shown that self-transcendence is a central predictor of well-being at the end-of-life, even after controlling for other critical variables (for reviews see Coward & Reed, 1996; Reed, 2009).

Psychedelic-Assisted Mystical Experiences and the Development of Self-Transcendence

At this point a critical question becomes: can psychedelic-facilitated mystical experiences be harnessed to catalyze the process of self-transcendence at the end-of-life? In other words, might psychedelic-assisted psychotherapy be used

to aid one's liberation from the boundaries of the personal self by inducing an experience of complete self-dissolution (ego death) and subsequent self-expansion (rebirth)? Previous findings strongly suggest that they may.

For example, Pahnke (1967, 1969) found that patients experienced the most dramatic therapeutic effects in the wake of a psychedelic mystical experience. Once an individual had a mystical experience, life and death came to be viewed from a new perspective. As the patient's personal sense of identity or self faded away, he or she became aware of being part of something much vaster and felt that "all is one." The person was able to approach the end of their life with a sense of tranquility and a loss of despair, anxiety, and fear of death. Pahnke noted that these therapeutic outcomes were most pronounced upon complete surrender to the experience of ego-loss and positive self-transcendence, which is often experienced as a moment of death and rebirth.

Similarly, Fisher (1970, 1972) found that patients who had a psychedelic induced mystical experience developed a new perspective towards life and a reduced fear of death. Patients reported that their sense of identity would often expand into a sense of "oneness" with the unfolding process of life or the universe. Fisher proposed that in the mystical state, one directly experiences shared identity with something extending beyond one's physical self, thereby reducing or eliminating death anxiety.

Richards (2009) has similarly described the benefits of mystical experiences for patients at the end-of-life. Richards noted that for patients who had a psychedelic-induced mystical experience, fear of death was replaced with a sense of curiosity and trust, as the notion of eternity, a perspective outside of space and time, and overwhelming love were directly experienced in the mystical state. However, the reality of physical death was not denied. Rather, the continued existence of the individual self ceased to be of chief relevance. For these patients, life came to be seen through an expanded lens extending beyond one's personal existence, which attenuated the fear of death, anxiety, depression, alienation, and preoccupation with pain. These patients thus became more integrated, better able to embrace the

remainder of their life, and more open to reconciling with family members (Richards, 2009).

More recently, Swift et al. (2017) and Malone et al. (2018) conducted follow-up interviews with participants in the aforementioned Ross et al. (2016) study. During their psilocybin sessions, many participants reported an experienced loss of self and feelings of connection/unity, the core facets of a mystical state (Swift et al., 2017; Malone et al., 2018). Importantly, this sense of ego-dissolution and unity brought relief for many patients, with nearly all participants noting the development of a new understanding and acceptance of death and dying (Swift et al., 2017). For example, one participant reported that her psilocybin experience provided “a greater understanding of global connectedness,” noting that this sense of belonging helped to ease her fear of death:

[The psilocybin] just opens you up and it connects you... it's not just people, it's animals, it's trees—everything is interwoven, and that's a big relief... I think it does help you accept death because you don't feel alone, you don't feel like you're going to, I don't know, go off into nothingness. That's the number one thing—you're just not alone. (Swift et al., 2017, p. 499)

Another participant similarly reported feelings of self-transcendent connection and unity which also helped her to reconcile fears surrounding death and dying:

I felt like this was really dealing with death... I'm in the forest and there's this beautiful, loamy, woody, green, lush kind of woods, and I'm down below the ground... And it felt really, really good, and I thought, “That's what happens when you die. I am going to be reconnected with this beautiful world. This earthy world that we live in... It was just simple. It was gorgeous. (Swift et al., 2017, p. 500)

Importantly, many participants noted that these feelings of connectedness were not transient but left an *enduring* self-transcendent perspective, lasting well beyond the session. For example, one participant reported, “I was the cloud, I was everything, and that was the theme throughout

the whole [experience], that I was all this—this was me. And it was so wonderful... to believe that. And I still do—that is me” (Malone et al., 2018, p. 5). Furthermore, she felt as if she experienced her own death (ego-death) on two occasions during the experience and emerged both unafraid and viewing it as an integral part of existence. She noted, “I was just part of this big beautiful world ... and that's what's going to happen when I die ... maybe death is a beautiful thing” (Malone et al., 2018, p. 5).

It is clearly evident that the patients' attitudes and perspectives fostered by the psychedelic experiences as reported by Pahnke (1967, 1969), Fisher (1970, 1972), Richards (2009), Swift et al. (2017), and Malone et al. (2018) closely resemble descriptions of self-transcendence in the palliative care and gerontology literature, such as noted by Tornstam (1989). This strong correspondence suggests that, when judiciously utilized, psychedelics may help further catalyze the developmental shift to a self-transcendent metaperspective. In other words, mystical experiences—as a temporary state of self-transcendence—may help facilitate the development of a more enduring self-transcendent trait (Yaden et al., 2017). By providing a direct experience of pronounced self-transcendence, this mystical state of consciousness could thus help patients resolve the final development crisis, thereby reducing existential distress as one approaches the end of life.

However, the complex interrelation of states and traits remains a point of contention (see Wilber, 2006). It must be emphasized that a temporary, self-transcendent state cannot be considered synonymous with an enduring, self-transcendent trait. Whereas traits are “consistent and stable modes of an individual's adjustment to his [or her] environment,” states may be viewed as “present activity, temporary states of mind, and mood” (Allport & Odbert, 1936, p. 26). Nonetheless, an enduring question in psychology has been: can the occurrence of temporary states lead to the development of enduring traits? Growing research suggests that this question can now be answered in the affirmative.

From a neurological standpoint, it has been argued that temporary activation of neural networks can lead to neuroplastic changes in

brain structure and functioning (Cahn & Polich, 2006; Garland et al., 2010). For example, Holzel et al. (2011) have documented neuroscientific evidence that mindfulness practice (inducing temporary states of mindfulness) can lead to changes in brain functioning associated with heightened trait mindfulness. Similarly, Kiken et al. (2015) demonstrated that induction of states of mindfulness via meditation practice can lead to increases in trait mindfulness. These studies support the argument made by Levenson and colleagues (2005) that it is possible to foster the development of a self-transcendent perspective (trait) through intentional induction of self-transcendent states via practices such as meditation. Furthermore, Carhart-Harris and Nutt (2017) proposed that 5-HT_{2A} activation by the classic psychedelics modulates neuropsychological change, citing evidence that enhanced 5-HT_{2A} signaling produces a state of neuropsychological plasticity (see Carhart-Harris & Nutt, 2017 for references). Similarly, Brouwer and Carhart-Harris (2020) provide a compelling review of the literature suggesting that radical, rapid, and discrete neuropsychological transformation can occur through activation of 5-HT_{2A} signalling.

Taken together, these findings suggest that experiencing acute states may indeed lead to the development of more enduring changes in traits. Nonetheless, just because one experiences a powerful self-transcendent state it does not follow that an enduring self-transcendent trait will by default be carried over into one's life. Sidney Cohen argued that the psychedelic experience "is not a spiritual labor-saving device, salvation, instant wisdom, or a shortcut to maturity. However, it can be an opportunity to experience oneself and the world in new ways—and to learn from it" (1967, p. 1). Thus, although psychedelics can produce self-transcendent states with profound import, they must be integrated to have lasting developmental implications, which requires deliberate reflection (Richards, 2016). In such a way, transpersonally oriented, psychedelic-assisted psychotherapy may be understood as a modality which helps patients experience *and* cultivate a self-transcendent perspective, thus helping them navigate life's final developmental crisis.

Considerations for the Safe and Ethical Application of Psychedelic Substances

The Western cultural bias against psychedelics has not only maligned the academic study of these agents but has made it difficult to take a balanced view of their relative harms and benefits (Hood et al., 2009). As a result, over the past 50 years, the use of psychedelic drugs as an adjunct to psychotherapy has remained a highly controversial and polarizing area of inquiry (Nichols, 2016). This is, at least to some extent, due to the historic abuses that have been committed with these substances. Although the therapeutic potential of psychedelic compounds is well documented, it must be equally acknowledged that these drugs have been used in highly unethical ways. For example, the United States military and CIA investigated the properties of psychedelic drugs in highly unethical experiments as agents of warfare and mind-control (see Collins, 1988; Grinspoon & Bakalar, 1979).

Although shameful to acknowledge, this period of research sheds light on contemporary societal fears of these drugs (Dyck, 2008). Highlighting both the beneficent and malevolent ends to which psychedelics may be applied illustrates that they are simply chemical tools. This must be emphasized, as it is ultimately the intentions, values, and structures guiding their use that determines the nature of the outcomes. Just as a scalpel may be used to incise a cancerous tumor or inflict grievous bodily harm, psychedelic compounds may also be used for good or for ill. With both a scalpel or psychedelic, however, it is not the tool itself which is to blame—or praise—but rather, the intent, skill, and maturity of the individual applying it. In such a way, one might consider the current ban on the use of psychedelics in mental healthcare as akin to a ban on the use of scalpels in surgery.

Nonetheless, with the resurgence of psychedelic research, and growing likelihood of their eventual re-legalization and use in psychotherapy (see Emerson et al., 2014), proper consideration of how to guarantee the ethical application of these substances will be paramount. The foremost way in which to ensure patient safety will be the establishment of rigorous protocols for both training psychedelic-psychotherapists and screening prospective patients.

Psychedelic-Psychotherapists

To optimize patient care and safety it will be imperative for clinicians to acknowledge the limits of their expertise and utilize specialist services in the application of this modality. As with all pharmacological agents, medical or nursing professionals will likely be required to oversee the administration of psychedelic substances to ensure the physical safety of patients.

However, as previously noted, psychedelics are typically not used as a pharmacotherapy, but rather to precipitate a state of consciousness that catalyzes the therapeutic process. As a result, great consideration will be required to choose the psychotherapists who will conduct the therapy itself, as patients under the influence of psychedelics are exceptionally open to environmental influences (Friedman, 2006). Issues of patient vulnerability, suggestibility, and relational power dynamics take on even greater significance in psychedelic-assisted psychotherapy. Psychedelic psychotherapists require a particularly high degree of psychological and spiritual development, emotional maturity, and ethical integrity to work judiciously with these compounds (Grob, 2007).

Eisner (1997) argued that the capacity for empathy, a decisively nonjudgmental attitude, great patience, and openness of the “mind and heart” are essential qualities for a psychedelic psychotherapist. Phelps (2017) has likewise suggested that therapists utilizing psychedelics must have a pronounced degree of spiritual intelligence to work safely with these substances. In a similar way, Sinnott (2000) argued that any therapist working with transpersonal content must be at a postconventional level of ego-development to avoid unskilled interventions that could lead to the traumatic loss of part of a patient’s self that may, for example, emerge in a psychedelic experience. At this time, both spiritual intelligence and ego-development can be assessed with validated psychometric scales (e.g., Hy & Loevinger, 1996; King & DiCicco, 2009). Perhaps these measures, or something similar to them, would be useful in the training or selection of psychedelic psychotherapists.

Beyond the requisite psychological and spiritual maturity, specialized training will also be required to be competent in psychedelic-assisted

psychotherapy. Training programs involving didactic, practical, and experiential training are currently being established by the Multidisciplinary Association for Psychedelic Studies and the California Institute of Integral Studies, amongst others (see Emerson et al., 2014; Phelps, 2017). At this time, potential trainees are required to be licensed medical or mental health professionals or clergy/chaplains who have had sufficient psychiatry, psychology, psychotherapy, or pastoral counseling training (Phelps, 2017). It has been suggested that first-hand experience with psychedelics should be included as part of training, as the capacity to safely guide others through a psychedelic sojourn is believed to require personal experience in these realms (Eisner, 1997).

Given that individuals may find religious or spiritual terminology most appropriate to describe their psychedelic experiences (Masters & Houston, 1966), spiritual professionals may be of tremendous assistance to help patients integrate these experiences. When used to foster a spiritual experience, psychedelics may even qualify as *sacraments*, defined as that “through which the holy makes its presence felt” (Dourley, 1981, p. 31). In discussing logotherapy, Frankl (1963) noted that it “does not cross the boundary between psychotherapy and religion. But it leaves the door to religion open and it leaves it to the patient whether or not to pass the door” (p. 143). In the same way, psychedelic psychotherapists must not proselytize, as imposing beliefs and values on patients is a breach of ethical standards. Following the participatory turn (Ferrer, 2011), psychedelic psychotherapists must hold an open, diverse, and multi-focal perspective towards spirituality to ensure that patient’s beliefs and spiritual trajectories are honored.

Psychedelic Patients

It will also be essential to have frameworks in place that help distinguish those patients most likely to benefit from those most likely to be harmed. As previously noted, psychedelic substances can be used in demonstrably therapeutic ways, but may also cause psychosis-like reactions or even trigger the onset of a psychotic disorder in predisposed individuals.

In a recent synthesis, Swanson (2018) reviewed the major psychedelic theories from

the 19th, 20th, and 21st centuries, and presented four areas on which they all converge: 1) psychedelics produce their effects by inhibiting the neuropsychological mechanisms which normally constrain consciousness; 2) too much or too little constraint can contribute to psychopathology; 3) psychedelic effects may appear similar to psychotic symptoms because both involve inhibited constraints; and 4) psychedelic drugs are therapeutically useful precisely because they inhibit these constraints. Thus, psychedelics may be viewed as the quintessential *pharmakon*, at once both a potential remedy or poison (cf. Meier, 1967).

Consequently, it follows that while for some individuals the relaxation of these neuropsychological constraints is potentially dangerous, for others it is potentially advantageous. Developmental psychopathology, in tandem with adult developmental and transpersonal psychology, may be helpful in aiding a delineation. Extensive research in this area has shown that psychotic illnesses do not simply emerge *de novo*, but rather, have a developmental trajectory. In other words, schizophrenia and related psychotic disorders are the outcome of numerous aberrations and deficits in development over time. Thus, a psychotic-like psychedelic experience in an otherwise healthy individual does not imply that one is now psychotic or will necessarily develop a psychotic disorder (St. Arnaud & Cormier, 2017).

Furthermore, according to adult developmental/transpersonal theory, the extent to which an individual may benefit, or be harmed, from non-ordinary states differs according to their developmental maturity (Cook-Greuter, 2000). Wilber's (2006) notion of the pre/trans distinction suggests that for individuals on a deleterious developmental pathway, self-dissolution via psychedelics may precipitate a pathological opening to the prerational—a regressive movement towards psychosis. Because psychedelic experiences can be highly destabilizing, they may trigger a psychotic response in such individuals, as they do not have the necessary self-structure to tolerate intense primary process affect, fantasy, or imagery (Cortright, 2007), and thus may lose their hold on reality testing. In a similar way, psychoanalysts refer to *lacunae* or holes

in the self-structure of those who have a psychotic disorder or are on a trajectory towards developing one (Harter, 2016).

Conversely, Nelson and Sass (2008) pointed out that although disruption in one's sense of self may induce pathological disruptions in those with, or prone to, psychotic disorders, the very same process can precipitate a beneficial mystical experience in others. In contrast to the potential for psychotic decompensation in those on a deleterious developmental pathway, healthy adult development involves movement from conventional into postconventional bands of ego maturity and beyond (Irwin, 2002). Individuals at these levels of development are able to deliberately and safely deconstruct self-boundaries, as they have developed the prerequisite ego stability to differentiate prepersonal from transpersonal material (Cook-Greuter, 2000). In other words, one must have established a stable self-structure before it can be safely transcended. For individuals on a healthy developmental pathway, self-dissolution may precipitate a non-pathological opening to the transrational or transpersonal. In such cases, inhibition of the normal constraints on consciousness with the aid of psychedelics may lead to ecstatic (though potentially frightening) self-dissolution and mystical union.

Psychedelics and Surrender

Fahlberg et al. (1992) cautioned that self-transcendence requires the individual to first surrender a former self-concept to achieve an expanded sense of self and noted that this form of transpersonal awareness can be distressing. Indeed, self-transcendence requires that we must first accept loss; to disidentify from a former self-concept, one must experience a type of ego loss (or death) and the associated feelings of grief. Stein (2004) argued that the inherent desire for self-transcendence involves a venture into the unknown—that which annihilates the ego. In other words, one first must “let go” of, or mourn, an aspect of self or identity before one can be reborn in a more integrated and expansive self. Given that one may encounter psychodynamic strata of the mind as a result of this ego-dissolution, such as unresolved intra- and interpersonal conflicts and repressed traumatic memories (Richards,

2016), the patient must be open to, and capable of integrating, this material.

Indeed, it has been noted since the early period of psychedelic research in the mid-20th century that deliberately surrendering control to whatever arises in the psychedelic state is crucial for a positive experience (Leary et al., 2007). From the perspective of the patient, it is essential that he or she have a serious, conscious intention of “letting go” to whatever arises (Eisner, 1997). Richards (2016) argued that fear and psychotic-like features emerge when one is unable to trust the process and desperately strives to maintain control.

The importance of surrender or acceptance is witnessed in Swift et al.’s (2017) qualitative study. Many patients reported that their psychedelic experience initially felt overwhelming, challenging, or fearful, noting that the difficulty was linked to fears of losing control. One participant reported, “I was watching everything disintegrate ... my past, my relationships, my personality, everything that makes me feel like [me] ... That was terrifying” (Swift et al., 2017, p. 497). However, when participants were able to surrender and accept the experience, the intensity abated, leading to feelings of calmness and peace.

Thus, the desire for self-dissolution and self-transcendence must be entered into intentionally (Levenson et al., 2001). Sundararajan (2002) also proposed that one of the key differences between whether an encounter with the numinous will be experienced as awe-full or awe-some is the desire of the individual to surrender to the experience, to deliberately and receptively allow their self to be dissolved and absorbed into something greater. In other words, both the desire and the requisite maturity for self-transcendence.

Thus, one must be able to distinguish which patients will have adaptive though potentially challenging experiences of self-loss and corresponding self-expansion from those who will have pathological self-loss and psychotic decompensation. To do so, one must assess the developmental history of the patient to understand the potential effects of inhibiting the normal constraints on consciousness. As a basic guideline, patients with cognitive and emotional conditions associated with diminished ego strength are typically not appropriate for psychedelic-

assisted psychotherapy (Byock, 2018). In other words, perhaps only patients within conventional and postconventional levels of ego functioning have the requisite psychological stability to safely dissolve their self-structure with the aid of psychedelics (cf. Irwin, 2002). In order to assess this dimension as a screening index, it may be advantageous for clinicians to utilize an assessment measure such as the *Washington University Sentence Completion Test* (Hy & Loevinger, 1996) which was designed to assess ego-development.

Philosophical Considerations

Despite evidence that psychoactive substances played a role in various Judeo-Christian, Islamic, and other religious sects (see Hood et al., 2009 for references), some individuals may object to the use of psychedelics on religious grounds by arguing that using psychoactive substances to induce spiritual experiences is either impossible or sacrilegious. However, the similarity between the psychedelic compounds found within plants, animals, and naturally within the human brain suggests that any delineation between natural and artificially generated experience, drug induced or otherwise, is arbitrary (Weil, 1986). Relatedly, some may take offense at the attempt to explain profound spiritual experiences using reductive language. However, understanding how our eyes receive wavelengths of light which are then processed into visual experiences does not detract from the experienced poignancy of a beautiful sunset (Goodman, 2002). In much the same way, explaining the biochemical pathways by which spiritual experiences are mediated need not detract from the profundity, or even veracity, of the experience itself (James, 1902).

Science can neither confirm nor deny the existence of metaphysical or divine realities based on phenomenological accounts of mystical experiences (Shafranske & Sperry, 2005). It can, however, study these experiences without accepting them as revealing ontological truths. Most importantly, it can study the tangible outcomes of these experiences—that is, William James’s (1902) *fruits* of religious experience (Hood et al., 2009). Although science must remain agnostic on the metaphysical veracity of psychedelic induced mystical experiences, if

nothing else it can and should study their potential contribution to well-being and flourishing.

Nonetheless, the robust empirical finding that the therapeutic effects of psychedelics often derive from the mystical experiences they can induce presents a challenge to contemporary notions about the role of spirituality in healthcare. More than half a century ago Pahnke and Richards (1966) noted that the use of psychedelics to induce mystical experiences was problematic for those health professionals who prided themselves on their “scientific objectivity.” However—perhaps somewhat ironically—it is precisely because psychedelics can evoke these states of consciousness under controlled conditions that they hold remarkable import for the scientific study of spiritual experiences and their clinical value. In this sense, psychedelics represent a critical tool for the continued development of transpersonal psychology and psychotherapy.

However, although it is essential to have a scientific appreciation and understanding of these drugs and the experiences they can induce, this must not diminish or otherwise reduce the importance of the phenomenology itself. Bradshaw (1996) raised an important point of concern when she questioned whether biomedical technology—though enhancing treatment—may at times over-medicalize our humanity. She cautioned that the spiritual ideal at the core of palliative care must not be rationalized away. Echoing Bradshaw’s warning, it is equally imperative that the use of psychedelics to foster transformative self-transcendent experiences not be diminished or merely explained away. We must accept that psychedelics are more than material objects with physiological effects; they hold meanings and shape social discourse as they evolve through the conjunction of individuals in society (Montagne, 1996).

Similarly, Chochinov (2006) argued that there is a substantial difference between the mechanistic application of a treatment and a truly holistic approach to care that accepts and gives credence to the totality of the person—biological, psychosocial, and existential-spiritual. Psychedelic-induced physiological changes and psychedelic-induced spiritual experiences need not be considered mutually exclusive. Rather, they may be viewed as

complementary ways of understanding the same process. By approaching psychedelics holistically—not only as potent serotonin agonists but also as spiritual medicines or even sacraments—perhaps an attitude guarding against an overly mechanistic and bureaucratic approach to their use can be instilled.

Conclusion

It has been said that we are in the midst of a psychedelic renaissance. The word renaissance derives from the French, *to be born again*, and refers to the recovery of culture, skills, learning, or knowledge that had been forgotten (Shafranske & Sperry, 2005). Given that humans have used psychedelics for millennia for therapeutic and spiritual purposes, the burgeoning study of these substances truly qualifies for this label. In fact, psychedelic-assisted psychotherapy may be considered a transpersonal “therapy directly or indirectly concerned with the recognition, acceptance, and realization of ultimate states. As such, it is not new; rather it is perhaps the oldest of all the therapeutic approaches” (Sutich, 1973, p. 3).

Indeed, as this article has sought to highlight, psychedelic-assisted psychotherapy is a promising renascent treatment that may—in particular—afford clinicians with an invaluable option to alleviate existential suffering amongst those approaching the end-of-life. Although psychedelic-assisted psychotherapy will not be a panacea for all individuals, given the severity of existential distress and lack of effective treatment options currently available (Boston et al., 2011; Gasser et al., 2015), surely this modality bears our serious consideration.

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