



Who are we, and what is the nature of reality? Insights from scientists' spiritually transformative experiences

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ABSTRACT

To analyze the first-person phenomenological Spiritually Transformative Experiences (STEs) of a sample of scientists and academics, the first-person phenomenological accounts of 40 scientists' and/or academics' Spiritually Transformative Experiences were analyzed with respect to their perceived changes in the nature of the personal self and the nature of reality. Eighty-five percent of experiencers described a dissolution of the boundaries of their personal self; this was experienced by 62.5% as a sense of boundless oneness, with the characteristics of pure unconditional love (45%). As to the nature of reality, 60% also experienced reality as unitive, and 47.5% of the experiencers described its essence as unconditional love, bliss, and luminosity (27.5%), with some describing it as filled with energy, intelligence and beyond time. For all individuals, the experiences were considered truly real. For those who have not had similar experiences, their ontological status remains an empirical question.

KEYWORDS

Consciousness; spiritually transformative experiences; (STEs); self; reality; love

Introduction

Spiritually Transformative Experience (STE) is a label coined by Kason (2019) as an umbrella term comprising six broad categories, each with many subtypes: Mystical Experiences; Spiritual energy/Kundalini awakenings; Psychic Episodes; Near-Death Experiences (NDE); Other Death-Related STEs; and Inspired Creativity and Genius. Though these experiences have been part of the human experience since ancient times (e.g. Tóth 2017) they have been increasingly studied during the last century and, during this process, labeled with different names, for example: religious experiences (James 1903); self-transcendent experiences (Yaden et al. 2017); quantum change experiences (Miller 2004); and mystical experiences (Wulff 2014), among others.

From a scientific point of view, these experiences are particularly interesting for the investigation of the nature and characteristics of consciousness. For example, ongoing research questions concern whether these experiences are forms of hallucination and thus pathology, or are, alternatively, real experiences of different levels or manifestations of human consciousness. Are these experiences solely derived from different patterns of aberrant brain activity, or do they represent forms of consciousness beyond the brain's

biological constraints? (Van Lommel 2013; Greyson 2010; Parnia 2014; Woollacott 2015).

Olaf Blanke and colleagues (Blanke 2004; Blanke et al. 2004) state that neurological evidence indicates that the out-of-body experiences (OBE) that often accompany an STE, including NDEs, are pathological, and are related to a disintegration within personal space (multisensory dysfunction) and a disintegration between personal space (vestibular) and extrapersonal space (visual) due to interference associated with the temporo-parietal junction.

In contrast to Blanke et al. (2004), other researchers propose that these and other mystical experiences are due to a reduction in brain activity associated with neural filtering mechanisms, which allows an individual to experience a wider, more expansive perception of reality (Greyson 2010; Van Lommel 2013; Woollacott and Shumway-Cook 2020). These data suggest that STEs are windows to a spiritual/transcendental world which permeates what we experience as material/physical reality.

STEs have been quantitatively investigated with scientific tools by many authors. For example, Woollacott, Kason, and Park (2021) interviewed 342 individuals recruited from the general population who described having a mystical experience, defined as an experience of a non-ordinary state of consciousness associated with physiological/energetic sensations (Sanchez and Daniels 2008). In Eastern traditions these are often called *kundalini* awakenings. Participants reported feelings of self-expansion and a sense of being enveloped in light or love. Eighty-five percent of participants reported unusual flows of energy through or around the body.

Similarly, Corneille and Luke (2021) surveyed 152 participants from the general population who filled in a questionnaire related to STEs. The phenomenological distribution of STE characteristics as measured with the 11-Dimensional Altered States of Consciousness Rating Scale (Studerus, Gamma and Vollenweider 2010), showed high scores on such dimensions as experience of unity, blissful state, changed meaning, and insightfulness. Chen et al. (2011) also investigated STEs in 139 Chinese Buddhist monks and nuns. Among the different findings from their qualitative analyses, they found nine STE characteristics: ego loss, timeless-spacelessness, internal unity, external unity, inner subjectivity, ineffability, positive affect, sacredness, and noetic quality.

More recently, Woollacott and Shumway-Cook (2022) surveyed STEs in 57 scientists and academics. This investigation is particularly interesting because the participants represent a sample of people who, in general, support a materialist/physiological or simply a cultural interpretation of this type of experience (Ecklund and Long 2011). From the interview questionnaire, Woollacott and Shumway-Cook investigated the characteristics of STEs, the energy/sensory components, their triggers and precursors, in addition to transformations in participants' worldview, values and career.

Participants reported the STE as a mystical experience involving feelings of expansion (including conscious awareness leaving the body), energy rising up the spine, a sense of being enveloped in light, love or part of a unified energetic field. Principal triggers for these experiences included concentrating on spiritual matters, the presence of a spiritually developed person, and intense meditation or prayer. Transformational changes in participants included increased sensory sensitivity, creativity, and changes in beliefs, including a desire to serve others, a sense of unity with all, and the immortality of the

spirit. Effects on career ranged from incorporating their new worldview and spiritual insights into the way they interacted with others within their current career, to radically changing their career to focus on questions related to the fundamental nature of consciousness or to serve others from this new perspective.

Though these investigations of key characteristics of STEs have provided much information about their phenomenology by using structured, semi-structured questionnaires or psychometric scales, the studies fall short of having a complete description of first-person phenomenological experiences. Only such descriptions offer the possibility of understanding all qualitative characteristics and nuances of such experiences.

The aim of this study was to investigate two topics related to first-person phenomenological STEs of a sample of scientists and academics, through analyzing the complete narrative of their experiences. Participants' first-person phenomenological experiences were examined in relation to the change of their perception of the personal self and also the nature of reality. We looked in more detail at how persons of a high level of literacy and scientific training described such non-ordinary consciousness experiences.

Methods

Materials

We examined the short essays written by the 57 authors who contributed to a book entitled *Spiritual Awakenings: Scientists and Academics Describe Their Experiences* (Woollacott and Lorimer, eds., 2022); 10 further STE descriptions collected by co-author MW; the first-person accounts of the single case described by Facco, Lucangeli, and Tressoldi (2018); and the 95 posts available up to October 2022 on the Academy for the Advancement of Postmaterialist Sciences (AAPS) website, *The Archives of Scientists' Transcendental Experiences* (<https://www.aapsglobal.com/taste>).

Participant recruitment and main demographic characteristics

Those who were invited to contribute an essay to the Woollacott and Lorimer book were contacted by email among the scientists and researchers affiliated with the Galileo Commission, the Scientific and Medical Network (SMN) and the AAPS. Inclusion criteria were as follows: persons trained in science and academia or who were currently pursuing a degree in science (including psychology or medical degrees) or academia (including graduate students) who believed they had had a spiritually transforming experience, and who were 18 years of age or older.

The book contributors lived in different countries, including the USA, Canada, England, Sweden, Italy, France, Greece, India, Kenya, Venezuela, New Zealand, Australia, and China. Fifty-seven percent were males and 43% females. Eighty-seven percent were white. As to the field of studies in which they were trained, 58% declared Science and the remaining Humanities, Medicine, and Education. In addition to responding to a structured questionnaire described by Woollacott and Shumway-Cook (2022), they were invited to describe in detail their STE.

Participants who contributed to the AAPS *Archives of Scientists' Transcendental Experiences* posted their STEs, mainly anonymously, following the instruction 'Please describe your experience in detail. Explain how this experience has affected you. How has it impacted your life and/or career?'

Analysis of STEs

We entered the first-person phenomenological accounts of each author's STE into a database, dividing the account contents into two categories, description of True Self and True Reality. In the True Self category, we added all contents related to how participants described their identity during their spiritual awakening, including names such as Self, I, me, etc. In the True Reality category, we added all contents related to how participants described what they identified as reality, the external world, etc.

The database is available open access at <https://doi.org/10.6084/m9.figshare.21706826.v1> for independent controls and analyses.¹

We then explored the descriptors used for each of these categories and, using thematic analysis (Braun and Clarke 2012), identified, analyzed and interpreted the patterns of meaning within the qualitative data. Selected themes were the participants' new description (1) of the Self and (2) of Reality. This approach emphasizes the participants' perceptions, feelings and experiences as the primary objective of the study.

Results

Data

Only 30 authors who contributed to the Woollacott and Lorimer book (2022) reported first-person phenomenological accounts of their STE. Adding the single case described by Facco, Lucangeli, and Tressoldi (2018), two STEs retrieved from those collected by MW, and seven from the *Archives of Scientists' Transcendental Experiences*, overall, we analyzed 40 accounts. All 40 authors reported accounts related to the change in understanding of their personal self.

Only 14 authors reported accounts related to the nature of Reality, separate from that for their personal self, as many described a similar experience for both personal self and Reality as a sense of unity with the cosmos. Their accounts ranged from a single sentence to short paragraphs: See Table 1.

Common descriptions of both categories

Note that the top three descriptive words/phrases for both categories were the same: 1. unity/oneness with cosmic source, 2. love, and 3. bliss/ecstasy/joy/wonder. In addition, 24 of the 31 words/phrases (77%) used to describe the True Self were also used for True Reality.

¹ID number refers to the chapter in the Woollacott and Lorimer edited book; AM to the single case described by Facco, Lucangeli, and Tressoldi 2018; Extra to STEs collected by MW; and Taste to STEs retrieved on <https://www.aapsglobal.com/taste>.

Table 1. Number of times specific words/phrases were used by the participants to describe both their True Self and True Reality, as part of the narrative of their transcendent experience.

Item	True self	N = 40	True reality	N = 40
1	Unity, oneness w/ cosmic source (2)	25 or 62.5%	Unity, oneness w/ cosmic source	24 or 60%
2	Love (2)	18 or 45%	Love	19 or 47.5%
3	Bliss, ecstasy, joy, wonder (2)	16 or 40%	Bliss, ecstasy, joy, wonder	11 or 27.5%
4	No boundaries (2)	9 or 22.5%	Light, luminosity	11 or 27.5%
5	Expanded (consciousness) (2)	9	Vastness-Infinite	8 or 20%
6	Light, luminosity (2)	8 or 20%	No time/eternal	7 or 17.5%
7	Beyond notions of self (2)	7 or 17.5%	No boundaries (2)	6 or 15%
8	Interconnection (2)	6 or 15%	Interconnection	6
9	No time/eternal (2)	6	Force filling universe	6
10	Vastness- infinite (2)	5 or 12.5%	Alive	6
11	I am That/ pure awareness /cosmic consciousness (2)	5	I am That/ pure awareness /cosmic consciousness.	5 or 12.5%
12	Spaciousness (2)	4 or 10%	Beyond notions of self	5
13	I'm home (2)	4	Expanded (consciousness)	5
14	Flowing (2)	3 or 7.5%	Intelligent/Self knowing consciousness	5
15	Particle and wave, observer-knower, subject-object (2)	3	Within & without/ subject & object, observer-knower, particle & wave	5
16	Recognition, familiarity, knowing (1)	3	Flowing	4 or 10%
17	Freedom (2)	3	Understand and know everything	4
18	Energy from the heart (1)	3	Celebrating/dancing energy/force/power/ever-active	4
19	Contentment, satisfaction, comfort (1)	3	Spaciousness	3 or 7.5%
20	Peaceful (2)	3	Peaceful	3
21	Numinous (1)	2 or 5%	I'm home	3
22	Force filling universe (2)	1 or 2.5%	God/Heart of God	3
23	Understand and know everything (1)	1	Mirror reflecting back my life/self-reflecting	2 or 5%
24	Clarity (2)	1	Clarity	1 or 2.5%
25	Sacred (2)	1	Wise	2
26	Innocence (2)	1	Innocence	1
27	Creative (2)	1	Creative	1
28	Ineffable (2)	1	Ineffable	1
29	Nectar (1)	1	Freedom	1
30	No fear (2)	1	No fear	1
31	Everything is as it should be (1)	1	Benevolent	2
			Sacred	1
			Vibrant/vibrating	1
			Waking up to itself	1

Note: The number 1 or 2 in parentheses indicates whether the item was found in only one category (Self or Reality) or in both.

The true self

The nature of the True Self was described as ‘boundless’ (9) or as ‘Oneness’ (25) by 34 (85%) of the authors. Descriptions varied among them. For example:

ID1: ‘Everything was, is ONE! I was not anymore, and I AM everything! There was no I;’

ID10: ‘My consciousness expanded out over the entire desert and mountains, the whole vista;’

ID14: ‘A spontaneous and noetic sense of absolute Oneness imbibed and activated every fibre in my body;’

ID18: 'I was simultaneously the world and the observer of the world. I was the world observing itself!'

For the remaining six authors, one participant referred to Conscious Energy imploding into the heart region, and the remaining five to different experiences of pure love.

Eighteen participants (45%) reported love as the dominant essence of this conscious state. For example:

ID18: 'I felt a powerful rush of energy-love emerge from my chest, the like of which I had never felt before and couldn't even imagine was possible. This feeling was clearly love, but a love so intense and so incredibly fulfilling that it surpassed any possible idea I had about what love is. Even more unbelievable was the fact that I was the source of this love;'

ID22: 'I felt an intense sense of love surrounding me, filling me, flowing through me, connecting me to my son and to the world around me;'

ID42: 'I – except there was no “I” any longer– experienced an inrushing of the most intense and overwhelming rapturous LOVE.'

Sixteen participants (40%) reported bliss, ecstasy, joy or wonder as a dominant essence of their experience. For example:

ID10: 'I felt like a floating point of perception in this expanded field of consciousness – swimming in the blissful ocean of myself;'

ID11: 'One after another massive waves of bliss started to rise through my being. In this outpouring of bliss, I become aware of my own deepest self, the very core of my being;'

ID12: 'In an instant of grace, the years of accumulated questions and yearnings opened into a joyful, sacred and crystalline space of Knowing;'

ID22: 'I felt an intense sensation of fullness, I was filled and overflowing with joy and extraordinary happiness.'

The true reality

It is interesting that unity (24, 60%), love (19, 47.5%) and bliss (11, 27.5%) were also the top three categories for words/phrases used in descriptions of true reality, with light or luminosity tied for third place with bliss (11, 27.5%).

There were also a number of descriptors related to a new concept of time and space, including 'vastness/infinite' (20%), 'no time/eternal' (17.5%) and 'no boundaries' (15%). Additionally, authors, referred to the universe as characterized by different types of force/power (15%), intelligence (12.5%). or flowing or dancing energy (10%).

Descriptions of the experience of unity within the universe

These included:

ID1: 'The entire scenery we call “life” and “the world” revealed itself as one and alive vibrating consciousness “waving at itself.” Waking up to itself! Dropping the veil of the “cosmic cinema,” “the drama” that covers the divinity and oneness of Being;'

ID12: ‘Everywhere I looked, I saw an infusing radiance of immense intelligence, creativity and love. I saw, and directly experienced, that everything, including “empty space,” is visibly alive. Space is not simply the absence of form, but the formless expression of infinite possibility. I also saw that the entire fabric of material reality is arising in a flow of continuous creation, that a reflective capacity is present throughout the universe, that an organizing geometry of elegant symmetry and simplicity infuses the universe, and that our cosmos exists within an ocean of boundless compassion;’

ID14: ‘I was bathed in the clearest “understanding” of an all-pervading, infinite, and benevolent “intelligence” that not only permeates the universe, but is the very essence from which it is made. I was also filled with the deep realization that the universe exists both outside and within each and every one of us.’

Descriptions of the universe as love

These included:

ID12: ‘Everywhere I looked, I saw an infusing radiance of immense intelligence, creativity and love;’

ID18: ‘And I was concurrently knowing that the world is made of a substance that feels like love. The essence of reality is a substance that knows itself by self-reflection, and its self-knowing feels like an irrepressible and dynamic love.’

ID22: ‘God’s true nature was unconditional love, and it filled the world, all was sacred;’

ID 25: ‘we are all expressions of an infinite and eternal, loving and creative reality.’

ID41: ‘Behind creation lies a love of extraordinary proportions, and all of existence is an expression of this love. The intelligence of the universe’s design is matched by the depth of love that inspired it.’

Descriptions of the universe as bliss/joy

These included:

IDTaste 64: ‘Everything became one, and this “one” looked like a uniform grey patch without the slightest information. Also, this “one” was pure bliss;’

IDTaste 49: ‘I was That, the wrapper and the wrapped all at once. There was no differentiation of experience. I WAS that state, nothing else. It was not me experiencing something outside of me. It was not happiness about any particular thing, but an unconditional, all-pervading bliss that depends on nothing outside of itself.’

Descriptions of the luminosity of the universe included:

ID Taste 4: ‘The white light around me merged with the reddish light of the sunset to become one all-enveloping, intense undifferentiated light field At this point, I merged with the light and everything, including myself, became one unified whole;’

ID12: ‘Accompanying this inner experience was a subtle radiance that bathed all that I could see with a soft light – the furniture, plants, and walls were all infused with a golden lustre and glow;’

ID20: ‘I woke up in a space of pure light. It was as if a veil had fallen from my eyes. I was no longer there. All around me glistened as if just created.’

Descriptions of new understandings of time and space included:

ID45: 'I experienced this Higher Power to be infinitely vast/omnipresent, infinitely intelligent/omniscient, unconditionally loving, and encompassing everything in past, present, and future.'

IDTaste 67: 'I had a feeling ... that time did not pass, that the future was contained in the past and the past contained in the future, and there was only one time, time present.'

IDTaste 4: 'Eventually, the sense of time passing stopped entirely. It is difficult to describe this feeling, but perhaps it would be better to say that there was no time, or no sense of time. Only the present moment existed.'

Additionally, authors referred to the universe as characterized by different types of energy, power, force, or intelligence. For example:

ID1: 'Matter is consciousness; space is consciousness;'

ID4: 'vibrant, dancing, sparkling energy;'

ID14: 'I was bathed in the clearest "understanding" of an all-pervading, infinite, and benevolent "intelligence" that not only permeates the universe, but is the very essence from which it is made;'

ID41: 'The energy became a massive tree of radiant energy suspended in space. Seemingly larger than the largest galaxy, it was comprised entirely of light.'

Discussion

The aim of this study was to explore the characteristics of first-person phenomenological STEs of scientists and academics, through investigating the complete narrative of their experiences. Our intention was to examine the manner in which persons of a high level of literacy and trained in scientific rigor described such non-ordinary states of consciousness, in terms of changes in their perception of the personal self and also the nature of reality.

The study results represent a further contribution to the investigation of the characteristics and nature of these experiences to be compared with those reported by the general population or other selected groups. What emerges from the evaluation of the first-person phenomenological accounts reported by the 40 authors included in this study confirms and expands what has already been reported by others STE experiencers.

As to the changes they perceived in the characteristics of their personal Self, our authors confirm that the main transformation is the loss of its boundaries, and identity merging in a universal Whole or Oneness.

However, it is interesting that the participants were able to describe this consciousness state as separate observers, entailing a sort of contradiction. This apparent contradiction could be solved following the analogy offered by ID18, a physicist:

I like to think that I have experienced my own nature both as a 'particle' and as a 'wave,' to use an analogy with quantum physics impossible to comprehend with our ordinary logical mind. The particle aspect was the ability to maintain my unique identity despite being also the world, which was the wave aspect. Thus, my identity is that unique point of view with which One – All that is, the totality of what exists – observes and knows itself. I am a point of view of One.

A recent investigation by Lindström, Kajonius, and Cardeña (2022), carried out with 12 STE experiencers, investigated with a more fine-graded approach the phenomenology of the self-dissolution. The more frequent characteristic was of a dissolution of the sense of separateness and identification with the physical body and narrative self, that is the self experienced as object of the experience. We observed this within this sample of scientists and academics as well. One person expressed it in this way,

I was bathed in the clearest ‘understanding’ of an all-pervading, infinite, and benevolent ‘intelligence’ that not only permeates the universe, but is the very essence from which it is made. I was also filled with the deep realisation that the universe exists both outside and within each and every one of us.

Another interesting finding is that 45% of authors identified universal Love as the essence of this identity, even if the common human experience of love is a pale representation of this universal Love, often described as unconditional, and rarely experienced in our human life.

If our essence, our True Self, is identical to the whole, that is, to what we commonly define as external reality, it is expected that it be made of the same basic stuff. This is confirmed by the authors’ descriptions of the True Reality, which was in many ways similar to their expanded understanding of the True Self: Love, Intelligence, creative Energy, etc.

This interpretation radically changes the common assumption that what we identify as physical/material reality is composed only of physical fields or particles. In other words, all that exists, including us, consists primarily of mental stuff or, better, Unconditional Love.

Do these personal accounts describing the individual’s true nature and that of the whole of reality represent reliable scientific evidence? Based on the direct experience of all authors, all of these experiences are more than real. For example:

ID18: ‘This was direct knowing, stronger than the certainty that human logic provides – a knowing from the inside (gnosis) rather than from the outside. A knowing that involved for the first time the concurrent resonance of all my conscious aspects: the physical, emotional, mental, and spiritual;’

ID12: ‘This knowing was direct, non-conceptual, self-evident and unmistakably clear;’

ID22: ‘I ‘knew’ without a shadow of a doubt that God knew ME, loved ME, intimately, personally and unconditionally.’

Though STEs and their transformational effects have been reported within the general population in many traditions throughout history, our study is one of the first to examine their characteristics in scientists and academics who have, in general, been trained in a materialistic worldview. Harvard psychologist, William James, was one of the first academics to explore the nature and effects of spiritual awakenings in the general population in his studies in the late 1800s and early 1900s. James noted at that time that his colleagues, whom he called ‘medical materialists,’ equated STEs with crises of puberty or pathologies such as schizophrenia or epilepsy (James 1903). This opinion concerning the nature of STEs is expressed by many scientists to this day.

Our results concerning the STEs of scientists and academics are thus perhaps unexpected, considering that a report by the National Academy of the Sciences states that

only 7% of their scientific members have stated that they have a belief in the transcendent (Larson and Witham 1998). However, it is of interest that the STEs of the scientists and academics in our study are very similar to those previously described in the general population (Wahbeh et al. 2018; Kason 2019; Woollacott, Kason, and Park 2021; Taylor and Egeto-Szabo 2017). For example, Taylor and Egeto-Szabo (2017) describe the STE as involving a primary transformative effect involving experiencing a new sense of identity and a shift in worldview, as well as a secondary effect including changing perspectives, values and beliefs. Similarly, Woollacott, Kason and Park 2021, in a study on energetic awakenings in the general population, stated that participants reported that the entire experience was mystical, involving feelings of expansion (including their conscious awareness leaving the body), and a sense of being enveloped in light or love.

In addition, our previous study on STEs in scientists and academics noted that the experiences were not explainable within a materialistic worldview and this may be one of the main factors contributing to the significant transformation in worldview reported by all the participants, as they could not accept the veracity of their experience and maintain their previous materialistic view of the world (Woollacott and Shumway-Cook 2022). Interestingly, Jeffrey Kripal (2019) has also qualitatively described a number of STEs of scientists, medical professionals, and highly trained intellectuals, including Nobel laureates, in his book entitled *The Flip*. As the title implies, he notes that there was a ‘flip’ in the worldview of each of these scientists, as a result of their experience, to a more expanded understanding of the nature of consciousness.

Study limitations

Limitations of the study include the fact that this was a limited sample ($n = 40$) and the participants were a select group, being scientists and academics who were invited to respond to the questionnaire or to contribute their experience to the TASTE website based on their having acknowledged in advance that they had undergone an STE. Though our participants were from a wide variety of countries and thus cultural backgrounds, in order to create a comparison of participants with different cultural and religious backgrounds and examine the commonalities and differences between their STEs, we would need to significantly increase the number of participants from each of the cultures we sampled.

Furthermore, as for comparison with other experiences based on first-person phenomenological accounts, such as near-death experiences, out-of-body experiences, or psychedelic experiences, we need to trust the experiences of the participants, due to the fact that it would be impossible to analyze them from the perspective of a third person.

Conclusions

This study aimed to examine the way in which persons of a high level of literacy and trained in scientific rigor described their own STEs in terms of changes in their perception of the personal self and the nature of reality. The participants confirmed that a main transformation in self-identity was the loss of individual boundaries and the merging of

their identity with a universal Whole or Oneness, often describing universal Love as the essence of this identity. Interestingly, participants' descriptions of Reality were in many ways similar to their expanded understanding of the Self, with descriptions including unity, love, bliss and light. These experiences indicate a shift in worldview from the previous materialistic view of most participants to one in which consciousness is seen as a fundamental aspect of the universe. These shifts are similar to those found in previous studies of STEs in the general population.

Though an examination of these accounts from the lens of a materialist perspective may cause one to doubt their veracity, we ask that those with this view approach the accounts with curiosity and take the time to carefully examine them, to see if there are contradictions. If individuals have not had a similar personal experience, we propose that they ask whether what the experiences reveal may offer a scientific alternative to a solely physical interpretation of who we really are.

STEs offer a unique opportunity to study spirituality more generally, representing a direct and not a mediated experience, which is typical of all religious and spiritual traditions.

Authors' contribution

Both authors contributed equally to conceptualization, data curation, methodology, validation, formal analyses, and writing.

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