Out-of-body-experiences: a phenomenological comparison of different causes

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Abstract

In out-of-body experiences (OBEs) the typifying phenomenal experience is the continuity/existence of the self, outside the boundaries of the physical body. In this work several characteristics of these experiences were investigated using the accounts of participants who underwent them via three forms of induction: (a) by way of hypnotic induction; (b) after traumatic physical experiences that can be defined as near-death experiences (NDEs); (c) and via non-traumatic experiences, such as meditation.

In each group, these experiences were described generally as positive and entail a state of greater phenomenal clarity compared to ordinary consciousness. Furthermore, a decrease in perception of time and one's personal boundaries were reported. The lack of substantial differences across groups suggests that all OBEs shares similar characteristics which are not necessarily modulated by induction type. Nonetheless, there were some differences across groups which were noteworthy; namely, hypnotically-induced OBEs resembled more closely a phenomenology of NDEs than that of typical spontaneous accounts.

Key words: near-death-experience, nde, out-of-body experience, phenomenology, self, first-person perspective, body transfer illusion.

Introduction

Out-of-body experiences (OBEs) have the distinctive feature of separation from one's center of consciousness, whereby one's sense of self moves "outside" the physical body. In this state the person experiences reality in a specific way, seeing and perceiving reality similar to, or even with greater perceptual depth and clarity, than waking state, and with variances in sensory perception including sight, physical motion, and perception of time (Tressoldi et al., 2015b).

Near-death experiences (NDEs) on the other hand occur following traumatic events in which the person is clinically dead and, in 10-18% of recorded cases (Parnia, 2001), the self has an incredible experience journeying to the "other side" in the period preceding the resumption of vital functions after resuscitation. This "journey" is characterized by OBEs, encounters with spiritual entities or those who have passed on, and many others as reported in the ample literature (e.g., Greyson, 2014, Agrillo, 2011). Although there is clear overlap between NDEs and OBEs, these are disparate phenomena. For example, in a questionnaire-based study of 339 OBErs, 28% reported perceiving a white light during their OBEs (Twemlow, Gabbard, & Jones 1982), an experience more characteristically reported as part of NDEs. The extent of overlap and/or disparity between NDE/OBE, although somewhat prominent, has not yet been adequately investigated.

OBEs can also arise spontaneously, such as during relaxation or meditative contemplation (Cardeña and Alvarado, 2014), or during physical activities like running or playing a musical instrument (Alvarado, 2016), or they can even be induced by hypnotic procedures, as shown by Tressoldi et al. (2015).

Similarly to the lack of NDE/OBE comparisons in literature, there has been a lack of typological research into OBEs which explores the impact of induction on one's quality of experience. In our review only one recent study focused on these differences: De Foe, Van Doorn, and Symmons (2012) found that people who induce OBEs are more likely to have a sensation of leaving their body at the beginning of the OBE than are those who experience spontaneous or unintended OBEs, for example. While this finding was incidental, it raised the question of whether there are differing phenomenal characteristics across types of OBEs (e.g., those induced as opposed to those occurring spontaneously).

OBEs are also distinctly different to artificially-induced illusions, such as those induced by exposing participants to conflicting multisensory bodily cues by means of mirrors, video technology or simple virtual reality (e.g. Bourdin et al., 2017; Blanke and Metzinger, 2009).

When investigating OBEs, it is prudent to avoid using terminology which applies to clinical dissociation because the latter involves a "partial or complete loss of the normal integration between past memories, awareness of one's identity and immediate sensations and control of body movements" (ICE-10), whereas during an OBE there is no loss of abilities such as integration of memory, nor any loss of elements regarding personal identity, sensations, and control of bodily movements. These can become altered but not diminished – on the contrary, phenomenological descriptions emphasize an amplification of many capacities, especially in NDEs, even highlighting greater clarity with respect to the "intensity" of awareness at the very moment of the physical body's "death". Phenomenological descriptions are therefore of particular interest in identifying specific elements of an experience to which the individual is the only witness. It is evident that during an OBE a person has a minimal phenomenal selfhood (MPS) and a self that can sometimes be perceived as having boundaries, for example, in some people, a "subtle" energetic body or, in others, a sphere of light.

Blanke and Metzinger (2009) define MPS as "the simplest form of self-consciousness" (p. 7), or what we might term the minimal conditions for a sense of self to arise. These authors argued that bodily presence may constitute MPS; however, it is interesting to explore whether a sense of selfhood is present in the OBE state. Certainly in terms of OBEs in which embodiment in a secondary or illusionary body occurs, these experiences have characteristics of MPS. OBEs may also include other features related to MPS, such as: identification with an actual identity (even if it has no distinct boundaries), a location in space-time, and a first-person perspective (1PP) of the experience (Blanke and Metzinger, 2009).

The main objective of this current work is to describe and compare experiences resulting from OBEs induced via hypnotic suggestion with those arising spontaneously and those associated with an NDE, in order to identify common and different features.

Method

Participants

Data were obtained from three different databases:

The first consisted of interviews with 11 participants who underwent an OBE via hypnotic induction, described in Tressoldi et al. (2015, 2016); The second consisted of answers from 235 participants who completed an online inquiry devoted to spontaneous OBEs, implemented by the first author; The third involved 50 questionnaires compiled by persons who claimed to have had an OBE during an NDE experience and available at http://www.nderf.org/Archives/exceptional.html[1].

Procedure

For each participant selected in the three databases, answers to the following questions were chosen because they were common to all three questionnaires:

- How would you describe your state of awareness?
- Did you have a sense of time?
- Were you able to perceive some sort of restriction (as in the physical body)?
- Did you perceive (e.g., see) all of your physical body? Where was it and what did it look like (e.g., position, clothes, etc.)?

Design

Content analysis was applied with each of the three databases to extract data relevant to the phenomenal characteristics of OBEs across these accounts. Specifically, for each participant we identified and recorded his/her response related to each of the four questions, even if their wording was slightly different in the three databases. Each response was classified in two different categories (see column "Answer" in Table 1), or as unavailable.

As this is a phenomenological investigation, we elected a qualitative approach to data analysis. We also have chosen not to analyze the data with inferential statistics. The main reason is that what has been observed with these participants cannot be generalized to different ones. Only future replications of our study could support our findings.

Results

[1] As available on 30th November 2016

Table 1 shows the percentage of similar answers given by persons included in three different databases. The file with all individual responses is available here: https://figshare.com/articles/OBE_comparison_database_xlsx/4560430

Table 1: Percentage of common answers.

	Answer	HypnOBE	Spontaneous OBE	NDE
How would you describe your state of awareness?	*Greater awareness; Positive*	82 % (9% "different"; 9% "similar")	67% (18% less aware; 15% unavailable)	92% (6% no change; 2% less aware; 2% unavailable)
Did you feel a sense of time?	*No*	100%	60% (22% yes, 17% unavailable)	92% (6% yes; 2% unavailable)
Did you feel any sense of confinement (as in your physical body)?	*No*	73% (27% unavailable)	59% (30% yes; 14% unavailable)	42% (32% yes; 26% unavailable)
Did you perceive (e.g. see) your physical body?	*Yes*	54% (45% No)	26% (59% No; 14% unavailable)	34% (62% unavailable)

Comments

In response to: *How would you describe your state of awareness?*

As evident in Table 1, the experience of consciousness is different to the normal one. In fact, phenomenological descriptions indicate a higher awareness, giving way to an apparently more complete, serene, and intense experience when compared to the ordinary state of consciousness. For NDEs, the most common reply to the question *"How high was your state of awareness and alertness during the experience compared to normal daily consciousness?"* given by all participants was *"Greater awareness and alertness than normal"*.

The reply *"There was an instant transfer of information and knowledge without the need for language, which is limiting and inadequate"*, for example, shows that the state of consciousness attained during an NDE allows access to information normally outside our awareness.

This trend is also seen in the HypnOBE group. An example is this account: *"Blissful/ecstatic (This is unusual for me... I usually feel normal, or sexually stimulated or even scared... but that time... blissful and insightful)"*. Lastly, in the spontaneous OBE group 67% report a state of "greater focus", "more aware"; this is a significant number, even though less than the other two groups included in this study. We point out however that around 15% of participants from this group did not give an answer to this question.

In response to the question: *"Did you have any sense of time?"*

In the OBE state, even the perception of time varies significantly. Again, the differences are in the spontaneous OBE group – 60% of online questionnaire participants report differences in perception of time, often towards a "removal" of the time category. It is significantly high, but still much less than the other two groups, with HypnOBE reporting 100% and the NDE group 92%. For example, Philip S., an NDE subject, reported that: "Everything seemed to occur immediately – either time had stopped, or it no longer mattered. Time didn't exist there. On earth I was virtually dead for three minutes, but while I was in that place, I could have stayed there for a few minutes or millions of years; time doesn't exist there".

In the HypnOBE group, subject D. Said: "I had no sense of time as I moved from one place to another; while looking at an object I was aware of time passing, but I had no sense of time itself."

In response to the question: *Were you able to perceive some sort of restriction (as in the physical body)?*

The question refers to the relationship between one's Self and the boundaries that separate/distinguish it from another Self. There are differences in all three groups, especially between the HypnOBE (73% said No) and the other two groups, with no boundaries reported in 59% of NDEs and 42% of Spontaneous OBEs. For example, a participant from the Spontaneous OBE group reported that: "When I astral travel it's as if I were only a pair of eyes", while two participants from the HypnOBE group stated: "No, I have no boundaries; I don't feel any boundaries; I feel very light, really good; I feel totally free; I don't perceive edges or shapes; I'm pure awareness; it's a state of awareness".

In response to the question: *Did you perceive (e.g., see) your physical body?*

With respect to perception of the body and the sensation of being attached to it, the percentages are similar between the HypnOBE and Spontaneous OBE groups. 45% of the HypnOBE group and 59% of the Spontaneous OBE group did not see/perceive their bodies (although 14% of the

Spontaneous group did not reply to the question). Responses like the following: “I never tried looking at my physical body”; “No clear sense of my physical body, but a vague sense of it being somewhere.”; “My body was at home, seated at the table staring at the wall.”; “I could see it as if I were a bird flying in the air” all indicate heterogeneity in the location of the Self in space, which, although separated from the body, continues to have experiences, sometimes noting the object called ‘body’ and other times simply just alert and observing other qualia. In the NDE group 34% reported some perception of the physical body, but unfortunately there was a significant number (62%) of non-replies.

Discussion

The purpose of this work was to locate similarities and differences in the phenomenology of OBEs from three different causes. Many report the difficulty of trying to communicate to others what makes this experience unique, such as these examples: “It was as if suddenly I knew everything that was being communicated. It was incredible, beyond words.” (Diana H); or “It’s hard to describe something that is beyond human experience. It’s like trying to describe love. How do you describe the feeling of love and acceptance? In our human form we are limited in what we’re able to know and understand. It’s only through this limited ability to understand that we can play the ‘role’ we chose to play here. After all, if we knew everything our souls know, this earthly game wouldn’t work. For example, how long would players enjoy a poker game if each one knew all the other players’ cards?” (Duane S).

When asked if the state of consciousness during the OBE is different to the normal one, we note that in the Spontaneous OBE group 67% say they had or continued to have positive and ‘more aware’ experiences. We point out that only 18% say they had ‘less awareness’, while the remaining 15% did not reply. In the other two groups however, almost all participants report having experienced a state of consciousness superior to the normal one.

Regarding the question about perception of time, reports clearly indicate the experience is counterintuitive to normal perception. Time is not perceived the same way, becoming faster or slower or even becoming insignificant. Here are examples in which time almost disappears: “Time had no meaning while I was outside the physical universe. I eventually understood that time is only a manifestation of the physical world. Outside the physical universe – which is only a small part of the divine realm – time has no meaning. As someone once said, time is simply a mechanism used to

avoid things happening simultaneously." (Duane S); "The concept of time wasn't at all present." (David N).

During OBEs the concept of time appears to become a particular construct, as is clear from the following comments: "No, I had no sense of time", or "There was no time", or even "In one to two minutes I experienced 128 years of my life and a thousand years of others' lives." These important responses indicate that the normal state of consciousness has been altered. In fact all responses indicate a perception of time that is neither basic nor distinguishing, which suggests that time is 'malleable' and not at all like the normal one-way passage of time from past to future, with no chance of escaping the present moment. Instead, the responses indicate that time is relative with respect to the body we 'reside' in at a particular time and from which we determine the Minimal Phenomenological Selfhood (MPS). This applies to the Self's movement in time towards both the past and the future, and is unanimously confirmed by all available responses.

These statements tend to reinforce the possibility that during the OBE time is no longer fundamental, in accordance with Baruss and Mossbridge (2016): "A new structure emerges that suggests two times: one apparent time to which we normally have access, and one deep time that creates the structure of nature, of knowledge, and physical manifestation, as well as a possible relationship between the two." (p. 54). This doesn't mean that normal everyday time is only an illusion, but rather, in certain conditions, the conscious experience of it differs.

Comments regarding the NDE condition illustrate that it generally begins with a 'review' of one's life, as if re-living it again: "My past flashed before me, outside my control; all the many events and emotions I had felt. Even things I'm not proud of or I don't want to face were not 'condemned', but shown as being useful for learning." (NDE, Steven D).

Also of particular interest is the notion of the future that people acquire after these experiences. Many in fact – but not all – retained a memory of having 'seen' future events that were subsequently (when possible) confirmed.

Other interesting responses regard perception of the Self's boundaries, in reply to the question: "Were you able to perceive some sort of restriction (as in the physical body)?" Many – 73% of HypnOBE, 59% of Spontaneous OBE, 42% of NDE group (although 26% of this latter did not

reply) – did not experience the usual boundaries imposed by the physical body, although still retained their distinct personal identities in that they were ‘separate from the outside world’.
For those who have had an OBE it is clear that they perceive themselves as being separate from the physical body and able to move around via intention, without the need to activate physical muscles. The statement “I wasn’t able to detect any boundary whatsoever” summarizes how a perception of location relates to the necessity of making sense of the experience, because obviously something is being experienced or there would be nothing. It’s therefore natural to view things from the 1PP so things make sense and to understand the world, but the union between the experiencer and the experience itself allows the Self to explore the whole environment from its own point of view, without physical limitations; the Self is therefore located within the Self, and not in the physical body.

From responses to the question: “Did you sense (e.g., see) your physical body?” we note that the self has detached from the physical body and the latter is no longer the center of identity, despite the continuing awareness of the physical body as its own. If we compare to normal waking consciousness, or what is usually generated by our sense organs, the data indicated that during these experiences perception is not the same; although the physical body is not perceived directly, its senses can still be used to filter useful information from the environment, viewed from the new 1PP however, which does not identify physically with a body. There are many responses that testify to the complete separation of the 1PP from the physical body, which becomes one of many objects on which to focus attention. The responses show the Self as an entity that paradoxically seems to have no boundaries to identify itself with and from which to create a 1PP.

In this sense, the Minimal Phenomenal Selfhood (MPS) is understood as having a specific identity, not so much in relation to the physical body but rather to awareness, or Self. This is also alluded to by Carruthers (2013), stating that: “The body doesn’t seem to be ‘the self’, just as it isn’t the object that defines the self. Nonetheless subjects state that they do see their own bodies, even when they don’t seem to be”, and furthermore: “During an OBE, the body that is experienced is not the object of self-identity, in that it is the apparently discarnate subject who seems to be the ‘real’ self.” (p. 6).

Phenomenal accounts that imply a separation of the Self from the physical body without a clinical dissociation could indicate the existence and permanence of consciousness beyond the confines of the physical body’s physiological activity. Responses clearly point in this direction, describing the Self as able to ‘fly’ and move about without limitations by simple intention. We highlight the very

interesting case of Tricia B, who during surgery saw her uncle removing a Snickers bar from a vending machine in the hospital waiting room, a fact that was later confirmed.

Conclusion

The current study has delineated clear phenomenological boundaries between hypnotically-induced OBEs, spontaneous OBEs, and OBEs occurring as part of NDE. No studies up until this point have adequately addressed disparities across these substrates of OBE phenomena, which make these findings interesting. We found both similarities and differences across these three tiers of the OBE. In particular, these were the increase and positive state of awareness and the loss of sense of time reported by almost all participants in the HypnOBE and NDE groups suggesting that the traumatic causes do not alter this effect. The same effects were also reported by almost two-third of those experiencing spontaneous OBEs.

More differences among the three groups were found in the response related to the sense of confinement of their non-physical body. In this case the participants of the spontaneous OBE and NDE groups gave less consistent responses than those of the HypnOBE group, of which 80% declared a lack of confinement. This finding suggests the possibility of experiencing a non-physical Self both with and without confinement. It remains to be explored if these two different conditions are stable or may change during the OBE.

As to the questions about the perception of their physical body, in this case we found more similarities between the HypnOBE and the spontaneous group where almost two-thirds reported not having perceived it, suggesting that the observation of their physical body may not be the most interesting thing during this experience.

In some respects, HypnoOBEs shared similar phenomenological characteristics to NDEs (in particular in relation to sense of awareness and the absence of a sense of time) to a greater degree than to spontaneous OBEs, which was surprising to note. Overall, we note that there are phenomenological similarities as well as differences across groups, but perhaps not sufficient disparity to conceptualize either of these accounts as ‘non-typical’ OBEs.

The study had a number of limitations, spanning from the small number of participants of the HypnOBE group to the heterogeneity of the NDE and spontaneous causes. However, we think

presenting a preliminary investigation is useful to guide future research focused on the differences between OBE phenomena to better understand their defining characteristics. As far as possible future developments are concerned, it would be interesting to identify if and how the Self can interact with the physical world during an OBE and what sensorial information can be obtained under these conditions, given that they can't be felt through the physical senses.

We conclude the discussion of this investigation by summarizing the impact of these experiences on the life of most of the participants. Participants across all three sources noted a significant psycho-spiritual/transpersonal change in their life perspectives which is important to note here. "I was told to see my time on Earth as a prolonged visit to the most important funfair of all." (Duane S). This sentence reminds us that, with respect to the human mind, some important elements emerge from these experiences, whether or not the cause is a traumatic event: OBEs have an effect on one's knowledge and beliefs about the idea of separation between the Self and the outer world. This also applies to the world within, especially if we look at the NDE group.

So it seems that these experiences carry a strong transformative power towards greater compassion of others, because the state of profound peacefulness they induce carries over – albeit somewhat reduced – into daily life and ordinary consciousness, perhaps persisting more as a memory rather than a true continuation of the experience of bliss [Bliss; I feel free" (S)] evident in the 'other' state. This personal experience leads to a greater awareness of Self, because that is what separates from the physical body; the awareness of being remains, but most of the 'laws' from the ordinary state of consciousness no longer apply.

The implications of these experiences are also rather significant within the science of consciousness and particularly on the brain-mind relationship, posing problems for a physicalistic explanation of the mind-brain identity (Smart 2014), or even an emergent one, which proposes that mind and consciousness emerge from the complex interaction between neuronal networks (Schwartz, Lilienfeld, Meca and Sauvigné, 2016; Cleeremans, 2011).

Experiments showing the possibility of artificially inducing a perception of body dislocation, such as virtual reality (Slater et al. 2010; Sanchez-Vives and Slater, 2005), in no way resemble the characteristics reported in out of body experiences in any of the three conditions we examined, but do exhibit a state compatible with the Minimal Phenomenological Selfhood, in that one is conscious of being the Self (Blanke and Metzinger, 2008), independent of the physical body.

These experiences appear more compatible with an interactionist model, which postulates a relationship between mind and matter [see for example Hameroff and Penrose, 2014, and Beauregard (2014)], or at least with metaphysical approaches, which assume that the material world (and therefore also the brain) are of the same substance as the mind: for example, mental panpsychism and monism, or dual-aspect monism (Atmanspacher, 2012).

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