

## FLOATING SENSATIONS PRIOR TO SLEEP AND OUT-OF-BODY EXPERIENCES

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**ABSTRACT:** Research suggests that a sensation of floating prior to sleep may be indicative of several sleep-related phenomena such as sleep paralysis, hypnagogic imagery, and out-of-body experiences (OBEs). Previous research into OBEs in particular has been limited in considering the broad range of tactile, auditory, and visual phenomena reported by individuals prior to sleep which relate to a floating sensation that tends to precede an OBE. In the present study, 178 participants were surveyed regarding their experience of a floating sensation prior to sleep as part of a larger OBE questionnaire. A thematic analysis was conducted in order to determine commonalities in floating sensations prior to sleep reported among participants. Themes in reports of tactile and emotional content during a floating sensation were noted. Tactile sensations of feeling light or weightless, body detachment or loss of physical sensation, sensations of flying and sensations of falling were most common. Emotions relevant to a sense of floating were reported as being negative, positive, or associated with a feeling of freedom. A number of the floating sensations reported prior to sleep overlapped with common descriptions of OBEs found in literature, while others did not. Implications are discussed.

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It is common for tactile hallucinations to arise prior to sleep as part of the hypnagogic pre-sleep state (Ohayon, Priest, Caulet, & Guilleminault, 1996). These may include a sense of body paralysis, imagined sensations of crawling or tingling along the skin and a sense of floating, as well as other visual, kinesthetic or auditory hallucinations. Ellison (1988) suggested that a sensation of floating experienced prior to sleep could be related to out-of-body experiences (OBEs), in which a person experiences a sensation of “floating” out of body while progressively relaxing. Other researchers have also suggested that OBEs may be more likely to occur as part of the sleep transition phase, in which one’s body is relaxed and in a sedentary state (Nelson, Mattingly, & Schmitt, 2007; Tart, 1998).

During an OBE, a person experiences their center of consciousness from a different location to that of their physical body. Previous research notes that 10%–20% of the general population has had an OBE on at least one occasion (Alvarado, 2000; Ellison, 1988). Descriptive anecdotes of OBEs tend to differ broadly across participants, with some reporting a brief sense of separation from their body that lasted less than a few seconds, while others report longer, in-depth experiences that had a significant psychological impact upon them (Blackmore, 2005; Greyson, 1981; Monroe, 1992). Those who report a sense of floating associated with sleep-related phenomena may, in some cases, be classified as OBEs given that these individuals could, in fact, be having a less immersive form of the experience.

Accounts of paralysis, losing a sense of body awareness, and body displacement have been noted as common precursors to OBEs (Cheyne, 2005; Hishikawa, 1976; Nelson et al., 2007). Ellison (1988) argued that partial body displacement also occurs in some instances of OBE. He suggested that those who have OBEs prior to falling asleep, on occasion, experience their consciousness partially displaced from their body. For example, “perhaps the top half sits up while the whole physical body remains lying down [...]” (pp. 68–69). Other literature has suggested that “sometimes a sensation of bodily paralysis precedes the OBE” (Levitan & LaBerge, 1991, p. 1) and that some accounts report “rising out of body and floating above the bed” (p. 2) at the commencement of OBEs. Levitan and LaBerge (1991) stated that in some but not all cases, experiencers report a distinct sensation of floating above the body at the commencement of their OBE(s).

Up to 42% of experiencers have reported a sense of leaving their physical body prior to their OBEs (Alvarado & Zingrone, 1999; De Foe, Van Doorn, & Symmons, 2012a). Further, Alvarado and Zingrone (1999) found that 77% of 400 OBEers responding to a questionnaire identified a sense of floating as part of their experience. De Foe, Van Doorn and Symmons (2012b) found that a sensation of floating out of one's body is more likely in accounts of induced rather than in spontaneous OBEs. In light of these findings, it could be that some people experience a sense of floating which then articulates into a "full OBE," while others may experience a sense of generalized floating prior to sleep.

Notably, some experiencers report no sense of floating and no sense of leaving the body as part of their OBE(s). Irwin and Watt (2007) provided an example of one OBE account in which an experiencer stated "I was sitting in the bath when I became aware that I was in the ceiling corner of the room looking down at myself in the bath" (p. 175). In this particular case, the OBE occurred spontaneously, with no noted progressive sense of body separation.

The issue of defining the characteristics of an "authentic" OBE is not only problematic from a participant's perspective (due to subjective accounts), but also from a research standpoint. Some researchers have suggested that a sense of leaving one's body is sufficient in order to define an OBE (Gelkopf & Meyerson, 2004), while others have argued that "objective laboratory demonstration of a separation of 'mind' from 'brain' is required to meet the definition of an out-of-body experience" (Twemlow, Gabbard, & Jones, 1982, p. 450).

Here we argue that contrary definitions in the literature have made it difficult for researchers to classify the "OBE" as distinctly different from a sense of floating away from the body. Are these, in fact, two different phenomena? Or are they more similar in nature than researchers have previously assumed? In order to address this question we endeavored to examine thematic overlap between accounts of a floating sensation reported by participants in the present study and OBE accounts found in previous literature.

In the present study we consider such questions as, how can we best define a sensation of floating associated with OBEs? Could the sense of floating be described in the same way as leaving the body? Perhaps anecdotes describing a floating sensation could be referring to a vision of perceiving their own body from a point of consciousness above their physical body. A strong visual component involving seeing one's own body from a distance during an OBE is reported commonly throughout the literature (e.g., Monroe, 1992). Finally, perhaps associated emotions such as a feeling of freedom while experiencing a sensation of floating could be relevant, especially as a sense of feeling free is commonly reported as part of a floating sensation that leads to an OBE (see Twemlow et al., 1982). In order to address this issue, the present study explores accounts of floating sensations in depth.

It is hypothesized that individuals who experience a sensation of floating prior to falling asleep are more likely to also report having OBEs. It is also anticipated that their descriptions will overlap with typical characteristics of OBEs found in the literature, allowing us to clarify a link between accounts of floating prior to sleep and of OBEs.

## **Method**

### **Participants**

Data was utilized from a questionnaire administered to study OBEs (see De Foe et al., 2012a). The questionnaire was completed by 370 participants between the ages of 18 and 65 years ( $M = 37$ ,  $SD = 13$ ). Of these 159 were men and 211 were women. Participants were located via University social media channels (Facebook and Twitter pages) as well as through a number of online psychology newsletters. The explanatory statement introduced participants to the research question, provided a brief explanation about the nature of OBEs, and a definition of the term. The definition was as follows: "An out-of-body experience is defined here as an experience where the center of awareness appears from a person's perspective to move to a position which is in a different physical space from his or her body."

### **Materials**

The original questionnaire contained 20 items that divided into five sections. The first set of questions related to gender, age, and prior encounters with OBEs. Section two included questions about OBE-associated sensations. This section consisted of three questions pertaining to participant experiences of a floating sensation while lying in bed and preparing to fall asleep. Participants were asked whether they have experienced this sensation. Those participants who answered “yes” were also asked to provide a descriptive account of their experience. Section three related to religious inclination, day-dreaming propensity and fantasy proneness. Section four consisted of a transitional question related to prior OBEs: “Have you ever experienced an OBE?” Those participants who responded “yes” to this question were asked to complete the questions in the section that followed.

The final section included questions which pertained to prior OBEs and were completed only by participants who indicated having had one. This section consisted of four questions related to physiological sensations associated with OBEs and the nature of participant’s prior OBEs. These were closed questions, apart from one item, “in recalling your previous OBE(s), how would you describe your surroundings during most of your experience(s)?” which prompted participants about whether the environment during their OBE(s) was mostly realistic or imaginary. Participants had the option of providing a textual response expanding upon the nature of the environment during their OBE(s).

### **Procedure**

The descriptive text-based responses regarding a sense of floating prior to falling asleep were considered by using a thematic analysis consistent with grounded theory (see Corbin & Strauss, 1990). Grounded theory mandates that researchers must carefully review textual data to identify all themes and concepts within text-based responses. In line with grounded theory, subjective interpretation of the themes was left out of the initial analysis; the aim was to classify themes correctly, prior to interpreting potential implications. Common patterns of words, related words, and linked phrases were identified in participant responses to the questions “Have you ever experienced a floating sensation while lying in bed prior to falling asleep?” If the response was “yes,” participants were asked, “How would you best describe this sensation?” This item aimed to assess a general sense of floating prior to sleep which may or may not have been associated with participants’ prior OBEs.

The researchers coded, and then categorized interrelated themes which were noted in participants’ textual responses. Responses were manually coded, as it was important to determine both implicit and explicit descriptions of a floating sensation. The descriptive content of themes was analyzed based on the overall meaning of each theme in relation to the entire dataset. Themes were categorized more broadly based on their interrelatedness, rather than examining specific words in isolation. For example, in cases in which a participant described a sense of disconnection from their physical body, this was coded as “dissociation from the body.” Braun and Clarke (2006) noted that themes identified during thematic analysis “would need to be an accurate reflection of the content of the entire data set. In such an analysis, some depth and complexity is necessarily lost ... but a rich overall description is maintained” (p. 83); thus it was important to consider themes more broadly based on sleep-related phenomena rather than in isolation.

Overlapping themes were included as part of the analysis, whereby a response was coded as two or more specific themes. Themes reported by  $> 5\%$  ( $N \geq 10$ ) of participants were not considered as part of the analysis. As per the procedure of thematic analysis consistent with grounded theory, categories of responses were then considered based on how well they fit into literature relevant to OBEs and sleep-related phenomena.

## Results

Of the 370 participants who responded to the questionnaire, 194 indicated having had an OBE in the past. 43.3% of these were men ( $n = 84$ ) and 56.7% were women ( $n = 110$ ). Two-hundred and twenty-three participants reported a sensation of floating prior to falling asleep. 42.1% of these were men ( $n = 94$ ), and 57.9% were women ( $n = 129$ ). The data showed that 82% ( $n = 159$ ) of the participants who had reported a floating sensation also reported having at least one OBE. A statistical relationship was noted between experiencing a sensation of floating prior to sleep and having an OBE,  $\chi^2(1, N = 370) = 72.46, p < .0005$ . The effect size for this finding was moderate to large,  $\Phi(1, N = 370) = .45, p < .001$ .

Only 19 of those who had reported an OBE provided a textual description of their experience in response to the question "In recalling your previous OBE(s), how would you describe your surroundings during most of your experience(s)?" Though a preliminary thematic analysis of these responses was conducted, responses were too varied and too few for the data to have been meaningful.

Of the 223 participants who responded to the question "Have you ever experienced a floating sensation while lying in bed?" One hundred and seventy-eight supplied a description of their experience. The thematic analysis highlighted two categories of themes in participant responses regarding a sense of floating prior to falling asleep. These were: (a) kinesthetic factors and (b) emotional factors.

### Kinesthetic Factors

Themes in kinesthetic/tactile sensations were identified, with the most common descriptions discussing a sense of feeling light or weightless (17.94% of participants who responded to the question about their experience with floating prior to sleep,  $n = 40$ ). Among these responses some indicated sensations such as: "I've experienced feelings best described as weightlessness while lying in bed," "I was weightless, almost like being under water or in zero-gravity. I was very aware of my surroundings and I knew the bed was beneath me, yet part of me felt like it was above the bed," and "a weightless sensation. I could feel my body but didn't feel the bed beneath me."

Other themes included a sensation of flying or being airborne (10.31%,  $n = 23$ ), such as "it feels like dreaming but flying, I cannot see anything though" and "like flying through space." Others described a falling sensation (8.07%,  $n = 18$ ), "falling from an elevated region" and "a sudden feeling of expanse and the intermittent falling sensation once I become aware of what is happening," for example. Additionally, a sensation of horizontal or vertical movement (5.38%,  $n = 12$ ), a relaxing sensation (4.93%,  $n = 11$ ), a pulling or rising sensation (4.93%,  $n = 11$ ), and a sensation of dissociation from the body (4.93%,  $n = 11$ ) were identified as less common, but nonetheless relevant, kinesthetic themes.

### Emotional Factors

A number of respondents discussed their experience in terms of the emotions associated with a sensation of floating. The most common theme was that of fear which was classified as including feeling scared, feeling unsettled, a disconcerting feeling, being afraid, being terrified, a frightening experience, feeling desperate, an unnerving feeling, or an unpleasant experience (8.07% of participants,  $n = 18$ ). The following are samples of responses that described negative emotions such as fear: "Strange and unsettling. I am not myself" and "initially feeling scared and puzzled."

Positive emotions also constituted a main theme in accounts of emotions associated with a sense of floating; these included descriptions of pleasant feelings, feeling fantastic, feeling good, feeling great, or mentioning emotions and states of being such as happiness or awe (6.73%,  $n = 15$ ). For example: "It feels warm and very pleasant, a feeling of freedom and happiness also arise" and "lightness of body, surreal, fantastic feeling."

Finally, a theme of freedom (or feeling free) was identified among responses (5.38%,  $n = 12$ ). "As if I was out of my body and could do/go where ever I wanted, it was a free lovely feeling" and "your body becomes heavy, and then you feel much lighter, followed by a sense of freedom with a touch of love" are

two examples of respondents who described a sensation of freedom associated with a floating sensation.

### **Discussion**

In the present study we anticipated a significant association between having a sensation of floating and having an OBE. A significant relationship between floating sensations prior to sleep and OBEs was noted with a moderate to large effect size, thus providing support for this hypothesis. This finding also provides support for Ellison's (1988) notion that OBEs tend to occur when a person is laying down, and can often be preceded by a sense of floating. As a strong association between these two phenomena was noted, we argue that it would be quite valuable for parapsychologists to investigate generalized accounts of floating for a potential link to OBE(s).

Although we acknowledge that common sense would prompt parapsychologists to conduct such an assessment as standard procedure, there is a lower likelihood that a broader OBE assessment would be administered in other professions in which practitioners work as clinical psychologists or medical practitioners (without a parapsychological background). Therefore, we argue that in cases in which a sense of floating is reported prior to sleep, the possibility that a person is experiencing aspects of an OBE should also be considered. Making such a consideration would serve to reduce the misrepresentation of a sense of floating prior to sleep as the result of a hallucination, a sleep disorder, or the side effects of medication, for instance, when, in fact, the floating sensation in a specific case is associated with OBEs.

### **Kinesthetic Descriptions of a Floating Sensation**

Sensations of weightlessness were most commonly mentioned by participants in their description of a kinesthetic sense of floating. Some consistency can be noted in literature in which weightlessness has been mentioned as one of the features associated with OBEs. Easton, Blanke, and Mohr (2009) collected responses from 11 OBEs and noted that four participants associated weightlessness with their experiences. However, Gow, Lang, and Chant (2004) found that among 32 OBEs only one respondent mentioned a sense of weightlessness. Therefore, although our findings fit with some of the literature, there is a lack of consistency regarding the instances of reports.

Descriptions of dissociating from the body are relevant to findings by Levitan and LaBerge (1991), which suggest that floating sensations related to OBE are often coupled with sleep paralysis and body dissociation. However, as a low proportion of participants mentioned a sense of disconnection from the body, it could be that only some of these accounts related to OBEs. A different, but also plausible, explanation for the low instances of a dissociative sensation is that some participants could have been experiencing pre-OBE markers, rather than having a full OBE as part of their floating experience.

The above theory is consistent with Cheyne, Rueffer, and Newby-Clark's (1999) observations that during the hypnagogic pre-sleep state it is common to experience a number of kinesthetic hallucinations such as a sense of floating, body dissociation, and other tactile aberrations in addition to sleep paralysis. In some cases, the onset of OBE-related sensations such as a sense of floating that may or may not articulate into full disembodiment is reported during pre-sleep hypnagogia. Further, Gow et al. (2004) found that a sense of body separation was reported by 29 participants (56.86%) in a study of 51 OBEs, however, in an analysis of sensations that participants experienced prior to the commencement of their OBEs, characteristics were reported in much less prominence. In fact, only one marginally common sensation was reported by  $\geq 5\%$  of participants pre-OBE, a sense of perfect peace (5.88%,  $N = 3$ ).

It was not surprising to note that participants mentioned a relaxing sensation associated with a sense of floating, as Twemlow et al. (1982) found that more than half of all of the participants in their study ( $N = 700$ ) mentioned sensations prior to an OBE as including "feeling physically relaxed" and "feeling mentally calm" (p. 452). This overlap suggests that some of those participants who experience a relaxation sensation in conjunction with a sense of floating could be encountering the initial stages of an OBE. However, as we noted a much lower percentage of participants who had experienced a sense of relaxation

associated with floating in the present study, this could also be accounted for by assuming that participants may have been referring to pre-OBE experiences, rather than during-OBE experiences.

Particular features of floating noted in the thematic analysis were not considered in previous studies which examined floating sensations, such as instances in which ‘floating’ does not refer to ‘floating’ at all, but rather a sensation of falling or a sensation of horizontal movement. These themes were found to be relevant in the present study. This indicates that previous research (Anzellotti et al., 2011; Ellison, 1988; Levitan & LaBerge, 1991) which has discussed “floating” as a precursor to OBEs should have given greater consideration to specific features in descriptions of pre-OBE sensations. There is the possibility that individuals who report “floating” associated with their OBEs may not have had similar experiences, and coupling the general question with other criteria such as whether the sensation was of a horizontal, rather than a vertical movement would make that plain.

Although Anzellotti et al. (2011), Ellison (1988), and Levitan and LaBerge (1991) have discussed floating as a precursor to OBEs, a clearer definition of “floating” could be explored to determine whether certain types of floating (for instance, dissociation and weightlessness) are more effective in predicting OBE likelihood than other types of floating sensation (for instance, a sense of falling as opposed to a sense of flying upwards). A further exploration of how kinesthetic floating sensations relate to OBEs could also lead to a broader understanding of the physiological processes occurring prior to OBE.

### **Emotions Relevant to Accounts of Floating and OBEs**

Gow et al. (2004) found that 31.37% ( $n = 16$ ) of participants in their research associated their OBEs with feelings of anxiety. However, as a number of participants in the present study discussed negative emotions in terms of fear and confusion, some of these cases could be related to sleep paralysis rather than anxiety. Cheyne, Newby-Clark, and Rueffer (1999) noted that sleep paralysis is often linked with negative, fear-oriented, feelings and their case descriptions match some of the accounts of fear in the present study. They also pointed out that the potential link between floating and sleep paralysis is also worth considering as some overlap between OBE accounts and accounts of sleep paralysis that has been noted in literature.

Themes related to positive emotions and a feeling of freedom reported in the present study overlap with OBE descriptors noted by Twemlow et al. (1982), some of whose participants reported experiencing feelings of “joy, freedom ... and peace” (p. 454) during their OBEs, especially in relation to a sense of mental calmness and relaxation that accompanied their experiences. Gow et al. (2004) also noted that a sense of peace was commonly noted in OBE accounts (60.78%,  $n = 31$ ) in their study. However, interestingly, a sense of peace was only associated with 5.88% ( $n = 3$ ) of accounts related to pre-OBE sensations. This statistical result has a close link with the descriptions of positive emotions and emotions related to freedom in the present study. The finding provides further support for the argument that participants who were experiencing floating may have been in the initial stages of an OBE, without having experienced a full OBE (in which case reports of peace would be expected to have been anticipated in higher instances).

### **Conclusion**

It is important to note that the most commonly reported themes were in the range of 4.93%–17.94% of responses. Although thematic analysis procedure does not mandate that themes must occur at a certain frequency to be considered meaningful (see Braun & Clarke, 2006), for the purposes of the present study we anticipated that certain themes would occur at higher frequencies. In Alvarado and Zingrone’s (1999) research which examined people who have had multiple OBEs, a number of prominent features emerged. For example, 44% reported seeing their own physical body during their OBEs, 33% reported hearing voices, and 35% saw spiritual entities. It was expected that similar themes (in content and occurrence) would have been noted among instances of floating in the present study, however, this was not the case.

Interestingly, almost no participants spoke of a floating sensation as having involved a visual

component (i.e., a vision of floating out and above their physical body). Prior research has suggested that OBEs often do contain a visual component. As the question utilized in the present study asked participants whether they had ever experienced a floating sensation prior to sleep, it is not surprising that most participants did respond in terms of a tactile sensation (rather than visual or auditory accounts of floating). The lack of a visual experience of being out-of-body could also be related to participants experiencing pre-OBE markers rather than full disembodiment. Nonetheless, at least some visual reports were anticipated. If they had been reported, these could have been explored further had we asked more specific questions related to the nature of the experience. As Hishikawa (1976) pointed out, visual/auditory hallucinations are common in the hypnagogic state, even in cases in which a person does not experience an OBE.

The present questionnaire was limited in that it did not ask participants whether their sense of floating, body displacement, or paralysis led to their previous OBEs. Instead, we examined common themes between the separate variable of a sense of floating while lying in bed and common sensations associated with OBEs found in previous literature. Typically, the results of a thematic analysis would be considered across studies which examine the same phenomenon (i.e., OBEs, in this case). However, as this study was a preliminary investigation on how a sense of floating prior to sleep could relate to OBE, we examined participant accounts of such an experience using common themes already available in the OBE literature. Notably, we recorded some overlaps between a sense of floating prior to sleep and common characteristics of OBEs, a number of which were consistent in terms of content, but not in terms of incidence.

Another limitation of this research is that participants who completed the questionnaire knew beforehand (based on the Explanatory Statement) that the questions were related to OBEs. This could have skewed their responses in answering the question “Have you ever experienced a floating sensation while lying in bed?” as participants could have interpreted this question as specifically related to OBEs.

In conclusion, common themes in sensations of floating were reported, although with less frequency than is typically expected in OBE accounts. However, a strong statistical association was noted between a sense of floating and OBEs. This finding suggests that individuals who experience a sense of floating prior to falling asleep have a high likelihood of also experiencing OBEs. However, the disparity found in the thematic analysis reinforces the idea that a sense of floating should not be equated with a traditional OBE. Although a sense of floating may correspond with many of the characteristics of OBEs, these are in fact, two distinct phenomena. Therefore, we suggest that individuals who report descriptions of floating prior to sleep could be experiencing pre-OBE sensations, rather than having a full-blown OBE. Due to the constraints of our research design, it was not possible to uncover which factors would allow us to determine whether a sense of floating would articulate into a full OBE. Therefore, it is important for future research to examine the nature of the relationship between a sense of floating prior to sleep and the OBE. Such research would provide valuable information about the factors that cause one to progress from a mild sense of floating into complete disembodiment.

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### **Abstracts in Other Languages**

#### *Spanish*

#### **SENSACIONES DE FLOTACIÓN ANTES DE DORMIR Y EXPERIENCIAS EXTRACORPORALES**

**RESUMEN:** La investigación sugiere que una sensación de flotar antes de dormir puede ser indicativa de varios fenómenos relacionados con el sueño, tales como la parálisis de sueño, las imágenes hipnagógicas, y las experiencias extracorporales (OBE). Las investigaciones previas sobre las OBE, no han considerado



suficientemente la amplia gama de experiencias táctiles, auditivas, y fenómenos visuales reportados por los individuos antes de dormir y relacionados con una sensación flotante que suele preceder a las OBE. En este estudio, hicimos una encuesta con 178 participantes sobre sus experiencias de una sensación de flotar antes de dormir, como parte de un cuestionario sobre OBE más grande. Un análisis temático se llevó a cabo con el fin de determinar aspectos comunes en las sensaciones flotantes antes de dormir reportadas por los participantes. Observamos temas en los informes sobre contenido táctil y emocional durante sensaciones de flotación. Los más comunes fueron las sensaciones táctiles de sentirse ligero o sin peso, desprendimiento del cuerpo o pérdida de la sensación física, sensaciones de vuelo, y sensaciones de caída. Las emociones relacionadas con la sensación de flotación fueron negativas, positivas, o asociada con una sensación de libertad. Algunas de las sensaciones de flotación antes de dormir se solapan con las descripciones comunes de OBE que se encuentran en la literatura, en tanto que otras no. Discutimos las implicaciones.

### *French*

#### SENSATIONS DE FLOTTER AVANT LE SOMMEIL ET EXPÉRIENCES DE HORS CORPS

RESUME : Des recherches suggèrent que la sensation de flotter avant le sommeil pourrait indiquer divers phénomènes relatifs au sommeil tels que la paralysie du sommeil, l'imagerie hypnagogique et les expériences de hors corps (EHC). Les précédentes recherches, en particulier sur les EHC, se sont limitées à repérer une vaste gamme de phénomènes tactiles, auditifs et visuels relatés par les individus avant de s'endormir qui pourraient être reliés à l'expérience d'une sensation de flotter qui tendrait à précéder une EHC. Dans la présente étude, 178 participants furent interrogés sur leurs expériences d'une sensation de flotter avant de s'endormir au sein d'un questionnaire plus large sur les EHC. Une analyse thématique a été conduite afin de déterminer les éléments communs dans les sensations de flotter avant le sommeil relatés par les participants. On a repéré quelques thèmes récurrents au niveau tactile et émotionnel durant les sensations de flotter. Les plus communes étaient les sensations tactiles de se sentir léger ou sans poids, de sentir un détachement du corps ou une perte de sensations physiques, des sensations de voler et des sensations de chuter. Les émotions associées à la sensation de flotter étaient négatives, positives, ou apparentées avec un sentiment de liberté. De nombreux aspects de la sensation de flottement avant le sommeil recouvrent les descriptions habituelles des EHC que l'on trouve dans la littérature, bien que certaines ne le fassent pas. Les implications de cette étude sont discutées.

### *German*

#### SCHWEBEGEFÜHLE VOR SCHLAFBEGINN UND AUSSERKÖRPERLICHE ERFAHRUNGEN

ZUSAMMENFASSUNG: Die einschlägige Forschung weist darauf hin, dass ein Schwebefühl vor Schlafbeginn zusammen mit verschiedenen, zum Schlaf gehörenden Phänomenen wie Schlafparalyse, hypnagogischen Bildern und ausserkörperlichen Erfahrungen (AKE) auftreten kann. Die bisherige Forschung insbesondere zu AKE hatte sich darauf beschränkt, das breite Spektrum taktiler, auditiver und visueller Phänomene, die von Einzelnen vor Schlafbeginn berichtet wurden, zu berücksichtigen, die sich auf ein Schwebefühl bezogen, die einer AKE vorherzugehen schienen. In der vorliegenden Studie wurden 178 Teilnehmer hinsichtlich ihrer Erfahrungen eines Schwebefühls vor Schlafbeginn als Teil eines umfassenderen AKE-Fragebogens befragt. Eine thematisch orientierte Analyse wurde durchgeführt, um Gemeinsamkeiten der Schwebefühle vor Schlafbeginn unter den Teilnehmern zu erfassen. Die Themen, die sich in den Berichten auf taktile und emotionale Inhalte bezogen, wurden festgehalten. Taktile Gefühle des sich leicht oder schwerelos Empfindens, körperliche Leichtigkeit oder Verlust der Körperwahrnehmung, Gefühle des Fliegens oder des Fallens waren am verbreitetsten. Wahrnehmungen,

die mit einer Schwebempfindung einhergingen, wurden als negativ oder positiv gewertet oder mit einem Freiheitsgefühl assoziiert. Eine Anzahl von Schwebefühlen vor Schlafbeginn deckten sich teilweise mit den bekannten Beschreibungen in der AKE-Literatur, andere hingegen nicht. Die Implikationen werden diskutiert.