

Table 1. The markers and their mentions in the literature

Marker	Targeted experience	Examples found in the literature	Survey's questions
M1	An episode of awareness that followed the dissolution of a lucid dream.	<ul style="list-style-type: none"> • Dzogchen tradition: Descriptions of a state achieved during sleep that allows one to realise the “true nature” or “essence” of our mind. A state regarded as “pure awareness” (see Fremantle, 2001; Padmasambhava & Gyatrul, 2008; Ponlop, 2006). • Practices of Yoga Nidra and Sleep Yoga: Descriptions alluding to the active disappearance of the dream environment to reach a state of “pure awareness (Norbu, 1983; Wangyal, 1998). • Lucid dreaming literature: Mentions to a state of awareness following the disappearance of the dream environment. Found under different names: “Imageless lucid dreams” (Magallón, 1987), “Minimal perceptual environments” (LaBerge and DeGracia, 2000), “Clear light dreams” (Johnson, 2020) or “void dreams” (Johnson, 2014). 	<p>Q5.2. What did happen when you realised that you were dreaming? (Specifically, the open answers to the option ‘Other’ were examined)</p> <p>Q6.4. Could you describe briefly your experience? (In that particular instance— In reference to Q6, “In the last month, were you ever conscious while dreaming but there was an absence of visuals? (e.g. you had a lucid dream that lacked visual experience or you saw your dream scenery dissolving”).</p>
M2	An episode of awareness during sleep that lacked self-other distinction, cognition and perception that did not follow the dissolution of a lucid dream.	<ul style="list-style-type: none"> • Advaita Vedānta: Mentions of a state of “pure awareness” during sleep, which is said to lack any sort of cognition of perception (Evans-Wentz, 1960; Olivelle, 1998; Prasad, 2000; Sharma, 2001) and that is not said to follow the dissolution of a dream. 	<p>Q6.4. (See above)</p> <p>Q8.4. Could you describe briefly your experience? (In that particular instance—In reference to Q8, “<i>In the last month, were you ever aware that you were sleeping, but not dreaming?</i>”</p>
M3	An episode of awareness during sleep that lacked self-other distinction, cognition that does not necessarily follow the dissolution of a lucid dream and that is regarded as the awareness of the sleeping state.	<i>Same literature as for Marker 2</i>	Q8.4. (See above)

M4	An awareness of falling asleep without a distinct object of awareness including instances of perceptual or cognitive experience like imagery, bodily sensations, or thoughts.	<ul style="list-style-type: none"> • Practices of Yoga Nidra and Sleep Yoga: Descriptions of these practices tend to focus on the maintenance of awareness during sleep-onset to reach a state of pure awareness (Wangyal, 1998). 	<p>Q1.1. Complete the following sentence by thinking of a particular time in which you were aware of falling asleep, (more than one might apply, but think of one particular time), “I realised I was not asleep yet because...” (Specifically, the open answers to the option ‘Other’ were examined)</p>
M5	An awareness of waking up without a distinct object of awareness including instances of perceptual or cognitive experience like imagery, bodily sensations, or thoughts.	<ul style="list-style-type: none"> • Transition from sleep to wake: Some authors have suggested that the instructions detailed in the practice of Yoga Nidra can also be carried out during the hypnopompic state (Raduga, 2021). 	<p>Q2.1. Complete the following sentence by thinking of a particular time in which you were aware of waking up, (more than one might apply, but think of one particular time) “I realised I was not asleep anymore because...” (Specifically, the open answers to the option ‘Other’ were examined)</p>
M6	A feeling of knowing that one was conscious while sleeping upon awakening that does not include mentions of a dream experience or the fact that one has forgotten the content of their dream experience (which they previously remembered)	<ul style="list-style-type: none"> • White dreaming: Some authors have suggested that certain instances of white dreaming might be linked to episodes of objectless sleep awareness (see Windt, 2015b; Windt et al., 2016). 	<p>Q4.3.1. If you think you had a dream but you didn't recall the actual dream experience, what brought you to think so? Could you describe it?</p> <p>Q7.1. Could you think of a particular time in which you experience this? How could you better describe the experience you had? —In reference to Q7, “What would describe best (on average, in the last month) your experience upon awakening?”) (Specifically, the open answers to the option ‘Other’ were examined)</p>

The table includes a description of the sort of experience targeted by the markers (“Description”), details of some representative sources in the literature where such experiences are mentioned (“Examples from the literature”), and the questions in the survey targeting the markers (“Survey’s questions”).

Table 2. Total amount of answers provided to Bloc 4 of the survey involving General Demographics, Beliefs and Lifestyle, and Health

General demographics	
Age	
Mean	29.61
SD	13.14
Range	17-85
Age groups	<i>% (counts)</i>
17-25	52.23 (293)
26-35	23.17 (130)
36-45	11.05 (62)
46-55	7.13 (40)
56-65	4.63 (26)
66-75	1.43 (8)
+76	0.36 (2)
Gender	<i>% (counts)</i>
Female	67.73 (382)
Male	29.07 (164)
Non-binary	2.30 (13)
Prefer not to self-identify	0.88 (5)
Country of residence	<i>% (counts)</i>
United Kingdom	59.42 (331)
United States	10.41 (58)
Germany	4.67 (26)
Spain	3.59 (20)
Canada	2.67 (15)
Netherlands	1.79 (10)
Other	17.41(97)

NA	3.63 (21)
Native Language	<i>% (counts)</i>
English	64.79 (357)
Spanish	6.89 (38)
German	5.26 (29)
Other	23.05 (127)
NA	4.67 (27)
Health	
Physical condition	<i>% (counts)</i>
No	83.51 (471)
Yes	16.48 (93)
NA	2.42 (14)
Mental condition	<i>% (counts)*</i>
No	68.20 (384)
Yes	31.79 (179)
NA	2.59 (15)
Taking medication	<i>% (counts)</i>
No	75.44 (424)
Yes	24.55 (138)
Affecting CNS	<i>% (counts)*</i>
Yes	48.03 (61)
<i>(Antidepressants, anti-seizures, benzodiazepines or sedatives, CNS stimulants and analgesics)</i>	

No (Other medication)	51.96 (66)
Sleep Condition Indicator	% (counts)
High score (>16)	20.97 (121)
Low score (<16)	79.03 (456)
Alcohol consumption	
Consumes alcohol	% (counts)
Yes	65.89 (371)
No	34.10 (192)
NA	2.59 (15)
Frequency	% (counts)
>4 units/week	37.19 (138)
<1 unit/week	19.40 (72)
Between 1-2 units/week	17.52 (65)
Between 2-3 units/week	14.28 (53)
Between 3-4 units/week	11.59 (43)
Drug consumption	%
Regular recreational drug consumption	% (counts)*
None	69.52 (431)
Cannabis	14.19 (88)
Psychedelics (including magic mushrooms, LSD, mescaline, DMT)	3.87 (24)
Stimulants (Methamphetamine, speed, cocaine)	3.87 (24)
Entactogens (MDMA, ecstasy)	3.70 (23)
Anaesthetics (Ketamine)	3.38 (21)
Others	0.96 (6)
Opiates	0.48 (3)

(Heroin, morphine, codeine, opium)	
Takes any of the above regularly	% (counts)
No	56.1 (78)
Yes	43.8 (61)
NA	75.95 (439)
Frequency	% (counts)
Every day	44.26 (27)
Twice a week	26.23 (16)
Once a week	13.11 (8)
Once a month	8.19 (5)
Twice a month	8.19 (5)
Religion	
Adhesion to religion	% (counts)
None	49.46 (277)
SBNR	20.00 (112)
Christian	18.67 (104)
Buddhist	3.21 (18)
Muslim	3.21 (18)
Other	2.67 (15)
Hindu	1.42 (8)
Jewish	1.42 (8)
NA	3.11 (18)
Importance of religion or faith	0-100
Mean	43.24
SD	34.80
Meditation	
Practises meditation	% (counts)
No	65.60 (370)

Yes	34.39 (194)
NA	2.42 (14)
Meditation type	% (counts)*
Mindfulness	44.01 (114)
Other	15.83 (41)
I don't know the style	9.65 (25)
Metta (loving kindness)	8.49 (22)
Vipassana	8.16 (21)
Shamata	5.09 (13)
Zen	4.63 (12)
TM	3.86 (11)
Frequency meditation practise	% (counts)
Every day	37.5(72)
Every other day	26.56 (51)
< twice a week	22.91 (44)
<five times a month	13.02 (25)
Duration of meditation practise	% (counts)
<15min	42.3 (82)
Between 15-30min	41.75 (81)
>30min	13.40 (26)
>1h	2.57 (5)

Years of meditation practise	
Mean	6.11
Range	0-30
SD	7.9
Importance meditation	0-100
Mean	60.36
SD	29.31
Dream interest	
Importance dream interest	0-100
Mean	72.09
SD	24.72
Part of a dream community	% (counts)
No	86.4 (495)
Yes	13.61 (78)
NA	0.86 (5)
Type of dream community	% (counts)*
Online forums (Reddit, Night Club Community, DreamViews.com)	62.5 (10)
Social media (Facebook groups)	25.0 (4)
Independent or private	12.5 (2)

*Multiple answers allowed. More than one participant could have given more than one answer

NA= No Answer (missing answers)

SD = Standard deviation

TM= Transcendental Meditation

SBNR = Spiritual but not religious

CNS= Central Neurosystem

Full survey's results

Q1. In the last month, were you ever aware of falling asleep?	% (counts)
Yes	57.26 (331)
No	27.85 (161)
NS	14.35 (83)
NA	0.52(3)
Only prompted to those answering Yes to Q1:	
Q1.1. Complete the following sentence by thinking of a particular time in which you were aware of falling asleep, (more than one might apply, but think of one particular time) "I realised I was not asleep yet because..."	
	% (counts)*
I was aware of my state	28.44 (186)
I had thoughts	20.95 (137)
I heard things in the room	11.31 (74)
I heard things in 'my head' (own voice or others)	10.70 (70)
I saw some visuals (i.e. images, flashes or geometric forms)	10.55 (69)
I felt something in my body	8.40 (55)
I experienced different sensations not necessarily located in my body	6.3 (41)
Other	3.36 (22)
Qualitative data for 'Other'	% (counts)*
Threshold of dreaming (Marker 4)	36.84 (7)
Bodily perception	21.05 (4)
Other	15.78 (3)
External stimuli	15.78 (3)
Hypnagogic hallucinations	10.52 (2)
Only prompted to those answering 'No' or 'Not sure' to Q1:	

Q1.2. Did you remember having experienced any of the following while you were falling asleep? (more than one might apply, but think of a recent time within the last month)	
	% (counts)*
I had thoughts	34.95 (129)
I don't remember having experienced anything	20.6 (76)
I saw some visuals (i.e. images, flashes or geometric forms)	12.2 (45)
I heard things in 'my head' (own voice or others)	10.03 (37)
I felt something in my body	7.86 (29)
I heard things in the room	7.6 (28)
I experienced different sensations not necessarily located in my body	4.34 (16)
Other	2.43 (9)
Q1.3. If you experienced any of the things in the previous list, including 'other', were you aware of those experiences while they were occurring?	
	% (counts)
Yes	65.45 (108)
Not sure	23.63 (39)
No	10.90 (18)
Q2. In the last month, were you ever aware of waking up?	
Yes	66.84 (383)
No	17.45 (100)
Not sure	15.70 (90)
Q2.1. Complete the following sentence by thinking of a particular time in which you were aware of waking up, (more than one might apply, but think of one particular time) "<i>I realised I was not asleep anymore because...</i>"	
	% (counts)*
I had thoughts	25.91 (163)
I heard things in the room	23.68 (149)
I felt something in my body	12.56 (79)
I experienced different sensations not necessarily located in my body	10.65 (67)
I heard things in 'my head' (own voice or others)	10.33 (65)

Other	10.01 (63)
I saw some visuals (i.e. images, flashes or geometric forms)	6.84 (43)
Qualitative data for 'Other'	% (counts)
Bodily sensations	24.2 (15)
Dream ending	20.97(13)
Awareness room	19.35 (12)
Transition (Marker 5)	17.74 (11)
Other	17.74 (11)

Distribution of answers for Bloc 1 of the survey to questions regarding the transition from waking to sleep and from sleep to waking. The themes extracted from the qualitative analysis which are related to each of the markers are indicated.

*Multiple answers allowed. More than one participant could have given more than one answer.

BLOC 2: Dream recall and awareness

Q3. In the last month, have you recalled your dreams <i>often</i>?	% (counts)
Yes	64.40 (371)
No	30.72 (177)
Not sure	4.86 (28)
NA	0.35 (2)
Only prompted to those answering 'Yes' to Q3	
Q4.1 How often did you recall the actual dream experience (the plot, the visuals)? (on average, in the last month)	% (counts)
>5 times a week	48.52 (180)
<5 times a week	31.53 (117)
Every day	15.09 (56)
Very rarely (once or twice within the month)	4.85 (18)
Q4.2 How real did your dreams feel like compared to wakeful experiences? Think of a particular dream had during the last month and judge how real did the dream feel. Was it more similar or less than wakefulness? (0-100)	
Mean	55.09
SD	21.26
Categories isolated	
As real as wakefulness	58.08 (212)
More real than wakefulness	27.67 (101)
Not real	14.25 (52)
Q4.3 In the last month, were there times in which you didn't recall the actual dream experience, but you thought you had a dream?	% (counts)
Yes	78.97 (293)
No	11.86 (44)
Not sure	9.16 (34)
Only displayed if answered 'Yes' to Q4.3	
Q4.3.1 If you think you had a dream, but you didn't recall the actual dream experience, what brought you to think so? Could you describe it?	% (counts)
Themes isolated	
Feeling of knowing (Marker 6)	35.71(45)
Emotional state (Marker 6)	34.12 (43)
Partial recall	24.60 (31)
Dream set	7.76 (6)
Mixed recall	0.79 (1)

Only prompted to those answering 'No' or 'Not sure' to Q3	
Q7. What would describe best (on average, in the last month) your experience upon awakening?	% (counts)
I feel I had a dream, but I couldn't recall it	56.72 (114)
Nothing, I just woke up	36.81 (74)
I feel I experienced something while I was sleeping, but I don't think it was a dream	6.47 (13)
Q7.1 Could you describe briefly your experience? (In that particular instance)	% (counts)
Themes isolated	
Partial recall	46.98 (39)
Feeling of knowing (Marker 6)	31.32 (26)
Emotional state (Marker 6)	13.25 (11)
Waking up	4.81 (4)
Dreaming set	2.40 (2)
Other	1.2(1)
Only prompted to those answering 'Yes' to Q3	
Q5. In the last month, were you ever aware that you were dreaming?	% (counts)
Yes	62.80 (233)
No	24.26 (90)
NS	12.94 (48)
Only prompted to those answering 'Yes' to Q5	
Q5.1 How often were you aware that you were dreaming? (On average, in the last month)	% (counts)
Very rarely (once or twice within the month)	40.77 (95)
>5 times a week	38.49 (92)
<5 times a week	14.6 (34)
Every day	5.15 (12)
Q5.2 What did happen when you realised that you were dreaming?	% (counts)*
I gained some control over the dream, but I couldn't do as I wished	23.08 (78)
Nothing else; the dream carried on	21.9 (74)
I gained control over the dream to do as I wished	17.16 (58)
The dream ended abruptly, and I woke up	14.5 (49)
The dream disappeared/dissolved	14.20 (48)
Other	6.80 (23)
The dream ended abruptly and nothing else happened	2.37 (8)
Themes isolated for 'Other'	

Dissolution/Void (Marker 1)	16.67(3)
Other: Some control but no lucidity, feeling body paralysed, voluntarily stopping the dream, state of awe, a new dream, lucidity no control	83.33 (15)
Q5.3 Did you follow some training or protocol to achieve lucidity while dreaming?	<i>% (counts)</i>
No	74.65 (156)
Yes	19.13 (40)
NS	5.22 (13)
Q5.3.1 Which training or protocol did you undertake?	<i>% (counts)*</i>
Daily dream diaries	24.6 (32)
Reality checks during wakefulness	23.07 (30)
Wake back to bed (WBTB)	13.07 (17)
Dream induction (DILD technique)	11.54 (15)
Wakefulness induction (WILD technique)	10.77 (14)
Other (Including Dream Yoga, and Sensory Initiated Lucid Dream or SSILD)	8.5 (11)
Mnemonic induction (MILD technique)	8.46 (11)
Only prompted to those answering 'Yes' to Q5	
Q.6 In the last month, were you ever conscious while dreaming but there was an absence of visuals? (e.g. you had a lucid dream that lacked visual experience or you saw your dream scenery dissolving)	<i>% (counts)</i>
No	58.8 (137)
Yes	22.5 (53)
NS	18.45 (43)
Q6.1 When did this occur? (More than one might apply if this happened more than once)	<i>% (counts)*</i>
At some point during my night sleep	53.70 (29)
At some point before I woke up in the morning	35.15 (19)
When I was napping	11.11 (6)
Q6.2 How often did this occur?	<i>% (counts)</i>
Very rarely (once or twice within the month)	52.83(28)
>5 times a week	37.73 (20)
<5 times a week	5.66 (3)

Every day	3.77 (2)
Very rarely (once or twice within the month)	52.83 (28)
Q6.3 Try to remember that particular instance in which that happened and choose which one of the following matches better with your experience:	% (counts)
I was aware, and there were no visuals, but there was some perceptual experience [e.g. sensorial: (auditory, smell, touch, taste) emotional or other]	55.55(30)
I was aware, and there were no visuals or any other perceptual experience, but I experienced something else.	20.37(11)
Other	12.96(7)
I was aware, and there were no visuals, any other perceptual experience or any other thing.	11.11(6)
Q6.4 Could you describe briefly your experience? (In that particular instance)	% (counts)
Themes isolated	
Emptiness/Minimal (Marker 2)	7 (36.84)
Dissolution/Void (Marker 1)	6 (31.58)
Other	15.79 (3)
Waking after the dissolution of the dream	15.79 (3)

Distribution of answers for Bloc 2 of the survey to questions regarding dream experiences and white dreaming. The themes extracted from the qualitative analysis which are related to each of the markers are indicated. Note that the percentages are computed in relation to those answering this part of the questionnaire, and not against the total of participants to the survey.

SD = Standard deviation

BLOC 3: Awareness of sleep

Q8. In the last month, were you ever aware that you were sleeping, but not dreaming?	% (counts)
No	65.20 (371)
I'm not sure	17.75 (101)
Yes	17.05 (97)
Q8.1 Please, try to recall a particular instance in which you had this awareness of sleeping but not dreaming. When did this occur?	% (counts)*
At some point during my night's sleep	38.61 (39)
At some point before I woke up in the morning	35.64 (36)
When I was napping	23.76 (24)
I don't know	1.98 (2)
Q8.2 In the last month, how frequently did this occur?	% (counts)
Very rarely (once or twice within the month)	39.60 (40)
Less than 5 times a week	32.67 (33)
Over 5 times a week	18.82 (19)
Every day	8.91 (9)
Q8.3 Which of the following matches better with your experience?	% (counts)
I was aware, and there were no visuals, but there was some perceptual experience [e.g. sensorial: (auditory, smell, touch, taste), emotional or other]	42.42 (42)
I was aware, and there were no visuals, any other perceptual experience or any other thing	32.32 (32)
I was aware, and there were no visuals or any other perceptual experience, but I experienced something else.	17.17 (17)
Other	8.08 (8)
Q8.4 Could you describe briefly your experience? (In that particular instance)	% (counts)
Themes isolated	
Awareness of sleeping state (Marker 3)	30.55 (11)
Emptiness/Minimal (Marker 2)	22.22 (8)
Other	16.66 (6)
Kinaesthetic	13.88 (5)
Sleep thinking	11.11 (4)
Feeling of knowing	5.55 (2)

Distribution of answers to Bloc 3 of the survey for questions regarding sleep awareness. The themes extracted from the qualitative analysis which are related to each of the markers are indicated. *Multiple answers allowed. More than one participant could have given more than one answer.