

Table S1. Regression models for Study 1 and Study 2 with all available predictors included

DV: Exploding head syndrome	Model information	
<u>Study 1</u>	Model 1 $\chi^2$ (df = 5) = 25.02, $p < .001$ OR (95% CI)	Model 2 $\chi^2$ (df = 6) = 25.27, $p = .003$ OR (95% CI)
Age	-	0.99 (0.93 – 1.07)
Insomnia symptoms	0.70 (0.48 – 1.02) +	0.69 (0.47 – 1.02) +
Life stress	1.27 (0.73 – 2.19)	1.27 (0.73 – 2.18)
Anxiety symptoms	1.31 (0.74 – 2.30)	1.36 (0.77 – 2.40)
Depression symptoms	0.69 (0.40 – 1.17)	0.67 (0.39 – 1.15)
Sleep paralysis	1.73 (1.25 – 2.40) **	1.72 (1.24 – 2.38) **
<u>Study 2</u>	$\chi^2$ (df = 10) = 117.90, $p < .001$ OR (95% CI)	$\chi^2$ (df = 12) = 120.38, $p < .001$ OR (95% CI)
Age	-	1.01 (1.00 – 1.02) *
Sex	-	0.98 (0.78 – 1.24)
Insomnia symptoms	0.82 (0.70 – 0.96) *	0.84 (0.72 – 0.99) *
Life stress	1.02 (0.80 – 1.31)	1.00 (0.78 – 1.29)
Anxiety symptoms	0.94 (0.73 – 1.22)	0.98 (0.76 – 1.27)
Depression symptoms	0.96 (0.77 – 1.20)	0.99 (0.79 – 1.24)
Dissociative symptoms	1.13 (0.97 – 1.31) +	1.15 (0.99 – 1.33) +
Sleep paralysis	1.16 (0.99 – 1.34) *	1.16 (1.00 – 1.35) *
Threatening hypnagogic/hypnopompic hallucinations	1.53 (1.32 – 1.77) ***	1.52 (1.32 – 1.77) ***
Nightmares	1.16 (0.99 – 1.36) +	1.17 (1.00 – 1.34) *
False Awakenings	1.08 (0.93 – 1.26)	1.09 (0.94 – 1.27)
Lucid dreaming	1.11 (0.96 – 1.28)	1.11 (0.96 – 1.29)

Note. OR = Odds ratio, CI = Confidence intervals, \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$ , + =  $p < .10$

Table S2. Descriptive statistics for variables included in Study 1 with the “once” option for exploding head syndrome frequency removed

Variable	Theoretical range	Overall		EHS present		EHS absent		Sig <i>p</i>
		Mean	SD	Mean	SD	Mean	SD	
Exploding head syndrome	1 – 4	1.33	0.87	-	-	-	-	-
Age	18 – 82 ±	34.17	13.62	21.24	7.34	19.96	3.89	
Sleep problems (SCI)	0 – 32	19.68	7.89	15.21	7.14	20.65	6.56	***
Life stress (PSS)	5 – 50	17.20	7.57	21.49	5.44	19.77	6.36	**
Trait anxiety (STAI)	20 – 80	43.69	12.26	52.08	10.66	48.45	10.10	**
Depressed mood (MFQ)	0 – 26	5.63	4.60	10.24	6.44	9.22	6.33	
Sleep paralysis	1 – 7	2.74	1.63	2.95	1.61	1.75	1.17	***

Note. SD = standard deviation, sig = independent samples t-tests between exploding head syndrome present and exploding head syndrome absent significance level, \*\* =  $p < .01$ , \*\*\* =  $p < .001$ , ± = actual range, not theoretical.

EHS = Exploding head syndrome. A higher score indicates more frequent episodes.

SCI = Sleep condition indicator. A higher score indicates better sleep.

PSS = Perceived stress scale. A higher score indicates higher levels of life stress.

STAI = State trait anxiety index (trait). A higher score indicates higher levels of trait anxiety.

MFQ = Mood and feelings questionnaire. A higher score indicates higher levels of depressed mood.

DES = Dissociative experiences scale. A higher score indicates higher levels of dissociative experiences

Sleep paralysis, threatening hypnagogic/hypnopompic hallucinations, nightmares, false awakenings, and lucid dreaming. A higher score indicates more frequent episodes of the experience

Table S3. Predictors of exploding head syndrome in Study 1 with the “once” option for exploding head syndrome frequency removed

Independent variable [predicting exploding head syndrome]	Model information	
<u>Insomnia symptoms and well-being</u>	Model 1 $\chi^2$ (df = 4) = 21.03, $p < .01$	Model 2 $\chi^2$ (df = 5) = 21.66, $p < .01$
	OR (95% CI)	OR (95% CI)
Age	-	0.97 (0.89 – 1.05)
Insomnia symptoms	0.39 (0.24 – 0.63) ***	0.37 (0.23 – 0.62) ***
Life stress	1.05 (0.53 – 2.06)	1.03 (0.52 – 2.04)
Anxiety symptoms	1.30 (0.65 – 2.59)	1.37 (0.68 – 2.75)
Depression symptoms	0.58 (0.31 – 1.12)	0.56 (0.29 – 1.08)
<u>Anomalous sleep experiences</u>	$\chi^2$ (df = 1) = 21.50, $p < .001$	$\chi^2$ (df = 2) = 22.70, $p < .001$
	OR (95% CI)	OR (95% CI)
Age	-	1.04 (0.98 – 1.11)
Sleep paralysis	2.19 (1.55 – 3.11) ***	2.17 (1.53 – 3.07) ***

Note. OR = Odds ratio, CI = 95% confidence intervals, \*\*\* =  $p < .001$

Table S4. Descriptive statistics for variables included in Study 2 with the “once” option for exploding head syndrome frequency removed

Variable	Theoretical range	Overall		EHS present		EHS absent		Sig
		Mean	SD	Mean	SD	Mean	SD	
Exploding head syndrome	1 – 4	1.45	0.83	-	-	-	-	-
Age	18 – 82 ±	34.17	13.62	33.03	12.64	35.14	13.97	*
Sex		60.46		64.55		61.46		
Sleep problems (SCI)	0 – 32	19.68	7.89	16.30	8.04	20.98	7.81	***
Life stress (PSS)	5 – 50	17.20	7.57	19.29	8.02	16.93	7.47	**
Trait anxiety (STAI)	20 – 80	43.69	12.26	46.70	12.73	43.30	12.16	**
Depressed mood (MFQ)	0 – 26	5.63	4.60	6.92	5.05	5.45	4.51	**
Dissociative experiences (DES)	0 – 2800	459.33	418.70	669.87	536.80	432.70	394.27	***
Sleep paralysis	1 – 7	2.74	1.63	3.64	1.86	2.59	1.57	***
Threatening hypnagogic/hypnopompic hallucinations	1 – 5	2.03	1.29	2.99	1.54	1.91	1.21	***
Nightmares	1 – 5	2.94	1.23	3.44	1.25	2.88	1.21	***
False awakenings	1 – 5	2.46	1.23	3.06	1.39	2.38	1.19	***
Lucid dreaming	0 – 8	3.75	2.11	4.53	2.22	3.67	2.19	***

Note. SD = standard deviation, sig = independent samples t-tests between exploding head syndrome present and exploding head syndrome absent significance level, \* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$ , ± = actual range, not theoretical.

EHS = Exploding head syndrome. A higher score indicates more frequent episodes.

SCI = Sleep condition indicator. A higher score indicates better sleep.

PSS = Perceived stress scale. A higher score indicates higher levels of life stress.

STAI = State trait anxiety index (trait). A higher score indicates higher levels of trait anxiety.

MFQ = Mood and feelings questionnaire. A higher score indicates higher levels of depressed mood.

DES = Dissociative experiences scale. A higher score indicates higher levels of dissociative experiences

Sleep paralysis, threatening hypnagogic/hypnopompic hallucinations, nightmares, false awakenings, and lucid dreaming. A higher score indicates more frequent episodes of the experience

Table S5. Predictors of exploding head syndrome in Study 2 with the “once” option for exploding head syndrome frequency removed

Independent variable [predicting the dependent variable]	Model information	
	Model 1	Model 2
<u>Insomnia symptoms and well-being</u>	$\chi^2$ (df = 5) = 53.51, $p < .001$	$\chi^2$ (df = 7) = 52.32, $p < .001$
	OR (95% CI)	OR (95% CI)
Age	-	0.99 (0.98 – 1.01)
Sex	-	0.90 (0.63 – 1.28)
Insomnia symptoms	0.63 (0.50 – 0.78) ***	0.63 (0.50 – 0.78) ***
Life stress	1.15 (0.81 – 1.64)	1.13 (0.79 – 1.61)
Anxiety symptoms	0.94 (0.65 – 1.35)	0.94 (0.65 – 1.36)
Depression symptoms	0.89 (0.65 – 1.22)	0.90 (0.65 – 1.23)
Dissociative experiences	1.50 (1.25 – 1.80) ***	1.47 (1.22 – 1.78) ***
<u>Anomalous sleep experiences</u>	$\chi^2$ (df = 4) = 154.32, $p < .001$	$\chi^2$ (df = 6) = 152.08, $p < .001$
	OR (95% CI)	OR (95% CI)
Age	-	1.00 (0.99 – 1.02)
Sex	-	1.10 (0.84 – 1.44)
Sleep paralysis	1.38 (1.17 – 1.63) ***	1.33 (1.12 – 1.57) **
Threatening hypnagogic/hypnopompic hallucinations	1.87 (1.58 – 2.23) ***	1.83 (1.53 – 2.19) ***
Nightmares	1.19 (0.99 – 1.43)	1.20 (1.01 – 1.45) *
False awakenings	1.17 (0.96 – 1.42)	1.18 (0.97 – 1.43)
Lucid dreaming	1.30 (1.08 – 1.57) **	1.30 (1.08 – 1.57) **

Note. OR = Odds ratio, CI = 95% confidence intervals, \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .01$