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

|  |  |
| --- | --- |
| DV: Exploding head syndrome | Model information |
|  | Model 1 | Model 2 |
| Study 1 | χ2 (df = 5) = 25.02, *p* < .001 | χ2 (df = 6) = 25.27, *p* = .003 |
|  | OR (95% CI) | 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) \*\* |
|  |  |  |
| Study 2 | χ2 (df = 10) = 117.90, *p* < .001 | χ2 (df = 12) = 120.38, *p* < .001 |
|  |  |  |
|  | OR (95% CI) | 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*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Theoretical range | Overall | EHS present | EHS absent | Sig |
| Variable |  | Mean | SD | Mean | SD | Mean | SD | *p* |
| 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 |
|  | Model 1 | Model 2 |
| Insomnia symptoms and well-being | χ2 (df = 4) = 21.03, *p* < .01 | χ2 (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) |
|  |  |  |
| Anomalous sleep experiences | χ2 (df = 1) = 21.50, *p* < .001 | χ2 (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*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Theoretical range | Overall | EHS present | EHS absent | Sig |
| Variable |  | Mean | SD | Mean | SD | Mean | SD | *p* |
| 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 |
| Insomnia symptoms and well-being | χ2 (df = 5) = 53.51, *p* < .001 | χ2(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) \*\*\* |
|  |  |  |
| Anomalous sleep experiences | χ2 (df = 4) = 154.32, *p* < .001 | χ2 (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