

1 **Supporting Information**

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3 **1. SAQ and MEQ**

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5 **S1 Table.** Responses to each SAQ question (number of respondents and percentage of the group total) divided
6 by groups according to the MEQ scores.

| SAQ question | | Assigned score | All (n = 153) | MEQ-based group | | |
|--------------|---|----------------|---------------|------------------|------------------------|------------------|
| | | | | Morning (n = 16) | Intermediate (n = 100) | Evening (n = 37) |
| Q1 | yes | 1 | 150 (98%) | 16 (100%) | 97 (97%) | 37 (100%) |
| | no | 0 | 3 (2%) | 0 (0%) | 3 (3%) | 0 (0%) |
| Q2 | Every day | 0 | 3 (1%) | 0 (0%) | 2 (2%) | 1 (3%) |
| | At least once a week | 0 | 61 (41%) | 10 (63%) | 36 (36%) | 15 (41%) |
| | Only on nights before important events (Which ones? Please specify) | 3 | 89 (58%) | 6 (38%) | 62 (62%) | 21 (57%) |
| Q3 | Yes | 0 | 65 (42%) | 5 (31%) | 47 (47%) | 13 (35%) |
| | No, just in the morning before the alarm clock | 3 | 88 (58%) | 11 (69%) | 53 (53%) | 24 (65%) |
| Q4 | 5 minutes before or less | 3 | 32 (21%) | 1 (6%) | 25 (25%) | 6 (16%) |
| | Between 5 and 15 minutes | 2 | 60 (38%) | 12 (75%) | 32 (32%) | 16 (43%) |
| | Between 15 and 30 minutes | 1 | 48 (31%) | 3 (19%) | 32 (32%) | 13 (35%) |
| | More than 30 minutes (please specify) | 0 | 13 (8%) | 0 (0%) | 11 (11%) | 2 (5%) |
| Q5 | When you have to wake up at the usual time (e.g., 7 a.m. on a working/school day) | 0 | 117 (76%) | 14 (88%) | 72 (72%) | 31 (84%) |
| | When you have to wake up at an unusual time (e.g., 3 a.m.) | 3 | 36 (24%) | 2 (12%) | 28 (28%) | 6 (16%) |

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9 **2. SAQ Italian version**

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11 **SELF-AWAKENING QUESTIONNAIRE**

12 **VERSIONE ITALIANA**

13

14 In particolari circostanze, per esempio prima di un esame universitario o un importante incontro di
15 lavoro, alcune persone sono in grado di svegliarsi spontaneamente prima del suono della sveglia o
16 addirittura non hanno bisogno di una sveglia. Le seguenti domande mirano a caratterizzare questo
17 comportamento.

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19 **Istruzioni**

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21 Leggi ogni domanda con attenzione.

22 Scegli la risposta che caratterizza con più precisione la tua esperienza personale.

23 Per favore rispondi a **TUTTE** le domande.

24

25 1. Ti è mai capitato di svegliarti volontariamente ad un orario prestabilito senza l'ausilio di una sveglia
26 o altri aiuti esterni?

27 Sì

28 No

29

30 2. Se sì, quanto frequentemente ti succede?

31 Tutti i giorni

32 Almeno una volta a settimana

33 Solo prima di un evento importante (Quale evento? Specificare:

34

35

36)

37

38 3. In tali occasioni hai dei risvegli frequenti durante la notte o ti svegli solo poco prima dell'orario
39 prestabilito?

40 Mi sveglio più di una volta (specificare in media quante volte:)

41 Mi sveglio solo una volta poco prima dell'orario prestabilito

42

43 4. Quanti minuti, in media, ti svegli **prima** dell'orario prestabilito?

44 5 minuti prima o meno

45 Tra 5 e 15 minuti

46 Tra 15 e 30 minuti

47 Più di 30 minuti (specificare quanto)

48

49 5. Nella tua esperienza, è **più probabile** che tale risveglio spontaneo si verifichi:

50 Quando ti devi risvegliare ad un orario abituale (per esempio, 7 del mattino in giornata
51 lavorativa/scolastica)

52 Quando ti devi risvegliare ad un orario insolito/non abituale (per esempio, 3 del mattino)

53 3. Description of battery tests and their scores

54

55 1. ISI is a 7-item self-report questionnaire to evaluate subjective symptoms and daytime consequences
56 of insomnia as well as the degree of distress caused by these difficulties. Higher scores indicate greater
57 insomnia severity. The total score ranges are: no significant insomnia (0–7), sub-threshold insomnia
58 (8–14), moderate insomnia (15–21), and severe insomnia (22–28). In the literature. “responders” to
59 treatment are defined by a decrease of ≥ 8 points on the ISI total score, whereas “remitters”^{xw} are
60 determined by a total ISI score < 8 at the end of the treatment. $\alpha = 0.75$.

61

62 2. The MEQ-SA is a 19-item self-report scale designed to evaluate subjective circadian typology:
63 morning-, intermediate- and evening circadian preference subjects. The total score ranges from 16 to
64 86. $\alpha = 0.68$.

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66 3. The PSQI is a 19-item self-report questionnaire used for a retrospective evaluation of sleep quality
67 over the previous months. Seven clinical domains regarding sleep problems are assessed: sleep quality,
68 sleep latency (SL), sleep duration, habitual SE, sleep disturbances, use of sleeping medications, and
69 daytime dysfunction. All the items of the questionnaire are scored, and a single factor of global sleep
70 quality is then computed. A total score 5 is considered an indicator of bad sleep quality

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72 4. The PSWQ is a 16-item instrument aimed to measure the trait of worry. Each item is rated on a scale
73 of one (“not at all typical of me”) to five (“very typical of me”), with items 1, 3, 8, 10, and 11 that are
74 reverse scored. A total score of 50 has been identified as a reliable cut-off to discriminate generalized
75 anxiety disorder patients from healthy subjects with both a high specificity (90%) and sensitivity (82%).

76

77 5. The STAI-Y is a 40-item self-report scale based on a 4-point Likert scale designed to evaluate anxiety
78 (STAI-Y-1 = state anxiety, and STAIY-2 = trait anxiety in two different modules). STAI-Y scores > 44
79 in state module and > 41 in trait module are evaluated as clinically significant. $\alpha =$ from 0.86 to 0.95.

80

81 6. The Center for Epidemiological Studies-Depression (CES-D) is a 20-item measure that asks to rate
82 how often over the past week one experienced symptoms associated with depression, such as restless
83 sleep, poor appetite, and feeling lonely. Response options range from 0 to 3 for each item (0 = Rarely
84 or None of the Time, 1 = Some or Little of the Time, 2 = Moderately or Much of the time, 3 = Most or
85 Almost All the Time). Scores range from 0 to 60, with high scores indicating greater depressive
86 symptoms

87

88 7. The RRS includes 22 items characterizing responses to depressed moods that are divided in three
89 types: self-focused responses, symptoms focused responses, and responses focused on the possible
90 consequences and causes of the mood. Every item must be rated on a scale from one (almost never) to
91 four (almost always).

92

93 8. The PSAS is composed by 16 items, each rated on a 5-point scale that describes symptoms of arousal
94 at bedtime. Eight items evaluate cognitive arousal and eight evaluates somatic arousal. Higher scores
95 suggest higher pre-sleep arousal.