DSM-IV-TR Diagnostic Criteria for Primary Insomnia

A. The predominant complaint is difficulty initiating or maintaining sleep, or nonrestorative sleep, for at least 1 month.

A1.1. The predominant complaint is difficulty initiating sleep

SL1 = 3-7 (problems getting to sleep \ge 3 and \le 7 nights a week) AND SL3 \ge 30 minutes (it takes 30 or more minutes to get to sleep those nights)

OR

A1.2. The predominant complaint is difficulty maintaining sleep

A1.2a. Waking multiple times (waking 3 or more times at night)

SL4 = 3-7 (problems staying asleep \ge 3 and \le 7 nights a week) AND EITHER [(SL6 \ge 3: waking 3 or more times)

OR

A1.2b. Taking a long time to get back to sleep after awakening at night (30 or more minutes awake)

SL4 = 3-7 (problems staying asleep ≥ 3 and ≤ 7 nights a week) AND EITHER [(SL5.1 ≥ 30 minutes awake at night) OR (SL7: Number of minutes it takes to get back to sleep) x (SL6: Number of awakenings) ≥ 30 minutes]

OR

A1.2c. Waking too early in the AM (30 or more minutes early)

SL8 = 3-7 (problems waking too early in the morning \geq 3 and \leq 7 days a week) AND SL10 \geq 30 minutes (R wakes 30 or more minutes early those mornings)

OR

A1.3. The predominant complaint is nonrestorative sleep

SL11 = 3-7 (problems feeling unrefreshed in the morning \geq 3 and \leq 7 days a week) AND SL13 = 2-4 (the severity of the problem waking up feeling nonrefreshed is either moderate, severe, or very severe) AND SS5+SS6 >= 7 hours (R has adequate opportunity for sleep) AND

A1.1 = No and A1.2a= No and A1.2b=No and A1.2c=No (R doesn't have any other sleep problem)

AND

A2. The complaint has lasted at least one month

 $SL21 \ge 30$ days (For how many weeks, months, or years have you had at least one of these problems?)

B. The sleep disturbance (or associated daytime fatigue) causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

We created a count of responses to all the daytime impairment items to operationalize this criterion.

SUM the number of responses in the SL28-34 series that were coded 3-4 plus whether or not SL35 was coded 4 plus whether or not 36A was coded 3-4 plus whether or not SL36B was coded 4-5 (you only get 1 point if either 36A or 36B was in the range) plus the sum of the SL41-44 series that were coded 7-10.

Impairment is initialized to zero.

28. reduced motivation mod/sev - If SL28=3 or 4 then impairment=impairment + 1 29. reduced performance at work, school, or social activities mod/sev - IF SL29=3 or 4 then impairment = impairment + 1

30. errors or accidents mod/sev - If SL30=3 or 4 then impairment=impairment + 1

31. irritability, nerves, mood disturbance mod/sev - If SL31=3 or 4 then impairment=impairment + 1

32. daytime attention, concentration, or memory problems mod/sev - If SL32=3 or 4 then impairment=impairment + 1

33. daytime fatigue mod/sev - If SL33=3 or 4 then impairment=impairment + 1

34. daytime sleepiness mod/sev - If SL34=3 or 4 then impairment=impairment + 1

35. tension headaches or digestive problems SEVERE (NOT MOD/SEV) - If SL35=4 then impairment=impairment + 1

36A. concerns or worries about your sleep mod/sev

36B. worried or distressed about sleep problems much/very much – If SL36a OR SL36b=3 or 4 then impairment=impairment+1

41. sleep probs interfered with home management 7-10/0-10 - If SL41 \geq 7 then impairment=impairment +1

42. sleep probs interfered with ability to work 7-10/0-10 - If $SL42 \ge 7$ then impairment=impairment +1

43. sleep probs interfered with social life 7-10/0-10 - If SL43 \geq 7 then impairment=impairment +1

44. sleep probs interfered with close relationships 7-10/0-10 - If SL44 \ge 7 then impairment=impairment +1

We say that Criterion B is met if impairment ≥ 2 .

C. The sleep disturbance does not occur exclusively during the course of narcolepsy, breathing-related sleep disorder, circadian rhythm sleep disorder, or parasomnia.

NOT OPERATIONALIZED

D. The disturbance does not occur exclusively during the course of another mental disorder (e.g., major depressive disorder, generalized anxiety disorder, a delirium).

NOT OPERATIONALIZED

E. The disturbance is not due to the direct physiological effects of a substance.

NOT OPERATIONALIZED

ICD-10 Diagnostic Criteria for Non-Organic Insomnia

A. The complaint is either of difficulty falling asleep or maintaining sleep, or of poor quality sleep;

Same items as in DSM-IV

B. The sleep disturbance has occurred at least three times per week for at least 1 month;

The 3 days a week part is met in the coding above for Criterion A The 1 month part is operationalized in the same way as DSM-IV, namely:

 $SL21 \ge 30$ days (For how many weeks, months, or years have you had at least one of these problems?)

C. There is preoccupation with the sleeplessness and excessive concern over its consequences at night and during the day;

SL36A = 3-4 (R has moderate or severe concerns about the sleep problems)

OR

SL36B = 4-5 (R has much or very much worries or distress about the sleep problems)

D. The unsatisfactory quantity and/or quality of sleep either causes marked distress or interferes with ordinary activities in daily living.

We created a count of responses to all the daytime impairment items to operationalize this criterion.

SUM the number of responses in the SL28-34 series that were coded 3-4 plus whether or not SL35 was coded 4 plus the sum of the SL41-44 series that were coded 7-10. Impairment is initialized to zero.

28. reduced motivation mod/sev - If SL28=3 or 4 then impairment=impairment + 1 29. reduced performance at work, school, or social activities mod/sev - IF SL29=3 or 4 then impairment = impairment + 130. errors or accidents mod/sev - If SL30=3 or 4 then impairment=impairment + 1 31. irritability, nerves, mood disturbance mod/sev - If SL31=3 or 4 then impairment=impairment + 1 32. daytime attention, concentration, or memory problems mod/sev - If SL32=3 or 4 then impairment=impairment + 1 33. daytime fatigue mod/sev - If SL33=3 or 4 then impairment=impairment + 1 34. daytime sleepiness mod/sev - If SL34=3 or 4 then impairment=impairment + 1 35. tension headaches or digestive problems SEVERE (NOT MOD/SEV) - If SL35=4 then impairment=impairment + 1 41. sleep probs interfered with home management 7-10/0-10 - If SL41 \geq 7 then impairment=impairment +1 42. sleep probs interfered with ability to work 7-10/0-10 - If $SL42 \ge 7$ then impairment=impairment +1 43. sleep probs interfered with social life 7-10/0-10 - If SL43 \geq 7 then impairment=impairment +1 44. sleep probs interfered with close relationships 7-10/0-10 - If SL44 ≥ 7 then impairment=impairment+1

We say that Criterion D is met if impairment ≥ 2

Research Diagnostic Criteria for Insomnia Disorder

A. The individual reports one or more of the following sleep related complaints: difficulty initiating sleep, difficulty maintaining sleep, waking up too early, or sleep that is chronically non-restorative or poor in quality.

We operationalize this in exactly the same way as the comparable DSM-IV criterion (i.e., using the 3-day rule, the 30 minutes for getting to sleep, the 30 minutes for waking in the night and waking two early, and the \ge 3 rule for number of times waking in the night (waking \ge 3 and being awake \ge 30 minutes are alternatives for the same sub-criterion)).

B. The above sleep difficulty occurs despite adequate opportunity and circumstances for sleep.

SS15a NOT EQUAL 4-5 (R did NOT say that his sleep problems are caused a lot or totally by problems with the place he sleeps)

SS16 NOT EQUAL 4-5 (R did NOT say that his sleep problems are caused a lot or totally by demands on his time that require him to sleep irrregularly)

C. At least one of the following forms of daytime impairment related to the nighttime sleep difficulty is reported by the individual:

- 1. Fatigue (SL33)/Malaise (NOT OPERATIONALIZED);
- 2. Attention, concentration, or memory impairment;(SL32)
- 3. Social/Vocational dysfunction or poor school performance (SL29, 41, 42, 43, 44);
- 4. Mood disturbance/Irritability (SL31);
- 5. Daytime sleepiness (SL34);
- 6. Motivation (SL28)/Energy (SL33)/Initiative reduction (SL28);
- 7. Proneness for errors/accidents at work or while driving (SL30);
- 8. Tension headaches, and/or GI symptoms in response to sleep loss (SL35);
- 9. Concerns or worries about sleep (SL36A/36B).

There is a one-to-one map (with the exception of malaise, which is not operationalized) of Criterion C symptoms to the SL28-44 series, as shown above. The thresholds used are the same as in the DSM operationalization, namely:

Impairment is initialized to zero.

28. reduced motivation mod/sev - If SL28=3 or 4 then impairment=impairment + 1

29. reduced performance at work, school, or social activities mod/sev - IF SL29=3 or 4 then impairment = impairment + 1

30. errors or accidents mod/sev - If SL30=3 or 4 then impairment=impairment + 1

31. irritability, nerves, mood disturbance mod/sev - If SL31=3 or 4 then

impairment=impairment + 1

32. daytime attention, concentration, or memory problems mod/sev - If SL32=3 or 4 then impairment=impairment + 1

33. daytime fatigue mod/sev - If SL33=3 or 4 then impairment=impairment + 1

34. daytime sleepiness mod/sev - If SL34=3 or 4 then impairment=impairment + 1

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36A. concerns or worries about your sleep mod/sev

36B. worried or distressed about sleep problems much/very much – If SL36a OR SL36b=3 or 4 then impairment=impairment+1

41. sleep probs interfered with home management 7-10/0-10 - If SL41 \geq 7 then impairment=impairment +1

42. sleep probs interfered with ability to work 7-10/0-10 - If SL42 \geq 7 then impairment=impairment +1

43. sleep probs interfered with social life 7-10/0-10 - If SL43 \geq 7 then impairment=impairment +1

44. sleep probs interfered with close relationships 7-10/0-10 - If SL44 ≥ 7 then impairment=impairment +1

We say that Criterion C is met if impairment ≥ 1