

Subject's Initials \_\_\_\_\_ ID# \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ AM  
 \_\_\_\_\_ PM

**PITTSBURGH SLEEP QUALITY INDEX**

**INSTRUCTIONS:**

The following questions relate to your usual sleep habits during the past month only. Your answers should indicate the most accurate reply for the majority of days and nights in the past month. Please answer all questions.

1. During the past month, what time have you usually gone to bed at night?

BED TIME \_\_\_\_\_

2. During the past month, how long (in minutes) has it usually taken you to fall asleep each night?

NUMBER OF MINUTES \_\_\_\_\_

3. During the past month, what time have you usually gotten up in the morning?

GETTING UP TIME \_\_\_\_\_

4. During the past month, how many hours of actual sleep did you get at night? (This may be different than the number of hours you spent in bed.)

HOURS OF SLEEP PER NIGHT \_\_\_\_\_

***For each of the remaining questions, check the one best response. Please answer all questions.***

5. During the past month, how often have you had trouble sleeping because you . . .

- a) Cannot get to sleep within 30 minutes

Not during the past month _____	Less than once a week _____	Once or twice a week _____	Three or more times a week _____
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- b) Wake up in the middle of the night or early morning

Not during the past month _____	Less than once a week _____	Once or twice a week _____	Three or more times a week _____
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- c) Have to get up to use the bathroom

Not during the past month _____	Less than once a week _____	Once or twice a week _____	Three or more times a week _____
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d) Cannot breathe comfortably

Not during the past month_____	Less than once a week_____	Once or twice a week_____	Three or more times a week_____
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e) Cough or snore loudly

Not during the past month_____	Less than once a week_____	Once or twice a week_____	Three or more times a week_____
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f) Feel too cold

Not during the past month_____	Less than once a week_____	Once or twice a week_____	Three or more times a week_____
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g) Feel too hot

Not during the past month_____	Less than once a week_____	Once or twice a week_____	Three or more times a week_____
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h) Had bad dreams

Not during the past month_____	Less than once a week_____	Once or twice a week_____	Three or more times a week_____
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i) Have pain

Not during the past month_____	Less than once a week_____	Once or twice a week_____	Three or more times a week_____
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j) Other reason(s), please describe \_\_\_\_\_

How often during the past month have you had trouble sleeping because of this?

Not during the past month_____	Less than once a week_____	Once or twice a week_____	Three or more times a week_____
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6. During the past month, how would you rate your sleep quality overall?

Very good \_\_\_\_\_

Fairly good \_\_\_\_\_

Fairly bad \_\_\_\_\_

Very bad \_\_\_\_\_

7. During the past month, how often have you taken medicine to help you sleep (prescribed or "over the counter")?

Not during the past month \_\_\_\_\_    Less than once a week \_\_\_\_\_    Once or twice a week \_\_\_\_\_    Three or more times a week \_\_\_\_\_

8. During the past month, how often have you had trouble staying awake while driving, eating meals, or engaging in social activity?

Not during the past month \_\_\_\_\_    Less than once a week \_\_\_\_\_    Once or twice a week \_\_\_\_\_    Three or more times a week \_\_\_\_\_

9. During the past month, how much of a problem has it been for you to keep up enough enthusiasm to get things done?

No problem at all \_\_\_\_\_  
 Only a very slight problem \_\_\_\_\_  
 Somewhat of a problem \_\_\_\_\_  
 A very big problem \_\_\_\_\_

10. Do you have a bed partner or room mate?

No bed partner or room mate \_\_\_\_\_  
 Partner/room mate in other room \_\_\_\_\_  
 Partner in same room, but not same bed \_\_\_\_\_  
 Partner in same bed \_\_\_\_\_

If you have a room mate or bed partner, ask him/her how often in the past month you have had . . .

a) Loud snoring

Not during the past month \_\_\_\_\_    Less than once a week \_\_\_\_\_    Once or twice a week \_\_\_\_\_    Three or more times a week \_\_\_\_\_

b) Long pauses between breaths while asleep

Not during the past month \_\_\_\_\_    Less than once a week \_\_\_\_\_    Once or twice a week \_\_\_\_\_    Three or more times a week \_\_\_\_\_

c) Legs twitching or jerking while you sleep

Not during the past month \_\_\_\_\_    Less than once a week \_\_\_\_\_    Once or twice a week \_\_\_\_\_    Three or more times a week \_\_\_\_\_

d) Episodes of disorientation or confusion during sleep

Not during the past month_____	Less than once a week_____	Once or twice a week_____	Three or more times a week_____
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e) Other restlessness while you sleep; please describe\_\_\_\_\_

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Not during the past month_____	Less than once a week_____	Once or twice a week_____	Three or more times a week_____
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# Pittsburgh Sleep Quality Index (PSQI)

## Form Administration Instructions, References, and Scoring

### Form Administration Instructions

The range of values for questions 5 through 10 are all 0 to 3.

Questions 1 through 9 are not allowed to be missing except as noted below. If these questions are missing then any scores calculated using missing questions are also missing. Thus it is important to make sure that all questions 1 through 9 have been answered.

In the event that a range is given for an answer (for example, '30 to 60' is written as the answer to Q2, minutes to fall asleep), split the difference and enter 45.

### Reference

Buysse DJ, Reynolds CF, Monk TH, Berman SR, Kupfer DJ: The Pittsburgh Sleep Quality Index: A new instrument for psychiatric practice and research. *Psychiatry Research* 28:193-213, 1989.

### Scores – reportable in publications

On May 20, 2005, on the instruction of Dr. Daniel J. Buysse, the scoring of the PSQI was changed to set the score for Q5J to 0 if either the comment or the value was missing. This may reduce the DISTB score by 1 point and the PSQI Total Score by 1 point.

#### **PSQIDURAT**

##### **DURATION OF SLEEP**

IF  $Q4 \geq 7$ , THEN set value to 0

IF  $Q4 < 7$  and  $\geq 6$ , THEN set value to 1

IF  $Q4 < 6$  and  $\geq 5$ , THEN set value to 2

IF  $Q4 < 5$ , THEN set value to 3

Minimum Score = 0 (better); Maximum Score = 3 (worse)

#### **PSQIDISTB**

##### **SLEEP DISTURBANCE**

IF  $Q5b + Q5c + Q5d + Q5e + Q5f + Q5g + Q5h + Q5i + Q5j$  (IF Q5JCOM is null or Q5j is null, set the value of Q5j to 0) = 0, THEN set value to 0

IF  $Q5b + Q5c + Q5d + Q5e + Q5f + Q5g + Q5h + Q5i + Q5j$  (IF Q5JCOM is null or Q5j is null, set the value of Q5j to 0)  $\geq 1$  and  $\leq 9$ , THEN set value to 1

IF  $Q5b + Q5c + Q5d + Q5e + Q5f + Q5g + Q5h + Q5i + Q5j$  (IF Q5JCOM is null or Q5j is null, set the value of Q5j to 0)  $> 9$  and  $\leq 18$ , THEN set value to 2

IF  $Q5b + Q5c + Q5d + Q5e + Q5f + Q5g + Q5h + Q5i + Q5j$  (IF Q5JCOM is null or Q5j is null, set the value of Q5j to 0)  $> 18$ , THEN set value to 3

Minimum Score = 0 (better); Maximum Score = 3 (worse)

#### **PSQILATEN**

##### **SLEEP LATENCY**

**First, recode Q2 into Q2new thusly:**

IF  $Q2 \geq 0$  and  $\leq 15$ , THEN set value of Q2new to 0

IF  $Q2 > 15$  and  $\leq 30$ , THEN set value of Q2new to 1

IF  $Q2 > 30$  and  $\leq 60$ , THEN set value of Q2new to 2

IF  $Q2 > 60$ , THEN set value of Q2new to 3

**Next**

IF Q5a + Q2new = 0, THEN set value to 0  
 IF Q5a + Q2new  $\geq$  1 and  $\leq$  2, THEN set value to 1  
 IF Q5a + Q2new  $\geq$  3 and  $\leq$  4, THEN set value to 2  
 IF Q5a + Q2new  $\geq$  5 and  $\leq$  6, THEN set value to 3

Minimum Score = 0 (better); Maximum Score = 3 (worse)

**PSQIDAYDYS****DAY DYSFUNCTION DUE TO SLEEPINESS**

IF Q8 + Q9 = 0, THEN set value to 0  
 IF Q8 + Q9  $\geq$  1 and  $\leq$  2, THEN set value to 1  
 IF Q8 + Q9  $\geq$  3 and  $\leq$  4, THEN set value to 2  
 IF Q8 + Q9  $\geq$  5 and  $\leq$  6, THEN set value to 3  
 Minimum Score = 0 (better); Maximum Score = 3 (worse)

**PSQIHSE****SLEEP EFFICIENCY**

Diffsec = Difference in seconds between day and time of day Q1 and day Q3  
 Diffhour = Absolute value of diffsec / 3600  
 newtib = IF diffhour > 24, then newtib = diffhour - 24  
           IF diffhour  $\leq$  24, THEN newtib = diffhour  
 (NOTE, THE ABOVE JUST CALCULATES THE HOURS BETWEEN GNT (Q1)  
 AND GMT (Q3))  
 tmphse = (Q4 / newtib) \* 100

IF tmphse  $\geq$  85, THEN set value to 0  
 IF tmphse < 85 and  $\geq$  75, THEN set value to 1  
 IF tmphse < 75 and  $\geq$  65, THEN set value to 2  
 IF tmphse < 65, THEN set value to 3  
 Minimum Score = 0 (better); Maximum Score = 3 (worse)

**PSQISLPQUAL****OVERALL SLEEP QUALITY**

Q6  
 Minimum Score = 0 (better); Maximum Score = 3 (worse)

**PSQIMEDS****NEED MEDS TO SLEEP**

Q7  
 Minimum Score = 0 (better); Maximum Score = 3 (worse)

**PSQI****TOTAL**

DURAT + DISTB + LATEN + DAYDYS + HSE + SLPQUAL + MEDS  
 Minimum Score = 0 (better); Maximum Score = 21 (worse)  
 Interpretation: TOTAL  $\leq$  5 associated with good sleep quality  
                   TOTAL > 5 associated with poor sleep quality