

## **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  $Q5a + Q2_{new} = 0$ , THEN set value to 0  
IF  $Q5a + Q2_{new} \geq 1$  and  $\leq 2$ , THEN set value to 1  
IF  $Q5a + Q2_{new} \geq 3$  and  $\leq 4$ , THEN set value to 2  
IF  $Q5a + Q2_{new} \geq 5$  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 =  $(Q4 / \text{newtib}) * 100$

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