CONCLUSIONS

The STQ appears to be a useful single-administration questionnaire for accurately assessing the habitual timing of a person's sleep. STQ measures of sleep timing showed good reliability and validity, correlating well with both wrist actigraph-based and 2-week diary-based measures. Correlations were also obtained with individual difference measures such as age and chronotype. STQ questions relating to sleep latency and WASO correlated well with equivalent nightly diary measures averaged over 2 weeks.

ACKNOWLEDGMENTS

REFERENCES

1. Reynolds CF, Grochocinski V, Monk TH et al. Concordance between habitual sleep times and laboratory recording schedules. Sleep 1992;15:571-575.
2. Lavie P. The 24-hour sleep propensity function (SPF): practical and theoretical implications. In: Monk TH, Sleep, sleepiness and performance. Chichester: John Wiley & Sons Ltd., 1991:65-93.
3. Strogatz SH, Kronauer RE, Czeisler CA. Circadian pacemaker interferes with sleep onset at specific times each day: role in insomnia. Am J Physiol 1978;253:R172-R178.
4. Horne JA, Ostberg O. A self-assessment questionnaire to determine morningness-eveningness in human circadian rhythms. Int J Chronobiol 1976;4:97-110.
5. Carrier J, Monk TH, Buysse DJ, Kupfer DJ. Sleep and morningness-eveningness in the "middle" years of life (20y-59y). J Sleep Res 1997;6:230-237.
6. Monk TH, Buysse DJ, Rose LR, Hall JA, Kupfer DJ. The sleep of healthy people—A diary study. Chronobiol Int 2000;17:49-60.
7. McGhie A, Russell SM. The subjective assessment of normal sleep patterns. J Ment Sci 1962; 108:642-654.
8. Tune GS. Sleep and wakefulness in normal human adults. BMJ 1968;2:269-271.
9. Monk TH, Reynolds CF III, Kupfer DJ, et al. The Pittsburgh Sleep Diary (PghSD). J Sleep Res 1994;3:111-120.
10. Wilson KG, Watson ST, Currie SR. Daily diary and ambulatory activity monitoring of sleep in patients with insomnia associated with chronic musculoskeletal pain. Pain 1998;75:75-84.
11. Rogers AE, Caruso CC, Aldrich MS. Reliability of sleep diaries for assessment of sleep/wake patterns. Nurs Res 1993;42:368-372.
12. Smith CS, Reilly C, Midkiff K. Evaluations of three circadian rhythm questionnaires with suggestions for an improved measure of morningess. J Appl Psychol 1989;74:728-738.

APPENDIX

SLEEP TIMING QUESTIONNAIRE (STQ)

Name_____

ID#_____

Date_____

SLEEP TIMING QUESTIONNAIRE (STQ)

This questionnaire asks about when you normally sleep. We are interested in getting as accurate a picture as we can of the times when you normally go to bed and get up. Please think carefully before giving your answers and be as accurate and as specific as you can be. **Please answer in terms of a recent "normal average week," not one in which you traveled, vacationed or had family crises. Thanks.**

Please think of GOOD NIGHT TIME as the time at which you are finally in bed and trying to fall asleep.

On the night before a work day or school day,
    what is your **earliest** GOOD NIGHT TIME ?____:____ pm/am
On the night before a work day or school day,
    what is your **latest** GOOD NIGHT TIME ?____:____ pm/am

On the night before a work day or school day,
    what is your **usual** GOOD NIGHT TIME ?____:____ pm/am

How stable (i.e., similar each night) are your GOOD NIGHT TIMES before a work day or school day? *(circle one)*

0-15mins.	16-30mins.	31-45mins.	46-60mins.
61-75mins.	76-90mins.	91-105mins	106-120mins.
2-3hours	3-4hours	over 4hours	

On a night before a day off (e.g. a weekend),
    what is your **earliest** GOOD NIGHT TIME ?____:____ pm/am

On a night before a day off (e.g. a weekend),
    what is your **latest** GOOD NIGHT TIME ?____:____ pm/am

On a night before a day off (e.g. a weekend),
    what is your **usual** GOOD NIGHT TIME ?___:____ pm/am

How stable (i.e., similar each night) are your GOOD NIGHT TIMES on a night before a day off (e.g. a weekend)? *(circle one)*

0-15mins.	16-30mins.	31-45mins.	46-60mins.
61-75mins.	76-90mins.	91-105mins	106-120mins.
2-3hours	3-4hours	over 4hours	

Please think of GOOD MORNING TIME as the time at which you finally get out of bed and start your day.

Before a work day or school day,
    what is your **earliest** GOOD MORNING TIME ?____:____ am/pm

Before a work day or school day,
    what is your **latest** GOOD MORNING TIME ?____:____ am/pm

Before a work day or school day,
    what is your **usual** GOOD MORNING TIME ?____:____ am/pm

How stable (i.e., similar each night) are your GOOD MORNING TIMES before a work day or school day? *(circle one)*

0-15mins.	16-30mins.	31-45mins.	46-60mins.
61-75mins.	76-90mins.	91-105mins	106-120mins.
2-3hours	3-4hours	over 4hours	

Before a day off (e.g. a weekend),
    what is your **earliest** GOOD MORNING TIME ?____:____ am/pm

Before a day off (e.g. a weekend),
    what is your **latest** GOOD MORNING TIME ?____:____ am/pm

Before a day off (e.g. a weekend),
    what is your **usual** GOOD MORNING TIME ?____:____ am/pm

How stable (i.e., similar each night) are your GOOD MORNING TIMES on a night before a day off (e.g. a weekend)? *(circle one)*

0-15mins.	16-30mins.	31-45mins.	46-60mins.
61-75mins.	76-90mins.	91-105mins	106-120mins.
2-3hours	3-4hours	over 4hours	

These questions are about how much sleep you lose to unwanted wakefulness:

On most nights, how long, on average does it take you to fall asleep after you start trying?

_____minutes

On most nights, how much sleep do you lose, on average, from waking up during the night (e.g. to go to the bathroom)?

_____minutes