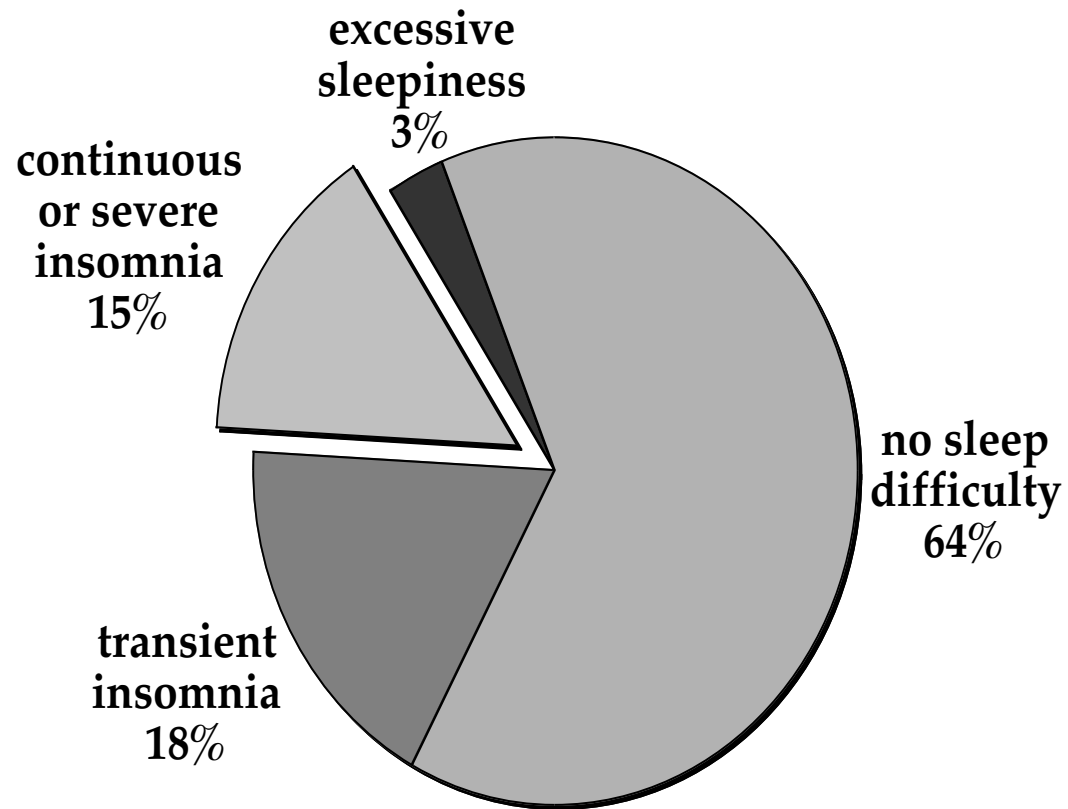


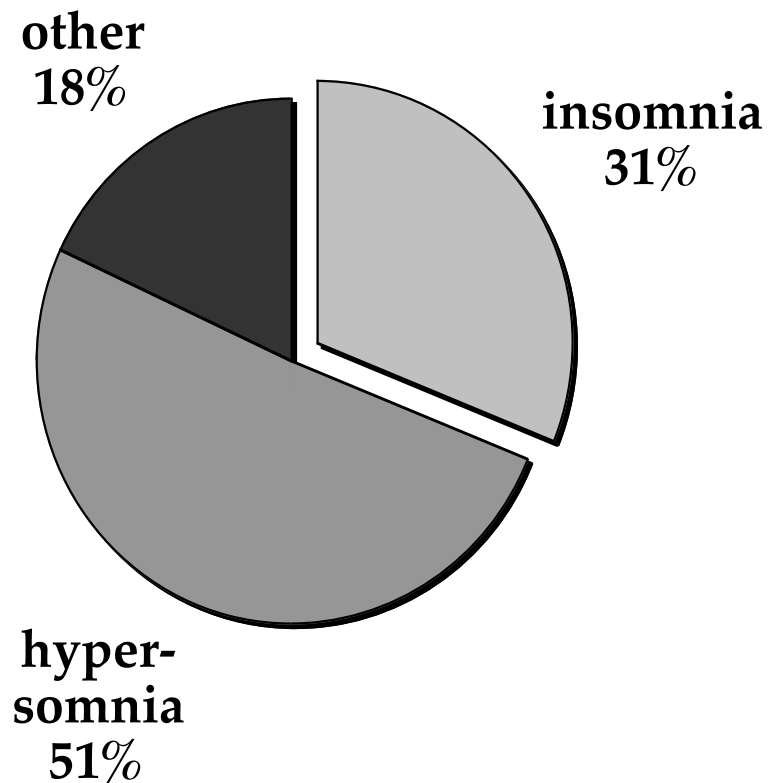
Sleep Difficulty: Epidemiology



Gallup Poll

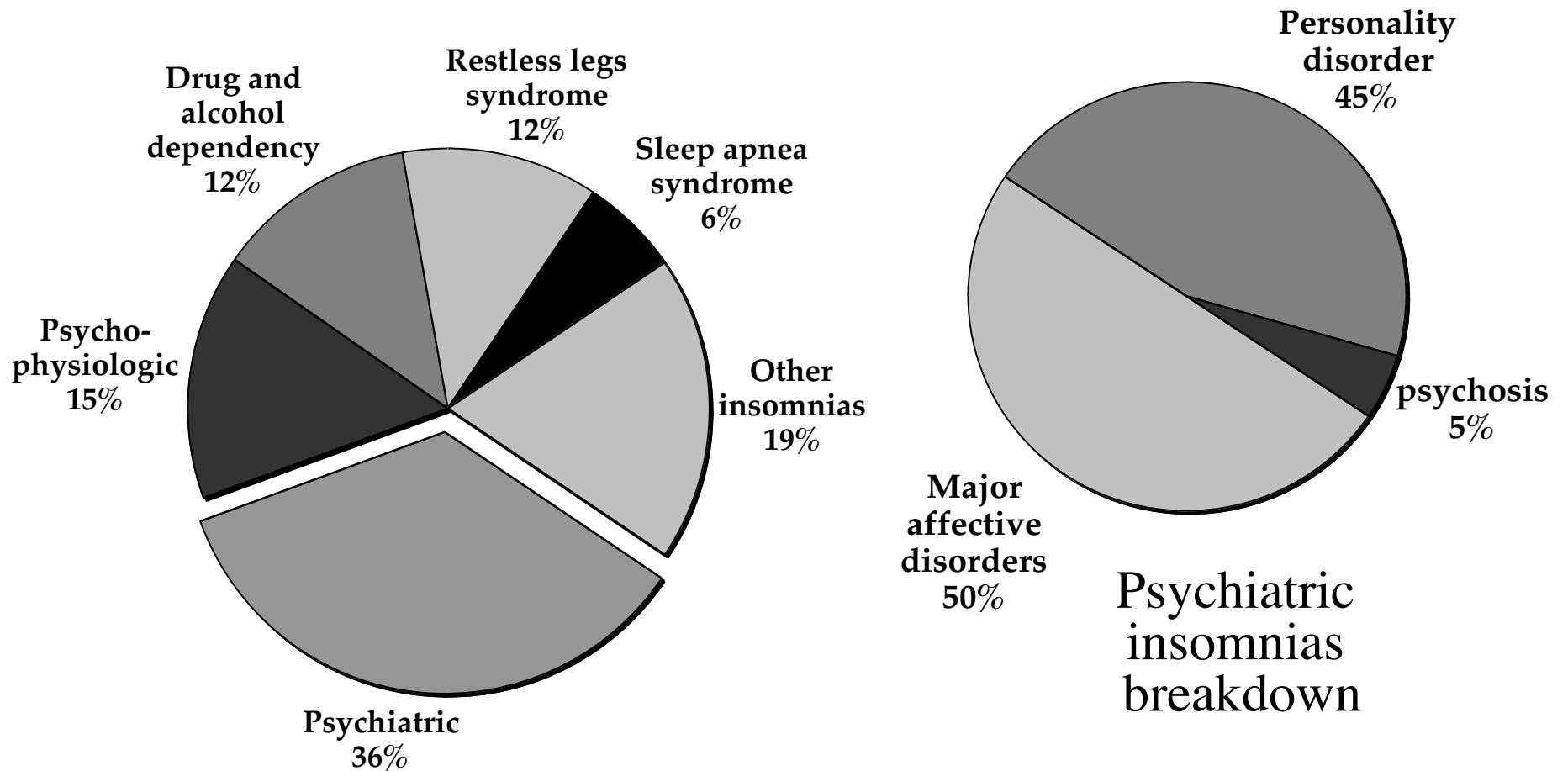
- Occasional insomnia: 27%
- Regular, chronic sleep problem: 9%
- Insomniacs:
 - Wake up feeling drowsy or tired: 72%
 - Wake in middle of night: 67%
 - Difficulty returning to sleep: 57%
 - Initial difficulty falling asleep: 56%
 - Self-medicate (alcohol or OTC drugs): 40%

Patients seen at Sleep Disorders Centers for Evaluation

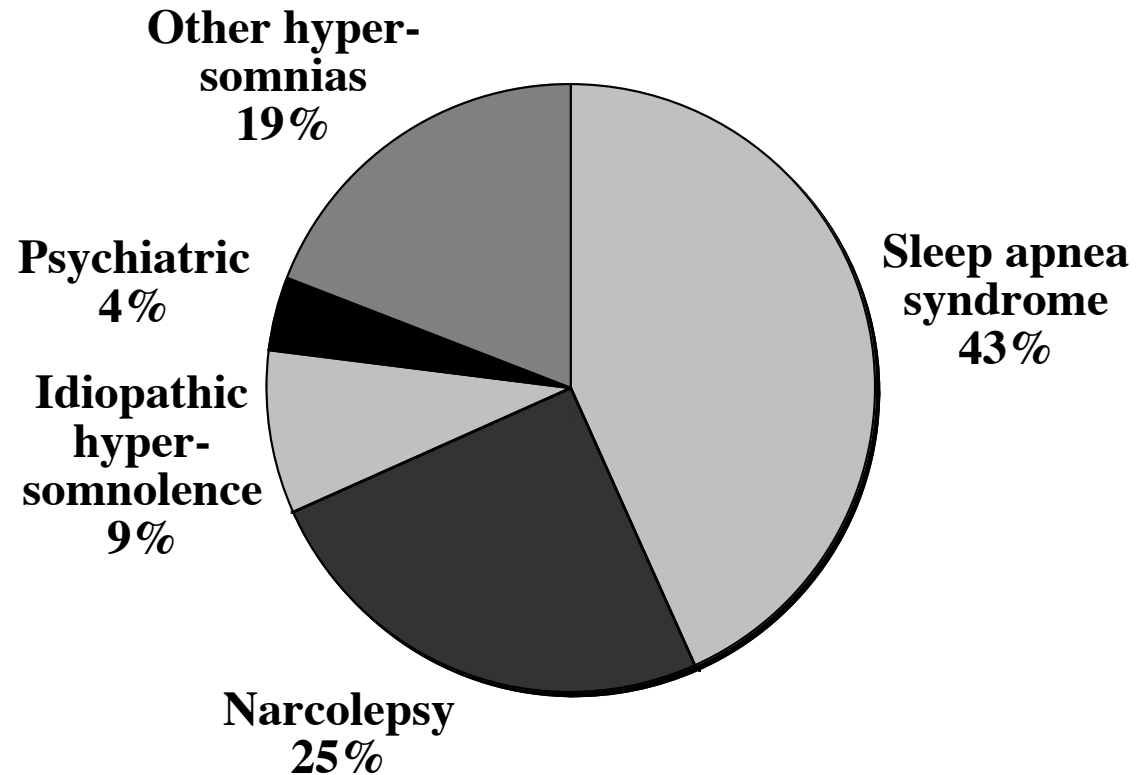


Cooperative study
of 3900 patients
evaluated in 11
centres

Insomnia Diagnoses

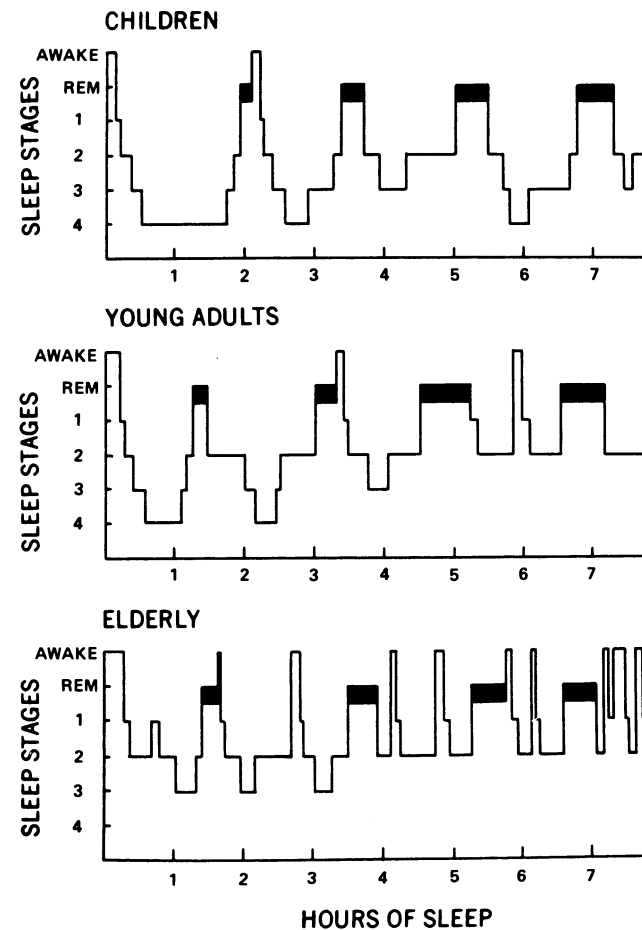


Hypersomnia Diagnoses



EEG Stages of Normal Sleep

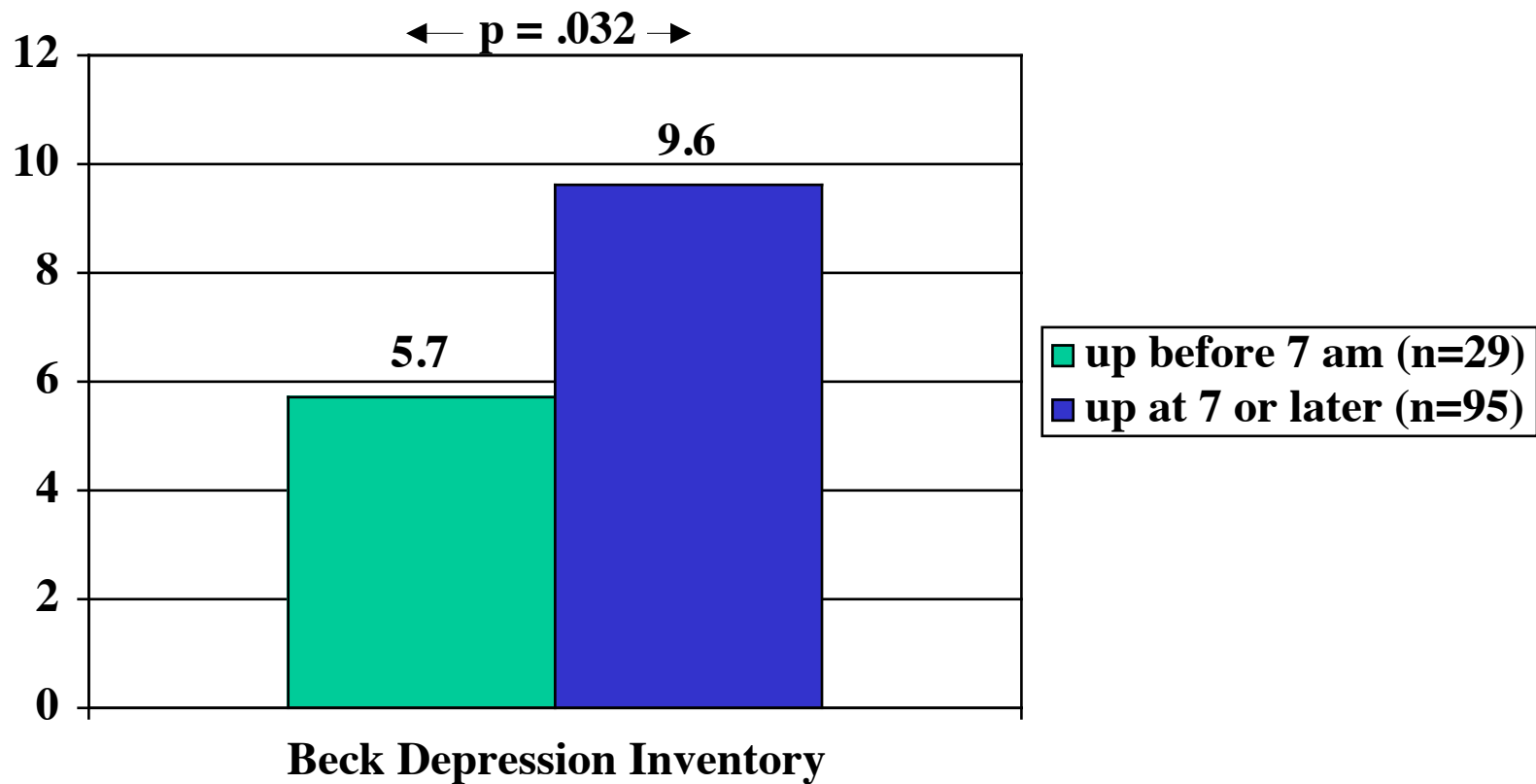
- Note decrease in stage 3 and 4, and increase in awakenings, with aging
- REM sleep occurs every 90 minutes, and increases through the night



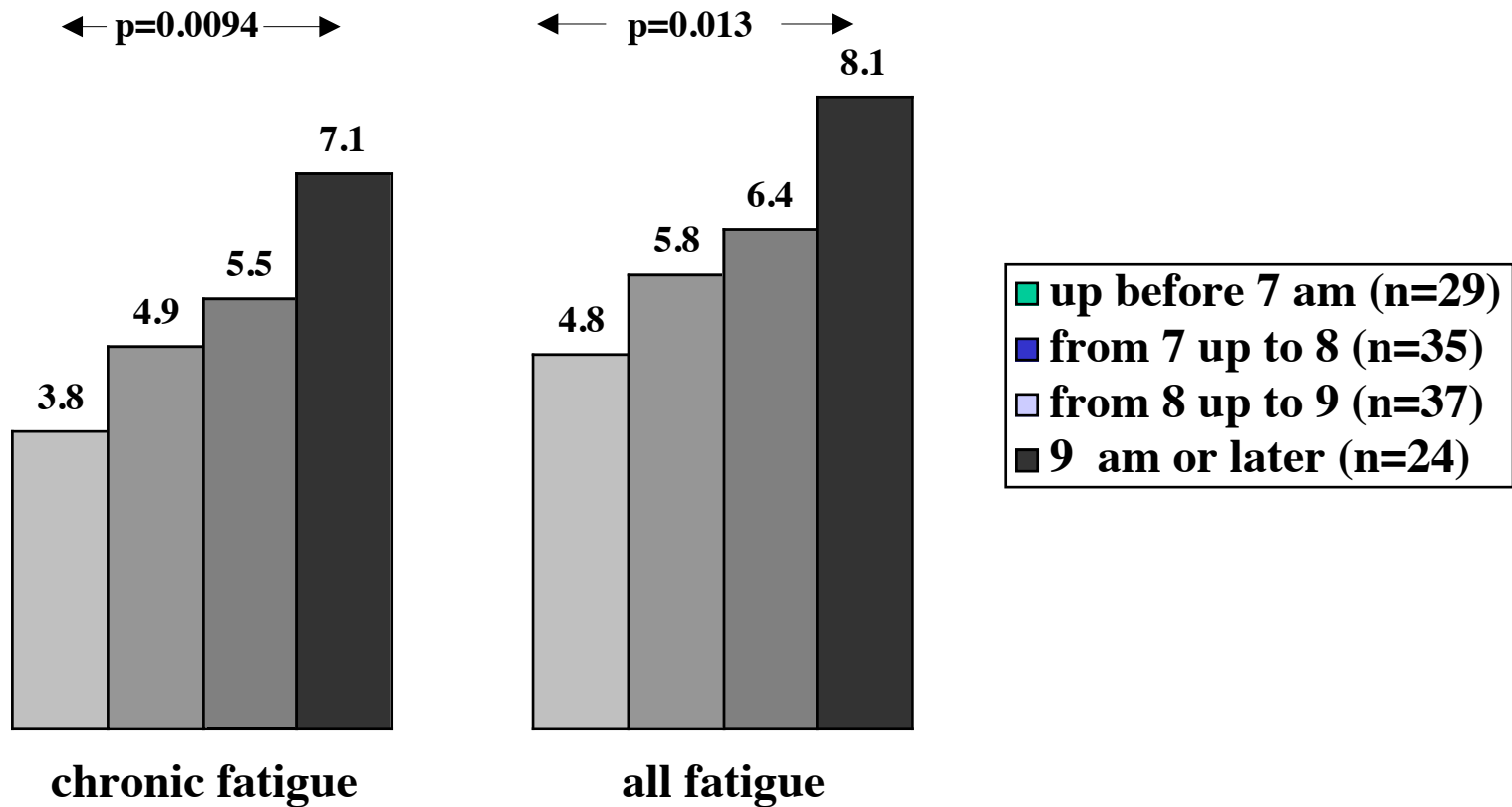
Excessive REM sleep causes depression:

- Medications which increase REM sleep
- Total or partial sleep deprivation
- Sleep prolongation
- Sleeping late
- Selective REM sleep deprivation
- Medications which decrease REM sleep
- Sleep abnormalities in affective disorder

Depression vs Arising Time

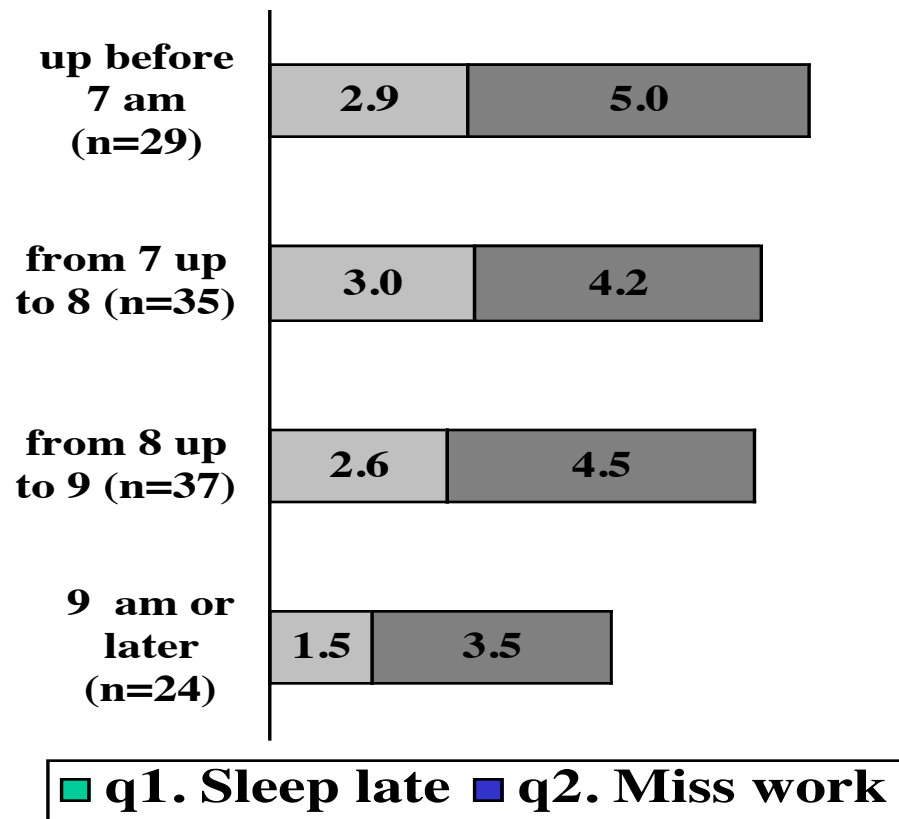


Fatigue vs Arising Time



Attitudes about Sleep

- Attitudes about sleep and sleep behaviours:
- q1. If I don't get enough sleep during the night, I should make up for it by sleeping late or taking a long nap. (agree strongly = 0; disagree strongly = 6)
- q2. Sometimes it's necessary to miss work or school because of lack of sleep or really poor sleep.



The Scientific Literature

- “Six hours sleep for a man,
Seven for a woman,
And eight for a fool.”
— 18th century proverb
- “Early to bed, early to rise,
Makes a man healthy, wealthy,
and wise.”
— Ben Franklin

Age-related Sleep Changes

- Shorter sleep
- Lower sleep efficiency
- Less slow wave sleep
- More awakenings
- More time in bed

Insomnia is:

- Distressing
- Unhealthy
- Dangerous
- Costly