

## Relationship of Sleep Disturbances and Physical Symptoms among College Women

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### Abstract

**Introduction:** Women in college face highly demanding and stressful schedules that may interfere with healthy sleep practices. As a result of poor sleep, many women may face physical symptoms that further interfere with their lives.

**Purpose:** The purposes of this study were to: 1) identify common physical symptoms experienced by college women, 2) determine whether or not the physical symptoms detected were associated with subjective sleep disturbances, and 3) ascertain if poor sleepers experienced more physical symptoms as compared to those identified as good sleepers.

**Methods:** This data analysis of material from the Sleep Study for College Women included a convenience sample of 103 college women who completed a seven-day sleep diary and questionnaires regarding sleep quality (PSQI: Pittsburgh Sleep Quality Index) and physical symptoms (PSI: Physical Symptom Inventory).

**Results:** The women (mean age 26.3, SD= 7.9) of varying ethnic backgrounds (45.6% Caucasian) included in the study reported an average of 5.86 (SD=3.6) out of 18 possible physical symptoms. The five most common physical symptoms were tiredness/fatigue (76.7%), headaches (74.8%), trouble sleeping (52.5%), backaches (52.4%), and an upset stomach/nausea (50.4%). The participants had an average PSQI score of 7.17 (SD=2.74). A score greater than five qualifies a poor sleeper (68% of participants were poor sleepers). Women in the study reported that they need an average of 7.81 hours of sleep; however the average number of hours that they actually slept on weekdays was 6.58, which was significantly less than what they needed (paired  $t(81) = 8.31, p < .001$ ). A statistically significant association between physical symptoms and sleep disturbances was found ( $r = .48, p < .001$ ); poor sleepers had a significantly higher number of physical symptoms ( $t[101] = 3.28, p = .001$ ) as compared to good sleepers.

**Conclusion:** Our findings demonstrate that the majority of college women are poor sleepers, and that as a result of this they are suffering significantly more undesirable physical symptoms than their well-rested counterparts. Further research involving a broader participant base over a longer period of time should be conducted to yield more exact correlations between sleep disturbances and symptoms in order to further aid college women in rectifying poor sleep habits.