

Supplementary Table S2.

Univariate analyses of changes in fatigue before and after the night shift and sleep parameters.

| Variable | Drowsiness | Instability | Uneasiness | Local pain or dullness | Eyestrain | Total score |
|---|------------|-----------------|-----------------|------------------------|-----------------|-------------|
| Night-shift napping (n = 52) ^a | | | | | | |
| Start of TIB [hh:mm] | −0.001 | −0.001 | −0.027 | 0.017 | 0.057 | 0.010 |
| TIB [min] | 0.082 | −0.166 | −0.083 | 0.158 | −0.228 | −0.052 |
| SL [min] ^c | 0.163 | −0.053 | 0.164 | 0.268 | 0.284 * | 0.224 |
| TST [min] | 0.018 | −0.132 | −0.127 | 0.008 | −0.341 * | −0.144 |
| SE [%] ^c | −0.044 | 0.060 | −0.047 | −0.162 | −0.208 | −0.110 |
| WASO [min] | 0.035 | 0.007 | −0.001 | 0.135 | 0.005 | 0.046 |
| BOT [min] ^c | 0.017 | −0.273 | −0.178 | 0.198 | −0.069 | −0.064 |
| End of TIB [hh:mm] | 0.023 | −0.067 | −0.052 | 0.079 | −0.015 | −0.004 |
| First sleep episode (n = 56) ^a | | | | | | |
| Start of TIB [hh:mm] | −0.243 | −0.056 | −0.272 * | −0.175 | −0.203 | −0.259 |
| TIB [min] | 0.131 | 0.202 | 0.104 | 0.055 | 0.087 | 0.147 |
| SL [min] ^c | −0.044 | 0.069 | −0.040 | 0.059 | −0.058 | −0.012 |
| TST [min] | 0.121 | 0.222 | 0.101 | 0.041 | 0.069 | 0.139 |
| SE [%] ^c | 0.090 | 0.140 | 0.138 | 0.033 | 0.102 | 0.129 |
| WASO [min] | 0.105 | 0.004 | 0.074 | 0.034 | 0.117 | 0.095 |
| BOT [min] ^c | 0.064 | −0.027 | 0.033 | 0.000 | 0.051 | 0.038 |
| End of TIB [hh:mm] | −0.097 | 0.115 | −0.144 | −0.101 | −0.099 | −0.098 |
| Main sleep episode (n = 61) ^a | | | | | | |
| Start of TIB [hh:mm] | 0.113 | −0.149 | 0.119 | 0.316 * | 0.115 | 0.146 |
| TIB [min] | −0.097 | 0.229 | 0.024 | 0.046 | −0.019 | 0.027 |
| SL [min] ^c | 0.043 | 0.086 | 0.029 | 0.231 | −0.099 | 0.068 |
| TST [min] | −0.127 | 0.056 | −0.045 | 0.044 | 0.035 | −0.021 |
| SE [%] ^c | −0.138 | −0.260 * | −0.133 | −0.024 | 0.076 | −0.116 |
| WASO [min] | 0.025 | 0.311 * | 0.109 | −0.076 | −0.049 | 0.066 |
| BOT [min] ^c | −0.068 | 0.044 | 0.034 | −0.025 | −0.063 | −0.028 |
| End of TIB [hh:mm] | 0.019 | 0.059 | 0.126 | 0.318 * | 0.086 | 0.152 |

Abbreviations: BOT, the interval between the last sleep onset and the change in posture from lying to standing; SD, standard deviation; SE, percentage of TST for TIB; SL, the interval between changing the posture from standing to lying and the start of the sleep episode; TIB, the time at which the posture involved lying; TST, using the start and end of TIB, we calculated the sum of periods in which participants were judged to have fallen asleep; WASO, the amount of min spent awake during the interval between sleep onset and offset.

Notes: Statistically significant values were marked in bold; a, Continuous variables: Correlation coefficients between fatigue scores and variables are shown in table; *, $P < .05$.