

**Diurnal variation of psychophysiological parameters: sex influence** (pp. 271-282)

Ana Adan and Miquel Sánchez-Turet

*University of Barcelona (Spain)*

The present work evaluates sexual differences in diurnal variation of psychophysiological parameters (body temperature, heart rate and arterial blood pressure). This is an issue seldom addressed in previous studies and even less taking into account other biological rhythms that can bias the results obtained. Forty-two normotensive university students were selected, 22 men and 20 women, between 18 and 26 years old. Recordings were obtained every hour from 8:00 to 21:00 h in resting conditions and sitting position. Diurnal variation of body temperature in women showed a time advance in their maximum and a lower range, thus reflecting a minor endogenous circadian control than men probably due to its coexistence with circamensual rhythmicity. In the after-lunch recording (15:00 h) a decompensation occurred between the arterial blood pressure parameters, the systolic increased and the diastolic decreased, being higher in men. Anomalous measures during post-lunch period in young and healthy subjects indicate that this must be considered as a vascular accident risk period in elderly patients and patients with cardiovascular pathologies, especially among men.