

Effects of Yoga on Sleep Quality, Depression, Anxiety, Stress, and Blood Glucose Levels Among Tertiary Students[†]

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Abstract: Sleep is defined as an easily reversible periodic state marked by the absence of wakefulness. Studies have shown that university students tend to have a diminished amount of sleep. This would lead to the loss of concentration, daytime sleepiness, and reduced academic performances. The aim of this study was to investigate the effects of yoga on overall sleep quality, depression, anxiety, stress, and blood glucose levels. A total of 88 participants with 44 students in each group, control and experimental, were recruited from Universiti Tunku Abdul Rahman based on the outcome of the Godin Shephard questionnaire. A total score of less than 14 was considered mild hence falling into the control group while above 14 and had practiced yoga for a minimum of 6 weeks were placed in the experimental group. The participants were required to self-administer a set of questionnaires consisting of socio-demographic information, the Pittsburgh Sleep Quality Index (PSQI) questionnaire and Depression, Anxiety, Stress Scores. Three components of sleep, namely the habitual sleep efficiency, sleep disturbances, and daytime dysfunctions, were better in the experimental group compared to the control one. Depression, anxiety, stress, and blood glucose levels also appeared to be more desirable in the experimental group with yoga students. It was found that blood glucose levels were positively correlated to the Global PSQI score, depression, anxiety, and stress measures in this study. In conclusion, yoga-practicing students have healthier sleep patterns, negative emotional states, and blood glucose levels. In order to obtain more conclusive findings, similar studies should be carried out in different universities with larger sample size and for longer periods.

Keywords: Yoga; Blood glucose; Sleep; Stress; Students.

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Conflicts of Interest

The authors declare no conflict of interest.