

Comparison of Health and Well-Being of Females Working in Day and Night Shift

Research Paper No. 2001-04



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Abstract

This study compared the health and well-being of females working in day and night shift in a yarn manufacturing company. Specifically, female workers in day and night work were compared with respect to the following: a) vital signs, to include heart rate, heart rate variability, and body temperature; b) health complaints; and c) sleeping pattern, alertness at work, perception of soundness of sleep and other sleep-related parameters. The psychosocial attributes and characteristics of the subjects were also described. Fifteen female workers from a yarn manufacturing company participated in the study. Questionnaires were administered and physiologic parameters were monitored.

Results showed that the most common response for going on shifts was that shift work is an essential part of the job. The subjects also answered that compensation is higher when working shifts. Notwithstanding, all of the subjects preferred daytime job to shift work. Marginal changes in the heart rate and temperature demonstrated by the study may already suggest tolerance to shift work. However, it is believed that physical activity, stress, sleep deprivation may produce some form of shift in the patterns of these variables.

The long-term changes in the physiologic parameters may be investigated to determine the extent of phase shift or inversion that will be attained. Methodological adjustments in future studies should consider protracted 24-hour monitoring of heart rate variability to ascertain the diurnal

pattern and pattern shifts. The study design may also be modified to account for the healthy shift worker survivor bias where unhealthy workers may be forced to give up jobs that involve shifting schedule leaving behind workers who are healthy.