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TWELVE WORKPLACE NAPPING RESEARCH STUDIES FROM AROUND THE WORLD

School of Medicine, Flinders University, Adelaide, SA, Australia.

"For most individuals, even those working permanent night shift, the circadian system is in sleep mode during the night. The picture emerging is similar to afternoon studies…the 10 minute sleep (about a 15 minute nap opportunity) produced improvements over the 3 hour post-nap period in all eight alertness and performance measures" [1]

Karolinska Institute, Stockholm, Sweden.

"The nap brought performance to baseline levels, and subjective sleepiness decreased significantly. It was concluded that the short nap had a clear positive effect on alertness." [2]

School of Psychology, Flinders University, Adelaide, SA, Australia

"The aim of the study was to investigate the recuperative value of brief and ultra-brief naps following nocturnal sleep restriction. Consistent with our previous study (Tietzel and Lack 2001), the 10-min nap resulted in significantly improved alertness and cognitive performance relative to a no-nap control." [3]

Department of Behavioral Sciences, Faculty of Integrated Arts and Sciences, Hiroshima University, Higashi-hiroshima, Japan.

"All of the subjects were awakened from sleep stage 2 during the nap. The 20 min nap improved the subjective sleepiness, performance level and self-confidence of their task performance .The results suggest that a short 20 min nap in the mid-afternoon had positive effects upon the maintenance of the daytime vigilance level." [4]

"The effects of a 20-min nap during 2 h of visual display terminal (VDT) work were examined. A 20-min nap maintained subjective alertness and performance level at a higher level and mental fatigue at a lower level for the additional 1 h of work. These results suggest that a short nap would be useful to both fatigue recovery and fatigue prevention during continuous VDT work." [5]

"The effects of a short nap against mid-afternoon sleepiness could be enhanced by combining caffeine intake, exposure to bright light, or face washing. The present study would provide effective countermeasures against mid-afternoon sleepiness and sleepiness related accidents." [6]

NASA Ames Research Center, Moffett Field, California, USA.

"Studies have demonstrated the effectiveness of naps to improve subsequent performance and alertness. Strategic naps can be used effectively to promote safety, performance, and productivity in operational settings." [7]

New Zealand Environmental and Occupational Health Research Center, Department of Preventive and Social Medicine, University of Otago, Dunedin, New Zealand.

"The purpose of this workplace evaluation was to assess the effects on performance, alertness and subsequent sleep of strategic napping on 12-h overnight shifts. The results revealed that taking a single 20-min nap during the first night shift significantly improved speed of response on a vigilance task measured at the end of the shift compared with the control condition." [8]

Sleep Medicine and Research Center La Jolla, California, USA.

"Napping plus caffeine helps improve performance and alertness of night-shift workers." [9]

Nagoya City University Graduate School of Medical Sciences, Japan.

"Nighttime napping is an effective measure to prevent adverse effects due to night shift work. A characteristic of the activity is using action checklist and group work, and heightening motivation to improvement working condition between worker and manager. Through the activities, (a) nighttime napping strategy would be spread more in the workplaces and play a role as one of the effective tools for improving working conditions, work performance and safety in the future." [10]

Center of Sleep Medicine, University of Genoa, Italy.

"As naps are a countermeasure to sleepiness, this study evaluates the role they play in preventing sleep-related accidents in Italian shift-working police drivers… the theoretical efficacy of napping was quantified (by a) 48% accident decrease. Our data seem to confirm that napping before working a night shift is an effective countermeasure to alertness and performance deterioration associated with night work."[11]

Department of Epidemiology, Harvard School of Public Health, Boston USA

"…researchers tracked 23,681 healthy Greek adults for an average of about six years. Those who napped for about half an hour at least three times weekly had a 37 percent lower risk of dying from heart attacks or other heart problems than those who did not nap." [12]

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