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EXTENDED ABSTRACT

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A Comprehensive Study on The Correlation of Physical Activity and Sleep Quality Among Employees at KBS Putrajaya

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I. Introduction

Physical activity and sleep quality play important roles in employees' health and work performance. Low physical activity and sedentary behavior are associated with poor sleep quality and increased fatigue, which may reduce productivity and raise health risks. This study examined physical activity levels, sleep quality, gender differences in sleep quality, and the correlation between physical activity and sleep quality among employees at KBS Putrajaya.

II. Methods

This quantitative research method study utilized simple random sampling to survey 247 employees at KBS Putrajaya. Data were collected via the International Physical Activity Questionnaire-Short Form (IPAQ-SF) by Craig et al. (2003) and the Pittsburgh Sleep Quality Index (PSQI) by Buysse et al. (1989). Statistical analysis was performed using SPSS version 31, employing descriptive statistics, Independent Samples T-tests, and Pearson's Chi-Square tests.

III. Results and Discussion

A. Physical Activity Level

The findings showed that the majority of employees demonstrated a moderate level of physical activity. This indicates that although employees are somewhat active, their activity level may still be insufficient to achieve optimal health benefits. the level of physical activity responds from all the respondents. As showed on the table, majority with 123 at 49.8% respondents were on high level of physical activity. While 83 at 33.6% respondents were on moderate level and lastly there were least respondents with 41 at 16.6% were on low level of physical activity.

B. Sleep Quality Level

The results revealed that most employees experienced poor sleep quality. Majority 151 at 61.1% respondents were on poor level of sleep quality and 96 at 38.9% respondents were on good level sleep quality. This suggests that sleep problems remain common among working adults despite having moderate physical activity levels.

C. Gender Differences in Sleep Quality

The Independent Samples T-test showed sleep quality level between male (N = 116, *Mean* = 1.34, SD = 0.477) and female (N = 131, *Mean* = 1.43, SD = 0.497) respondents revealed a non-significant difference. This indicates that sleep quality issues affect both genders similarity within this population.

D. Correlation Between Physical Activity Level and Sleep Quality Level

The Pearson Chi-Square value obtained was χ^2 = 0.105, with a p-value (Sig. 2-tailed) of 0.135 Chi-Square correlation analysis indicated a significant negative correlation between physical activity and sleep quality. This means that higher levels of physical activity are associated with better sleep quality among employees.

TABLE I
CORRELATION BETWEEN PHYSICAL ACTIVITY LEVEL AND SLEEP QUALITY LEVEL

		Physical Activity Level
Sleep Quality Level	Pearson Chi-Square	0.105
	Significant (2-tailed)	0.135
	N	247

III. Discussion

In conclusion, physical activity plays a significant role in improving sleep quality among employees. Workplace health programmes are recommended to encourage regular physical activity and enhance employees' well-being.

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References

[1] Aye, L. M., & Lee, W. H. (2024). Poor sleep quality and its associated factors among working adults during COVID-19 pandemic in Malaysia. Cambridge Prisms Global Mental Health, 11, e28. https://doi.org/10.1017/gmh.2024.23
[2] Chen, Y., & Zhang, B. (2022). Latent classes of sleep quality and related predictors in older adults: A person-centered

approach. Archives of Gerontology and Geriatrics, 102, 104736. https://doi.org/10.1016/j.archger.2022.104736

approach. Archives of Gerontology and Geriatrics, 102, 104736. https://doi.org/10.1016/j.archger.2022.104736