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Power Nap: The Secret Of A Simple 20-Minute Investment That Supports Employee Work Productivity

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Abstract

This study aims to examine the effect of power naps on employee work productivity. A power nap refers to a short period of sleep taken during the day to restore physical and mental energy. This research employed a quantitative approach using simple regression analysis to determine the relationship between power naps as the independent variable and work productivity as the dependent variable. The data were collected through questionnaires distributed to employees at the research site. The results indicate that power naps have a positive and significant effect on employee productivity. Taking a short nap during working hours can help improve concentration, alertness, and reduce levels of work fatigue experienced by employees. These conditions allow employees to perform their tasks more effectively and efficiently. In addition, power naps contribute to maintaining employees' physical and mental balance, enabling them to work more optimally.Therefore, the implementation of power naps can be considered as an alternative strategy to support a healthier work environment and enhance overall employee productivity.

Keywords: Power nap, Work productivity, Employees, Job performance.

INTRODUCTION

Work productivity is one of the main indicators in determining the effectiveness and success of an organization. Employees with high productivity levels are not only able to complete their work on time, but also demonstrate good quality work, creative thinking skills, and resilience to work pressure. However, in reality, high job demands, long working

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hours, and continuous exposure to stress often reduce concentration levels, trigger physical and mental fatigue, and hinder productivity. In this context, a simple but effective strategy is needed to help restore employees' energy and focus amid their busy work routines. One method that is gaining widespread attention in the modern workplace is the power nap, which is a short nap lasting about 15–20 minutes. Power naps are not intended to replace nighttime sleep, but rather as a form of short rest that serves to renew energy, improve concentration, and maintain emotional stability. Short naps during the day provide significant benefits to an individual's cognitive and physiological performance.

(Hayashi et al., 1999) found that a 20-minute nap significantly reduces sleepiness and increases brain alertness, power naps can improve short-term memory, reaction speed, and accuracy in decision making. (Mednick et al., 2003), that short naps can reduce stress levels, improve mood, and have a positive effect on heart health (Bender, 2023), sleep also serves to restore brain and body energy, optimize cognitive function, and improve emotional regulation (Flinker et al., 2015). The duration of a nap is an important factor in determining its benefits. Sleeping too long can cause sleep inertia, which is dizziness and confusion after waking up, while sleeping too briefly may not be enough to restore energy optimally. Therefore, a short nap of 15–20 minutes at the right time, usually after lunch when there is a natural decline in alertness, is considered the most effective duration to support productivity without disrupting nighttime sleep patterns. Thus, power naps can be seen as a simple investment of time that has a significant impact on improving employee performance.

The phenomenon of power naps in the workplace is attracting increasing attention from various circles, particularly due to its link to increased productivity and employee well-being. Many companies around the world, such as Google and Zappos, as well as sports companies such as Nike, have long implemented nap facilities as a common practice and support employee health, which is believed to increase overall productivity and well-being (Phelps, 2019), (Rosekind et al., 1994) stated that NASA even provides nap rooms or special nap rooms for its employees. A short nap of 26 minutes can increase alertness by up to 54% and work performance by up to 34%. By allowing time for power naps, they have succeeded in creating a healthier, more innovative, and more productive work environment (Robinson, 2023). This is based on various studies showing that short breaks can restore cognitive function and significantly reduce fatigue levels, indicating that power naps help maintain cognitive performance and sustained attention in night shift workers (Lovato & Lack, 2010).

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In addition, the phenomenon of short naps is also closely related to the body's ability to adapt to circadian rhythms. After lunch, the body naturally experiences a decline in energy known as the post-lunch dip. During this phase, the brain tends to lose focus and work productivity declines. Short naps at this time have been proven to be effective in restoring cognitive function, improving mood, and maintaining stable work performance throughout the day (Takahashi et al., 1998). This phenomenon shows that power naps are not just a relaxing habit, but a scientific strategy with strong physiological and psychological foundations. In the context of a competitive and high-pressure work environment, allowing employees to take short naps can be an innovative step toward improving efficiency, creativity, and workplace well-being. Thus, power naps can be understood as a simple 20-minute investment that can yield significant returns in the form of employee productivity and mental health.

LITERATURE REVIEW

Power Nap

The power nap was first introduced (Maas et al., 1998) The book Power Sleep refers to short naps lasting around 10–30 minutes to restore energy, improve brain function, and enhance work performance. Sleep serves as a mechanism for restoring energy and cognitive brain function. During sleep, biochemical restoration processes occur that repair nerve cells, stabilize neurotransmitters, and optimize memory function (Horne, 1988). A short nap during the day acts as a “micro-recovery” that helps correct deficits in attention and alertness caused by intense work activities. A short nap (10–20 minutes) has a significant effect on improving executive function, attention, and positive mood (Mantua et al., 2021).

Work Productivity

Work productivity is a measure that describes the effectiveness and efficiency of an individual or group in producing a certain output compared to the input used, and becomes a benchmark for a company in achieving its goals (Dharasta & Utami, 2024). Increased productivity is made possible by increased efficiency (time, materials, labor), work systems, production techniques and increased skills of the workforce (Suriadi et al., 2024), Productivity is influenced by individual abilities, skills, and knowledge. Investing in training, education, and employee health will increase productivity by expanding a person's work capacity (Becker, 1964).

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RESEARCH METHOD

The research method used was quantitative, where the respondents of this study were workers employed in the formal sector in the city of Pematangsiantar. The research was conducted from November 2025 to December 2025, with an expected population of 76 worker respondents during the research period. Furthermore, the research variables were power naps as the independent variable and work productivity as the dependent variable. For questionnaire items with a correlation value ≥ 0.30 (Taherdoost et al., 2014), and reliability testing with a minimum Cronbach's alpha limit of 0.70 (Eisingerich & Rubera, 2010). The equation for the direction coefficient uses simple regression with the formula Y = β0 + β1X + e (Bevans., 2020). In addition, to answer the hypothesis, a partial test or t-test was conducted. The hypothesis was that power naps can have a positive and significant effect in supporting work productivity.

RESULTS AND DISCUSSION

RESULTS

Description of Research Respondents

Table 1: Respondent Descriptions

Respondent Data	Respondent Description	Number	Percentage
Gender	Male	38	50%
	Female	38	50%
Respondent Age	<25	17	22,4%
	25-34	27	35,5%
	35-44	21	27,6%
	>45	17	22,4%
Length of Employment Respondents	Less than 1 year	6	7,9%
	1-3 years	18	23,1%
	4-6 years	13	17,1%
	> 6 Year	39	51,3%
Occupation Respondents	Staff	25	32,9%
	Supervisor	7	9,2%
	Manager	6	7,9%
	Lecturer	5	6,6%

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	Teacher	4	5,3%
	Sales	3	3,9%
	Administration	9	11,8%
	Other positions	17	22,4%

Source: Questionnaire Processing, 2026

Table 1 shows the results of the research respondents for gender, that the number of male and female respondents was the same, namely 38 male respondents and 38 female respondents. The results for the dominant age of respondents were 25-24 years old with a total of 27 people. followed by those who had been working for > 6 years, with 39 people, and the most common occupation among respondents was staff, with 25 people.

Validity and reability test

Table 1: Instrument validity and reliability test

Variables	Validity Test			Reliability Test		
	Corrected Item-Total Correlation	t critical	Criteria	Cronbach's Alpha	t critical	Criteria
Power Nap	0,597	0,30	Valid	0,827	0,70	Reliable
Work Productivity	0,652	0,30	Valid	0,863	0,70	Reliable

Source: Questionnaire Processing, 2026

Furthermore, Table 2 shows the instrument validity test for the power nap variable with a value of 0.597 and work productivity with a value of 0.652. These results show that the power nap and work productivity variables have values > 0.30, which means that power naps and work productivity meet the validity criteria. Furthermore, for the reliability test, the values of the power nap variable are 0.827 and work productivity 0.863, while the critical limit is 0.70. In conclusion, power naps and work productivity have reliable criteria.

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Simple Regression

Table 2: Simple Regression Equation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	8,500	2,248		3,782	,000
	Power Nap	,711	,072	,756	9,923	,000

a.Dependent Variable: Work Productivity

The following Table 2 shows the results of the regression equation from the study. The results of the regression equation Y = 8.500 + 0.711X mean that the regression equation Y = 8.500 + 0.711X describes the relationship between the independent variable (X) and the dependent variable (Y). The constant value of 8.500 indicates that when the X variable is at zero or does not change, the Y variable is estimated to have a value of 8.500. This constant reflects the base value of the Y variable before being influenced by changes in the X variable. The regression coefficient for variable X of 0.711 shows the magnitude of change that occurs in variable Y due to changes in variable X. This coefficient value indicates that every one-unit increase in variable X will cause an increase in variable Y of 0.711 units, assuming that other variables outside the model are considered constant. In addition, the positive sign on the regression coefficient indicates that the relationship between variable X and variable Y is positive or unidirectional. This means that an increase in the value of variable X tends to be followed by an increase in variable Y. Thus, it can be interpreted that variable X has a positive contribution to the changes that occur in variable Y in the research model used.

Hypothesis Testing

Table 3: Research hypothesis testing

Model		t	Sig.
1	(Constant)	3,782	,000
	Power NAP	9,923	,000

a. Dependent Variable Work Productivity

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Table 3 is used to test the hypothesis of this study, where the results are tested using the formula (df) = (n-2) = 76-2 = 74, where the result is 1.992. For a t-count of 9.923 and a t-table of 1.992, the conclusion is that t-count ≥ t-table, then t-count is 0.000, while the degree of α is 0.005, meaning that the t-count value of 0.000 ≤ α 0.005. Based on the results of hypothesis testing using the t-test, the calculated t-value is 9.923, while the table t-value is 1.992. These results show that the calculated t-value is greater than the table t-value (9.923 ≥ 1.992). Thus, it can be concluded that the alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected. This indicates that the tested variable has a significant effect on the dependent variable in the study. In addition, when viewed from the significance value, the calculated significance value is 0.000, while the significance level used in the study is α = 0.005. These results indicate that the calculated significance value is smaller than the specified significance level (0.000 ≤ 0.005). Based on both testing criteria, both through comparison of the calculated t-value with the table t-value and through the significance value, it can be concluded that the independent variable studied has a significant effect on the dependent variable. Thus, the research hypothesis stating that there is an effect can be accepted statistically.

DISCUSSION

Continuous work activities without sufficient breaks can cause physical and mental fatigue, which can lead to decreased concentration and work performance. In such conditions, power naps serve as a form of short recovery that helps restore the body's energy and brain function so that individuals can return to work with a higher level of alertness. Previous studies have shown that short naps can increase alertness, improve sustained attention, and reduce drowsiness caused by long work activities (Lovato & Lack, 2010). Theoretically, the results of this study can be explained through the function of sleep as a physiological and cognitive recovery process, where the results show that power naps have a positive and significant effect on work productivity. This is evidenced by the t-test results, which show a calculated t-value of 9.923, which is greater than the table t-value of 1.992. In addition, the significance value obtained is 0.000, which is smaller than the significance level used in the study (α = 0.005). Based on these results, it can be concluded that the research hypothesis is accepted, which means that power naps have a significant effect on employee work productivity. These findings show that short breaks between work activities can make a real contribution to improving individual performance in completing work tasks.

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The findings of this study are also in line with research conducted by (Mednick et al., 2003) which shows that short naps can improve cognitive functions such as memory, information processing speed, and decision-making abilities. This indicates that power naps not only serve as a form of physical rest, but also provide important benefits for brain functions that are directly related to work productivity. When individuals have the opportunity to rest for a short period of time, neurological recovery processes can occur, resulting in optimal mental performance. The quality and duration of sleep play a crucial role in maintaining cognitive function, emotional stability, and an individual's level of alertness in performing daily activities. Adequate sleep, including short naps, can help the brain recover energy and improve an individual's ability to maintain concentration and mental performance. This is particularly important in work environments that demand a high level of focus and quick thinking. When employees have good alertness and concentration levels, they tend to be able to complete their work more effectively and efficiently, thereby increasing work productivity (Bergmann et al., 2021)

(Dutheil et al., 2020) states that meta-analysis also shows that short naps during work activities can improve executive function, working memory, and alertness levels after waking up. The results of the study show that individuals who take short naps have better cognitive performance than individuals who do not take a short break in the middle of work activities. Thus, power naps can be seen as an effective recovery strategy to reduce work fatigue and increase productivity. Napping during the day can increase alertness and sustained attention so that individuals can perform tasks better after resting. This increase in attention occurs because napping helps restore physiological conditions and improves cognitive readiness to face tasks that require high concentration. Therefore, when individuals experience fatigue or a decrease in energy during working hours, power naps can be an effective strategy to restore mental condition and maintain stable work performance (Ru et al., 2022).

In addition to cognitive aspects, the benefits of power naps can also be seen from psychological and physiological perspectives. A short nap during the day can help reduce stress levels, improve emotional regulation, and enhance an individual's mood. A more stable mental state allows employees to work more calmly and focus on completing their tasks. This is in line with research that explains that sleep plays an important role in the process of restoring brain energy, strengthening memory, and stabilizing an individual's emotional functions, thereby contributing to improved performance and psychological well-being (Medic et al., 2017) In the context of the body's biological rhythms, the benefits of power naps can also be explained by the phenomenon of the post-lunch dip, which is a

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natural decline in energy and alertness after lunch. During this phase, the body biologically experiences a decrease in activity that can lead to a decline in concentration and work productivity.

Research (Takahashi et al., 1998) shows that a short nap during this period can significantly improve an individual's alertness and cognitive performance. Thus, a power nap taken at the right time can help individuals maintain stable work performance throughout the day. In addition to providing benefits for individuals, the practice of power napping is also gaining attention in the context of modern organizational management. Several organizations are beginning to consider policies that support workplace napping or provide short breaks for employees as part of efforts to improve health and work performance. Research shows that adequate rest during working hours can help restore energy, reduce work fatigue, and improve employee well-being.

With the opportunity to take a short break in the middle of work activities, individuals can restore their physical and mental condition so that they can return to work with better concentration and productivity levels. Therefore, providing effective rest time, including short naps, can be a strategy that supports the creation of a healthier and more productive work environment (Sonnentag & Fritz, 2014). Power naps are a simple yet effective strategy for boosting work productivity. A short, planned break not only helps restore physical energy, but also improves cognitive function, maintains emotional stability, and enhances an individual's ability to complete tasks more efficiently. Therefore, organizations may consider implementing policies that support power naps as part of their efforts to improve employee well-being and performance in the workplace.

CONCLUSION

Power naps have a positive and significant effect on employee productivity. Taking short naps between work activities has been proven to help restore energy, improve concentration, and reduce work fatigue. This allows employees to work with greater focus and effectiveness, thereby increasing productivity. Therefore, power naps can be one strategy to consider in order to support the creation of a healthier and more productive work environment. Additionally, the habit of taking regular short breaks can also help maintain the physical and mental balance of employees while performing work activities. This ultimately has a positive impact on improving both individual and organizational performance.

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