



Research Article

Analysis of Work Fatigue Based on Dhikr Behaviour among Administration Workers in Higher Education

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ABSTRACT

Administrative workers have the potential to experience work fatigue. Fatigue conditions among workers can affect work productivity and even cause health problems. Work fatigue can be characterized by decreased reaction time. The longer reaction time indicates that a worker is getting higher work fatigue level. Dhikr is a religious activity by reciting lafadz of dhikr along day. Dhikr activity could create peace and relaxed body muscle then make workers not getting excessive fatigue. Work fatigue assessed using reaction timer. Dhikr behaviour collected using developed questionnaires to assess the level of intensity. This descriptive analytical study employed a cross-sectional design, with a sample of 70 administrative workers from a higher educational institution selected through simple random sampling. The objective of the study was to analyze the effect of dhikr behavior intensity on the level of work fatigue. The results indicate that the intensity of dhikr behavior does not significantly influence the level of work fatigue among administrative workers in higher education.

Keywords: Administration workers, dhikr, reaction time, and work fatigue.

INTRODUCTION

Work fatigue is a condition of workers that requires to be handled and controlled (Permatasari et al., 2017). Global fatigue data shows that every year there are nearly two million work accidents caused by work fatigue (Oksandi & Karbito, 2020). Work fatigue is an unpleasant subjective symptom. Apart from that, work fatigue is the body's response to psychosocial stress over a certain period of time (Setyawati, 2013). Work fatigue is closely related to work motivation (B. M. Dewi, 2018), work productivity, health problems (Tarwaka, 2015), accident related to work or fatality (Berek et al., 2022).

Administration workers tend to have monotonous work so they experience boredom (Torik, 2015). Boredom encourages the emergence of work fatigue, both physical and psychological aspect (Darma, 2018). Besides that, the high workload faced by office administration workers has the potential to cause work fatigue (Kondi, 2019). This condition leads to the onset of work fatigue among office administration workers.



Proper management of work fatigue is essential and urgently required to maintain productivity and well-being (Setyawati, 2013). Dzikir is a spiritual activity aimed at remember Allah (Purwanto, 2006). Reciting dhikr repeatedly encourages nerve function parasympathetic which plays a role in reducing heart rate and respiratory rate, thereby causing a relaxing effect on the body (Ramadhan & Saputri, 2019). Administrative workers experiencing work fatigue often suffer from muscle tension, and engaging in dhikr activities can help reduce this tension, allowing their bodies to relax (Anggraeni & Subandi, 2014).

Previous research shows that the prevalence of work fatigue in office workers reaches 85% of the total population (Sitorus, 2022). Work fatigue is caused by workload and working period (Nurman et al., 2022). University X in Ponorogo is an educational institution with a large number of administrative workers, more than a hundred, with quite high work demands and monotonous activities. This condition can trigger work fatigue in the administrative staff at University X. Researchers want to see the level of work fatigue based on the intensity of the dhikr habits of administrative workers at higher educational institution.

MATERIAL AND METHOD

This study was analytical quantitative research with a cross-sectional approach. It was registered and approved by the Ethics Committee at regional general hospital Dr. Harjono S Ponorogo, with registration number 00542135022112420230925060/X/KEPK/2023. The study was conducted in November 2023. The population consisted of administrative workers at a higher education institution in Ponorogo, East Java, Indonesia. A sample size of 70 respondents was determined using Slovin's formula, and participants were selected through simple random sampling. Data collection included assessing the level of workers' fatigue, the intensity of dhikr behavior, and personal demographic factors such as age, job position, marital status, and work duration. All data were analyzed using the logistic regression test.

The questionnaires of intensity of dhikr behaviour developed from questionnaires used in previous research (Mahmud, 2022). There were 25 items with scale 1 - 4. The questionnaires had been tested to find the validity and reliability value. All items were proven valid and reliable, with a Cronbach's alpha score of 0.844. The scoring categories for the dhikr intensity level were as follows: a score of <50 points indicated rare practice, 51-74 points indicated frequent practice, and >74 points indicated consistent practice. The intensity of dhikr behavior was measured by the frequency of reciting dhikr phrases throughout the day. The other variable, work fatigue, was measured using the L77 Lakassidaya reaction timer. The classification of work fatigue is presented in Table 1 (Setyawati, 2013).

Table 1. Categories of Work Fatigue

Score Reaction-Time	Work Fatigue Category
150.0-240.0 milliseconds	Normal
>240.0- <410.0 milliseconds	Low
410.0- <580.0 milliseconds	Moderate
>580.0 milliseconds	High

RESULTS AND DISCUSSION

The Characteristics of Respondents

Data were collected from respondents who agreed to participate in the study. The characteristics of the respondents, including age, work duration, job position, and marital status, are presented in Table 2.

Tabel 2. Characteristics of Respondents

Characteristics of Respondent	Frequency	Percentage
Age (years)		
<25	25	36%
25 – 29	31	44%
>30	14	20%
Working Period (years)		
<3	57	81%
>3	13	19%
Job Position		
Full-time worker	53	76%
Trainee	17	24%
Marital Status		
Married	23	33%
Single	47	67%

Table 2 shows that the majority of respondents were aged between 25 and 29 years. The youngest respondent was 19 years old, while the oldest was 40 years old. According to the Ministry of Health in Indonesia, all respondents fall within the productive age range (15–64 years old) (Kementerian Kesehatan, 2021). Respondents were dominated by workers with a working period of less than 3 years which is categorized as new workers (Handoko, 2010). More than three-quarters of respondents were full-timers or workers on permanent contracts. More than half of the respondents are not married.

This research conducted to find the work fatigue level among administration worker in higher education. The data frequency and percentage of workers' work fatigue are shown in the Table 3.

Table 3. Work Fatigue Level among Administrative Workers

Level of Work Fatigue	Frequency	Percentage
Low	17	24%
Moderate	36	52%
High	17	24%
Total	70	100%

Table 3 shows that more than half of the workers experienced moderate levels of work fatigue. A quarter of the total respondents experienced mild work fatigue, while the remaining respondents experienced high levels of work fatigue.

Table 4. Dhikr Level Intensity among Administrative Workers

Dhikr Level Intensity	Frequency	Percentage
Often	19	27%
Always	51	73%
Total	70	100%

Table 4 shows that none of the respondents had a low level of dhikr behavior intensity (rare). The majority of respondents, 73%, exhibited a high level of dhikr behavior intensity (always), while the remaining respondents demonstrated a moderate level of dhikr behavior intensity (often).

Work Fatigue Based on Dhikr Behaviour Intensity

All respondents' characteristics were analyzed using an ordinal regression test, and the results are presented in Table 5.

Table 5. The Result of Logistic Regression Test

Dependent Variable	Independent Variable	Sig.
Work Fatigue	Age	0.564
	Working Period	0.150
	Job Position	0.007*
	Marital Status	0.335
	Dhikr Behaviour Intensity	0.688

*significant with alpha 5%, p value < 0.05

The results of the test in Table 5 indicate that the intensity of dhikr behavior did not significantly affect work fatigue among administrative workers at University X Ponorogo (p = 0.688). This outcome may be influenced by various other factors. Work fatigue is often caused by factors such as age, work environment, job shifts, job stress, sleep quality, and length of employment (A. Agustin et al., 2021; Wahyuni et al., 2021). All workers in this study exhibited dhikr behavior intensity at either the "often" or "always" levels, and despite their heterogeneous characteristics, most still experienced moderate to high levels of work fatigue. Dhikr serves not only as an act of worship but also as a form of relaxation (Mustary, 2021). Dhikr is an activity carried out by speaking verbally or simply in the heart when reciting Allah's name (Gustina et al., 2021). Dhikr make people closer to Allah and calming soul if done correctly and sincerely (Mustary, 2021; Sucinindyasputeri et al., 2017). A calm condition of the soul correlated to a relaxed condition of worker so that make a healthy condition (Zethira et al., 2022).

Work fatigue is influenced by age (Amin et al., 2019). According to the theory, young workers have better physical abilities than older workers. Young workers are still able to do physical work and do not get tired easily compared to older workers (Darmayanti et al., 2021). In this study, all respondents were included in the group of young workers with a maximum age of 40 years.

Physiologically, workers over 40 years old experience a decrease in muscle strength, so that workers of that age tend to be more tired (Setiorini, 2021; Tueyeh et al., 2021). The trending data in this research is 52% of the respondent experienced the work fatigue in moderate level among the worker with 25 – 29 years old. This result shows that majority of the population experienced the moderate level of work fatigue even though those population at the age of younger group. This result could happen because of possibility of younger worker to do more physical activity beside the work, so younger workers have potential to get more tired (Putri & Susilowati, 2023).

Working period influences work fatigue (Nala Utami et al., 2018). The longer the work period, the more workers tend to have good abilities or competencies (Manabung et al., 2018), so they are able to control stressors so that work fatigue decreases (Salim et al., 2019). On the other hand, longer working periods influence workers to become more bored so they get tired more easily (Setyawati, 2013). This study included respondents, the majority of whom had been working for less than 3 years, a period categorized as the early stage of employment. As a result, these workers may be more likely to experience moderate work fatigue due to lower competence and emotional instability (Lahay et al., 2018). According to previous research, the longer working period significantly correlated with higher level of work fatigue (Agustin & Sariah, 2018).

Another finding of the study is the significant correlation between work fatigue and job position. The respondents' job positions were categorized into two types: full-time workers and trainees. Full-time workers have greater responsibilities and job demands, which can affect both their mental and physical health (Putri & Tiarapuspa, 2023). The high demand from institution that given to full-timer workers tend to increase the level of work fatigue. The trending data of this result interpreted that moderate and high level of work fatigue experienced by the full-timer workers (62,8% of the total workers).

This result shows no correlation between work fatigue and marital status, which contradicts previous research. According to earlier studies, married workers tend to experience higher levels of work fatigue due to the additional responsibilities associated with household activities (Dewi et al., 2022). Married workers have to do more activities with their spouse and or children compared to single worker after the work hours (Agustin & Sariah, 2018). In this case, administrative workers did not feel fatigued after their working hours, possibly due to spending seven hours in the office primarily in a seated position. This sitting posture may contribute to reduced fatigue, as previous research has shown that sitting conserves more energy compared to standing, which requires more energy and leads to quicker fatigue (Malik et al., 2021).

CONCLUSION AND SUGGESTION

This research shows that the intensity of the dhikr behaviour does not affect the level of work fatigue among administrative workers in higher education. The suggestion for the further research might analyze the other specific factor such as the time of dhikr, the kind of dhikr and/or how workers recite dhikr. The further research might use two group of respondents which are control and treatment.

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CONFLICT OF INTEREST

Corresponding author and all author declare that there is no conflict of interest. All the authors of a submission disclose any financial and personal relationships with other people or organizations that could inappropriately influence this research.

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