# **Factors Relating to Productivity of Fish Unloading Workers**

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### ABSTRACT

**Introduction:** Tasik Agung Coastal Fishing Port handles the most fish unloading activities in Rembang, which include high and strenuous work with no rest before the activity is completed, long work duration as well as high work demand, work fatigue, work period, and workload. In the professional world, human resources are said to be productive if they complete their tasks and fulfill their responsibilities on time. This study aims to analyze the factors related to the productivity of fish unloading workers. **Methods:** This study is an analytical observational study applying quantitative method with a cross-sectional approach. The population examined in this study was 100 fish unloading workers. Sampling was carried out offline through the accidental sampling technique, or the determination of samples by chance, in which potential respondents were selected from coincidental meeting with the fish unloading workers. The main data sources are direct measurements of variables, questionnaires, surveys, and interviews. Meanwhile, the secondary data as supporting information were obtained from journals of previous related studies. The data analysis used Spearman's rank correlation test. **Results:** The study did not find any relationship between work fatigue (p-value = 0.419) and workload (p-value = 0.975) with worker productivity. On the other hand, work period is proven to significantly related to worker productivity (p-value = 0.001). **Conclusion:** Work fatigue and workload are not related to the productivity of fish unloading workers. Meanwhile, there is a relationship between work periods and worker productivity. The increase in job mastery and work periods are followed by an increase in worker productivity.

Keywords: work fatigue, work period, worker productivity, workload

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### **INTRODUCTION**

In the health model developed until 2020, the World Health Organization (WHO) has anticipated that psychological illness in the form of a sensation of extreme fatigue that leads to depression will be the second deadliest disease after heart disease. Regarding this, a randomized study conducted by the Ministry of Health, Labor, and Welfare of Japan on 12 thousand companies and about 16 thousand workers found that 65% of workers experienced physical exhaustion from their day jobs, 28% of them had mental fatigue, and 7% of them encountered severe stress. Meanwhile, the results of a study on a company engaged in the production sector in Indonesia explained that on average, workers experienced work fatigue with symptoms of headaches, back pain, dizziness, and stiff shoulders. Furthermore, ignoring work fatigue can cause various work-related illnesses and accidents (Zaeni, Supriyanto, and Ginanjar, 2019).

Work fatigue is a common health problem felt by workers of all types of work. It is the defense mechanism of our body against serious injury, allowing it to recover quickly. However, work fatigue gives workers subjective feelings associated with decreased efficiency and effectiveness of performance (Yudisianto, Tualeka, and Widajati, 2021).

The causes of work fatigue may come from both internal and external factors. Internal factors include personal factors, job descriptions, psychological factors (responsibility, workability, conflict, anxiety, work motives, etc.), eating habits, medical history, health status, and circadian rhythms. Meanwhile, external factors are work environment (lighting, the surrounding environment, noise, etc.), and the duration of work (Hidayah, Musyarofah, and Widjasena, 2018).

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This is in accordance with a previous study by Verawati (2016) on the relationship between subjective fatigue levels and the productivity of employees in the packaging division at CV Sumber Barokah, which found a significant relationship between subjective fatigue and workers' productivity. Work fatigue on employees at this company is triggered by heavy load of crackerpacking job which is performed every day and is less diversified.

According to Ramdan (2018), work fatigue can also cause decreased concentration, slowness, and obstructions to perception, slow and difficult thinking, lower motivation to work, decreased efficiency, and decreased physical and mental activities, all of which can lead to work accidents and losses in work output.

Physical work that is done continuously over a lengthy period will affect the body's processes (Ramdan, 2018). Work period is the length of time a worker has worked within the scope of his/her work, which can be calculated in months or years. Workers who have a long work period can produce good productivity or performance since they have mastered their work and are more experienced than new workers (Laminia and Muniroh, 2018). In addition, more experienced workers can work more effectively and know the optimal or most comfortable working position as to maintain their productivity (Ramdan, 2018).

The jobs given to workers cover various levels of workload, which is a series of activities to be done by workers within a certain period of time. So as not to overburden the workers, workload should be set according to their capacity (Mutiadi, Gunawan, and Sucipto, 2021). Workload and work productivity are closely interrelated, meaning that excessive workload will have an impact on a decline in productivity. The greater the amount of work, the greater the workload (Soputan, Kawatu, and Mandagi, 2018).

The Port of Rembang plays a vital role as an economic center of the people of Rembang Regency. Unloading fish at this coastal fishing port is a physically demanding job. Every day, from 06.00 to 11.00 am, workers unload fish from fishing vessels, each of which can load and unload tens to hundreds tons of fish per day. Each basket carried by the workers can hold 32-33 kg of fish. Fish unloading activities consist of unloading fish from holes or jegongs, pulling ropes, transporting fish baskets to the dock, sorting, towing, and carrying fish to vehicles.

Based on interviews, it is known that the fish unloading workers have to stand for 5 hours without a break until the work is done. Regardless of the type of work that requires physical strength, work demands, workers' characteristics, work fatigue, work period, and workload are factors that affect work productivity. Human resources are said to be productive if they complete their tasks and fulfill their obligations in a timely manner (Purbaya and Paskarini, 2020). Completion of work must be balanced with personal work capacity in order to make realistic work demand, so that workers can improve efficiency at work. In regard to such problems, this study aims to analyze the relationship between work fatigue, work period, and workload with the productivity of fish unloading workers.

### **METHODS**

This study applied quantitative method using an analytical observational design with a crosssectional approach. Data collection was conducted in April 2021 at the Port of Rembang.

The population examined in this study was 100 fish unloading workers. Sampling was carried out offline through the accidental sampling technique, or the determination of samples by chance, in which potential respondents were selected from coincidental meeting with the fish unloading workers. This study has obtained an ethical approval certificate from the Health Research Ethics Committee of the Faculty of Public Health, Diponegoro University no: 115/EA/KEPK-FKM/2021.

There are two types of variables in this study, namely the dependent variable and the independent variable. The dependent variable is worker productivity, whereas the independent variables are age, sex, education, work fatigue, work period, and workload. The investigation procedure was carried out in three stages, namely preparation, implementation or data collection, and completion.

Data collection was performed on primary and secondary data. Primary data were obtained from direct observations, interviews with workers and helmsmen, and measurements of variables, i.e., measuring work fatigue using a reaction timer, measuring work period by disseminating questionnaires, measuring workload using pulse palpation on the radial artery of the left wrist with the method 10 beats (if the stopwatch is pressed on a count of one, it must stop at the count of 11; Pulse=(10 beats)/(calculation time) x 60 (beats/ minute)), and measuring work productivity by conducting interviews, distributing questionnaires adapted from Hertanto (2017) "Employee Work Productivity Questionnaire", and documentation. Secondary data were collected from journals of relevant previous studies.

The data were processed using the IBM SPSS Statistics version 22 application, licensed under the terms of the license agreement by entering the license code using the License Authorization Wizard. The data were analyzed to test the correlation between variables using the Spearman's rank correlation test with a significance value of 0.05 (5%).

### RESULTS

#### **Characteristics of Respondents**

Individual characteristics examined in this study include age, sex, and the highest level of education. The distribution for each characteristic is presented in Table 1. The age variable is the age of the workers at the time the survey was conducted. Based on Table 1, 74% of the observed fish unloading workers at the Port of Rembang were in the 'old' category (aged >35 years old), 70% of them were women, and 46% of them only had a junior high school diploma.

Table 3 shows that up to 48% of fish unloading workers at the Port of Rembang experienced moderate work fatigue (410-580 ms), 62% of them were relatively new to the job (< 5 years), 84% of them had a low workload ( $\leq$  90 bpm), and 80% of them had a high level of work productivity.

Table 1. Distribution of Age, Sex, and Educationof Fish Unloading Workers at the Port ofRembang in 2021

Characteristics of Respondents	Frequency (n)	Percentage (%)		
Age (Years)				
Young ( $\leq$ 35)	13	26.0		
Old (> 35)	37	74.0		
Sex				
Male	15	30.0		
Female	35	70.0		
Education				
Elementary School	20	40.0		
Junior High School	23	46.0		
High School	7	14.0		

Table 4 signifies that fish unloading workers at the Port of Rembang with high productivity (65.7%) experienced moderate and severe work fatigues. Calculation results using Spearman's rank correlation test show the correlation coefficient of 0.117 or a weak relationship, with a positive correlation (one-way relationship) and a significance value or Sig. (2-tail) of 0.419, meaning that there was no significant relationship between work fatigue and worker productivity.

According to Table 5, workers with a short work period (<5 years) have low productivity with a percentage of 54.8%. The calculation results using Spearman's rank correlation test indicate the correlation coefficient of 0.443 or a sufficient

Table 2. Distribution of Job Descriptions for Fish<br/>Unloading Workers at the Port of Rembang<br/>in 2021

Job description	Frequency (n)	Percentage (%)		
Unloading/Jegong	2	4.0		
Pulling rope	9	18.0		
Transporting fish basket to the dock	5	10.0		
Sorting fish	18	36.0		
Pulling fish basket	14	28.0		
Transporting fish basket to vehicles	2	4.0		
Total	50	100.0		

Table 3. Distribution of Work Fatigue, WorkPeriod, Workload, and Productivity ofFish Unloading Workers at the Port ofRembang in 2021

Characteristics of Respondents	Frequency (n)	Percentage (%)		
Work Fatigue				
Low	15	30.0		
Moderate	24	48.0		
High	11	22.0		
Work Period (Years)	15	30.0		
Short (< 5)	31	62.0		
Long ( $\geq 5$ )	19	38.0		
Workload	20	40.0		
Low	42	84.0		
High	8	16.0		
Productivity				
Low	10	20.0		
High	40	80.0		

relationship, with a negative correlation (nonunidirectional relationship) and a significance value or Sig. (2-tail) of 0.001, meaning that there was a significant relationship between work period and worker productivity.

As displayed in Table 6, fish unloading workers at the Port of Rembang with high productivity (61.9%) have a low workload. Calculation results using Spearman's rank correlation test show that the correlation coefficient is 0.004. This means that the correlation strength is weak and the relationships between variables are unidirectional. Furthermore,

**Table 4.** Cross Tabulation between Work Fatigue and<br/>Productivity of Fish Unloading Workers at<br/>the Port of Rembang in 2021

	Productivity				Tatal	
Work Fatigue	Low		High		- Total	
	n	%	n	%	Ν	%
Low	7	46.7	8	53.3	15	100.0
Moderate+ High	12	34.3	23	65.7	35	100.0
p-value					0.419	
Correlation Coefficient					0.117	

**Table 5.** Cross Tabulation between Work Period and<br/>Productivity of Fish Unloading Workers at<br/>the Port of Rembang in 2021

	Productivity				Tetal	
Work Period	Low		High		Total	
	n	%	n	%	Ν	%
Short	17	54.8	14	45.2	31	100.0
Long	2	20.5	17	89.5	19	100.0
p-value					0.001	
Correlation Coefficient					0.443	

Table 6. Cross Tabulation between Workload and<br/>Productivity of Fish Unloading Workers<br/>at the Port of Rembang in 2021

	Productivity				Total	
Workload	Low		High		Total	
	n	%	n	%	Ν	%
Low	16	38.1	26	61.9	42	100.0
High	3	37.5	5	62.5	8	100.0
p-value					0.975	
Correlation Coefficient					0.004	

the significant difference or Sig. (2-tail) is 0.975, meaning that there was no significant relationship between workload and worker productivity.

### DISCUSSIONS

### Individual Characteristics of Fish Unloading Workers at the Port of Rembang in 2021

According to Robbins as cited in Gaffar, Abduh, and Yantahin (2017), "individual characteristics include age, sex, education level, marital status, and years of service in the organization." In addition, Suma'mur (1989) stated that one's ability to carry out duties is influenced by several factors, one of which is age that will affect physical condition. In this study, age variable was divided into two categories, namely young and old. Young people who can cope with heavy workload will grow well, be agile, and will not get tired quickly, so that their performance will not be affected (Ramdan, 2018).

As regards to physical strength, Tarwaka, Solichul, and Lilik (2004) reported that in general, women only have about 2/3 of the muscle strength of men. At the Port of Rembang, however, there are more female workers than male ones. Female workers are assigned to jobs that require accuracy, whereas male workers get heavier workload and do the highly-physical works that require more energy. In this regard, available jobs are divided according to the sex of the workers to obtain the best work output. This is adjusted to the abilities and limitations of each individual (Ramdan, 2018). There are six jobs regarding the fish loading and unloading activities at the Port of Rembang, namely unloading/jegong, pulling rope, transporting fish baskets to the dock, sorting fish, pulling fish baskets, and carrying fish baskets to vehicles.

Concerning education, well-educated people generally have broader insights, especially in their area of expertise. Conversely, the non-formal fish unloading work does not require a high level of education, but rather an expertise and skills in completing the given tasks. In fact, the majority of fish unloading workers only have a junior high school diploma.

# The Work Fatigue of Fish Unloading Workers at the Port of Rembang in 2021

Work fatigue is a health problem often experienced by workers. It is identified with

poor physical fitness, exhaustion, as well as low motivation, efficiency, skills, and productivity. Work fatigue can reduce performance and increase the error rate at work caused by a weak body (Ramdan, 2018).

In this study, analysis on work fatigue was carried out by testing the reaction timer on an android application with five touches on the screen. Reaction time is the time needed by a person to carry out or respond to a stimulus. The reaction is simple and coordination is necessary to get the stimulus.

The work fatigue variable was divided into three categories, namely: (1) low work fatigue, with a response time of >240-<410 ms; (2) moderate work fatigue, with a response time of 410-580 ms; and (3) high work fatigue, with response time of >580 ms.

Based on the results of the univariate analysis, 48% of fish unloading workers at the Port of Rembang experienced moderate work fatigue. The contributing factors to work fatigue are worker's age, the duration of work (workers have to stand for 5 hours from 6 to 11 a.m. during their work), the absence of rest time, heavy workload (workers manually pull, lift, sort, and move the fish), direct solar radiation, and work environment (at a port in a tropical country with a hot climate).

A hot climate or heat stress can cause systemic disorders such as heatstroke, heat exhaustion, heat cramps, heat syncope, and numerous skin conditions such as skin cancer, as well as neuropsychiatric disorders such as work fatigue. In addition, a hot work environment makes workers feel thirsty, causing their entire body to become tired and weak, thereby reducing concentration and vigilance (Setyaningsih, 2018).

Workers' age is sufficient to determine their success in performing the job. In general, young workers have more physical strength, while older workers have limited energy, are physically weaker, and are more likely to experience work fatigue more quickly (Safira and Nurdiawati, 2020). The results of this study found that up to 74% of fish unloading workers at the Port of Rembang were considered old (aged >35 years) and suffered from moderate to severe work fatigue.

In every job, rest time must be given for all workers. This is regulated in Law of the Republic of Indonesia number 11 of 2020 Article 79 on Job Creation. Work-break is the period of time in which workers can take time off from their job to recover after working for a certain time. Every worker has the right to rest between working hours in a day, at least half an hour after 4 (four) hours of work. Meanwhile, weekly rest period is one day for 6 working days or 2 days for 5 working days in a week (Central Government of the Republic of Indonesia, 2020).

Excessively long working hours and working overtime beyond the limits of workers' abilities will accelerate the onset of fatigue and reduce accuracy, precision, and thoroughness in work (Verawati, 2016). The best way to deal with work fatigue is by not making it worse or chronic. Besides, this condition can be prevented by resting well, stretching muscles such as gently moving the head, hands, and feet between works or spontaneous stretching, rehydrating, and using appropriate personal protective equipment (Safira and Nurdiawati, 2020).

# The Work Period of Fish Unloading Workers at the Port of Rembang in 2021

The cumulative length of time spent by workers to work in a certain workplace from the beginning to the end of their employment is referred to as work period, which can provide an overview of their experience in mastering their job (Safira and Nurdiawati, 2020).

The work period variable in this study was calculated from the time the respondents started working at the port until the time the study was conducted. This variable was categorized into two groups, namely the short work period (<5 years) and the long work period ( $\geq$ 5 years). The data used ordinal scale of measurement. The period of service data was included in the questionnaire as the primary data.

Based on the results of the univariate analysis, 62% of the observed fish unloading workers at the Port of Rembang had a short work period of <5 years. This was triggered by the shift in people's occupations from farmers to fish unloading workers to increase their income during the COVID-19 pandemic.

Work period is closely related to work experience; workers who have just started to work or got a new job normally have low work experience, knowledge, and skills. The longer the work period, the higher the work experience and qualifications of workers (Safira and Nurdiawati, 2020).

# The Workload of Fish Unloading Workers at the Port of Rembang in 2021

Workload refers to a series of activities that workers are obligated to complete within a certain period of time. It must be commensurate with workers' abilities so as not to overburden them (Fathoni, 2021).

The analysis on the workload variable is carried out on physical workload, which is determined by calculating heart rate, oxygen consumption, and changes in blood chemistry levels and body temperature (Puspita and Puspawardhani, 2020).

Pulse measurement is an objective measurement method of physical activity. This is done by monitoring the physical condition and physical fitness of workers and measuring their workload through muscle movements. The more muscle activity, the greater the fluctuations in heart rate, and vice versa. Pulse rate measurement does not cause harm to the respondents and does not require expensive instruments, it is easy and fast, and the results are quite reliable (Pujatari, Gustopo and Adriantantri, 2021).

The sensitivity of the pulse to changes in the load received is quite high; the heart rate will immediately be in rhythm with changes in mechanical, physical, or chemical loading (Pujatari, Gustopo and Adriantantri, 2021). Data on the workload variable is included in the ordinal scale of measurement. The categories of this variable are low, medium, high, very high, and extremely high.

The results of the univariate analysis found that 84% of fish unloading workers at the Port of Rembang had a low workload, with a heart rate of  $\leq$  90 beats/minute. This was caused by the number of workers at each job description, the volume of work, the comfort in work, workers' skills or capacity, and the perception of work.

However, a low workload may make workers feel bored due to the monotonous work. Boredom at work arises from the fact that the tasks performed are invariant and highly repetitive. This can be overcome by exchanging work assignments according to workers' abilities (Fathoni, 2021).

# The Productivity of Fish Unloading Workers at the Port of Rembang in 2021

Work productivity is the ability of a person or a group of people to produce certain products, both in the form of goods and services, which continues to increase qualitatively and quantitatively over time. Productive people can design and carry out all works in accordance with the intended goals or targets in a timely manner (Purbaya and Paskarini, 2020).

The measurement of workers' productivity was done through questionnaires and interviews with workers. Indicators to determine worker productivity are the ability, increased results achieved, spirit at work, self-development, quality, and efficiency. Worker productivity is determined by comparing the capacity of workers with activities they can complete. The data showed that 80% of fish unloading workers at the Port of Rembang had high productivity. This was due to the enthusiasm, conscientiousness, and efforts of the workers to finish their jobs. Fish unloading workers at the Port of Rembang are proven to have positive attitudes as well as high motivation and discipline, remarkable skills, and professional ethics.

The level of worker productivity is also influenced by the commitment between the port workers and the helmsmen, the good treatment of the helmsmen towards the port workers, the suitability of job descriptions with experience and expertise, as well as good communication (Fathoni, 2021).

Work motivation is one of the determining factors in worker productivity as it can encourage workers to carry out and finish their work. In response to the 13 statements presented to the fish unloading workers at the Port of Rembang, 92% of them are always fully enthusiastic about their job and always strive to achieve the set goals. Furthermore, a total of 94% of workers completed their work quickly and accurately. Workers with high motivation at work will be able to reward themselves and the people around them, thus being able to work harder, faster, and more accurately.

This is in line with the previous study which found that work motivation is related to the work productivity of employees of PT. Samudera Mulia Abadi in North Minahasa, with the results showing that 87.8% of the workers have good motivation and 12.2% of them have low motivation (Kaawoan, Kolibu and Kawatu, 2017). However, the present study did not examine the work motivation variable.

## Correlation between Work Fatigue and Productivity of Fish Unloading Workers at the Port of Rembang in 2021

Work fatigue was experienced differently in every worker. It is characterized by low production, work efficiency, and motivation caused by individual factors, types of job, and work environment. Workers who suffer from work fatigue are easily affected, develop headaches, and have low enthusiasm (Zaeni et al., 2019).

Fatigue is centrally regulated by the brain. It is triggered by the accumulation of waste products in the muscles and blood circulation which can affect the fibers and make the central nervous system, which is organized into a system of activation and inhibition, work slowly. The activating system is in the reticular formation which can stimulate the body to move, whereas the inhibitory system is found in the thalamus and can reduce one's ability to react and lead to sleep habits. The body will be stable when these two systems are in balance (Ramdan, 2018).

As seen in the cross-tabulation in Table 4, fish unloading workers with high productivity at the Port of Rembang experienced work fatigue in the moderate to high levels. The Spearman's rank correlation coefficient is Sig. (2-tailed) 0.419 > 0.05, meaning that there was no significant correlation between work fatigue and worker productivity.

This is in contrast with a prior study by Elia, Josephus, and Tucunan (2016) on the "Relationship between Work Fatigue and Work Period with Work Productivity of Unloading Workers at the Port of Bitung in 2015" which found that work fatigue is related to the work productivity of the unloading workers at the Port of Bitung. The p-value was 0.019, meaning that the probability was smaller than 0.05 (0.019 < 0.05), so Ho was rejected and Ha was accepted. Work productivity increases along with the decrease in the level of work fatigue. The higher the level of work fatigue, the lower the work productivity.

In line with the present study, Safira and Nurdiawati (2020) revealed that up to 70.8% of their respondents had moderate work fatigue and moderate productivity, and 80.4% of them had mild work fatigue and moderate productivity. The p-value was 0.499 > 0.05, indicating no relationship between subjective fatigue complaints and the productivity of workers at PT. KHI Pipe Industry in 2019.

Someone experiencing moderate to severe fatigue may remain productive at work as the activating system is stronger than the inhibitory system, resulting in good health and high enthusiasm. The activating system regulates motivation. There are two types of motivation: intrinsic and extrinsic ones. Intrinsic motivation is the one generated within the individual and is not subject to any influence from external parties. Meanwhile, extrinsic motivation is obtained from other people, such as family, friends or colleagues, and the surrounding environment. Workers with an activating system have high spirit, don't feel fatigued easily, and can complete tasks well (Ramdan, 2018).

Based on the results of this study, it is found that the fish unloading workers at the Port of Rembang have high enthusiasm or motivation to complete their work despite experiencing work fatigue. This enthusiasm comes from cohesiveness in groups and is gained by joking with their colleagues at work as well as with children and other family members at home. In addition, wages and bonuses are also proven to increase the enthusiasm of workers.

### **Correlation between Work Period and Productivity of Fish Unloading Workers at the Port of Rembang in 2021**

Based on the results of the cross-tabulation between work period and worker productivity, workers with short work period (<5 years) are proven to have lower productivity, and vice versa.

The calculation results of the Spearman's rank correlation test show a correlation coefficient of 0.443 or a sufficient relationship, with a negative correlation (non-unidirectional relationship) and a significance value or Sig. (2-tailed) of 0.001, meaning that there was a significant relationship between work period and worker productivity.

Similarly, Elia, Josephus, and Tucunan (2016) found in their study on the "Relationship between Work Fatigue and Work Period with Work Productivity of Unloading Workers at the Port of Bitung in 2015" that of the 91 respondents, 66 of them (72.5%) had a work period of >3 years, while the remaining 25 respondents (27.5%) had a work period of <3 years. Based on the bivariate analysis using the chi-square test with p-value of <0.05, the obtained p-value was 0.025, meaning that there was a relationship between work period and work productivity of unloading workers at the Port of Bitung.

Work period is used to determine the length of time spent by workers to work and their level of expertise. It has a significant impact on work productivity. This statement is in accordance with a study by Safira and Nurdiawati (2020) on the employees at PT. KHI Pipe Industries in 2019, whose findings show that most workers have been working in the company for more than 5 years. Workers with long work period are proven to be more productive, and vice versa. Work period goes in line with work experience, knowledge, and skills; the longer a person works, the more experienced they are. Therefore, they will be able to master their job, solve existing problems, and contribute to increasing productivity (Safira and Nurdiawati, 2020).

## Correlation between Workload and Productivity of Fish Unloading Workers at the Port of Rembang in 2021

Factors that affect workload are related to workers' skills, work environment, workers' behavior, and workers' perceptions (Munte, Hasibuan, and Lubis, 2021). It is closely related to work efficiency in that excessive workload will reduce the level of work efficiency. The more works given to workers, the greater the workload (Soputan, Kawatu, and Mandagi, 2018).

Of all respondents, 61.9% of the fish unloading workers at the Port of Rembang with a low workload have high labor productivity of. Meanwhile, there were five workers who coped with heavy workload and still have high level of productivity. This is because the jobs are given according to the skills and abilities of the workers.

The results of the Spearman's rank correlation test show that the correlation coefficient is 0.004, which indicates that the correlation strength level is weak and the relationship between variables is one-way. The obtained significance value or Sig. (2-tailed) of 0.975 means that there was no significant relationship between workload and worker productivity.

The results of this study are consistent with a study carried out by Sanjani, Putri, and Haedar (2021) on the "relationship between workload and work productivity of employees at Stikes Griya Husada Sumbawa", whose Pearson's productmoment correlation test using SPSS Statistics version 16.00 shows no relationship between workload and productivity. The obtained significance value was 0.297 (> $\alpha$  value of 0.05), indicating that Ho was accepted and Ha was rejected

On the contrary, a previous study by Soputan, Kawatu, and Mandagi (2018) on the "Relationship between Age and Workload with Work Productivity in the Civil Service Police Unit at the Regional Office of the Civil Service Unit of Manado City in 2018" shows a relationship between workload and work productivity of the Civil Service Police Unit (Satpol PP) officers of Manado City with a p-value of 0.000. In conclusion, giving excessive work or tasks to employees with limited time will reduce the level of employee productivity.

At the Port of Rembang, the fish unloading workers accepted the given workload wholeheartedly. Of all respondents, 60% of them mastered their jobs, with 52% of the total amount of work given are within their abilities. This makes them have a low workload and high work productivity, meaning that workers can achieve the set goals if they are given the appropriate level of workload that is in accordance with their abilities (Mutiadi, Gunawan, and Sucipto, 2021).

### CONCLUSIONS

The productivity of workers can be seen from the completion of the fish unloading activities carried out every day. Workers have different levels of productivity due to different work period and workload as well as work fatigue. Workers who have moderate to severe levels of work fatigue and low workloads are proven to have high productivity. On the other hand, those with shorter work period have lower work productivity. Meanwhile, work fatigue and workload are not significantly related to worker productivity due to the strong motivation generated by the workers themselves and the supportive work environment. There is a relationship between work period and worker productivity; the longer the work period, the higher the level of skill and mastery of workers, thus the productivity increases.

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