

## RELATIONSHIP BETWEEN WORK STRESS AND VIBRATION AGAINST FATIGUE AND DISCOMFORT AMONG TRAIN DRIVERS AT OPERATION AREA VI OF YOGYAKARTA

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### ABSTRACT

**Background:** Nowadays competence and requirements for international standard make occupational safety and health problems as a crucial global issue. Minimum control to work environment leads to the incidence of health problems, the emergence of various diseases and occupational accident. Fatigue as one of declining physical condition symptoms and stamina commonly occurs to manpower. Working condition which is not supported by healthy, comfortable, and secure environment may trigger fatigue. Drivers of public transportation are most likely to encounter fatigue. Vibration on the time of driving have high risk to give on exposure to work environment.

**Objective:** The study aimed to identify the relationship between work stress and vibration against fatigue and discomforts.

**Method:** This was a survey which used cross sectional design with as many as 80 samples.

**Result and Conclusion:** The result of the study showed that work stress had relationship with fatigue ( $r=0.254$ ,  $p=0.015$ ), vibration had relationship with fatigue ( $r=0.260$ ,  $p=0.023$ ), work stress had relationship with discomfort ( $r=0.271$ ,  $p=0.015$ ), vibration had relationship with discomfort ( $r=0.473$ ,  $p=0.000$ ). The result of multivariable analysis showed that work stress and vibration were significant predictor to the incidence of fatigue and discomfort with effective contribution as much as 12.61% for fatigue and 27.883% for discomfort. There was a significant relationship between work stress and vibration against fatigue and discomfort. Therefore there should be efforts to prevent fatigue and discomfort through monitoring of work environment, health check, and the implementation of occupational safety and health for train drivers in particular.

**Keywords:** work stress, vibration, fatigue, discomfort, train drivers, occupational health and safety

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