

**ANALYSIS OF BIOPSYCHO FACTORS ON THE INCIDENT OF  
MUSCULOSKELETAL DISORDERS (MSDs) IN THE BST BUS DRIVERS  
AT SOLO RAYA**

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**ABSTRACT**

**Background:** Complaints about MSDs often occur in workers with poor work statistics and ergonomics, such as bus drivers who work 8-9 hours per day. Risk factors for MSDs generally happen due to 3 factors, namely individual or biological, psychological, and social. **Objective:** to analyze biopsychosocial factors on the incidence of musculoskeletal disorders (MSDs). **Subjects and Methods:** This research is a quantitative study, using a cross-sectional study approach, with a population of 251 subjects and a sample of 78 subjects selected by random sampling based on inclusion and exclusion criteria. This research was conducted on PT Bengawan Solo Trans BST bus drivers. The independent variables in this study were biopsychosocial factors (BMI and stress level) and the supporting variables were the incidence of musculoskeletal disorders (MSDs). Stress level assessment using PSS-14 and measurement of MSDs complaint level using the Nordic Body Map questionnaire. **Results:** Based on the results of the chi-square test, it shows that there is a relationship between the incidence of MSDs and BMI ( $p=0.001$ ) and stress level ( $p=0.000$ ). From the multivariate test, a significance value of 0.000 ( $p<0.05$ ) was obtained, so it can be concluded that BMI and stress level simultaneously or together influence the incidence of MSDs. The variable that most influences the incidence of MSDs is stress level with an unstandardized coefficient B value of 0.493. **Conclusion:** There is a relationship between BMI and stress level on the incidence of MSDs

**Keywords:** musculoskeletal disorders, biopsychosocial factors, BMI, stress level