

ABSTRACT

Interaction Individual Factors, Noise Absorbing Mechanism and Intensity toward Noise Hearing Threshold**Mardji**

This research sought to find the interaction between the individual factors, (consisting of age, experience, education and training), noise absorbing mechanism and noise intensity toward threshold at the weaving manufactories in East Java. The populations taken are those working in production and maintenance section within the industrial domains.

The sample taken is numbered 150 out of 948 workers of PT. Sandang Nusantara at Patal Lawang and Grati using stratified proportional random sampling. In order to avoid some inconsistency within the observation, the researcher had asked help from unit leaders, and for the deafness evaluation from the company's medical specialists. The independent variables of the study are individual factors (age, education, experience and training), noise absorbing mechanisms and noise-intensity; and the dependent variable is hearing threshold. The data are analyzed with multivariate method, i.e. general model Manova.

Result showed firstly, there is a significant difference ($p < 0.05$) in age, education and training, but little significant ($p > 0.05$) in experience; secondly, there is a significant interaction ($p < 0.05$) between age and training and training with education and experience; and thirdly, there is a significant interaction ($p < 0.05$) takes place between individual factors and noise-intensity, but only little interaction ($p > 0.05$) between noise absorbing mechanism with both individual factors and noise-intensity.

It can be concluded that working-safety-training program be highly necessary to prevent hearing threshold in East Java weaving manufactories workers; the program should be held in more than a week; some compositions such as age and education should be given more attention in order to achieve better training results; the training program should be a conducted for any workers working in the area with highly noise-intensity, since the higher the intensity, the lower the contribution of individual factors to prevent increase hearing threshold.

Keywords: *interaction, individual factors, absorbing mechanism, noise intensity, hearing threshold.*