

**CORRELATION BETWEEN INDIVIDUAL
CHARACTERISTICS, HUMAN POSTURE, AND
WORKSTATION WITH MUSCULOSKELETAL
DISORDER IN COMPUTER WORKERS AT
INDONESIAN STATE OWNED ENTERPRISES IN
SURABAYA**

UNDERGRADUATE THESIS

**MILIK
PERPUSTAKAAN
UNIVERSITAS AIRLANGGA
SURABAYA**



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**FACULTY OF MEDICINE
AIRLANGGA UNIVERSITY
SURABAYA**

2019

FORM OF APPROVAL

**CORRELATION BETWEEN INDIVIDUAL
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SURABAYA**

UNDERGRADUATE THESIS

**Submitted as One of the Requisite for the Completion of Preclinical
Study in Faculty of Medicine, Airlangga University, Surabaya**

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AIRLANGGA UNIVERSITY
SURABAYA**

2019

EXAMINER DECISION FORM

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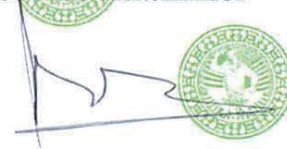
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ABSTRACT

Background: Computer becomes a highly used and essential tool in daily life. This also applies to occupational level. However, there are risk factors in using the computer within daily life while working. Due to these, computer workers develop complaint in upper extremities, but tend to ignore. The complaint silently decreases the life quality, efficiency, and productivity.

Purpose: To find the correlation between individual characteristics, human posture, and workstation with musculoskeletal disorder.

Methods: This is an observational analytic study, using total sampling technique. The subjects were given questionnaire of individual characteristics and NMQ for mapping the distribution of complaint. Observational sheets were provided to assess the human posture using NERPA Assessment Worksheet and workstation. Spearman's rank method was used to observe the correlation between individual characteristics, human posture, and workstation with musculoskeletal disorder.

Results: 112 chosen subjects were involved. For the individual characteristics, there was moderate correlation with musculoskeletal disorder. Meanwhile, human posture showed large correlation with musculoskeletal disorder. The workstation only showed small correlation with musculoskeletal disorder. All of these were calculated using alpha value 0.05 for the significance.

Conclusion: There were correlation with different level in each of individual characteristics, human posture, and workstation with musculoskeletal disorder.

Keywords: Individual Characteristics, Human Posture, Workstation, Musculoskeletal Disorder





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ABBREVIATIONS

MSD : Musculoskeletal Disorder

NERPA : Novel Ergonomic Postural Assessment

NIOSH : National Institute for Occupational Health and Safety

NMQ : Nordic Musculoskeletal Questionnaire

WHO : World Health Organization

WMSD : Work-Related Musculoskeletal Disorder