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UNIVERSITI TEKNOLOGI MARA

**THE EFFECTIVENESS OF EIA
ERGONOMICS TRAINING MODULE
AMONG OFFICE WORKERS**

ERNA FARYZA BINTI MOHD POOT

Thesis submitted in fulfilment
of the requirements for the degree of
Master of Science

Faculty of Health Sciences

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of student : Erna Faryza Binti Mohd Poot

Student I.D No : 2012825962

Programme : Master of Science (HS781)

Faculty : Health Sciences

Thesis title : The Effectiveness of EIA Ergonomics Training Module
Among Office Workers

Signature of Student :

Date : 20 June 2016

ABSTRACT

Office workers are commonly being affected by musculoskeletal pain and workplace stress and ergonomics training often is able to solve this problem, but there is still a lack of implementation of combinations of best approaches in using ergonomics training. This study was conducted to investigate the effectiveness of EIA ergonomics training (integration of 3 models; environmental control model, instructional design model, adult learning model) with conventional ergonomics training in order to evaluate the individual's level of environmental control, musculoskeletal pain and workplace stress among office workers. Sixty-eight office workers (n=68) participated in this study and were divided into two groups; a conventional group (n=34) and intervention group (n=34). Observation (ergonomics hazard risks) and self-report questionnaire techniques were used in this study to examine the effectiveness of ergonomics training after one week (post-intervention 1) and three months (post-intervention 2) after implementation. The results show EIA ergonomics training was more effective compared to conventional ergonomics training. There was a significant difference ($p < 0.05$) results for intervention group's observation of individual environmental control checklist score, workplace stress score and prevalence of musculoskeletal pain for post-intervention 1 and post-intervention 2. However, there was no significant difference ($p > 0.05$) between the control group and the intervention group for the individual environmental control questionnaire score in post-intervention 1 and post-intervention 2. In conclusion, the new EIA ergonomics training combining three models is found to be effective. Occupational therapists, industrial training centres and companies are recommended to use this EIA for reducing workplace stress and prevalence of musculoskeletal pain among office workers.

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TABLE OF CONTENTS

	Page
CONFIRMATION BY PANEL OF EXAMINERS	ii
AUTHOR'S DECLARATION	iii
ABSTRACT	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	x
LIST OF FIGURES	xii
LIST OF SYMBOLS	xiii
LIST OF ABBREVIATIONS	xiv
CHAPTER ONE: INTRODUCTION	1
1.1 Background Of Study	2
1.2 Problem Statement	6
1.3 Objectives	9
1.4 Research Questions	10
1.5 Research Hypothesis	11
1.6 Conceptual Framework	12
1.6.1 The Environmental Control Model	13
1.6.2 The Instructional Design Model	15
1.6.3 The Adult Learning Model	16
1.7 Significance Of Study	18
1.8 Scope Of The Study	19
1.9 Definitions Of The Key Terms	20