UNIVERSITI TEKNOLOGI MARA

THE EFFECT OF POSTURAL ANGLES ON WORK-RELATED MUSCULOSKELETAL DISORDERS (WMSDs) AMONG SEWING MACHINE OPERATORS (SMOs)

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Project report submitted in partial fulfillment of the requirements for the Bachelor in Environmental Health and Safety (Hons)
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Declaration by Student

Project entitled 'The Effect Of Postural Angles On Work-Related Musculoskeletal Disorders (WMSDs) among Sewing Machine Operators (SMOs)' is a presentation of my original work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative project and discussions. This project was done under the guidance and supervision of Mr. Abdul Mujid bin Abdullah as supervisor. It has been submitted to the Faculty of Health Sciences in partial fulfillment of the requirements for the Bachelor in Environmental Health and Safety (Hons).

Student's Signature

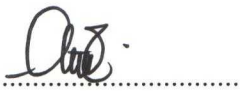

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TABLE OF CONTENTS

TITLE	PAGE
Approval by Supervisors	i
Declaration by Student	ii
Acknowledgement	iii
Table of Contents	iv
List of Tables	viii
List of Figures	ix
List of Appendices	x
List of Abbreviations	xi
Abstract	xii
CHAPTER 1 INTRODUCTION	
1.1 Background Information	1
1.2 Problem Statement	4
1.3 Significant of Study	6
1.4 Objectives	
1.4.1 General Objective	7
1.4.2 Specific Objectives	7
1.5 Hypothesis	8
1.6 Scope of Study	8
1.7 Conceptual Framework	9
1.8 Conceptual and Operational Definition	10
1.8.1 Conceptual Definition	10
1.8.2 Operational Definition	12
CHAPTER 2 LITERATURE REVIEW	
2.1 GIATMARA Background	13

Abstract

THE EFFECT OF POSTURAL ANGLES ON WORK-RELATED MUSCULOSKELETAL DISORDERS (WMSDs) AMONG SEWING MACHINE OPERATORS (SMOs)

By

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Introduction: Work-related musculoskeletal disorders (WMSDs) are a major cause of work related disabilities and injuries in the developed and developing countries. Several studies have reported that musculoskeletal disorders (MSDs) are more common among women than among men. Several studies have found that a high prevalence of musculoskeletal symptoms is neck and shoulder among sewing machine operators (SMOs). Sewing machine operation includes sew, seam, alter or repair wearing apparel. **Objectives:** The objectives of this study are to identify the prevalence of WMSDs among participants, to measure the participants' postural angles whilst performing their tasks, to determine the association between postural angles whilst performing their tasks and WMSDs among participants and to calculate the risk of getting WMSDs using Rapid Upper Limb Assessment (RULA). **Methodology:** A cross-sectional study was conducted on 45 SMOs at GIATMARA in Kuala Selangor. The inclusion and exclusion criteria were only SMOs who are registered at GIATMARA, literate person with age range between 15 to 50 years old with 8 hours of class session were involved in this study and SMOs who are experienced any accident, or have spinal abnormalities, do part time jobs after class session were excluded to take part in this study respectively. **Results:** The most prevalence of WMSDs was neck and followed by shoulder, wrist/hand and elbow. The mean of RULA score for left and right were 4.69 and 4.84 respectively. There were no significant association between postural angles and WMSDs among SMOs. **Conclusion:** There was no significant association between postural angles whilst performing their tasks and WMSDs among SMOs.

Keywords: Work-related musculoskeletal disorders, postural angles, sewing machine operators, RULA