

**UNIVERSITI TEKNOLOGI MARA**

**PARENTS' AWARENESS ABOUT THE  
CHARACTERISTICS OF HEALTHY SCHOOL  
BACKPACK AT PUNCAK ALAM, SELANGOR**

**NURISLAH BINTI BAHARUDDIN**

**Project submitted in fulfillment of the requirements  
For the degree of**

**Bachelor (Hons.) of Environmental Health and Safety  
Faculty of Health Sciences**

**July 2015**

## Declaration by Student

Project entitled “Parents’ Awareness about the Characteristics of Healthy School Backpack at Puncak Alam, Selangor” is a presentation of my original research work. Whenever contribution of other are involved, every effort is made to indicate this clearly, with due reference to literature, and acknowledgement of collaborative research and discussion. The project was done under the guidance of En Abdul Mujid bin Abdullah as Project Supervisor. It has been submitted to the Faculty of Health Science in partial fulfillment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons.).

Student Signature:



(NURISLAH BINTI BAHARUDDIN)

2011241214

910818-09-5046

DATE: ~~8/6~~ 6/6/2015 .....

## ACKNOWLEDGEMENT

*“Bismillahirrahmanirrahim”.*

*In the name of Allah, The Most Gracious, The Most merciful*

Alhamdulillah, I am grateful to Allah S.W.T for everything that happens, with the help and bless from HIM, I manage to successfully complete my study, data collection and analysis and also able to complete the dateline without much obstacle. I feel grateful to my family, my research team and friends for their support, cooperation and help all the way through my research.

Furthermore, i would like to thank Project Supervisor En Abdul Mujid bin Abdullah for his assistance and support in helping me completing my research and without him, I cannot complete my research. With his supervision, I finally manage to finish my research on time and also expand the scope as well.

Throughout the phase of my research, I also had help from dedicated Science Officers of Environmental Health and Safety Assistances, Mr. Syamsul Amri, Mr. Deli, and Mdm. Hasnida.

# Table of Contents

<b>Declaration by Student.....</b>	<b>ii</b>
<b>Approval by Supervisor .....</b>	<b>iii</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>iv</b>
<b>LIST OF TABLES.....</b>	<b>viii</b>
<b>LIST OF FIGURES .....</b>	<b>ix</b>
<b>LIST OF PLATE .....</b>	<b>x</b>
<b>LIST OF APPENDICES.....</b>	<b>xi</b>
<b>LIST OF ABBREVIATION.....</b>	<b>xii</b>
<b>ABSTRACT.....</b>	<b>xiii</b>
<b>ABSTRAK.....</b>	<b>xiv</b>
<b>CHAPTER ONE: INTRODUCTION.....</b>	<b>1</b>
1.1. Background	1
1.2. Problem statement	7
1.3. Study justification	11
1.4. Objectives	13
1.4.1. General objective	13
1.4.2. Specific objectives	13
1.5. Hypothesis	14
1.6. Inclusion and exclusion criteria	14
1.6.1. Inclusion criteria	14
1.6.2. Exclusion criteria	14
1.7. Conceptual framework	15
1.8. Conceptual and operational definition	16

## ABSTRACT

### Awareness of Parents about Characteristic of Healthy School Backpack

Nurislah Binti Baharuddin

---

In Malaysia, it is common thing to see children carrying a backpack especially during school day. Unfortunately, carrying a heavy backpack among schoolchildren has not yet become an issue or concern or threat in Malaysia. The objective of this study is to investigate the knowledge of parents about the characteristic of the school backpack and backpack-related musculoskeletal disorder. The awareness of parents about school backpack was divided into three domains such as standard school backpack, correct carrying of school backpack and musculoskeletal disorder related to the use of backpack. A cross-sectional study design was used to determine the knowledge of parents about the characteristic of the school backpack and backpack-related musculoskeletal disorder in Puncak Alam area. This study involves 300 parents of elementary school students that live and attend schools in Puncak Alam. The awareness of parent is assessed by using established questionnaire by Javadijala et al. (2012). All statistical analyses were calculated by using IBM SPSS software 20.0. Descriptive analysis was used to determine the awareness of parents. Out of 300 elementary school students, only 102 parents were willing to participate in this study. It consists of 57 mothers (55.9%) and 45 fathers (44.1%). Approximately, 67 (65.7%) of parents were not aware that backpack should not weigh more than 15% of child's body weight. However, 83 (81.4%) parents were found to be aware that the size of backpack should be fitted to child's body dimension. In conclusion, parent's awareness can manipulate the musculoskeletal pain or discomfort and weight of backpacks carried by their children. A low parental awareness of school backpack weight has connection to high prevalence of musculoskeletal pain amongst schoolchildren. These implied that the recommendation and guidelines concerning the safe load carriage and ways of good ergonomic work practice by schoolchildren are not communicate properly to those involved with child care.

**Keywords:** School backpack, school students, parents' awareness, low back pain among school students