

UNIVERSITI TEKNOLOGI MARA

**COMPARISON OF AEROBIC FITNESS
BETWEEN ATTENTION DEFICIT
HYPERACTIVITY DISORDER (ADHD) AND
NORMAL MALE CHILDREN AGED 7 TO 10
YEARS OLD**

**By
MOHAMAD HAFIZ BIN MOHAMAD KHANI**

**Research Project Report submitted in partial fulfillment of the
requirements for the
Degree of Bachelor of Sports Science (Hons.)**

Faculty of Sports Science and Recreation

January 2016

DECLARATION OF ORIGINAL WORK

UNIVERSITI TEKNOLOGI MARA (UiTM)

FACULTY OF SPORTS SCIENCE AND RECREATION


I, MOHAMAD HAFIZ BIN MOHAMAD KHANI (I.C: 930302-10-6427)

Hereby, declare that:

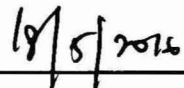
This work has not previously been accepted in substance for any degree, locally or overseas and is not being concurrently for this degree or any other degrees.

This research project was the best result of my independent work and investigation, except where otherwise states. I absolve Universiti Teknologi MARA (UiTM) and it is Faculty of Sports Science and Recreation from any blame because of my work.

All verbatim extract is being distinguished by quotation marks and sources of my information have been specially acknowledgement.

Signature : 
(Mohamad Hafiz Bin Mohamad Khani)

UiTM ID : 2013510725

Date : 

ABSTRACT

Continuous active physical activities may contribute to better aerobic fitness. ADHD children tend to be hyperactive such as running, jumping, climbing and interrupting in all activities and this factor hypothesized contributes to aerobic fitness. This study was conducted to investigate aerobic fitness level between ADHD and normal male children, and to compare the aerobic fitness level of ADHD and normal male children according to the VO_2 max normative. 35 ADHD and normal male children were recruited in the study. The VO_2 max parameter was measured for two different categories of children which are ADHD and normal male children. The independent variable (IV) representing by ADHD and normal children, and dependent variable (DV) was VO_2 max. Subjects were tested using 20 meter multi-stage shuttle run test and levels of the test were recorded to identify VO_2 max. Subjects aged ranges between 7 to 10 years old. The results showed aerobic fitness level has no significant difference between ADHD and normal male children. Meanwhile, VO_2 max normative also has no significant difference between both categories. Thus, null hypotheses were accepted.

Keywords: *ADHD, Aerobic fitness, Normal male children, VO_2 max*

TABLE OF CONTENTS

		Page
ACKNOWLEDGEMENTS		i
TABLE OF CONTENTS		ii
DECLARATION OF ORIGINAL WORK		iv
LETTER OF TRANSMITTAL		v
AFFIRMATION		vi
LIST OF TABLES		vii
LIST OF FIGURES		viii
LIST OF SYMBOLS AND ABBREVIATIONS		xi
ABSTRACT		x
CHAPTER		
1	INTRODUCTION	1
	1.1 Background of the Study	1
	1.2 Statement of the Problems	3
	1.3 Purpose of the Study	4
	1.4 Objective of the Study	4
	1.5 Hypotheses of the Study	5
	1.6 Operational Terms of the Study	5
	1.6.1 Aerobic Fitness	5
	1.6.2 Bleep Test	5
	1.6.3 Hyperactivity	6
	1.6.4 Impulsivity	6
	1.6.5 Pharmacological	6
	1.6.6 VO ₂ max	6
	1.6.7 Velocity	7
	1.7 Significant of the Study	7
	1.8 Limitations and Delimitations of the Study	7
	1.9 Assumptions of the Study	8
2	LITERATURE REVIEW	9
	2.1 Introduction	9
	2.2 Prenatal Development, Chromosomes Disability and ADHD Mechanisms	11
	2.3 Aerobic Fitness For Male Children	12
	2.4 ADHD and Aerobic Fitness	13

3	METHODOLOGY	15
	3.1 Introduction	15
	3.2 Instrument	16
	3.3 Warm-Up	16
	3.4 20 Meter Multi-stage Shuttle Run Procedures	17
	3.5 Statistical Analysis	17
4	RESULTS	18
	4.1 Introduction	18
	4.2 Descriptive Analysis	20
	4.3 Independent T-test Analysis	21
5	DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS	22
	5.1 Introduction	22
	5.2 Discussions	23
	5.3 Conclusion	24
	5.4 Recommendations	25
	REFERENCES	27
	APPENDICES	30