

UNIVERSITI TEKNOLOGI MARA

FINAL YEAR PROJECT REPORT

**PARENTAL INFLUENCES ON CHILDREN'S BODY MASS
INDEX (BMI) LEVEL AMONG KINDERGARTEN PUPILS IN
TADIKA TENGKU ANIS II, KOTA BHARU, KELANTAN**

NORAMIRAH BINTI CHE OMAR

(2014734687)

UMMI NABIHAH BINTI MOHD AZHAR

(2014711275)

NUR FARHAN NATASHA BINTI MOHAMAD NASIR

(2014161775)

**Report submitted in partial fulfillment of the requirement
for the degree of
Bachelor of Science (Hons.) (Statistics)
Center of Statistics Studies
Faculty of Computer and Mathematical Sciences**

JANUARY 2017

ACKNOWLEDGEMENT

IN THE NAME OF ALLAH, THE MOST GRACIOUS, THE MOST MERCIFUL

First and foremost, we are thankful to Allah S.W.T. for blessing us with strength and patience to complete this project successfully.

We are highly indebted to our beloved supervisor, Madam Shamsunarnie Binti Mohamed Zukri for the continuous support for this study. We are thankful for her aspiring guidance, immense knowledge and friendly advices during the project work. We could not have imagined that the accomplishment of this project would be possible without her.

In addition, we would like to thank the lecturer for Final Year Project (MSP660) subject, Sir Omar Kairan and also the other lecturers for their insightful comments and encouragement.

My appreciation also goes to Universiti Teknologi MARA (UiTM) Kelantan Campus of Kota Bharu which provided us an opportunity to undergo our Bachelor of Science (Hons.) Statistics and also for giving access to laboratory and research facilities. This project would not be possible without the precious support.

Lastly we would like to express a warm thanks to any organization, people or individual who involve directly or indirectly in this research study. Thank you.

TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMENT	i
TABLE OF CONTENTS	ii
LIST OF TABLES	iv
LIST OF FIGURES	iv
ABSTRACT	v
CHAPTER 1: INTRODUCTION	
1.1 Introduction	1
1.2 Problem Statement	2
1.3 Research Objective	3
1.4 Research Question	4
1.5 Research Hypothesis	4
1.6 Scope and Limitation of Study	5
1.6.1 Scope	5
1.6.2 Limitation of Study	5
1.7 Significance of Study	6
CHAPTER 2: LITERATURE REVIEW	
2.1 Introduction	7
2.2 Parental Influences Factors	
2.2.1 Parental Eating Behaviour	7
2.2.2 Parental Child-Feeding Practices	8
2.2.3 Future Health Concerns	10
2.2.4 Parental Nutritional Knowledge	11
CHAPTER 3: METHODOLOGY	
3.1 Target Population	12
3.2 Study Sample	
3.2.1 Inclusion Criteria	12
3.2.2 Exclusion Criteria	12
3.3 Sampling Frame	13
3.4 Sample Size	13
3.5 Sampling Technique	14
3.6 Research Design	15
3.7 Theoretical Framework	16
3.8 Data Collection Method and Tools	17
3.9 Pilot Study	19
3.10 Data Processing and Analysis	
3.10.1 Reliability Analysis	19
3.10.2 Normality Test	20
3.10.3 Descriptive Statistics	21
3.10.4 Chi-Square Test of Independence	22

	3.10.5 Independent T-Test	23
	3.10.6 Binary Logistic Regression	24
3.11	Summary of Data Analysis Technique	28
CHAPTER 4:	ANALYSIS AND RESULT	
4.1	Introduction	29
4.2	Reliability Analysis for Pilot and Actual Study	29
4.3	Normality Test	30
4.4	Descriptive Analysis	
	4.3.1 Demographic Characteristics of Respondents	30
	4.3.2 Level of Children's Body Mass Index	31
4.5	Chi-Square Test	32
4.6	Independent T-Test	32
	4.5.1 Homogeneity of Variance	32
4.7	Binary Logistic Regression	34
	4.6.1 The Omnibus Test Result	34
	4.6.2 The Hosmer and Lemeshow Test Result	35
	4.6.3 Cox & Snell and Nagelkerke R Square Analysis	35
	4.6.4 The Classification Table	36
	4.6.5 Variable in Equation	37
	4.6.6 The Summary of Binary Logistic Regression	37
CHAPTER 5:	CONCLUSION AND RECOMMENDATION	
5.1	Conclusion	38
5.2	Recommendation	39
REFERENCES		41
APPENDICES		43

ABSTRACT

Being underweight has a marked effect on one's physical health specifically on heart and circulation system, sex hormones and fertility, bones' strength and others. In Peninsular Malaysia, studied done by Khor and Tee (1997) stated that 32.6% of the boys and 35.9% of the girls were underweight among children aged 1 to 6 years old. In this case, family lifestyles can contribute on the eating behaviour of their children and finally the outcome of their weight. Thus, this study was conducted to investigate the parental influences factors that affecting the children's Body Mass Index (BMI) level among kindergarten pupils aged 5 to 6 years old in Tadika Tengku Anis II, Kota Bharu, Kelantan. The cross sectional design was used for this study and the sample size of 148 pupils from all the pupils in Tadika Tengku Anis II, Kota Bharu, Kelantan was obtained using Proportionate Stratified Random Sampling technique. A validated self-administered questionnaire was used as a data collection tool for this study. This study also uses Descriptive Statistics, Chi-square Test of Independence, Independent T-test and Binary Logistic Regression analysis to examine these factors that affecting the children's Body Mass Index (BMI) level. The prevalence of underweight amongst kindergarten pupils was 58.10%. The results have showed that there was no significant association on the children's Body Mass Index (BMI) level based on gender. Besides, there was also no significant mean difference in the children's Body Mass Index (BMI) level between the parental influences factors. The finding also indicated the factors that affecting the children's Body Mass Index (BMI) level were only Parental Nutritional Knowledge and gender for boys. In order for this study to obtain more precise results, it was recommended to apply other sampling techniques such as cluster sampling and also to use face-to-face interview as the data collection method.

Keywords: underweight, children, BMI, independent t-test, binary logistic