



CONSEQUENCE OF THE HEALTH STUDY IN STUDENTS ON BMI

Medical Science

Dr. Thavamani J MBBS, DGO, MBA, PHD

Dr. Deepa Sachdev* MBBS, DVD, DNB *Corresponding Author

Ms. Brinda Panneerselvam Medical Student, SMVMCH, Pondicherry.

ABSTRACT

Purpose: The health of young students is strongly linked to their academic success and it is vice versa academic success of students is strongly bonded with their health. Thus, helping students stay healthy is a fundamental part of the study.

Methodology: For the study, 60 school students of boys and girls in the ratio 2:1 from UAE were selected as subjects. Their age ranged between 12 to 16 years. The subjects have been divided into three groups each consisting of equal members of boys and girls. Experimental Group I was given physical activities, counselling and Diet; Experimental Group II was given physical activities and counselling for 10 weeks. Controlled Group was kept in active rest.

Results: The results of study showed a significant improvement in the BMI of the Experimental Groups I, II subjects than the Controlled group. Through the physical activities, counselling and Diet their BMI has got reduced and their academic performance increased.

Conclusion: It has been concluded that physical activities, counselling and Diet helps in improving the BMI and increase their physical wellbeing.

KEYWORDS

Physical activities, Counselling, Diet, Academic performance.

INTRODUCTION:

Health is a global concern of every people in the world. Public health emphasizes on prevention and embrace collective, multifaceted action to respond to emerging challenges to health practitioner and researchers. In its simplest terms, physical fitness is to the human body which fine-tuning an engine indent increases the performance. It enables people to perform up to their potential. It helps us to investigate the disease, determinants and risks, improve health care quality and helps to keep mind. School-based programs can play an important role in promoting healthy eating habits. Dietary factors contribute substantially to the burden of preventable illness and premature death. Healthy eating patterns in childhood and adolescence promotes health, growth, and intellectual development; prevent many problems, such as iron deficiency anaemia, obesity, eating disorders, and dental caries; and may prevent long-term health problems. At the same time, what humans do with their bodies directly affects the state of mind, fitness influences to some amount in the mental alertness and emotional wellbeing also which determine the character of man. School health programs can help children and adolescents in educating good health leads to skills, social support, and environmental reinforcement that they need to adopt long-term, healthy eating behaviours.

OBJECTIVES OF THE STUDY

Schools play a critical role in improving the dietary and physical activity behaviours of children and adolescents. Schools can create environments supportive of student's efforts to eat healthy and be active by implementing policies and practices that support healthy eating and regular physical activity this provides an opportunity for the students to learn about their behavioural of the body.

STATEMENT OF THE PROBLEM

The health of students is linked to their academic success. Both physical activity and healthy eating may help improve academic achievement. Healthy eating and regular physical activity play a powerful role in preventing obesity and chronic diseases, including heart disease, cancer, and stroke.

HYPOTHESIS

There will be significant differences in the subjects on selected variable of BMI due to the practices of Physical activities, counselling and Diet than the Control group.

LIMITATIONS

- 1) The study is focused only on selected students.
- 2) Even though there are several variables which can influence the determinants relating to the health of the student only selected variables have been considered
- 3) The study is not focused on the forecast.
- 4) The impact of other factors which influence the health and education is not included in analysing the data

SELECTION OF SUBJECTS

For the study, 60 school boys and girls at the ratio of 2:1 from UAE were selected as subjects. Their age ranged between 12 to 16 years.

METHODOLOGY:

For the purpose of study, 60 school students of boys and girls from UAE were selected as subjects. Their age ranged between 12 to 16 years. The subjects have been divided into three groups namely Experimental Group I & II and Control group in each group there were equal number of boys and girls. Experimental Group I was given physical activities, counselling and Diet; Experimental Group II was given physical activities and counselling for 10 weeks. Controlled Group were not given any inputs and kept in monitoring.

SELECTED VARIABLES FOR EXPERIMENT

DEPENDENT VARIABLES:

Physiological variable

- BMI

INDEPENDENT VARIABLES

- Physical activities
- Counselling
- Diet

RESULTS AND DISCUSSIONS ON DEPRESSION:

For statistical analysis the data collected from the pre-test and the post test on BMI of experimental groups and control group have been presented in Table I

Table I

Analysis of Covariance for the pre and post test data on BMI

TEST	GROU P1	GROU P2	GROU P3	df	SS	MOS	F value
Pre	27.45	25.33	26.66	2	45.58	22.79	0.3
				57	398.97	6.99	
Post	25.49	23.8	26.19	2	60.41	30.2	1.34
				57	1280.14	22.45	
Adjusted	25.7	23.62	26.15	2	712.61	356.30	7.11
				56	2807.3	50.13	

*Significant at 0.05 level of confidence the Table value for df 2 and 56 was 3.16 and Table value for df 2 and 86 was 3.17.

The post test scores analysis proved that there was significant difference between the groups as the obtained F value at 1.34 was greater than the pre-test F value of 0.3. This proved that the differences between the post-test mean at the subjects were significant. The adjusted mean scores show the statistical treatment that obtained F value at 7.11 was greater than the required F value at 3.16. The results

showed that there was Significant differences among the means due to 10 weeks of physical activities, counselling and Diet on the physiological variable BMI.

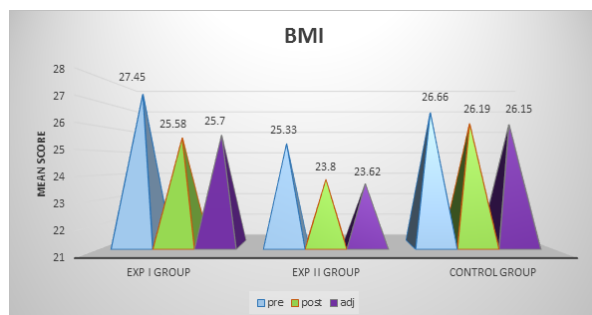
The results were subjected to post hoc analysis using Scheffe's Confidence Interval test to see which group has most significant results. The results are presented in table II.

TABLE - II
SCHEFFE'S POST-HOC TEST FOR BMI

Groups			Mean	CD
Exp Group1	Exp Group2	Cnt Group		
25.7	23.62		2.07	1.002*
25.7		26.15	0.45	
	23.62	26.15	2.53	

Table-II shows that there was significant difference between group which followed physical activities, counselling and Diet and control group, the group which followed physical activities, counselling and control group, the group which followed physical activities, counselling & Diet and the group which followed physical activities, counselling only. The obtained adjusted mean values were presented in bar graph.

BAR GRAPH SHOWING PRE, POST AND ADJUSTED POST-TEST VALUES ON BMI



CONCLUSIONS

Within the limitations the present study results were obtained, the following conclusion was drawn.

For the purpose of this study it was hypothesized that there will be significant differences in the subjects on selected variable of BMI due to the practices of Physical activities, counselling and Diet than the Control group.

The physiological variables BMI was significantly improvement Due to 10 weeks of Physical activities, counselling and Diet (Experimental Group- I), Physical activities, counselling only (Experimental Group-II) among subjects when compared to the control group.

SUGGESTION FOR FURTHER RESEARCH

1. The study could be undertaken on other age groups.
2. The study may be undertaken for college students and other profession.
3. This study may be undertaken for other problems also.

REFERENCES

1. World Health Organization (1995), School health initiative, retrieved from <http://www.who.int/school youth health/gshi/en/>
2. Centre for Disease control and prevention (1946), Retrieved from <http://www.cdc.gov/healthyyouth/wsc/index.htm>
3. School Health Guidelines – Manual for private schools in Dubai (2011), Primary Health Care – Health Affairs Department – community Health Services Programs section, schools & Educational institutes Services Unity, Dubai, Pg.8-10.
4. Centre for Disease control and prevention (2011) retrieved from <http://www.cdc.gov/healthyyouth/npao/strategies.htm>.
5. Lipas77 (2011), Business concept, studymode.com, January 2011.
6. Olivia Olarte-Ulherr (2012), "Hurdles to a healthy Nation" Khaleej Times, Monday, December 10, 2011