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# Comparison of Health Knowledge and Academic Grade of Senior Secondary School Students

Sanjoy Dolai<sup>1</sup>, Prof. S.R. Mishra<sup>2</sup>

<sup>1</sup>Chandrakona Vidyasagar Mahavidyalaya, Chandrakona, Paschim Medinipur, 721201, West Bengal

<sup>2</sup>Dept. of Phy. Edn., Panskura Banamali College, Purba Medinipur.

**Abstract:** 100 students (50 boys and 50 girls) from 12<sup>th</sup> class were chosen as subjects. They were assessed about their knowledge of Health and Academic grade by a prepared questionnaire and Senior Certificate Examination respectively. After analysis it was found that Girls have performed better in Academic grade in comparison to Boys while Boys shown better scoring on health knowledge in comparison to Girls.

**Keywords:** Knowledge of Health, Academic Grade.

## I. INTRODUCTION

Health has been regarded as the foremost heavenly blessing. As cited by Justus (1961), Health is “the rich man’s blessing, the poor man’s wealth.” Health knowledge was considered as a store of information related to up-keep of body and its poise, if recalled and exercised, gives an individual the capacity for being healthy. Health education contributes to academic achievement through their contribution to social development. It has been brought into the field of education so that an individual may develop favourable attitude for healthful and joyful life. Health education is perhaps the largest of the areas allied to physical education. It is commonly used in the sense of total fitness of the person i.e. physical, mental, emotional and social. These sub-areas are also functions or goals of health education (Jenny 1961). *The purpose of the study was to ascertain the relation of knowledge of health with academic grade of senior secondary school students.*

## II. METHODOLOGY

A questionnaire was developed to measure Knowledge on Health. An attempt was made to prepare 150 multiple choice questions on the basis of knowledge, thus acquired, so as to draw a rough draft of the questionnaire. Multiple-Choice question is composed of short or incomplete question or statement followed by three to five potential answers (Bosco & Gustafson 1983). The questionnaire comprehensively covered the area of nutrition, anatomy and physiology, community health, communicable diseases and general health and hygiene. Consequently, analysis technique, by using discriminative power of an item, was employed which is a modified method based upon the biserial. The total number was scrutinized and reduced to fifty as a result of item analysis. The validity of the questionnaire was also obtained by means of logical validity. One hour duration was fixed for answering the questions.

Only the 12<sup>th</sup> class students numbering 100 (50 boys and 50 girls) were randomly selected as subjects for the study. It was emphasized that they should tick ☒ the response after careful reading of the question; and avoid over writing. Each correct response carried two scores. The results of the subjects at their Senior Certificate Examination conducted by West Bengal Board of Higher Secondary Education were being obtained and converted into percentage, rounded off to the nearest whole number for comparing with the scores as obtained from knowledge on Health test. The ‘mean’ and the ‘standard deviation’ of all the scores obtained by the subjects were worked out. Descriptive analysis was used to find out the variability or spread of scores.

TABLE - 1  
DESCRIPTIVE MEASURES OF ALL THE VARIABLES  
ON THE WHOLE SAMPLE (N = 100)

Variables	Mean	S.D.
Academic Grade	49.86	12.77
Knowledge of Health	64.72	18.55

Mean and standard deviation values of academic grade were found to be 49.86 and 12.77, respectively. Similarly mean and standard deviation of participation in physical activities were 39.34 and 15.57, whereas those of knowledge of health were 64.72 and 18.55 respectively.

TABLE - 2  
DESCRIPTIVE MEASURES OF ALL THE VARIABLES  
ON THE BOYS' SAMPLE (N = 50)

Variables	Mean	S.D.
Academic Grade	48.49	12.33
Knowledge of Health	67.11	15.90

The above table illustrates the descriptive analysis of boys' sample. Mean values of scores in academic grade and knowledge of health were 48.49 and 67.11 respectively. Likewise, standard deviations were 12.33 and 15.90 respectively.

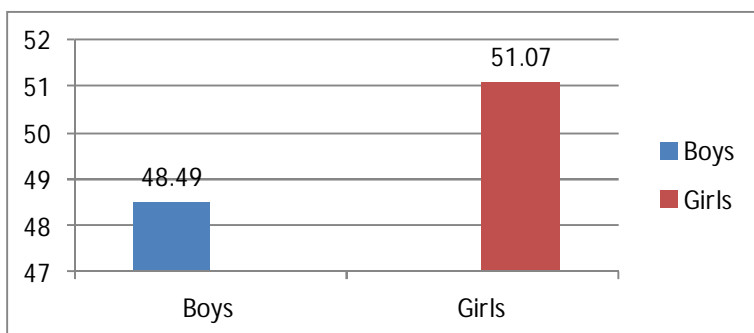
TABLE - 3  
DESCRIPTIVE MEASURES OF ALL THE VARIABLES  
ON THE GIRLS' SAMPLE (N = 50)

Variables	Mean	S.D.
Academic Grade	51.07	13.04
Knowledge of Health	62.65	20.36

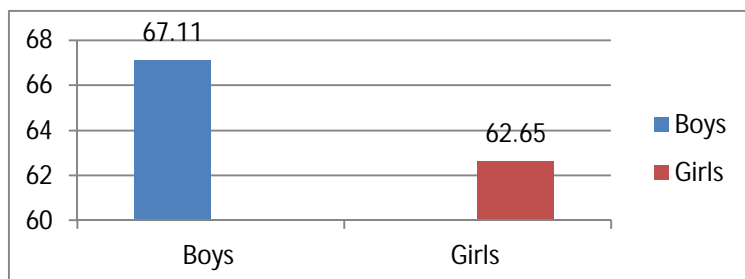
The above table presents the mean values of academic grade, participation in physical activities and knowledge of health which were 51.07 and 62.65, whereas, the standard deviations were 13.04 and 20.36 respectively.

The average academic grade and knowledge of health in Boys and Girls are presented in Fig. 1 & 2.

Academic Grade



Knowledge of Health



### III. DISCUSSION

Mean value of academic grade of all the students was 49.86. Corresponding values for boys and girls were 48.49 and 51.07 respectively. Mean value of academic grade for the girls was higher than that of the boys. Mean value of the whole sample regarding knowledge of health was 64.72 whereas; the boys' sample indicated higher mean value of 67.11. Corresponding value for girls was found as 62.65.



#### IV. CONCLUSION

The study indicated that the Girls concentrated more on academic pursuit, may be because they have comparatively more time at their disposal. Tendency of compensation, due to lack of opportunity regarding participation in physical activities, may be a factor that inspired girls to take up academic matters more seriously.

Boys showed a tendency to acquire higher score in knowledge of health as compared to girls. Social freedom for girls was not equivalent to that of the boys. Hence, acquisition of knowledge of health among girls through social interaction in an incidental manner was greatly minimized.

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