iJRASET
International Journal For Research in Applied Science and Engineering Technology



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

**Volume:** 10 **Issue:** IV **Month of publication:** April 2022

**DOI:** https://doi.org/10.22214/ijraset.2022.41403

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
*ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538*
*Volume 10 Issue IV Apr 2022- Available at www.ijraset.com*

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

Sanjoy Dolai[1], Prof. S.R. Mishra[2]
[1]*Chandrakona Vidyasagar Mahavidyalya, Chandrakona, Paschim Medinipur, 721201, West Bengal*
[2]*Dept. of Phy. Edn., Panskura Banamali College, Purba Medinipur.*

***Abstract: 100 students (50 boys and 50 gorls) from 12th 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 12th 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.

©IJRASET: All Rights are Reserved 

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 |

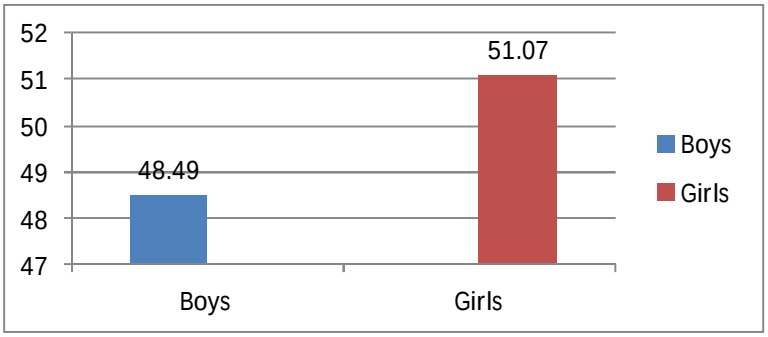
The above table illustrates the descriptive analysis of boys' sample. Mean values of scores in academic grade and knowledge of health were 48.49 and 67.11 respectively. Likewise, standard deviations were 12.33 and 15.90 respectively.

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

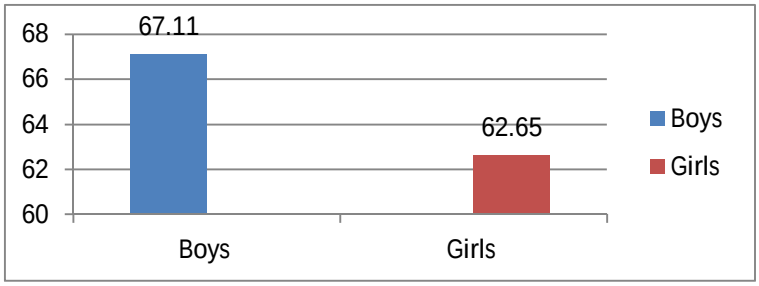
| Variables | Mean | S.D. |
|---|---|---|
| Academic Grade | 51.07 | 13.04 |
| Knowledge of Health | 62.65 | 20.36 |

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.

©IJRASET: All Rights are Reserved 

*ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538*
*Volume 10 Issue IV Apr 2022- Available at www.ijraset.com*

## IV. CONCLUSION

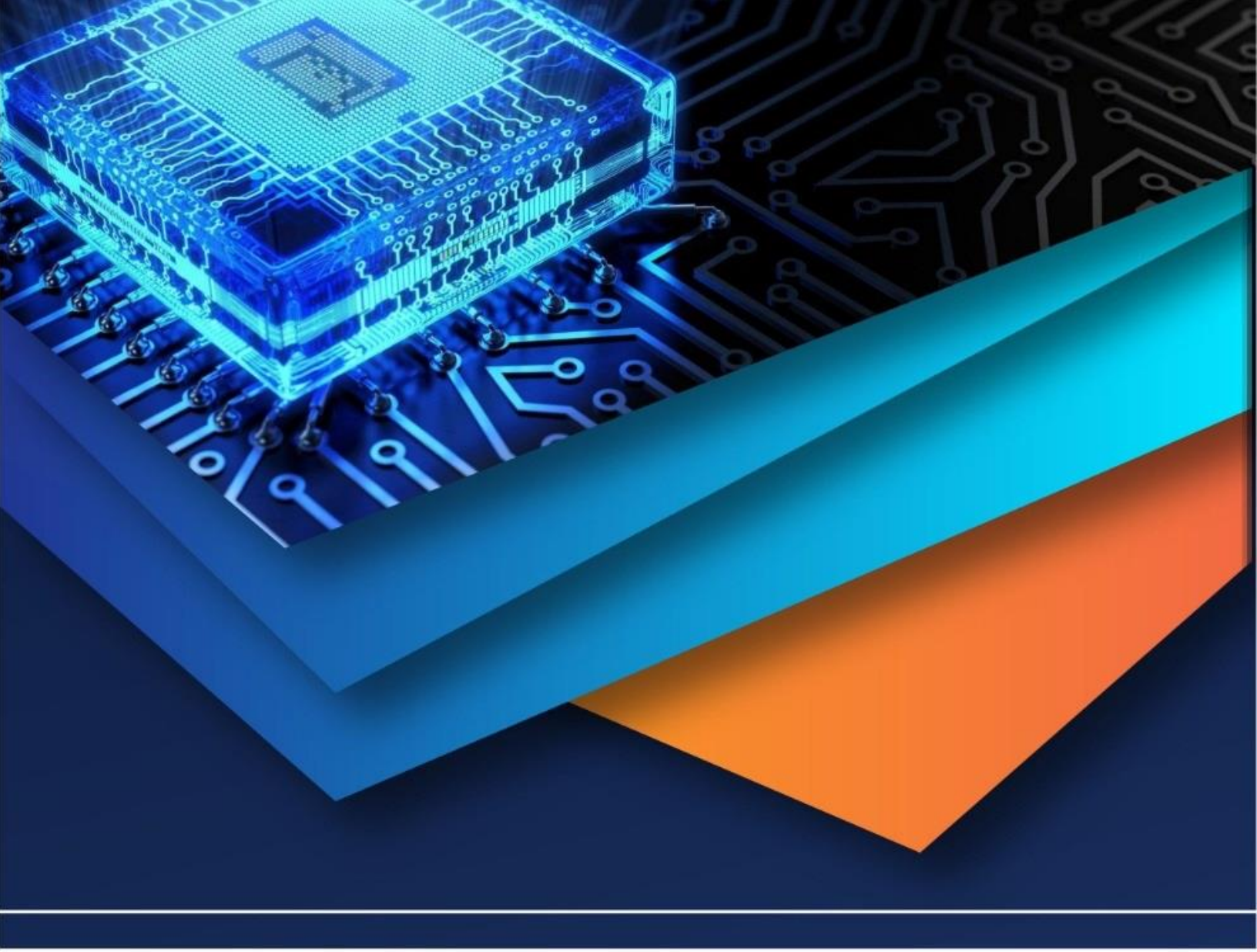
The study indicated that the Girls concentrated more on academic pursuit, may be because they have comparatively more time at their disposal. Tendency of compensation, due to lack of opportunity regarding participation in physical activities, may be a factor that inspired girls to take up academic matters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

## REFERENCES

[1] Bosco, James S. and Gustafson, William F. (1983) Measurements and Evaluation in Physical Education, Fitness and Sports (Englewood Cliffs, New Jersy : New Prentice Hall Inc.,), pp. 280-283.
[2] Jenny, John H. (1961) Physical Education, Health Education and Recreation: Introduction to Professional Preparation for Leadership (New York : Mc Millan Co.,), p.43.
[3] Schiffres, Justus J.( 1961) Essentials of Healthier Living (New York : John Wiley and Sons Inc.,), p.2.

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)