

Relationship of Health Status on Achievement in Biology of Higher Secondary School Students

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Abstract

Health is an important factor for academic performance at school and in higher education. Consequently in the context of schools or colleges, promoting the health and well being of all members means promoting effective learning. The present study intended to feel out of the relationship OF HEALTH STATUS ON ACHIEVEMENT IN BIOLOGY OF HIGHER SECONDARY SCHOOL STUDENTS of Pathanamthitta district. It is mainly concerned with 300 higher secondary school students from 10 different schools of Pathanamthitta District. The investigator used standardised questionnaires based on the health of higher secondary school students and Quarterly marks of higher secondary school students in biology for collecting data. The results of the study indicate that there exists a significant positive correlation between the health status and achievement of higher secondary school students. The result focuses on comprehensive health programs students organics in schools that definitely relationships student's achievement.

Key words: Health status, Achievement, Higher Secondary School student

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I. INTRODUCTION

Health is an important factor in all human life for better performance in different aspects in academic as well as in service along with maintaining good relationship with others. Promoting the health and well being of all members means promoting effective learning. A systematic review to examine whether school health programs improved academic success provided positive evidence for at least some programs. Similarly another review showed positive association between par health and academic outcome or performance regards the academic achievement of students; higher education institutions face deal challenges. The schools will need to match the private sector efficiency in the provision of training and development while simultaneously remaining as centres of learning for young people. School and college management committees are progressively more accountable for their student retention and completion rates and other educational outcomes. An important contribution to achieving sound outcomes is a careful focus on the needs of individual learners and their satisfaction with their learning experience.

The potential for health to improve cognitive function learning and academic achievement in children has received attention by researchers and policy makers. It is widely accepted that health and well being are essential elements for effective learning. Vice versa education is a strong predictor of lifelong health and quality of life in different population settings and time. However the pathways through which education leads to better health and longer life expectancy are still not clearly understood. It is widely held however that education, health and social outcomes are very closely

interdependent. Social and occupational status in adulthood and health status throughout life are largely determined by success in school and years of schooling. Among school children academic success, health status are cyclically interdependent. Poor school performance is associated with health compromising behaviour and physical, mental and emotional problems. School performance is also compromised by poor nutrition, substance abuse, sedentary behaviour, violence depression and sociality. This negative cycle established during the school years, has a large impact on success and productivity in our society. The findings of the study revealed that the health status and academic achievement of adolescence students are interrelated. As health increases the academic achievement also increases. Students with better health status can prepare well and do well in the examination. So the parents can provide nutritious food give more care and attention to maintain the health status of their children and motivate them to perform well in the examination. The teachers also give advice to their students to take nutritious food and encourage them to achieve better in the examination.

II. NEED AND SIGNIFICANCE OF THE STUDY

Many factors are associated with academic outcomes. Adolescents who use alcohol, tobacco or other drugs achieved lower grades, had more negative attitudes towards school, and exhibited increased absenteeism. Furthermore academic outcomes and malnutrition additionally plays an

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important role in academic performance. Hence health surveillance questionnaires to detect students with health problems associated with academic functioning, should inquire about social support, general health, physical and psychological health, study related issues, and help seeking behaviour and life events in the past. This study explored the associations between student health and their academic performance. Health related factors such as hunger, physical and emotional abuse and chronic illness can lead to poor school performance. Health risk behaviour such as early sexual initiation, violence and physical inactivity are consistently linked to poor grades and test scores and lower educational attainment.

Academic success is an excellent indicator for the overall well being of youth and a primary predictor and determinant of adult health outcomes. Leading national education organizations recognize the close relationship between health and education, as well as the need to foster health and well being within the education environment for all students. Children who are unhealthy are at higher risk for school programs than students who are free from medical problems. Students with poor health have a higher probability of school failure, grade retention and dropout. The relationship between a student's health and academic success is complex. Common manageable factors of student health are nutrition, maintaining healthy weight and physical fitness. Through a comprehensive literature review the relationship among school achievement and nutrition maintaining healthy weight and physical fitness are examined. The efficacy of educational programs to improve nutrition, maintain healthy weight and increase physical fitness is evaluated. Establishing a positive school climate where healthy engaged and prepared to learn is a critical component in increasing student's engagement and closing the achievement gap. Educators need to be aware of the impact of education related outcomes and school ability to provide support to students in school scenarios because health is very important for achieving goals in life.

III. OBJECTIVES OF THE STUDY

1. To find out the level of health status of higher secondary school students.
2. To find out the level of achievement of higher secondary school students.
3. To find out whether there is any significant difference between the mean scores of health status of higher secondary school students
4. To test whether there is any significant difference between the mean scores of achievement of higher secondary school students
5. To find out whether there is any significant correlation between Health status and achievement in biology of higher secondary school students.

IV. METHODOLOGY

The present study is an attempt to investigate the correlation between health status and achievement in biology of higher secondary school students. Normative survey method was adopted for the present study. Data was collected from the

300 higher secondary school students from 10 different schools of Thiruvananthapuram District. Mean standard deviation, t-test and correlation analysis were used for analysing data.

V. TOOL USED FOR THE STUDY

- **A questionnaire based on health of higher secondary school students.**

The investigator has used a standardised questionnaire. These are responded by the student either in (yes) or (no). A score of one is awarded to each "Yes" response, which is indicative of Health and zero to "No". Higher scores on this scale indicate higher Health status and low scores show low Health status.

- **Quarterly marks of higher secondary school students in biology statistical techniques used.**

Mean, standard deviation, t-value and correlation were used for analysing the data

Analysis and discussion

The result of the objective to find the health and achievement in biology is discussed

Table 1

Percentage of the classified sample into three groups (Low, average and High) of health status and achievement in biology

Variables	Low	Average	High
Health Status	26.6	60.0	13.3
Achievement in biology	21.6	66.6	11.6

It is inferred from Table -1 that the level of health status and achievement in biology of higher secondary school students is average in nature.

Table 2

Showing the significant difference between the mean scores of health status and achievement in biology of boys and girls.

Variables	Gender				t- value	Significant at 0.05 level
	Boys (140)		Girls (160)			
	Mean	SD	Mean	SD		
Health status	64.5	9.5	62.1	8.9	2.25	S
Achievement in biology	62.5	8.8	60.5	8.5	2	S

From Table -2, it is clear that boys scored significantly higher than girls with regard to health There will be a significant correlation between Health status and achievement in biology of higher secondary school students.

Table 3

Showing the significant difference between the mean scores of health status and achievement in the relationship of rural and urban students.

Variables	Locality				t- value	Significant at 0.0 level
	Urban (180)		Rural (120)			
	Mean	SD	Mean	SD		
Health status	66.5	12.8	63.8	10.35	2.01	S
Achievement in relationship	64.2	18.11	60.2	16.69	1.97	S

Table 3 reveals that the rural students differ much from urban ones in the case of health status and achievement in biology of higher secondary school students.

Table 4

Showing the significant difference between the mean scores of health status and achievement in relationship of students belong to nuclear and joint families

Variables	Families				t- value	Significant at 0.01 level
	Nuclear (240)		Joint (60)			
	Mean	SD	Mean	SD		
Health status	62.51	12.13	66.9	10.24	2.86	S
Achievement in biology	61.9	11.51	61.8	11.31	0.06	NS

From the table 4, it is seen that health status of students from joint family scored significantly higher than those from nuclear family and type of family has no significant difference on achievement in relationships among higher secondary school students.

Table 5

Correlation between health status and achievement in relationships of higher secondary school students.

Comparison of Variables	Sample size	Coefficient of correlation (r)	Level of significance
Health status vs Achievement in biology	300	0.61	0.01

The 'r' value was found to be 0.61. This indicates that there is significant positive correlation between health status and achievement in biology of secondary school students.

VI. FINDINGS OF THE STUDY

- The level of health status and achievement in the relationship of secondary school students is average in nature.
- The boys scored significantly higher than girls with regard to health status and the achievement.
- The rural students differ much from urban ones in the case of health status and achievement in relationships.
- The health status of students from joint families scored significantly higher than those from nuclear families and this type of family has no significant difference on achievement in relationship biology among higher secondary students.
- There is a significant positive correlation between health status and achievement in biology of higher secondary school students.

VII. CONCLUSION

The present study aimed at finding the relationship between health status and achievement of higher secondary school students in biology stream. The purpose was to compare the mean score of health status and achievement based on gender, the locality, the type of family. Here the investigator found that there is a positive correlation between health status and achievement of secondary school students.

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IX. HYPOTHESES OF THE STUDY

- The level of Health status of higher secondary school students is average in nature.
- The level of achievement of higher secondary school students is average in nature.
- There will be a significant differences in the mean scores of health status of higher secondary school students with respect to
 - a) Gender (Male/Female)
 - b) Locality of the students (Rural/ Urban)
 - c) Type of family (Nuclear / Joint)
- There will be a significant differences in the mean scores of achievement of higher secondary school students with regard to
 - a) Gender (Male/Female)
 - b) Locality of the students (Rural/ Urban)
 - c) Type of family (Nuclear / Joint)

ool student status and the achievement also.