
ENVIRONMENT RELATED HEALTH BEHAVIOUR OF SECONDARY SCHOOL STUDENTS

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Abstract

In the universe, the earth is the only known planet which has all favorable environments for human lives. However, the behaviour of human being is decreasing the quality of the environment which has direct influences on human health. In the present study the investigators tried to find out the environment related health behaviour of secondary school students. The investigator used the normative survey method for the study. The samples of 100 students from the state board high schools of Coimbatore district. The tool used for the study namely "Environment Related Health Behaviour Survey" was constructed and validated by the researcher (2014) to assess the secondary school students' behaviour related to environment related health. The collected data were computed and analyzed by using descriptive and inferential statistical techniques. The result revealed that the secondary school students have high environment related health behaviour.

Introduction

The nature provides the healthy environmental element like air, water, soil, light, etc. These natural elements fulfill the essential needs of human and provide comfortable life. But, unplanned and poor planned industrial and urban development, over exploitation the natural resources, improper disposal of domestic and industrial wastages are the great threats to retain the quality of environment. The poor quality of air, chemically polluted river, toxic pollution in soil, acid rain, radiation threats, etc. evidence that the present quality of environment is rapidly decreases its quality. An estimated 12.6 million people died as a result of living or working in an unhealthy environment (WHO, 2016) reveals that the poor quality of the world

environment. Particularly in developing and undeveloped countries the quality of environment is a great threat to human health. Hence, it is the need of the hour in changes of behaviour of the people in protection of personal health from polluted environment.

Statement of the Problem

In the modern world the tendency of human being seeks temporary joy without thinking of sustainable environment. The irresponsible utilization of natural resources, toxic chemicals, energy resources, use and throw of non degradable materials, etc., leads enormous hazardous to the environment. The polluted environment creates many eternal problems for the future generation. To avoid and overcome from these serious issues human need to aware about the value of precious environment. The awareness may enhance positive attitude towards both environmental health and personal health. The prime wealth of a nation is the sound health of people. Especially, the health of children & youth is very important, because they are the future

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pillar of the nation. Hence, an attempt was made to study on “The environment related health behaviour of secondary school students”.

Need and Significance of the Study

To maintain sustainability along with development become great challenge. Globally to achieve economic growth boosted hazardous industrial development and toxic inputs in agricultural activities which are become the great threat to healthy life. The contemporary research findings reveal that the pollution not only injures the natural elements but also creates genetic disorder among all living being. In this circumstance we need to get back the pure environment and we need to work together for long duration. But, the immediate need is to protect our health from the polluted environment. For that we need to create awareness among students. However, the ultimate solution is the need of behavioural changes among young generation to sensitize personally to protect the environment which inturens protect our health.

The study may help the teaching community at various levels. The results of the study may help teacher educator to find solution for how to teach environment related health concept. The finds of the study may enlighten to the curriculum frame workers to incorporate the environment related health concept withvarious application strategies. It may help the young generation to create awareness about environment related health.

Objectives of the Study

The present study has the following objectives:

1. To study the environment related health behaviour of secondary school students.
2. To find out the significant difference, if any in the behaviour of secondary school students towards environment related health with respect to gender, locality and types of school.
3. To analyses the interaction effect of gender, locality, and types of school on the behaviour of secondary school students towards environment related health.

Hypotheses of the Study

Based on the objectives the following hypotheses were formulated:

1. There is no significant difference in the mean scores of secondary school students in their behaviour towards environment related health with respect to (a) Gender, (b) Locality, (c) Types of school.
2. (a) There is no significant effect of (a) gender, (b) locality & (c) type of school on environment related health behaviour of secondary school students.
 - (b) There is no significant interaction effect between gender and types of school on environment related health behaviour of secondary school students.
 - (c) There is no significant interaction effect between gender and locality of school on environment related health behaviour of secondary school students.
 - (d) There is no significant interaction effect between types of school and locality on environment related health behaviour of secondary school students.

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3. There is no significant interaction effect between gender, type of school and locality on environment related health behaviour of secondary school students.

Delimitation of the Study

The present study has the following delimitation:

1. The investigators selected only 100 students from standard IX.
2. The investigators selected sample only from state board secondary schools in Coimbatore district, Tamil Nadu.

Materials and Methods Used

In the present study, the investigators used simple random sampling and have given due representation to gender, locality and type of school.

Tool

The investigators constructed a tool entitled "Environment related health behaviour survey" (2014). The tool contains 26 items with five point likert scale rating and all statements are positive. Hence, the maximum of 130 and the minimum is 26. The reliability of this tool is found to be 0.797.

Sample

The sample consisted of 100 secondary school students studying in various state board schools in Coimbatore district, Tamil Nadu.

Collection of Data

The investigators got permission from the head of the institution of six schools of Coimbatore district and visited each school personally and collected the data from the respondents. The investigators distributed the tool to the standard 9th students and assured them that their response would be kept confidential and used for research purpose only. Clear instruction was given to enable them to give their response meaningfully. The gathered responses were scored by the researcher.

Statistical Analysis

The collected data were analyzed by using descriptive and inferential analysis. The statistical techniques 't' and factorial ANOVA test were employed for analysis and interpretation of data.

Analysis of the Data

Table1 Environment Related Health Behaviour of Secondary School Students

N	Mean
100	102.05

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The above table shows the mean of score of environment related health behaviour of secondary school students. The mean value is greater than the mid value and hence, the secondary schoolstudents in Coimbatore have favorable environmental related health behaviour.

Testing Of Hypotheses

Hypothesis-1 There is no significant difference in the mean scores of secondary school students in their bheaviour of environment related health with respect to (a) Gender, (b) Locality, (c) Types of school.

Table 2 Difference in Environment Related Health Behaviour of Secondary School Students with Respect to (A) Gender, (B) Locality and (C) Type of School

Variables	Categories	N	Mean	SD	t-value	Sig	
Gender	Male	46	94.86	13.89	5.577	.000*	
	Female	54	108.15	9.78			
Locality	I	Urban	33	101.09	15.022	2.008	.049*
		Semi urban	34	107.59	11.255		
	II	Semi urban	34	107.59	11.255	3.560	.001*
		Rural	33	97.30	12.378		
	III	Rural	33	97.30	12.378	1.118	.268
		Urban	33	101.09	15.022		
Type of school	Govt	53	102.96	13.70	.714	.477	
	Private	47	101.02	13.39			

*significance at 0.05 level

The table 2 shows that there is a significant difference between male and female, urban and semi urban, semi urban and rural students in their mean score with reference to their environment related health behaviour. The calculated t-values (5.577, 2.008, & 3.560) are more than the table value (1.96). However, there is no significant difference between rural and urban, government and private school student in their mean score with reference to their environment related health behaviour. The calculated t-values (1.118 & .714) are less than the table value (1.96). Hence the null hypothesis 1 (a), 1 [b, (I, II)] are rejected at 0.05 level and null hypothesis 1 [(b), III], 1 (c) are accepted at 0.05 level.

Hypothesis-2(a) There is no significant effect of (a) gender, (b) locality & (c) type of school on the behaviour of secondary school students towards environment related health. (b) There is no significant interaction effect between gender and types of school on environment related health behaviour of secondary school students. (c) There is no significant interaction effect between gender and locality of school on environment related health behaviour of secondary school students. (d) There is no significant interaction effect between types of school and locality on environment related health behaviour of secondary school students.

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Table 3 Three Way Factorial Anova – Effects of Gender, Locality and Type School on Their Behaviour of Environment Related Health

Variables	Type III Sum of Squares	df	Mean Square	F	Sig.
Gender	4058.483	1	4058.483	34.014	.000*
Locality	1057.593	2	528.796	4.432	.015*
Type of school	4.069	1	4.069	.034	.854
Gender * Locality	29.125	2	14.562	.122	.885
Gender * Type of school	53.820	1	53.820	.451	.504
Locality * Type of school	814.359	2	407.179	3.413	.037*
Gender * Locality * Type of school	821.930	2	410.965	3.444	.036*
Error	10499.970	88	119.318		
Total	1059541.000	100			
Corrected Total	18120.750	99			

*Significant at 5% level

The above factorial ANOVA in table 3 reveals that there is a significant effect of gender ($F(1,88) = 34.014, P < 0.05$), locality ($F(2,88) = 4.432, P < 0.05$) on environment related health behaviour and there is no significant effect types of school ($F(1,88) = .034, P > 0.05$) on environment related health the behaviour. Hence, the formulated null hypothesis 2(a) is rejected in terms of gender and locality. However, the calculated 'F' value is less than the table value at 5% significant level for type of school. Hence, it is failed to reject the formulated null hypothesis 2(a) in terms of types of schools and it is concluded that enough evidence is not available to prove the null is false at 5% significant level.

The above table also reveals that the calculated 'F' value is less than the table value at 5% significant level for interaction effects of gender and locality [$F(2,88) = .122, P > 0.05$], gender and types of school [$F(1,88) = .504, P > 0.05$] on environment related health behaviour of secondary school students. Hence, it is failed to reject the formulated null hypotheses 2(b) & 2(c) in terms of interaction effects of gender and locality and gender and types of school and it is concluded that enough evidence is not available to prove the null is false at 5% significant level.

However, there is a significant interaction effects of locality and types of school [$F(2, 88) = 407.179, P < 0.05$] on environment related health behaviour of secondary school students. Hence, the formulated null hypothesis 2(d) is rejected

Hypothesis-3 There is no significant interaction effect between gender, type of school and locality on environment related health behaviour of secondary school students.

The above factorial ANOVA in table 3 reveals that there is a significant interaction among gender, locality and types of school [$F(2, 88) = 3.444, P < 0.05$] and this interaction has significant effect on behaviour of environment related health. Hence the formulated null hypothesis-3 is accepted.

The female semi urban government secondary school students (115.83) have higher environment related health behaviour than male urban government (101.25) and private

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(86.00), male semi urban government (98.60) and private (101.22), male rural government (88) and private (94.88), female urban government (106.78) and private (109.63), female semi urban private (108), female rural government (99.91) and private (108.17).

Male urban private secondary school students (86.00) have less in environment related health behaviour than male urban government (101.25), male semi urban government (98.60) and private (101.22), male rural government (88) and private (94.88), female urban government (106.78) and private (109.63), female semi urban private (108), Female rural government (99.91) and private (108.17).

Findings

1. Secondary school students of Coimbatore districts have high environment related health behaviour.
2. Environment related health behaviour of secondary school students differs in terms of their gender, locality and does not differ in types of schools.
3. Female secondary school students have high environment related health behaviour.
4. Among male urban government secondary school students have better environment related health behaviour and male urban private secondary school students have less environment related health behaviour.
5. Among female semi urban government secondary school students have better environment related health behaviour. And female from rural government secondary schools have less environment related health behaviour.
6. There is a significant effect of gender on environment related health behaviour of secondary school students.
7. There is a significant interaction effect of locality and types of secondary school students.
8. There is a significant interaction effect of gender, locality and types of school of secondary school students.

Educational Implication

The present study made an attempt to investigate the environment related health behaviour among secondary school students, in Coimbatore district. The results of the study have the following implications.

1. The present study reveals that the female students have higher environment related health behaviour. The community based intensive training programme may help to achieve overall environment health behaviour.
2. The finding also reveals that the students belonging to rural and semi urban have better environment related health consciousness. Special instruction, field observation, video simulation may help the students belongs to urban area to sensitizes environment related health behaviour.
3. Continuous instruction, long term environment related health education training programme may be helpful for students to protect health through daily practices.

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4. Conducting awareness camp to face hazardous environment and seasonal changes may enlighten students and society to protect personal health.
5. Special guidance need to provide girl children and women to practices healthy personal hygiene.
6. Need to encourage students to participate eco friendly activities, workshop, cleaning activities, etc. may health to maintain healthy environment for healthy life.
7. The teaching community needs to follow interdisciplinary approach and need to correlate the human activities with environment to make health consciousness.

Conclusion

The poor quality of air, water, soil, etc. decreases the quality of environment gradually. Especially in the last few decades the quality of environment was decreased very rapidly. In this circumstances awareness and self protection is the need of the hour. With the consciousness of polluted environment eachand every one of us need to concentrate on their behaviour to protect health. And it is the responsibility of teaching community to make aware of students about their environment related health behaviour. The outcomes of the study reveal the various level of environment related health behaviour. It may helpful for teacher, teacher educator, curriculum frame worker, policy maker, administrator, NGOs, etc. to implement various programme to improve environment related health behaviour.

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