



RELATIONSHIP BETWEEN PERSONAL BEHAVIOUR AND ENVIRONMENT HYGIENE OF HIGHER SECONDARY STUDENTS

P.Madhavan, Ph.D. Research Scholar, Department of Education, Alagappa University, Karaikudi, Tamilnadu, professormadhavan@gmail.com

Dr.M.Mahendraprabhu, Assistant Professor, Department of Education, Alagappa University, Karaikudi, Tamilnadu, eduprabu2011@gmail.com

Dr.R.Ramnath, Assistant Professor, Department of Education, Alagappa University, Karaikudi, Tamilnadu, rrnathedu@gmail.com

K.Sathish Kumar, Ph.D. Research Scholar, Department of Education, Alagappa University, Karaikudi, Tamilnadu, edusathish@gmail.com

M. Mani, Ph.D. Research Scholar, Department of Education, Alagappa University, Karaikudi, Tamilnadu, mani.pro4689@gmail.com

Abstract- In this paper the researcher investigated the relationship between personal behaviour and environment hygiene of higher secondary students. Cleanliness, hygiene, and personal hygiene habits have an extremely important place in maintaining and developing an individual's physical and spiritual health. In contrast, it has been observed that research on student behavior for cleaning and hygiene applications has been limited in the literature. The individuals who make up the community need to preserve and develop their health to maintain their generations. Individual behavior can be defined as a mix of responses to external and internal stimuli. The environment to help him to grow, to develop, to become complete, and to possess integrity. There is no significant relationship between Personal Behaviour and environmental hygiene of higher secondary students. The coefficient of correlation was computed by using the product-moment correlation method. The reliability was 0.78. The population for the present study consists of XI standard students who are studying in higher secondary schools in Sivaganga Educational District. The sample consists of 350 higher secondary school students from XI standard students. The calculated value of (0.010) is less than the table value (0.159) at 5% level the hypothesis is accepted. Hence there is no significant relationship between Personal Behaviour and environmental hygiene of higher secondary students. In schools, proper cleaning and hygiene behaviors should be reminded by seminars, theatres, conferences, and showing public spots with certain periods.

Keywords: Personal Behaviour, Environment Hygiene, and Higher Secondary Students, etc.

I. INTRODUCTION

The individuals who make up the community need to preserve and develop their health to maintain their generations. Healthy growth of a generation is also necessary to accelerate the productivity and development of countries[1]. The protection and development of health are ensured by eliminating all disease-constructive factors. Many of the disease-forming factors are spread through cross or direct contamination. In the control of many infectious diseases, personal hygiene habits are known to be important. With weak personal hygiene practices, all people are negatively affected. But the most vulnerable group in all individuals constitutes school-age children[2].

Sanitation is a higher priority than autonomy - Mahatma Gandhi Cleanliness and disinfection are indispensable pieces of the Gandhian method of living. The mission was complete disinfection for all. Climate is where people, plants, and creatures live. Keeping it perfect and flawless is the duty of an individual[3]. It is important to keep our current circumstances clean since we get outside air, lessen contamination, and so on Neatness is the main method to forestall sicknesses. Tidiness ought to be started taking all things together with the workplaces, schools, social orders, and universities. Numerous neatness ventures and missions, for example, "Save Narmada Agitation", "Swachh Bharat Abhiyan" (Clean India Mission), and "Practice environmental awareness" have been embraced by the public authority. The mission of Clean India development is the greatest advance taken ever as a tidiness drive to date. Upon the arrival of the dispatch of the mission, around 3 million government representatives including understudies from schools and universities had taken an interest in the occasion to cause it to promote worldwide and unveil basic mindfulness of it[4]. This occasion was coordinated at Rashtrapati Bhavan on the second of October in 2014 within the sight of 1500 individuals. This occasion was hailed off by the Indian President, Pranab Mukherjee. Leader, Narendra Modi, had named the name of nine popular Personal Behaviourities from business enterprises, sports, and Bollywood to drive the perfect India crusade. He likewise had mentioned the Personal Behaviourities to welcome other well-known

individuals and in this way, a chain of individuals participated in crusade all-over the country. Narendra Modi has said that this mission ought to be taken as the large test and should pass the solicitation to welcome other nine individuals exclusively (actually like stretching of tree) so this vision of tidiness might be finished till 2019 and may India become a perfect country perpetually in the set of experiences[5].

Personal Behaviour

Individual behavior can be defined as a mix of responses to external and internal stimuli[1]. It is the way a person reacts in different situations and the way someone expresses different emotions like anger, happiness, love, etc. To get a brief idea about individual behavior let us learn about the individual behavior framework and other key elements related to it. Certain individual characteristics are responsible for the way a person behaves in daily life situations as well as reacts to any emergencies. These characteristics are categorized as Inherited characteristics and Learned characteristics[16].

Environment hygiene

Environmental hygiene encompasses effective cleaning of surfaces using appropriate products, decontamination of medical equipment and devices used in patient-care procedures, safe and appropriate handling of sharps, blood and body fluid spills, waste, and linen[6]. Environmental disturbances which occur during construction or renovation projects pose both airborne and waterborne risks particularly to persons with poorly functioning immune systems. All key stakeholders must be included in all stages of the project to minimize the risk of vulnerable persons acquiring a potentially serious infection within the healthcare setting[7].

Need and Significance of the study

The environment to help him to grow, to develop, to become complete, and to possess integrity[8][15]. The complex structure and functioning of the society have proved to be too taxing for the individuals adjusting capacities to meet the demands of the environment. The home environment includes the facilities of home, education of parents, occupation of parents' income, etc. A healthy home environment is a prerequisite for developing personal behavior[9][14].

Every student from the beginning of the first grade until he finishes college education makes a long series of adjustments between his whole unique personality and the environment[10]. The best integrated and adjusted individuals would have established some reasonable goal in line with their interests, abilities and settled down to work towards these goals seriously and steadily, without unusual tensions[17]. The stage of adolescence is a transitional period. Sometimes the conflicting demands of the parents leave the adolescent confused and maladjusted to himself and the society[11][13].

Personal behavior and intellectual growth depend to a large extent on environmental hygiene. Adolescents are at crossroads in their life[12]. They need to mature into well-adjusted human beings. Keeping in mind the needs of a good environment on personal behavior, the study has been undertaken to find out the relationship between environment hygiene and personal behavior of higher secondary students.

Title of the problem

The problem selected for the present study is entitled "**RELATIONSHIP BETWEEN PERSONAL BEHAVIOUR AND ENVIRONMENT HYGIENE OF HIGHER SECONDARY STUDENTS**".

Definition of terms

Personal Behaviour

Personal Behaviour refers to the atmosphere prevailing at Personal Behaviour concerning parent-child relations, growth, and development of the child and facilities available at Personal Behaviour.

Environment hygiene

Environment hygiene refers to any test that measures the attainment of an individual after a period of training or learning.

Higher secondary students

Students, who have passed their 10th standard examination and studying 11th standard, are called higher secondary students.

Objectives

1. To find out the level of Personal Behaviour of higher secondary students.
2. To find out the level of environmental hygiene of higher secondary students.
3. There is no significant relationship between Personal Behaviour and environmental hygiene of higher secondary students.

Null Hypotheses

1. There is no significant difference between males and females in their Behaviour of higher secondary students.
2. There is no significant difference between rural and urban school students in their Behaviour of higher secondary students.

3. There is a significant difference between girls and co-education school students in their Behaviour of higher secondary students.
4. There is no significant difference between government school and aided school students in their Behaviour of higher secondary students.
5. There is no significant difference between males and females in their environment hygiene of higher secondary students.
6. There is no significant difference between rural and urban students in their environment hygiene of higher secondary students.
7. There is no significant difference between girls and co-education school students in their environment hygiene of higher secondary students.
8. There is no significant difference between government school and aided school students in their environment hygiene of higher secondary students.

Relationship between Personal Behaviour and Environment Hygiene

9. There is no significant relationship between Personal Behaviour and environmental hygiene of higher secondary students.

Delimitation of the Study

This work has its delimitations. The main delimitations of the study are,

- The present study is confined only to Sivaganga Educational District.
- The sample has been limited to 350 XI standards students.
- The present study is limited to the XI students only.

Tools Used in the Study

In the recent study, the investigator used the following tools.

1. General data sheet prepared by the investigator.
2. Personal Behaviour Scale prepared and validated by the investigator.
3. Environmental hygiene questionnaire prepared and validated by the investigator

Establishing reliability

The draft tool was subjected to a pilot study. For establishing reliability test-retest method was employed. This scale was administered to 46 students of higher secondary school. The investigator scored their response. After 10 days, the same tool is administered to the same set of 46 students. Again, the investigator scored their responses. Then the coefficient of correlation was computed by using the product-moment correlation method. The reliability was 0.78.

The population of the study

The population for the present study consists of XI standard students who are studying in higher secondary schools in Sivaganga Educational District.

Sample

The investigator has used a random sampling technique for selecting the sample from the population. The stratification has been done based on gender, nature of the school, locality of the students, type of school. The sample consists of 350 higher secondary school students from XI standard students.

II. DIFFERENTIAL ANALYSIS

Objective 1

To find out the level of Personal Behaviour of higher secondary students in terms of background variables.

TABLE 1

LEVEL OF PERSONAL BEHAVIOUR OF HIGHER SECONDARY STUDENTS INTERMS OF BACKGROUND VARIABLES

Variable	Low		Average		High	
	N	%	N	%	N	%
Personal Behaviour	53	15.1	241	68.9	56	16.0

It is inferred from the table (1) that 15.1% of the higher secondary students have low, 68.9% of them have average and 16.0% of them have a high level of Personal Behaviour.

Testing the Hypotheses

Null Hypothesis 1

There is no significant difference between male and female students in their Behaviour of higher secondary students.

TABLE 2
DIFFERENCE BETWEEN MALE AND FEMALE STUDENTS IN THEIR PERSONAL BEHAVIOUR

Gender	N	Mean	SD	't' value	Remark
Male	148.00	52.59	8.79	4.81	S
Female	202.00	56.86	7.31		

(Table value at 5% level of significance is 1.96)

It is inferred from table (2) that the calculated 't' value 4.81 is higher than the table value (1.96) at 5% level of significance. Hence null hypothesis is rejected.

Based on the calculated mean score, it is found that female students (M = 56.86) are better than male students (M = 52.59) in their Personal Behaviour.

Null Hypothesis 2

There is no significant difference between rural and urban students in their Personal Behaviour of higher secondary students.

TABLE 3
DIFFERENCE BETWEEN URBAN AND RURAL STUDENTS IN THEIR PERSONAL BEHAVIOUR

Locality of Students	N	Mean	SD	't' value	Remark
Rural	291.00	55.16	8.27	0.56	NS
Urban	59.00	59.00	8.09		

(Table value at 5% level of significance is 1.96)

It is inferred from table (3) that the calculated 't' value 0.56 is less than the table value (1.96) at 5% level of significance. Hence null hypothesis is accepted.

Based on the calculated mean score, it is found that urban students (M = 59.00) are better than rural students (M = 55.16) in their Personal Behaviour.

Null Hypothesis 3

There is no significant difference between girls and co-education school students in their Personal Behaviour of higher secondary students.

TABLE 4
DIFFERENCE BETWEEN GIRLS SCHOOL AND CO-EDUCATION SCHOOL STUDENTS IN THEIR PERSONAL BEHAVIOUR

Nature of School	N	Mean	SD	't' value	Remark
Girls	110.00	57.19	7.96	3.37	S
Co-education	240.00	54.07	8.19		

(Table value at 5% level of significance is 1.96)

It is inferred from table (4) that the calculated 't' value 3.37 is greater than the table value (1.96) at 5% level of significance. Hence null hypothesis is rejected.

Based on the calculated mean score, it is found that girls school students (M = 57.19) are better than the co-education school students (M = 54.07) in their Personal Behaviour.

Null Hypothesis 4

There is no significant difference between government school and aided school students in their Personal Behaviour of higher secondary students.

TABLE 5
DIFFERENCE BETWEEN GOVERNMENT SCHOOL AND AIDED SCHOOL STUDENTS IN THEIR PERSONAL BEHAVIOUR

Type of School	N	Mean	SD	't' value	Remark
Government	171.00	55.67	6.60	1.38	NS

Aided	179.00	54.46	9.53		
-------	--------	-------	------	--	--

(Table value at 5% level of significance is 1.96)

It is inferred from table (5) that the calculated 't' value 1.38 is less than the table value (1.96) at 5% level of significance. Hence null hypothesis is accepted.

Based on the calculated mean score, it is found that government school students (M = 55.67) are better than the aided school students (M = 54.46) in their Behaviour.

Null Hypothesis 5

There is no significant difference between male and female students in their environment hygiene of higher secondary students.

TABLE 6

DIFFERENCE BETWEEN MALE AND FEMALE STUDENTS IN THEIR ENVIRONMENT HYGIENE

Gender	N	Mean	SD	't' value	Remark
Male	148.00	125.43	25.36	2.89	NS
Female	202.00	133.38	25.51		

(Table value at 5% level of significance is 1.96)

It is inferred from table (6) that the calculated 't' value 2.89 is higher than the table value (1.96) at 5% level of significance. Hence null hypothesis is rejected.

Based on the calculated mean score, it is found that female (M = 133.38) are better than the male (M = 125.43) in their environment hygiene.

Null Hypothesis 6

There is no significant difference between rural and urban students in their environment hygiene of higher secondary students.

TABLE 7

DIFFERENCE BETWEEN URBAN AND RURAL STUDENTS IN THEIR ENVIRONMENT HYGIENE

Locality of Student	N	Mean	SD	't' value	Remark
Rural	291.00	130.74	24.66	1.02	NS
Urban	59.00	126.46	30.32		

(Table value at 5% level of significance is 1.96)

It is inferred from table (7) that the calculated 't' value 1.02 is less than the table value (1.96) at 5% level of significance. Hence null hypothesis is accepted.

Based on the calculated mean score, it is found that urban school students (M = 126.46) are better than rural school students (M = 130.74) in their environment hygiene.

Null Hypothesis 7

There is no significant difference between girls and co-education school students in their environment hygiene of higher secondary students.

TABLE 8

DIFFERENCE BETWEEN GIRLS SCHOOL AND CO-EDUCATION SCHOOL STUDENTS IN THEIR ENVIRONMENT HYGIENE

Nature of School	N	Mean	SD	't' value	Remark
Girls	110.00	133.21	28.67	1.48	NS
Co-education	240.00	128.56	24.15		

(Table value at 5% level of significance is 1.96)

It is inferred from table (8) that the calculated 't' value 1.48 is less than the table value (1.96) at 5% level of significance. Hence null hypothesis is accepted.

Based on the calculated mean score, it is found that girls school students (M = 133.21) are better than the co-education school students (M = 128.56) in their environment hygiene.

Null Hypothesis 8

There is no significant difference between government school and aided school students in their environment hygiene of higher secondary students.

TABLE 9

DIFFERENCE BETWEEN GOVERNMENT SCHOOL AND AIDED SCHOOL STUDENTS IN THEIR ENVIRONMENT HYGIENE

Type of School	N	Mean	SD	't' value	Remark
Government	171.00	131.51	24.78	1.06	NS
Aided	179.00	128.59	26.56		

(Table value at 5% level of significance is 1.96)

It is inferred from table (9) that the calculated 't' value 1.06 is less than the table value (1.96) at 5% level of significance. Hence null hypothesis is accepted.

Based on the calculated mean score, it is found that government school students (M = 131.51) are better than the aided school students (M = 128.59) in their environment hygiene.

Null Hypothesis 9

There is no significant relationship between Personal Behaviour and environment hygiene of higher secondary male students.

TABLE 10

RELATION BETWEEN PERSONAL BEHAVIOUR AND ENVIRONMENT HYGIENE OF HIGHER SECONDARY STUDENTS

Correlation	ΣX	ΣY	ΣX^2	ΣY^2	ΣXY	Calculated Value	Remark
Environmental Hygiene	18564	7783	2423738	420735	976564	0.010	NS

(Table value of is 0.159)

Since the calculated value of (0.010) is less than the table value (0.159) at 5% level the hypothesis is accepted. Hence there is no significant relationship between Personal Behaviour and environmental hygiene of higher secondary students.

III. RESULTS AND FINDINGS

It is inferred from table (1) that 15.1% of the higher secondary students have low, 68.9% of them have average and 16.0% of them have a high level of Personal Behaviour. It is inferred from table (2) that the calculated 't' value 4.81 is higher than the table value (1.96) at 5% level of significance. Hence null hypothesis is rejected.

Based on the calculated mean score, it is found that female students (M = 56.86) are better than male students (M = 52.59) in their Personal Behaviour. It is inferred from table (3) that the calculated 't' value 0.56 is less than the table value (1.96) at 5% level of significance. Hence null hypothesis is accepted.

Based on the calculated mean score, it is found that urban students (M = 59.00) are better than the rural students (M = 55.16) in their Personal Behaviour. It is inferred from table (4) that the calculated 't' value 3.37 is greater than the table value (1.96) at 5% level of significance. Hence null hypothesis is rejected. Based on the calculated mean score, it is found that girls school students (M = 57.19) are better than the co-education school students (M = 54.07) in their Personal Behaviour.

It is inferred from table (5) that the calculated 't' value 1.38 is less than the table value (1.96) at 5% level of significance. Hence null hypothesis is accepted. Based on the calculated mean score, it is found that government school students (M = 55.67) are better than the aided school students (M = 54.46) in their Personal Behaviour.

It is inferred from table (6) that the calculated 't' value 2.89 is higher than the table value (1.96) at 5% level of significance. Hence null hypothesis is rejected. Based on the calculated mean score, it is found that female (M = 133.38) are better than the male (M = 125.43) in their environment hygiene.

It is inferred from table (7) that the calculated 't' value 1.02 is less than the table value (1.96) at 5% level of significance. Hence null hypothesis is accepted. Based on the calculated mean score, it is found that urban school students (M = 126.46) are better than rural school students (M = 130.74) in their environment hygiene.

It is inferred from table (8) that the calculated 't' value 1.48 is less than the table value (1.96) at 5% level of significance. Hence null hypothesis is accepted. Based on the calculated mean score, it is found that girls school students (M = 133.21) are better than the co-education school students (M = 128.56) in their environment hygiene.

It is inferred from table (9) that the calculated 't' value 1.06 is less than the table value (1.96) at 5% level of significance. Hence null hypothesis is accepted. Based on the calculated mean score, it is found that

government school students (M = 131.51) are better than the aided school students (M = 128.59) in their environment hygiene.

Since the calculated value of (0.010) is less than the table value (0.159) at 5% level the hypothesis is accepted. Hence there is no significant relationship between Personal Behaviour and environmental hygiene of higher secondary students.

IV. CONCLUSION

Menstrual hygiene practices are important at all times, the need for more careful attention to personal cleanliness. Activities can be prepared for cleaning and personal hygiene practices in guidance and club activities to improve the hygiene and hygiene habits of the students in a positive way and to maintain their health. To prevent the cleaning and hygiene habits of students of this age to be forgotten and forgotten, the related subjects must be repeated and reminded. In schools, proper cleaning and hygiene behaviors should be reminded by seminars, theatres, conferences, and showing public spots with certain periods.

REFERENCES

1. Aiello, A. E., & Larson, E. L. (2002). What is the evidence for a causal link between hygiene and infections?. *The Lancet infectious diseases*, 2(2), 103-110.
2. Babu, R. U. M., & Kalaiyarasan, G. (2019). New Education Policy Consultation. *Pros and Cons of New Educational Policy*.
3. Dorri, M., Sheiham, A., & Watt, R. G. (2009). Relationship between general hygiene behaviours and oral hygiene behaviours in Iranian adolescents. *European journal of oral sciences*, 117(4), 407-412.
4. Gomes, J., Lloyd, O. L., & Revitt, D. M. (1999). The influence of personal protection, environmental hygiene and exposure to pesticides on the health of immigrant farm workers in a desert country. *International archives of occupational and environmental health*, 72(1), 40-45.
5. Guzek, D., Skolmowska, D., & Głabska, D. (2020). Analysis of gender-dependent personal protective behaviors in a national sample: Polish adolescents' COVID-19 experience (PLACE-19) study. *International journal of environmental research and public health*, 17(16), 5770.
6. Ichsani, I. Z., Rahmayanti, H., Purwanto, A., Sigit, D. V., Singh, C. K. S., & Babu, R. U. M. (2020). HOTS-AEP-COVID-19: Students knowledge and digital worksheet of ILMIZI environmental learning model. *International Journal of Advanced Science and Technology*, 29(6), 5231-5241.
7. Ifegbesan, A. (2010). Exploring Secondary School Students' Understanding and Practices of Waste Management in Ogun State, Nigeria. *International Journal of Environmental and Science Education*, 5(2), 201-215.
8. Iwu, A. C., Uwakwe, K. A., Duru, C. B., Diwe, K. C., Chineke, H. N., Merenu, I. A., ... & Ohale, I. (2017). Knowledge, attitude and practices of food hygiene among food vendors in Owerri, Imo State, Nigeria. *Occupational Diseases and Environmental Medicine*, 5(01), 11.
9. Jamal, F., Fletcher, A., Harden, A., Wells, H., Thomas, J., & Bonell, C. (2013). The school environment and student health: a systematic review and meta-ethnography of qualitative research. *BMC public health*, 13(1), 1-11.
10. Kumar, R., O'Malley, P. M., & Johnston, L. D. (2008). Association between physical environment of secondary schools and student problem behavior: A national study, 2000-2003. *Environment and Behavior*, 40(4), 455-486.
11. Lee, A. (2009). Health-promoting schools. *Applied health economics and health policy*, 7(1), 11-17.
12. Lee, A., Wong, M. C., Keung, V. M., Yuen, H. S., Cheng, F., & Mok, J. S. (2008). Can the concept of Health Promoting Schools help to improve students' health knowledge and practices to combat the challenge of communicable diseases: Case study in Hong Kong?. *BMC public health*, 8(1), 1-8.
13. Lin, S. Y., Lin, C. Y., & Hsin, M. C. (2018). Comparison of social and culture based risk perception of personal hygiene behaviours. *Heliyon*, 4(10), e00839.
14. Mahon, T., & Fernandes, M. (2010). Menstrual hygiene in South Asia: a neglected issue for WASH (water, sanitation and hygiene) programmes. *Gender & Development*, 18(1), 99-113.
15. Ranasinghe, S., Ramesh, S., & Jacobsen, K. H. (2016). Hygiene and mental health among middle school students in India and 11 other countries. *Journal of infection and public health*, 9(4), 429-435.
16. Sengupta, M., Das, J., & Maji, P. K. (2010). Environmental awareness and environment related behaviour of twelfth grade students in Kolkata: Effects of stream and gender. *Anwesa*, 5(1), 1-8.

17. Susanto, L. H., Istiana, R., Retnowati, R., Ekamilasari, E., Ichsan, I. Z., Sigit, D. V., ... & Rosyid, A. (2021). Disaster preparedness behaviors in biology education: Knowledge of environmental disaster mitigation. *Edubiotik: Jurnal Pendidikan, Biologi dan Terapan*, 6(01).