

ATTITUDE OF SECONDARY SCHOOL STUDENTS TOWARDS ENVIRONMENTAL POLLUTION IN RELATION TO LOCALE AND TYPE OF SCHOOL

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Abstract

The current research paper studies the attitude of secondary school students towards environmental pollution with respect to locale and type of school. To study the attitude of secondary school students towards environmental pollution descriptive survey method has used as research method. A sample of 200 secondary school students, comprised of 100 urban and 100 rural was drawn from five secondary schools (100 secondary school students from three government schools and 100 secondary school students from two private schools) of district Kapurthala, Punjab. The secondary school students were selected from different schools of district Kapurthala, Punjab through convenience sampling technique. Environmental Pollution Attitude Scale by Prof. M. Rajamanickam (1998) was used to collect the data from secondary school students. Z'-test was used to analysis the data. Result revealed that 1) there exists statistical significant difference in attitude of urban and rural secondary school students towards environmental pollution; and 2) there exists statistical significant difference in attitude of private and government secondary school students towards environmental pollution.

Keywords: Attitude, Environmental Pollution and Secondary School Students.

Introduction

Attitude means readiness to react towards or against some situations, person of thing or resentment to a particular degree of intensity. It gives meaning to an individual's daily perception and activities he/she perceive in his attempted achievements of various goals. Attitude is also the product of education we get at home and school. Attitude guide an individual's behaviour as well as effect actions.

Environment is the combination of all the organic and inorganic substances surrounding the man. It is the sum of all social, economical, biological, physical and chemical factors which constitute its surrounding. In short, it consists of inseparable whole system constituted by physical, chemical, biological and social elements which are inter-related in many respects.

Environment may be defined as a set of natural and anthropogenic elements that interact and influence the ecological balance, the quality of life, the residents' well-being, the historical and cultural tradition and the aesthetic values.

Pollution may be defined as contamination of air, water or soil with undesirable amount of pollutants or heat. The substances, which cause pollution or contamination, are called as pollutants.

Environmental pollution means an undesirable change in the physical, chemical and biological characteristics of air, water and soil that can harmfully affect health, survival and activities of human beings and other living organism. It leads to direct or indirect changes in the environment which are harmful and undesirable to human beings and other living organism. Environmental pollution categorized in to different type of pollutions namely water, air, soil and noise pollution.

Environment pollution can also be expressed as the unfavorable alterations of our surrounding wholly or largely as a byproduct of man's action through direct indirect effects of changes in energy patterns, radiation levels, chemical and physical constitution abundances of organisms.

Environment pollution may be defined as unlimited exploitation of the nature by man has disturbed the ecological balance between living and non-living components of the environment. Man has created the unfavourable conditions by himself, threatened the survival not only of man himself but also other living organisms.

Environment pollution causes deterioration in the quality of ubiquitous resource like land, water and air because all the factors, which lead to causing environmental pollution, contribute in same way or the other in degrading the quality of these resources.

In the present time, we have a good industrial infrastructure in core industries like metals, chemicals, fertilizers, petroleum, food etc. but their unchecked growth leads to environmental pollution. Also, the emission of different poisonous gases from industrial sector present in the atmosphere pollute the air and progress of atomic energy increases the amount of radioactive elements in the biosphere.

Today the cry of pollution is heard from all the corners of the globe and pollution has become a major threat to the existence on this earth. It is the major challenge in the present time. Man is himself responsible for the environment pollution because he has violated the laws of nature. He has done cruelty not only to the natural objects but also to that entire animal which help to control pollution. The pollution of various resources has gone to such an extent that we are unable to breathe fresh air and drink fresh water. Environment pollution is on the increase and is increasing due to the industrializations and urbanization. The industrialization has increased production but the industries either bigger or smaller have added pollution to the environment. On one hand the advancements of the science and technology have added to the human comforts by giving us automobiles, electrical

appliances, supersonic jets, better chemicals to control insects and other pests, modern gadgets etc., but on the other hand, they have given human beings a very serious problem related to environment like environmental pollution when scientific advancements used ill-logically, unwisely and humans give more importance to their greed i.e. collecting material wealth instead of protecting natural wealth. When man and other animals began their life on this earth, there was absolutely no sign of pollution. There was a perfect balance in various natural processes in the early times. The air and water were pure and soil was fertile. The problem of pollution arose with the very civilization of man. As soon as man learned to use fire, the air pollution began. The rapid unplanned urbanization and industrialization leads to problems related to environmental pollution.

Reviews of Related Literature

Grewal and Kang (2011) investigated environmental awareness of school children in relationship of locale and intelligence. Results revealed that 1) females were found to have high level of environmental awareness as compared to males but male and female respondents do not differ significantly from one another on the basis of their awareness towards environment; 2) significant difference was found in the environmental awareness of school children with respect to locale; 3) a significant difference was found between Intelligence and locale of the respondents; 4) a non-significant difference was found in the level of intelligence with gender of the respondents; 5) intelligence was found to be significantly affecting the health & hygiene, wild life, forests, polluters, population explosion, environmental concerns and total environmental awareness of the school children; 6) a non-significant association was found between environmental awareness and gender of the respondents; 7) locale of the respondents was significantly associated with the different dimensions of environmental awareness like health & hygiene, forests, population explosion, environmental concerns and overall environmental awareness whereas non-significantly associated with wild life, and polluters; and 8) a significant association was found between intelligence and locale of the respondents while it was non-significantly associated with gender of the respondents.

Yousuf and Bhutta (2012) studied the difference between male and female students' attitude towards environmental issues (pollution of air and water, overuse of resources, global changes of the climate etc.) The results of the study indicate that - there was no significant difference between male and female students' attitude towards environmental issues and there was significant insights into male and female students' attitude towards environmental issues towards discipline in both government and private secondary schools.

Dahiya and Ritu (2013) studied the environmental awareness and attitude towards environmental degradation towards of senior secondary school students. The findings of the study are- 1) male and female students are found to have no difference in their environmental awareness; 2) science and arts student have difference in their environmental awareness; 3) arts male and female are found to have no difference in their environmental awareness; 4) science male and female are found to have no difference in their environmental awareness. 5) gender does not play an important role on environmental attitude; 6) localities of the schools play an important role on environmental attitude. 7) types of secondary school play an important role on environmental attitude. 8) gender and locality does not have any interaction effect on environmental attitude; 9) gender and type of secondary school does not have any interaction effect on environmental attitude; and 10) locality and type of school have interaction effect on environmental attitude.

Gopinath (2014) investigated the level of environmental awareness among secondary school students in a district of Kerala in relation to gender, locale of study and medium of instruction. Results of the study reveal that 1) Girls' have more environmental awareness as compare to boys; 2) urban students' have more environmental awareness as compare to rural students and 3) Malayalam medium students' have more environmental awareness as compare to English medium students.

Grewal and Kumar (2014) studied the attitude of adolescents towards the environmental pollution. The findings of the study reveal that no statistical significance difference exists in attitude of adolescents towards the environmental pollution with respect to grade (9th and 11th grade students), residence (rural and urban students) and gender (boys and girls).

Sandhu (2015) investigated the environmental awareness of secondary school students in relation to gender and locale. The findings of the study reveal that - 1) female secondary school students showed significantly more environmental awareness as compared to male secondary school students; and 2) urban secondary school students showed significantly more environmental awareness as compared to rural secondary school students.

Adejoke, Andile, and Murembiwa (2016) compared the levels of awareness, knowledge and attitudes about environmental pollution of secondary school students from two South African provinces. The purpose was to determine the levels of AKA between students living under different environmental conditions. Results of the study reveals that there is statistically significant differences between students from the two provinces with regards to all the environmental variables tested and students from both provinces identified newspapers as the most important source of information on environmental pollution.

Katoch (2017) studied the awareness and attitude of school students towards environment and related issues. The results revealed that both male and female have equal awareness towards environment and female students are having better attitude towards environment than male students.

Yalçinkaya and Çetin (2018) investigated the attitude and opinions of secondary school students about environmental education. Results of the study reveal that there exists a significant difference in attitude and opinions of secondary school students about environmental education with respect to gender and school type whereas no significant difference exists with respect to class level. Researchers recommended that schools should organize the activities that will promote environmental awareness and education among secondary school students.

Significance of the Study

The review of related literature shows that there is no significant difference in the attitude of urban and rural secondary school students towards environmental pollution (Grewal and Kumar, 2014). On the other hand studies conducted by Grewal & Kang (2011), Dahiya and Ritu (2013), Gopinath (2014) and Sandhu (2015) found significant difference in the attitude of urban and rural secondary school students towards environmental pollution. There is significant difference in the attitude of private and government rural secondary school students towards environmental pollution (Yousuf & Bhutta, 2012 & Yalçinkaya and Çetin,

2018). No definite conclusion thus can be drawn regarding the environmental awareness of senior secondary students in relation to gender and locale. So the proposed study seems fully justified.

As the population is increased day by day, the problem of environmental pollution increases day by day. In present time, underground water and water from rivers is not even fit to drink or for daily use due to water and soil pollution caused by unchecked discharge of industrial wastage in water bodies; soil pollution caused by excess use of chemicals in agricultural land; and air pollution is caused by the mixing of poisonous gases in air due to burning of agricultural wastage, garbage, smoke from factories or any unwanted micro particles. So, it is the responsibility of everyone to solve the problem of environmental pollution as early as possible to save our nature or mother earth for future generations.

Therefore, the present study is an attempt to study the attitude of secondary school students towards environmental pollution in relation to locale and type of school.

Statement of Problem

Attitude of Secondary School Students towards Environmental Pollution in relation to Locale and Type of School

Objectives

- To compare the attitude of secondary school students towards environmental pollution with respect to locale.
- To compare the attitude of secondary school students towards environmental pollution with respect to type of school.

Hypotheses

- There exists significant difference in attitude of urban and rural secondary school students towards environmental pollution.
- There exists significant difference in attitude of private and government secondary school students towards environmental pollution.

Design of the Study

In the present study, descriptive survey method was used to collect the data. A sample of 200 secondary school students, comprised of 100 boys (50 urban and 50 rural) and 100 girls (50 urban and 50 rural), was drawn from five senior secondary schools (100 secondary school students from three government schools and 100 secondary school students from two private schools) of district Kapurthala, Punjab through convenience sampling technique.

Research Instrument

Environmental Pollution Attitude Scale (EPAS) by Prof. M. Rajamanickam (1998) was used by the investigator to measure the attitude of secondary school students towards environmental pollution.

Delimitation

The present study was delimited to urban and rural secondary school students studying in three government and two private secondary schools of district Kapurthala, Punjab.

Statistical Technique

The objectives and hypotheses of the study have been tested by using z' -test.

Result and Discussion

Analysis of data, result and interpretation of findings has been done keeping in view the objectives and hypotheses of the study.

Result Pertaining to Attitude of Secondary School Students towards Environmental Pollution with respect to Locale

The objective was to compare the attitude of secondary school students towards environmental pollution with respect to locale. After administering the environmental pollution attitude scale; mean, standard deviation, standard error of difference and z' -value for attitude of urban and rural secondary school students towards environmental pollution were computed and the result have been presented in table 1.

H_a : There exists significant difference in attitude of urban and rural secondary school students towards environmental pollution.

TABLE 1
Significance of Difference between Attitude of Urban and Rural Secondary School Students towards Environmental Pollution

Group	N	Mean	SD	SE _D	z' -value	Remark
Urban	100	96.74	13.93	1.69	5.87*	P < 0.01
Rural	100	86.82	9.59			

*Table values of t' (df=198) at 0.05 and 0.01 level of confidence are 1.96 and 2.57 respectively.

Interpretation

Table 1 shows the mean scores, standard deviations, standard error of difference and z' -value for attitude of urban and rural secondary school students towards environmental pollution. The table 1 reveals that the mean attitude scores of urban and rural secondary school students towards environmental pollution are 96.74 and 86.82 respectively. It may be concluded that urban secondary school students have more concern towards environmental pollution as compared to rural secondary school students. The value of standard deviation in case of urban and rural secondary school students is 13.93 and 9.59 respectively. The z' -value for attitude of urban and rural secondary school students towards environmental pollution comes out to be 5.87, which is statistically significant at 0.01 level of confidence. It shows that urban and rural secondary school students differ significantly from one another with respect to their attitude towards environment pollution.

Hence, the stated hypothesis that there exists significant difference in attitude of urban and rural secondary school students towards environment pollution is accepted at 0.01 level of confidence.

Result Pertaining to Attitude of Secondary School Students towards Environmental Pollution with respect to Type of School

The objective was to compare the attitude of secondary school students towards environmental pollution with respect to type of school. After administering the environmental pollution attitude scale; mean, standard deviation, standard error of difference and z'-value for attitude of private and government secondary school students towards environmental pollution were computed and the result have been presented in table 2.

H_a: There exists significant difference in attitude of private and government secondary school students towards environmental pollution.

TABLE 2**Significance of Difference between Attitude of Private and Government Secondary School Students towards Environmental Pollution**

Group	N	Mean	SD	SE _D	z'-value	Remark
Private School Students	100	94.73	15.30	1.78	3.31*	P < 0.01
Government School Students	100	88.83	9.17			

*Table values of t' (df=198) at 0.05 and 0.01 level of confidence are 1.96 and 2.57 respectively.

Interpretation

Table 2 shows the mean scores, standard deviations, standard error of difference and z'-value for attitude of private and government secondary school students towards environmental pollution. The table 2 reveals that the mean attitude scores of private and government secondary school students towards environmental pollution are 94.73 and 88.83 respectively. It may be concluded that private secondary school students have more concern towards environmental pollution as compared to government secondary school students. The value of standard deviation in case of private and government secondary school students is 15.30 and 9.17 respectively. The z'-value for attitude of private and government secondary school students towards environmental pollution comes out to be 3.31, which is statistically significant at 0.01 level of confidence. It shows that private and government secondary school students differ significantly from one another with respect to their attitude towards environment pollution.

Hence, the stated hypothesis that there exists significant difference in attitude of private and government secondary school students towards environment pollution is accepted at 0.01 level of confidence.

Conclusions

It is concluded from the result and discussion that -

- Urban and rural secondary school students differ significantly from one another with respect to their attitude towards environment pollution. The same result has been reported by Grewal & Kang (2011), Dahiya and Ritu (2013), Gopinath (2014) and Sandhu (2015) in their studies. Table 1 shows that urban secondary school students found to have more concern towards environment pollution as compared to rural secondary school students because there are more problems related to environmental pollution in urban areas as compared to rural areas.
- Private and government secondary school students differ significantly from one another with respect to their attitude towards environment pollution. The same result has been reported by Yousuf & Bhutta (2012) and Yalçinkaya & Çetin (2018) in their studies. Table 2 shows that private secondary school students found to have more concern towards environment pollution as compared to government secondary school students because more activities related to environmental pollution are organized in private secondary schools as compared to government secondary schools.

Implication

The present study would go a long way in the field to assess the attitude of secondary school students towards environmental pollution because the students are the torch bearers of the future society and if we can strive to make them sensitive towards their environment and problems related to environment than the whole society may see a revolutionary change. The results shows that the urban secondary school students are more concern towards environmental pollution than rural secondary school students and private secondary school students are more concern towards environmental pollution than government secondary school students. The teachers and managing bodies are suggested that more programmes related to issues of environmental pollution need to organize in the schools with active participation of students to create awareness about environmental pollution with special reference to rural and government secondary school students.

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