



"A Study To Assess The Effectiveness Of Self-Instructional Module On Knowledge Regarding Global Warming And Its Impact On Health Among High School Students In Selected Govt. School At Community Area, Jabalpur (MP)"

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ABSTRACT: A gradual increase in the overall temperature of the earth's atmosphere generally attributed to the greenhouse effect caused by increased levels of carbon dioxide chlorofluorocarbon [CFC] and other pollutants. pre- test post- test research design used to observe the effectiveness of self -instructional module among high school students regarding Global Warming and its impact on health. This study was conducted in Govt. Girls Higher Secondary School, Panagar. The sample size of this study consists of 60 students. Self-structured questionnaire is used to assess the knowledge level of the students. knowledge. 23(38%) of students have poor knowledge. None of the students have good knowledge. A pre-experimental approach was adopted. Sample size 60 high school students. It depicted that mean posttest knowledge score 22.17 was apparently higher than mean pretest knowledge score 11.67. This indicates that self-instructional module was effective and increased knowledge score of high school students regarding Global Warming and its impact on health. The study finding showed a highly significant difference ($t=12.7$, $p<0.05$) between pretest knowledge score 11.67 and posttest knowledge score 22.17

KEYWORDS – Global Warming , Health , Knowledge

INTRODUCTION

A gradual increase in the overall temperature of the earth's atmosphere generally attributed to the greenhouse effect caused by increased levels of carbon dioxide chlorofluorocarbon [CFC]

and other pollutants. It is one of the most current and widely discussed factor's it has far reaching impact on biodiversity and climatic conditions of the planet. several current trends

clearly demonstrate that Global warming is directly impacting on rising sea levels, the melting

of ice caps and significant worldwide climate changes. The 5th assessment report of the IPCC [intergovernmental panel and climate change], finalized

in November 2014 confirms that human activities have produced since the mid 19 century, an increase in greenhouse Gases such as Carbon dioxide, Methane, & Nitrous oxide in the earth's atmosphere & an increase in average temperature without comparison in human activity. Temperature in India have risen by 0.7° C between 1901-2018. Thereby changing the climate in India. In May 2022 severe heat waves were recorded in India. The



temperature reached 51° C climate change makes such heatwaves 100 times more likely.

OBJECTIVES

1. Assess the knowledge regarding Global Warming and its impact on health among high school students in selected govt. School at community area, Jabalpur.
2. To evaluate the effectiveness of self- instructional module on knowledge regarding Global Warming and its impact on health among high school students in selected govt school at community area, Jabalpur.
3. To determine the association between pre-test knowledge regarding Global Warming and its impact on health with their demographic variables among high school students in selected Govt. School at community area, Jabalpur.

Methodology

In this study quantitative research approach was used. we select a pre-experimental one group pre- test post- test research design used to observe the effectiveness of self - instructional module among high school students regarding Global Warming and its impact on health. This study was conducted in Govt. Girls Higher Secondary School, Panagar. The sample size of this study consists of 60 students. Self-structured questionnaire is used to assess the knowledge level of the students.

DESCRIPTION OF TOOL

Data collection tools are procedures or instrument used by the researcher to measure the variable in the research problem. After the review literature and discussion with the expert the self-structured questionnaire and

Self-instructional module were developed.

Tools used for this study is structured questionnaire. The tools consist of section A & B

SECTION A -This shows the socio demographic variable. There are demographic variable include age, class, family type, resident, family income, source of previous knowledge.

SECTION B –Questionnaire related to knowledge regarding Global Warming and its impact on health. It consist of questionnaire to assess knowledge regarding Global Warming and its impact on health.

SCORING CRITERIA

Scoring for the questionnaire was established based on the correct answers provided for each question. Each correct answer is fetched 1 mark and each incorrect or unanswered question fetched 0 mark. Participants can achieve a total score 30 out of 30 which can be the maximum

marks, available for the number of questions in the questionnaire. After participants complete the questionnaire, their scores were calculated by summing the marks earned answer. Knowledge score- A score of 0-10 poor knowledge, a score of 11-20 average knowledge, a score 21-30 good knowledge. Knowledge score- A score of 0-10 poor knowledge, a score of 11-20 average knowledge, a score 21-30 good knowledge.

. Level of knowledge Score

1. Poor 0-10
2. Average 11-20
3. Good 21-30

DATA ANALYSIS AND INTERPRETATION

SECTION 1-

DEMOGRAPHIC PROFILE:

From the major finding, it was relieved that about the high school students are age group of 87% , 13-15 years about 10% belong to the age group 16-18 years , 3% belong to age group of 10-12 years and 0% belongs to the age group of 19-21 year. Majority of students that is 50% are 9th students and 50% are 10th



students. Majority of students are coming from nuclear family ii. Post-test knowledge score-The finding of the study was that is 63% and 35% are from joint family 2% from extended family. Majority of area of residence is urban 52% and rural 48% . knowledge. 20(33%) of sample have average knowledge. None Majority of students family income is less than 10,000 that is of the sample have poor knowledge. The mean is 22.17 and SD is 63% , 11000-20000 that is 30% , 20,000-30,000 that is 5%. is 4.75 of posttest knowledge. Majority of source of previous knowledge from school is 90%, newspaper is 7%, multimedia is 2%.

SECTION II

It deals with the analysis of data related to knowledge score before administering the self instructional module.

i. Pre-test knowledge score- The finding of the study was showed that in pretest majority 37(62%) of sample have average knowledge. 23(38%) of sample have poor knowledge. None of the sample have good knowledge. The mean is 11.67 and SD is 4.903 of the pretest knowledge.

SECTION III

ANALYSIS OF EFFECTIVENESS OF SELF-INSTRUCTIONAL MODULE KNOWLEDGE SCORE REGARDING GLOBAL WARMING AND ITS IMPACT ON HEALTH.

Table No.4.3.12

Comparison of pre-test & post-test knowledge of student regarding Global

Warming and its impact on health

(N=60)

| S. No. | Description | Mean | Mean Difference | SD | SD Difference | "t"-value | Inference. |
|--------|---------------------|-------|-----------------|-------|---------------|-----------|-------------|
| 1 | Pre-test Knowledge | 11.67 | 10.5 | 4.903 | 0.153 | 12.0 | Significant |
| 2 | Post-test Knowledge | 22.17 | | 4.75 | | | |

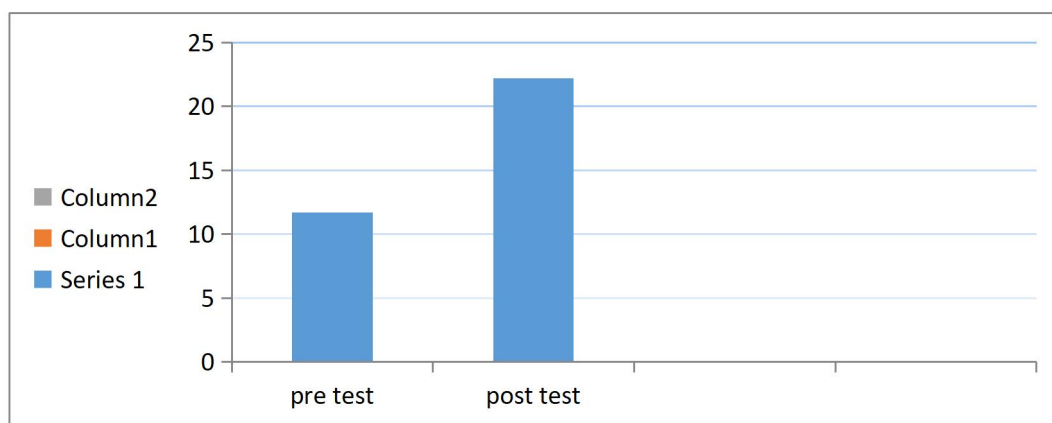




Table value=2.00

The table no.4.3.12 Depicts that the mean knowledge score of pre test is 11.67 and the mean knowledge score of post-test is 22.17, mean difference of pre-test and post-test is 10.5 with standard deviation of pre-test is 4.903, standard deviation of post-test is 4.75, SD difference of pre-test and post-test is 0.153 and calculated 't' value is 12.0 since the table value at 0.05 level is 2.00 and calculated 't' value is 12.0.

ASSOCIATION

the association between pre-test knowledge score of school students regarding Global Warming and its impact on health with demographic variables is statistically tested by applying chi-square test. Only previous knowledge was found significant, and rest others were not significant.

LIMITATION

The following points were beyond the control of investigator:

- 1) The study was carried out small scale student so the finding can be generalized for a larger student population.
- 2) Tools used for data collection has to be developed for the purpose of the study as these was standardized tool.
- 3) The samples were limited to the high school students.

FINDINGS

The finding of the study was saw that in pretest majority 37(62%) of students have average knowledge. 23(38%) of students have poor knowledge. None of the students have good knowledge. A pre-experimental approach was adopted. Sample size 60 high school students. It depicted that mean posttest knowledge score 22.17 was apparently higher than mean pretest knowledge score 11.67. This indicates that self-instructional module was effective and increased knowledge score of high school students regarding Global Warming and its impact on health. The study finding showed a highly significant difference ($t=12.7$, $p<0.05$) between pretest knowledge score 11.67 and posttest knowledge score 22.17.

CONCLUSION

The majority of high school students have the average knowledge regarding Global Warming and its impact on health. They require a self- instructional module regarding Global Warming and its impact on health. To conclude, the researchers would like to mention that the present study healed to assess the knowledge level of high school students regarding Global Warming and its impact.

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