Reflecting Environmental Awareness through Cognitive Ability: A Study of Primary School Students' of Madhya Pradesh

*AKHAND SHARMA[1]
(Research Scholar)
Department of Education,

Shyam Sunder Singh[2]
(Senior Research Fellow)
Department of Education,

Dr. Rani Dubey[3]
(Head of the Department)
Department of Education
Dr. Harisingh Gour V.V.
(A Central University) Sagar (M.P.)

ABSTRACT

School plays an important role in character building and building of all types of concepts, including inculcating environmental values and ethics in students through education.   The aim of the proposed study was to evaluate the environmental awareness among students studying in grade fourth and fifth in Government Primary School (GPS) of Sagar city, Madhya Pradesh. An Environment Awareness Test (EAT) was designed from environmental education text book running in the Government schools, it was administered on 110 students; (Grade 4th – 54 and 5th – 56) in order to measure the environmental cognitive ability (ECA) of the student's. Independent T Test, AMOS and other statistical measures were used to analyse the data. Item wise analyses were used for analysing other facts related to environmental issues.

The result reveals the facts related to various environmental issues in context to cognitive ability. The study will provide suggestions to the academicians, environmentalists and government so that they will incorporate these ideas in order to innervate students towards environmental consciousness. The study is highly original; innovative especially it is an effort to correlate cognitive ability with environmental awareness.

Key Words: Environment Education, Environmental Awareness, Cognitive Ability, EAT

INTRODUCTION –

The UNESCO, UNEP Congress on Environmental Education and Training (1987) agreed that, 'Environmental education should simultaneously attempt to create awareness, transmit information, teach knowledge, develop habits and skills, promote values, provide criteria and standards and present guidelines

for problem solving and decision making. Therefore it aims at both cognitive and affective behaviour modification.

The Intergovernmental Conference on Environmental Education (UNESCO, 1978) recommended the primary categories of environmental education curriculum goals and objectives of : (a) awareness (b) knowledge (c) attitudes (d) skills and (e) participation, These components are cited in various documents, articles and participations, not all authors agree upon the degree of importance of the objectives over the other. The difference in objectives and goals stated by different authors, groups and organisations don't present a unified approach to environmental curriculum development.

According to NCF (2005), environmental education should be the main subject in the curriculum. Supreme Court also directed the education system to make strategic plans to inculcate environmental education as a mandatory subject in all classes.

Thus on the basis of reports and articles it is quite visible that developing environmental awareness among children is the foremost objective of the environmental education creating awareness and sensitivity towards environmental issues should be the primary concern for all educational institutions globally.

Key Terms:

Environmental Education-

A process of developing a world population that is aware of and concerned about the total environment and its associated problems and which has the knowledge, skills, attitude, motivation and commitment to work individually and collectively towards solutions of current problems and the prevention of new ones (UNESCO-UNEP , 1976, Athman and Monroe, 2000. p.38) .

Awareness-

To acquire; concern and sensitivity towards the environment and its problems.

Cognitive Ability-

Cognitive ability is defined as a general mental capability involving reasoning, problem solving, planning, abstract thinking, complex idea comprehension, and learning from experience (Gottfredson, 1997).

EAT-

Environment Awareness Test (EAT) was designed from NCERT based text book in order to evaluate the environmental awareness of the students studying in Government Primary Schools.

STATEMENT OF THE PROBLEM –

The statement of the problem; to study the environmental awareness in terms of cognitive ability of the students studying in Government Primary Schools of Madhya Pradesh. Environmental Cognitive Ability (ECA) includes Knowledge, Comprehension, Skill, Analysis and Evaluation as an important component to evaluate environmental awareness among primary students. Environmental Awareness Test (EAT) includes 10 items from various perspectives of cognitive ability; overall test score will reflect their environmental cognitive awareness level.

NEED & SIGNIFICANCE OF THE STUDY -

The primary stage of schooling is the most important phase of cultivating; culture, values, ethics, sensitivity and other attributes in the students related to environmental concern. The under-study in its preliminary stage in order to collect data related to environmental awareness of the primary students have administered EAT on students studying in Grade fourth and fifth.

The study is an intensive attempt to explore facts related to environmental awareness level among primary students studying in government schools. The proposed work will provide the suggestions how we can develop environmental cognitive ability in context to environmental conservation and protection among students.

REVIEW OF LITERTAURE–

Review of literature is helpful in exploring the previous studies enriches and excites the intellect of the investigator. Some of the studies are:

Ahmet Altin, Selecen Tecer et.al (2014), 'Environmental Awareness Level of Secondary School Students: A Case Study in Balikesir (Turkiye)'**.** The proposed study highlighted the awareness for the secondary students towards environmental issues and problems associated with it. The study also investigated the interaction of the student, family and media towards environmental awareness. The study was conducted on Grade 6th students from three secondary schools whose socio-economic and demographic levels were quite different. The study exaggerated the facts that environment disclosures made in schools were insufficient and the participation level of students to environmental activities was low. The major findings of the study revealed the facts that students gain environment experiences mostly from mass media; audio and visual and girl student have higher level of environmental awareness and participation level than boy.

Arani Mohsen Hesami, Bagheri Somayeh et.al (2016), 'Role of Environment Education in Increasing the Awareness of Primary School Students and Reducing Environmental Risks'. The paper focused that primary school is the first social environment of children. Developing attitude towards environmental hazards plays a vital role in personality development of the children. The objective of the study was to identify the environmental hazards and their assessment and to explore environmental knowledge among students. Questionnaire as a tool was administered on 172 students in order to study their environmental awareness. The paper suggest that school environment management plays an important role in preparing students for environmental education, the results of this study showed a significant relationship between education and promotion of students' environmental awareness.

Baraanza Laura (2010), 'Environmental Education in Mexican Schools: The Primary Level'. The article shows schools' relevance in developing environmental awareness in young children. The study explains that primary level, national curriculum and the Mexican educational system are working towards an environmental policy. The conclusion of the study, environmental education is becoming an area of major concern and interest in the Mexican educational system. More schools are becoming aware of their role in

promoting positive attitudes towards the environment and the community. Mexican government is playing a vital role in instituting environmental education in its schools. Educators should encourage Mexican children to learn about their country, history and many eco-systems through the use of text-book.

Dhanya C.H. and Pankajam R. (2017), 'Environmental Awareness among Secondary School Students'. The understudy focussed on meaning of environmental awareness, understanding of environmental sensitivity and importance of environmental security, for the better future of the students, environmental awareness should be foster through managerial co-operation. The objective of the study was to examine the environmental awareness of the secondary school students.

Khan Shazli Hasan (2013), 'A Study of Attitude towards Environmental Awareness in Relation to Certain Variables among Senior Secondary School Students'. The present study was conducted to study the environmental awareness among senior secondary school students of Aligarh city of Uttar Pradesh. The investigator conducted the studies on Class XII students of various schools (N=200). The study found that there is no significant level of awareness among senior secondary school students but they could be made aware if proper guidance and counselling is given to them about environment and environment related awareness programs. The results of the present study would have its positive e implications on the environmental awareness of student's fraternity is not for the senior secondary schools students of Aligarh city but also it would have positive relevance and serious educational implications for the other senior secondary schools students of India as well.

Lammina Sharmin (2003), 'Assessment of Environmental Awareness of the Student's with Primary Education'. The present study aimed to assess the environmental awareness of the students who have completed primary education both from the non-formal school of BRAC and formal government schools, 420 interviews were conducted with both boys and girls. There are no major differences in the performance of boys and girls in different environmental issue, but indicates that more current protective measures to resolve these problems should be included in the primary level curriculum.

Pandey Anuradha (2010), 'Environmental Education in Rural Central Himalayan School'. The proposed study focussed on the inclusion of experimental environmental education in school curriculum of central Himalayan region. The study highlighted the issues related to land degradation, which is the major problem in such region. The aim of the study is to train students so that they manage their village eco-system, in-order to ensure maximum sustainable productivity. The study shows that a separate course on environment education is feasible. This course can be easily adapted to any other eco-system.

Shobeiri S.M., Omidvar B and Prahallada N.N. (2007), 'Comparative Study of Environmental Awareness among Secondary School Students in Iran and India' The study investigated secondary school student's environmental awareness in India and Iran. Nine Ninety One (991) students were selected through stratified random sampling from 103 secondary school of Mysore and Tehran. There are used Environment Awareness Ability Measure (EAAM). The results indicated that there are significant differences between Indian and

Iranian students in their level of environmental awareness. There exist significant differences between them in environmental awareness across and within two groups with regard to their gender.

The investigator had selected 300 students of class sixth (government and private) from Coimbatore district. The results highlighted on environmental awareness issue; 26% students low, 48% moderate and 26.6% showed high level of environmental awareness. The finding of the study was no significant environmental awareness among secondary school students.

OBJEVCTIVES OF THE STUDY –

Major Objective: To study the environmental awareness through cognitive ability.

Specific Objectives are:

i.   To study the environmental awareness among the students on the basis of grade; IV and V

ii.   To study the environmental awareness among the students on the basis of sex; boys and girls

iii. To study the Environmental Awareness of the students studying in grade fourth and fifth on the basis of EAT scores

iv.   To study the Environmental Awareness of the students; boys and girls on the basis of EAT scores

v.   To study the model; reflecting relationship between various cognitive domain with EAT scores

vi.   To study the responses of the students towards specific environmental issues

HYPOTHESIS –

The following hypotheses are formulated and tested at 95% level of significance.

i.   There will be statistically no-significant difference between grade fourth and fifth student's EAT scores

ii. There will be statistically no-significant difference between boy's and girl's EAT scores

iii. There will be statistically no-relationship exists between cognitive domain and EAT scores reflecting through environmental awareness model

RESEARCH METHODOLOGY –

Research Methodology is the systematic procedure by which the research starts from the identification of the problem to its final conclusion.

AREA OF STUDY :

The area for the proposed study was students studying in Grade IV and V of Government Primary School, Sagar Block District Sagar (M.P.)

SCHEDULE OF THE STUDY :

Environmental Awareness Test (EAT) was administered between October 2018- January 2019 on the students studying in Government Primary School (Grade 4th and 5th) in Sagar Block, district Sagar of Madhya Pradesh.

POPULATION :

All the students studying in Grade IV and V of Government Primary School, Sagar Block District Sagar comes under population of the study. According to Session 2018-19, there were 50 schools in which 1648 students enrolled in concerned grades.

SAMPLE & SAMPLING TECHNIQUES :

Simple random sampling technique was used for selecting sample from 50 schools of Sagar city in which 1648 students studying in Grade IV and V. The study has used stratified sampling for selecting **10 schools** for understudy: 2 schools each from North, South, East, West and Central part of Sagar City, total **110 students** selected for study who were present at the time of test administration.

VARIABLES :

The proposed study explores the facts related to environmental awareness in the terms of cognitive ability.

Dependent Variables-

Environmental Awareness and Total Score (EAT Score)

Independent Variables-

Students of Grade IV and V and Boys and Girls consider as independent variable whose effect on dependent variable has to be studied.

Controlled Variables-

Duration of test, Subject Content, IQ Level of students studying in particular grade and Classroom environment considered as constant variables.

TOOL –

Environmental Awareness Test (EAT) was administered on primary students studying in Grade fourth and fifth. EAT contains 10 items; multiple choice as well as open ended question in order to collect varied responses from the students. The test includes item from cognitive domain as: ability; knowledge, comprehension, skill, analysis and evaluation.

ENVIRONMENTAL AWARENESS TEST (EAT) :

EAT reflects the environmental awareness of the students in terms of cognitive domain. Test includes **10 Items** and time allotted for it was 1 Hour. The distribution of Items and their parts were as:

TABLE 1: ENVIRONMENTAL AWARENESS TEST (EAT)

ITEM No.	BRIEF DESCRIPTION	TYPE	WEIGHTAGE
1.	Disease generate through drinking polluted water	MCQ	02
2.	Environment consists of	MCQ	02
3.	Gas we get from green plants	MCQ	02
4.	Classify the given animals on the basis of their inhabitants	Matching	10

5.	Classify the eating products– Obtained from Plants and from Animals	Matching	10
6.	Friend of Farmer	MCQ	02
7.	Main source of natural energy	MCQ	02
8.	Classify the given pollutions into Air, Water and Sound Pollution	Matching	10
9.	Essay on Environment Cleanliness (Min.5 Lines)	Open Ended	05
10.	Main sources of energy (Write any 5 sources)	Open Ended	05
	GRAND TOTAL		**50**

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(* EAT was developed from NCERT Grade IV and V Text Books: Environmental Studies- *"Looking Around"*, पर्यावरण अध्ययन – आस-पास)

DISTRIBUTION OF MARKS:

Distribution of test marks on the basis of cognitive ability was given as:

TABLE 2: EAT AND COGNITIVE ABILITY

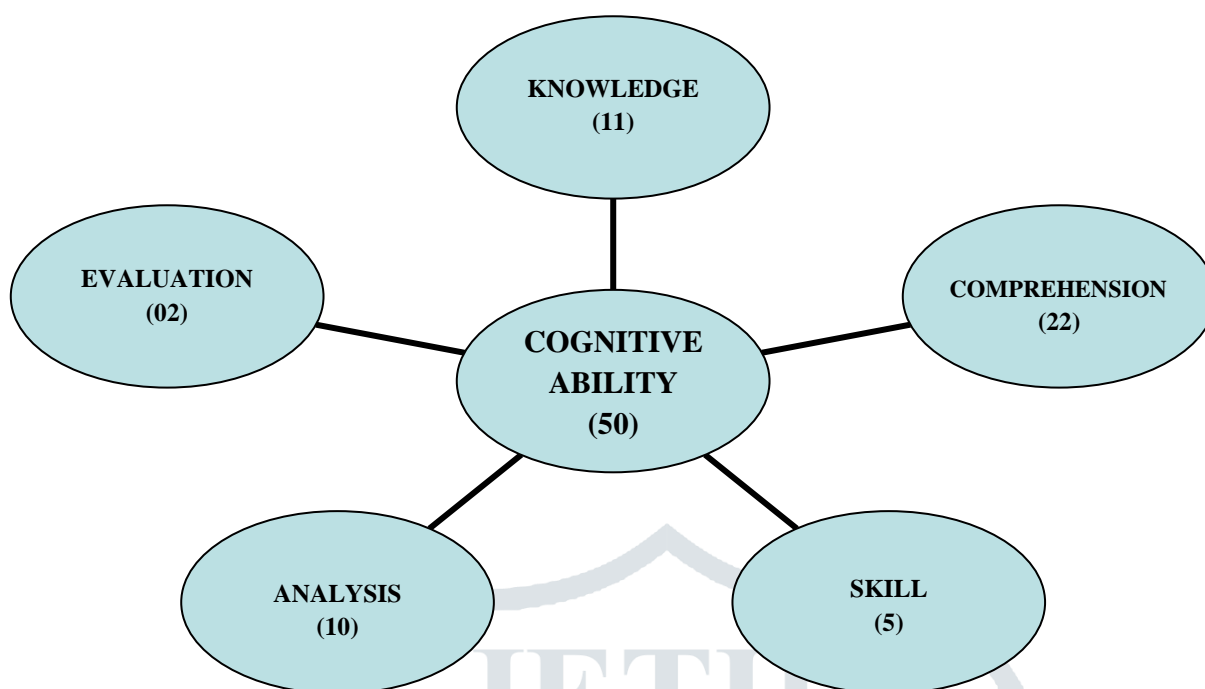| ITEM.	COGNITIVE ABILITY	WEIGHTAGE
1.	EVALUATION	02
2.	KNOWLEDGE	02
3.	KNOWLEDGE	02
4.	ANALYSIS	10
5.	COMPREHENSION	10
6.	COMPREHENSION	02
7.	KNOWLEDGE	02
8.	COMPREHENSION	10
9.	SKILL	05
10.	KNOWLEDGE	05
	GRAND TOTAL	**50**

Fig1: Distribution of Marks (Cognitive Ability)

* Maximum marks (MM) were 50, for analysis the study converts all the marks out of 100.

ANALYSIS :

SPSS 21 and AMOS were used for analysis, Comparative study on the basis of Grade and Sex, Independent t- test, and CFA were used for testing the hypothesis and model fitting. Analysis was done on the basis of specific items which exhume various facts related to student's environmental awareness.

RESULTS &DISCUSSIONS–

A. Comparison on the Basis of Grade :

There are 110 students selected for understudy; 54 from Grade 4th and 56 students from Grade5[th.] 33.3% students from Grade 4th attained A Grade (81-100) marks falls under excellent category whereas in Grade5[th], 55.4% students attained A Grade (81-100) marks comes under excellent category. 55.6% students from grade 4th attained B Grade (61-80) marks falls under good category whereas in grade5[th], 33.9% students attained B Grade (61-80) marks comes under good category. The result reflects that in grade 5th more than half of the students fall under excellent category (81-100 marks). Overall results of Grade4[th] and Grade5[th] are quite common because nearly 89% students fall under excellent and good category.

Statistics

Total_Score

Grade 4	N	Valid	54
		Missing	0
	N	Valid	56

Grade 5		Missing	0			

Total_Score

Grade			Frequency	Percent	Valid Percent	Cumulative Percent
Grade 4	Valid	81-100	18	33.3	33.3	33.3
		61-80	30	55.6	55.6	88.9
		41-60	5	9.3	9.3	98.1
		21-40	1	1.9	1.9	100.0
		Total	54	100.0	100.0	
Grade 5	Valid	81-100	31	55.4	55.4	55.4
		61-80	19	33.9	33.9	89.3
		41-60	6	10.7	10.7	100.0
		Total	56	100.0	100.0	

B. Comparison on the Basis of Sex :

62 Boys and 48 Girls selected for understudy; from grade 4th and 5th studying in Government Primary Schools.   38.7% Boys attained A Grade (81-100) marks whereas 52.1% Girls attained A grade (81-100) marks. Most of the boys (48.4%) fall under Grade B (61-80) marks. Overall results 87.1% Boys and 91.7% Girls fall under excellent and good category. It reflects that girls have more environmental cognitive awareness than boys which highlighted through their comparative score in EAT.

Sex = Boy

Statistics[a]

Total_Score

N	Valid	62
	Missing	0

a. Sex = Boy

Total_Score[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	81-100	24	38.7	38.7	38.7
	61-80	30	48.4	48.4	87.1
	41-60	7	11.3	11.3	98.4
	21-40	1	1.6	1.6	100.0
	Total	62	100.0	100.0	

a. Sex = Boy

Sex = Girl

Statistics[a]

Total_Score

N	Valid	48
	Missing	0

a. Sex = Girl

Total_Score^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	81-100	25	52.1	52.1	52.1
	61-80	19	39.6	39.6	91.7
	41-60	4	8.3	8.3	100.0
	Total	48	100.0	100.0	

a.   Sex = Girl

C. Ho: There is statistically no significant difference between Grade IV and Grade V   EAT Scores

Before applying Independent sample T Test one should check the assumptions of Normality

i.   Skewness and Kurtosis:

 Skewness= -0.984 Kurtosis= 0.860

 It satisfies the condition because Skewness and Kurtosis must lie between -1 to +1.

ii.   K.S .and Shapiro Wilk Test:

In both the case the p value is <.05 it shows that data is not normally distributed, it deviates slightly from normality.

iii.   Homogeneity of Variance:

On the basis of Levene's Test p value> .05 it shows that there is no statistically significant difference between groups. It met the condition of homogeneity of variance.

After satisfying the assumptions of Normality, Independent T Test can be applied for testing the hypothesis.

Group Statistics

	Grade	N	Mean	Std. Deviation	Std. Error Mean
TS_Actual	0 Grade 4	54	75.22 22	12.04029	1.63848
	1 Grade5	56	78.35 71	13.07938	1.74781

Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means

		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
TS_Actual	Equal variances assumed	1.606	.208	-1.307	108	.194	-3.13492	2.39934	-7.89084	1.62099
	Equal variances not assumed			-1.309	107.772	.193	-3.13492	2.39571	-7.88375	1.61391

Since in case of Total Score (TS) to Equal variances assumed the p value= 0.194 (> .05) it shows that there is statistically no significant difference.

Therefore Null Hypothesis: is accepted; There is statistically no significant difference between Grade 4 and Grade 5 EAT scores.

D. Ho: There is statistically no significant difference between Boy and Girl EAT Scores

Group Statistics

	Sex	N	Mean	Std. Deviation	Std. Error Mean
TS_Actual	1 Boy	62	75.5806	12.08243	1.53447
	2 Girl	48	78.4167	13.24055	1.91111

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
TS_Actual	Equal variances assumed	.246	.621	-1.171	108	.244	-2.83602	2.42233	-7.63750	1.96546
	Equal variances not assumed			-1.157	96.297	.250	-2.83602	2.45090	-7.70084	2.02879

Since in case of Total Score (TS) to Equal variances assumed the p value= 0.244 (> .05) it shows that there is statistically no significant difference.

Therefore Null Hypothesis: is accepted; There is statistically no significant difference between Boy's and Girl's EAT scores.

E. Model Fitting :

The model designed for understudy was tested by using AMOS. The first step is Model Specification; to test whether the model is consistent with the theory. One latent variable and six indicators variable designed in the model. The problem is to test whether the data fit a hypothesised model or not. The model is given as:
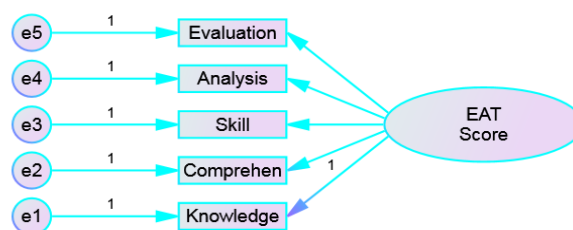

Fig2: Hypothetical Model

Before estimating the parameters the study specified the model and tested that our model is identifiable, after that the study go for estimating the model parameters. The report is given as:

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

            Number of distinct sample moments: 15

Number of distinct parameters to be estimated: 10

                Degrees of freedom (15 - 10):   5

Result (Default model)

Minimum was achieved

Chi-square = 13.920

Degrees of freedom = 5

Probability level = .016

Minimum was achieved it reflects solution conversed. Overall Chi-square value is 13.920 with df 5. The next step is exploding model fit indices for hypothesised model.

I. Model Fit Summary

On the basis of first summary

P-value= 0.016 (Less than 0.05)

GFI Value= 0.953 (Greater than threshold value 0.9)

CFI Value= 0.849 (Less than threshold value 0.9)

Since p-value is insignificant it represents that the model is not fit.

RMR Value= 0.099 (Greater than 0.05)

RMSEA = 0.128 (Value is quite high)

The study concluded that the hypothesised model doesn't fit the data well so test of model fit indicate a poor fit. Therefore model requires re-specification, the study go for Modification Indices. Specify the covariance among the error term, from modification indices; it requires covariance between e_1 and e_5, it results there will be over change in Chi-square value by 5.777.

II. Model Fit Summary

After specifying the covariance between e_1 and e_5 the study rechecks the model fit. The second model fit summary:

P-value= 0.112 (Greater than 0.05)

GFI Value= 0.975 (Greater than threshold value 0.9)

CFI Value= 0.941 (Greater than threshold value 0.9)

Since p-value is significant it represents that the model is quite fit.

RMR Value= 0.084 (Greater than 0.05)

RMSEA = 0.090 (Value is quite high)

Both RMR and RMSEA is more than 0.05 it shows that model is not fit. Again the study goes for model specification and specify covariance between e_4 and e_5, it results there will be over change in Chi-square value by 5.363.

III. Model Fit Summary

After specifying the covariance between e_4 and e_5 the study rechecks the model fit. The third model fit summary has given as:

P-value= 0.680 (Greater than 0.05)

CMIN = 0.503 (Greater than threshold value 0.05)

GFI (Goodness of Fit Index) = 0.995 (Greater than threshold value 0.9)

AGFI (Adjusted Goodness of Fit) = 0-973 (Greater than threshold value 0.9)

CFI (Comparative Fit Index) Value= 1.00 (Greater than threshold value 0.9)

NFI (Normed Fit Index) = 0.978 (Greater than threshold value 0.9)

Since p-value is significant it represents that the model is quite fit.

RMR Value= 0.020 (Less than 0.05)

RMR value less than 0.05, suggests that data fit the model

RMSEA (Root Mean Square Error of Approximation) = 0.000 (Value is quite low, less than threshold value 0.05)

Similarly RMSEA value indicates data fits the model.

Overall model fit statistic indicates a good fit and the hypothesised model fit the data, in other words it indicates that the data fit the model well.

The final model fit summary is given as:

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	12	1.510	3	.680	.503
Saturated model	15	.000	0		
Independence model	5	68.949	10	.000	6.895

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.020	.995	.973	.199
Saturated model	.000	1.000		
Independence model	.194	.786	.679	.524

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.978	.927	1.023	1.084	1.000
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.300	.293	.300
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	.000	.000	4.983
Saturated model	.000	.000	.000
Independence model	58.949	36.288	89.100

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.014	.000	.000	.046
Saturated model	.000	.000	.000	.000
Independence model	.633	.541	.333	.817

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.000	.000	.123	.762
Independence model	.233	.182	.286	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	25.510	26.908	57.916	69.916
Saturated model	30.000	31.748	70.507	85.507
Independence model	78.949	79.531	92.451	97.451

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	.234	.248	.293	.247

Model	ECVI	LO 90	HI 90	MECVI
Saturated model	.275	.275	.275	.291
Independence model	.724	.516	1.001	.730

HOELTER

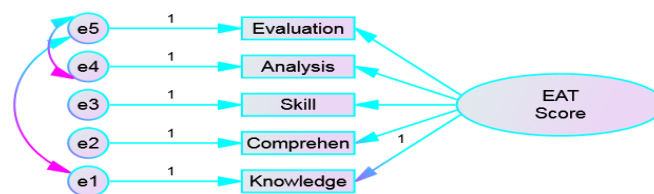| Model	HOELTER .05	HOELTER .01
Default model	565	819
Independence model	29	37

Fig3: Final Fitted Model

F. Discussion on the basis of Specific Item in Environment Awareness Test (EAT) :
ITEM No.2

- *Environment consists of* :

  a. Biotic Components **b**. Abiotic Components **c.** Biotic, Abiotic and Energy **d**. Gases

  8 students out of 54 from Grade 4th make mistakes while answering this question whereas 11 students out of 56 from Grade5th repeat the same mistakes.

ITEM No.8

- *Classify the following environment issues into air, water and sound pollution:*

  6 students don't attend the question where as some of them left column incomplete falls under different types of pollution. In most of the cases it is found that students unable to copy and classify the pollution into different categories. Students mostly face problems while categorising environmental issues into air pollution.

ITEM No.9

- *Write an essay on Environmental Cleanliness (Minimum 5 Lines)*

    The proposed question included in the EAT in order to test the environmental awareness issues among the students studying in Government Primary School in Grade 4th and 5th. 5 students unable to answered the question, 2 students wrote only one line, 5 students wrote two lines, 8 students wrote only three lines, 4 students wrote four lines whereas 86 students answered the item well. In most of the cases it is found that students make grammatical and spelling mistakes while expressing their feelings, it reflects they have knowledge and understanding regarding environmental issuers but due to weakness in Hindi grammar portion they feel problem to express their ideas in sentence.

DELIMITATIONS & SUGGESTIONS –

The major delimitations of the present study is that it is restricted to study the environmental awareness of the students studying in Grade fourth and fifth in government primary schools of Sagar city, Madhya Pradesh.

The suggestions for the upcoming studies is that they will broadened their area of study in context to student's grade as well as geographical area even some new variables can be added in order to draw some interesting results which force the education world to think seriously in this area.

The suggestions for increasing environmental awareness among students at primary level are:

- Environmental curriculum should be revised and it should be activity based rather than theoretical so that students at primary level enrich their environmental experience through practical work.

- Environmental day and week should be celebrated on monthly basis in order to create awareness among primary students like celebrating; 2nd Feb. as Wetland Day, 20th March as Sparrow Day, 22nd March as World Water Day, 22nd April Earth Day, 5th June World Environmental Day and various other environmental day and week falls in different months throughout the year.

- Environmental Studies teaching strategies should be modified on the basis of need of the topic.

- Environmental Studies teaching-learning aids and supported toolkit should be developed with help of teacher and student in order to learn the complex topics, it makes teaching-learning process more interactive and result oriented.

- Government should establish *'Enviro School'* firstly at primary level in every block at initial stage which focussed towards environmental studies and its infrastructure also designed in eco-friendly manner.

- Environmental activities should be designed on weekly basis in primary schools like; cleaning the campus and surroundings, sapling, drawing the pictures screening various environmental issues etc.

- Summer and Winter Camps related to **"*Enviro Awareness"*** should be organise at block level on the basis of student's interest and teacher recommendations from every school at the end of such camp student should get certificate which will be useful and valuable throughout their academic life.

- Eco-clubs should be form in primary schools which perform activities time to time like; skits, essay writing, slogans, quiz etc.
- Environment Competitions should be organised at cluster, block, district and state levels among primary schools under different categories like poster, slogans, quiz etc. which enthuse primary students to show interest in environmental programs.

The above suggestions are focussed towards induced participation of the primary students in environmental activities and their sensitivity towards environmental issues. The proposed study is a mere attempt to test the environment awareness in context to cognitive ability of the students studying in government primary schools. Student are the future of any nation, so selecting strident from primary schools is the good avenue to study and investigate the environmental cognitive ability of the student ; knowledge, comprehension, skill and other abilities in context to environmental awareness and their reactions towards certain environmental issues.

CONCLUSION –

Students in primary schools are like bud and they should be nurtured by proper manure in form of inculcating environmental ethics and values in them after all they are the future of any nation and foundation of any nation depend on their shoulders. Being a researcher it's our duty to suggest some measures to the government so that the proposed study can sensitise the feelings of eco-friendly environmental circle. The study is an exercise to raise the issue related to environmental awareness among primary students; it's a pebble which will pave the future success path. The study believes that environmental feelings and emotions, attitudes, ethics, values, knowledge, skills and participation should be encouraged from primary level onwards so that we can produce responsible citizens capable of playing an active role in all matters concerned with the environment in which we all inhabit.

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