



## Attitude of School Students Towards Geography

### KEYWORDS

Attitude towards Geography, Preference scores, habitat, Inter rater agreement ratio

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**ABSTRACT** *Of late Geography has drawn the attention of the students, schools and the society in India and more particularly in West Bengal. The present researchers like to see whether the Attitude of the students towards geography has been developed in consonance with the growing importance of the subject in the society. The authors developed a test on "Attitude of the Students towards Geography (with six dimensions)" in this connection. The test was administered on 800 boys and girls of class IX distributed over WB. With ANOVA, t-test and correlation it was found that (1) In general boys and girls do not significantly differ in their mean attitude scores towards geography scores but such difference is observed in urban habitat.(2) Boys of urban and rural habitats differ significantly in mean attitude scores towards geography.(3) In general students of different habitats significantly differ in their mean attitude towards geography. 4) Attitude & Achievement in Geography are significantly correlated.*

Introduction: Selection of subjects in higher secondary and higher stages of learning is sometimes dictated by parents, guardians, relatives and others in our country overriding the attitude of the students towards any subject or liking pattern of the students for the school subjects. Such selection is most often found to be disastrous. Students' attitude and preference for the subject is, therefore, very important as regards their development and career.

A student's attitude towards a school subject in most of the times an indicator of student's effort, participation, learning outcome related to the subject (Standslause, 2013). It also indicates how the student will react to the subject in the combination of different school subjects. According to Inceoglu (2004)-Attitude is some body's tendency to react to an event, object (or idea) in his or her environment. Attitude is spread over the domains of education i.e. Cognitive (intellectual activities related to the subject under consideration), affective (emotional attachment to the subject) and psychomotor (tendency to act for the subject). A positive attitude of a student towards a subject also shows the student's liking for the subject during higher studies, his/her leadership in the subject in the school and college level. Hogg, & Vaughan (2005, p. 150) and (Eagly, & Chaiken, 1993, p. 1) defined Attitude in the similar tone (<http://www.simplypsychology.org/attitudes.html>: dl 06/11.14).

Attitude towards a subject is not always absolute. Neo Freudian Psychologist like Jung(1921) considers two sides of Attitude –the explicit (developed consciously in a man out of different exposures in life) and the implicit (developed unconsciously in a man remaining somewhat beyond the conscious control of a man). Attitude of a student towards a school subject, in all academic transactions, comes within the purview of explicit attitude (<https://implicit.harvard.edu/implicit/faqs.html>- dl06/11/2014)

It may vary from class to class [ Kbiatko, Janko & et al.2012]. It may differ from school to school . Govt school student possess better attitude towards geogra-phy (Sumesh & Gafoor, 2012). It may vary from gender to

gender. However Kabiato et al. (2012) & Ozdemir (2012) show that gender has no effect on the attitude of the students towards geography. Grade does not always affect the attitude of the students' attitude towards geography. Change of curriculum affects the students attitude towards geography (Mularczyk: 2011).Students' positive opinion about geography teachers (Tomal-2010) and blended learning model ( Korkmaz: 2009) contribute more to the attitude of the students towards geography.

Attitude of students towards a school subject is based on social status of the subject, its scope in higher education and profession, teacher's quality & personality, and observation of different role models (Bandura,1971 in Mangal,2005).

Development of attitude for Geography depend upon three factors

1. Student factor: Student's achievement, self efficacy and self concept, intrinsic and extrinsic motivation (Tahar et al.; 2010), school experience, belief about a subject.
2. School-teacher factor: School-teacher's personality, subject knowledge, method of teaching, resources available in the school, classroom management (Mohamed, L. & Waheed, L.: 2011)
3. Social factors: Home environment, educational background of the parents and their occupations, parental expectations etc

Even after three decades of independence in India, geography was a neglected

subject in different levels of education. The curriculum of the subject was not coherently built and teachers were under qualified (particularly in schools). Number of geography teachers and supporting materials were not adequate. There was no adequate scope of studying the subject in higher secondary and higher education level. The entire scenario has changed from the late seventies of the last

century. The cognitive value of the subject has increased making it all the time life centric and profession oriented. Teachers in the subject are qualified and accomplished. A more number of the school students has been attracted towards subject. Geography belongs to the social science group of disciplines. It is interdisciplinary subject having inducted different disciplines like Mathematics, Physics, Astronomy, Economics, Environmental studies, Sociology, Biology, Soil science etc. Students having interest in social science and moderate ability in science subjects most often lean towards geography. The school students widely differ from one another in their hierarchy of preferences for different school subjects (De and Bera: 2012). Student's attitude towards a subject may not constant through out the academic life. It may change due to the change of circumstances of the student, change of teacher, change teaching style, learning facilities of the student, teacher pupil relation, period of holding the class during the school hours and change of home conditions and bindings in home. Attitude of a student is particularly necessary at the onset of teaching and learning and also to sustain the learning. It remains to be seen whether this preference has any relation with attitude in the case of geography.

**Problem:** The geography education in the schools of West Bengal (WB) has changed radically during the last four decades as discussed earlier. Such change might bring out a corresponding change in attitude of the students towards the subject and also their achievement in the subject. In WB very little researches on the teaching learning, attitude and achievement in Geography have been reported. Some researches on the attitude of the students towards geography done in Turkey, Maldives, Malaysia and African countries demonstrate adequate attitude among the school students towards geography. However similar works seem to be necessary in India and more particularly in WB to estimate the attitude of the students towards geography and corresponding achievement in the subject after remodeling of Geography education in schools in recent times. A study is, therefore, necessary to ascertain the attitude of the students towards geography in the schools of WB and its contribution towards augmenting the achievement of the students in the subject.

#### Objectives:

1. To find the attitude score of the students towards geography and find mean scores sex-wise and habitat-wise
2. To compare the mean scores sex-wise and habitat-wise
3. To find the correlation between attitude and achievement

#### Hypotheses

- 1 The boys and girls do not differ significantly in the mean attitude towards geography scores
2. The urban and rural students do not differ significantly in the mean attitude towards geography scores
3. The urban boys and urban girls do not differ significantly in the mean attitude towards geography scores
4. The rural boys and rural girls do not differ significantly in the mean attitude towards geography scores
- 5 The urban boys and rural boys do not differ significantly in the mean attitude towards geography scores
- 6 The urban girls and rural girls do not differ significantly in the mean attitude towards geography scores
7. Students' attitude and achievement in geography are not significantly correlated.

#### Methodology

Population: Students of class IX just promoted to class X, studying under Bengali medium schools of WBBSE (West Bengal Board of Secondary Education)

No of schools: 16; Schools (8 boys'+8 girls')

Sample size-800 students Boys -400 & Girls-400

Sampling technique-cluster sampling

#### Variables:

Independent Variables: Attitude towards Geography

Dependent variable: Achievement in Geography

Confounding (categorical) variables: Sex and habitat of the students

Control variables: WB, WBBSE, Bengali medium schools, Geography subject

#### Attitude of the students towards

Three tools developed were (1) Attitude & (2) Achievement test

(1) A test on Attitude towards Geography developed by Sarkar, De & Maiti was used to collect data on the attitude of the students towards Geography. It consists of twenty three items with 12 positive items and 11 negative items. The test comprised three responses against each item: Yes(Y), No (N) & Undecided (U). For positive items, scores for responses Y =1, N =0 & U =0 and for negative items, scores for responses Y=0, U=0 & N=1. (U is not scored for positive or negative statement, a scoring pattern used in Bell's Adjustment scale as reported in Hossain, 1985). In addition to their normal responses as per objectives, the students will be advised to record their preferences for the seven school subjects, in hierarchical order, with digits 1 to 7, 1 indicating the first preference and 4 will indicate mid preference to attitude towards geography to see whether the attitude scale may be replaced by preference scale.

#### The dimensions of Attitude Test & Bunch –Total Correlation:

Sl.No.	Dimensions	No. of items	bunch total correlations of the subtests with total test
1	Geography teacher	4	0.471
2	To know a place	3	0.536
3	Career in Geography	4	0.564
4	Recreational activities	4	0.490
5	Interest in learning the subject	4	0.570
6	Value of the subject	4	0.533
Total		23	

The discrimination value of each test item was determined by t-test. The bunch total correlations of the subtests with total test are: 0.471, 0.536, 0.564, 0.490, 0.570 and 0.553 respectively. Maximum and minimum marks for the entire test are 23 & 0 respectively. The test retest reliability of the test is-  $r=0.8252$ ,  $df=151$ . The reliability of the test by Kuder Richardson Method (Formula- 21) is 0.4404 (since the

score of each item is dichotomous).

Content Validity: Inter rater agreement ratio: (Gregory, 2005 in Banerjee & Mukhopadhyay; 2011). No. of discriminating items (n)=23

Raters	No. of items recommended by each rater	No. of common items (n') jointly recommended by	Agreement Ratio(n'/n)	Mean Agreement Ratio (n'/n)
T1	19	T1&T2=18	18/23=0.783	0.739
T2	22	T1&T3=17	17/23=0.739	
T3	18	T2&T3=17	17/23=0.739	

(2) . An Achievement Test in Geography: Geography Tests in Secondary Examination of West Bengal Board of Secondary Education was considered as Achievement Test in Geography. The items corresponding to class ix syllabus were collected by the present investigators from the Geography question papers set during 2009 -12 for the Secondary Final Examination under West Bengal Board of Secondary Education. As the questions were set in the Final Examination, its standardization was not necessary. It consists of short answer and very short answer type questions covering the erstwhile syllabus of class ix. The full marks of the test were 20 and number of items was 10 (S.A-5 and V.S.A-5)

7.2. Sample:

Presentation of Data

Table-1 Frequency Distribution of the Attitude scores of 800 students forming the total sample

Scores	0-2	3-5	6-8	9-11	12-14	15-17	18-20	21-23
freq	0	1	30	200	297	223	32	17

Table-2 Descriptive statistics different strata-wise for Attitude scores

	Boys	Girls	Scores of Total students	Urban	Rural	Urban Boys	Urban Girls	Rural Boys	Rural Girls
Number	450	400	850	400	400	250	200	200	200
Mean	13.488	13.205	13.345	13.16	13.53	13.036	13.285	13.836	13.125
SD	3.13	2.676	3.007	2.86	3.14	3.124	2.57	3.078	3.167
Median	14	13	13	13	14	13	13	14	13

Fig:1 Frequency polygon on entire sample:

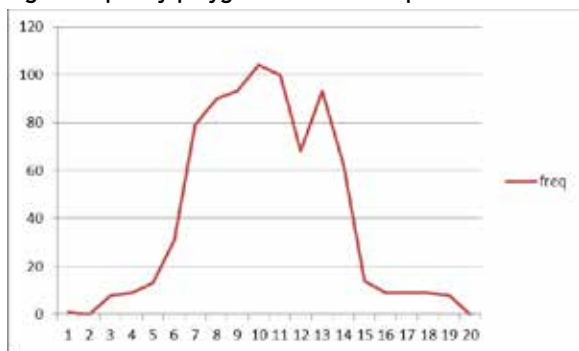


Table-3 Attitude towards Geography

For studying the main effects between sexes and habitat and their interaction a random sample of 50 from each cell of sex & habitat was considered for ANOVA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
sex	5.120	1	5.120	.624	0.431 (p>0.05)
habitat	46.080	1	46.080	5.615	0.019 (p<0.05)
sex * habitat	69.620	1	69.620	8.484	0.04 (p<0.05)
Error	1608.360	196	8.206		
Corrected Total	1729.180	199			

Interpretation: Main findings from ANOVA in Table 3 are as

- (i) Boys and Girls do not differ significantly in their attitude scores
- (ii) Rural and Urban students differ significantly in their attitude scores

Since there is significant interaction between sex and habitat sex-wise significant difference of attitude scores might be possible at different levels of habitats. It is, therefore, necessary to apply t-test to find the differences between boys and girls at different levels of habitat in their attitude scores.

Table- 4 t-test to find the significance of difference between different pairs of attitude towards geography scores

Pair	N	df	M	SD	t	Sig
1.UB	50	98	12.060	2.780	2.769	0.007(p<0.05)
UG	50		13.560	2.365		
2.UB	50	98	12.060	2.780	3.679	0.000(P<0.05)
RB	50		14.200	3.030		
3.RB	50	98	14.200	3.030	1.428	0.157(p>0.05)
RG	50		13.340	2.993		
4.UG	50	98	13.560	2.635	0.390	0.697(p>0.05)
RG	50		13.340	2.993		

Interpretation: From table 4, t-test shows that only urban boys & girls and so also boys of rural and urban area significantly differ in attitude scores

Table-5 Bivariate Coefficient of Correlation between Attitude and Achievement Scores in Geography

Sample Size Considered in	df	Coefficient of correlation	Significance
Attitude Test	798	0.700	P<0.01
800			

Interpretation: The scores of attitude and Achievement tests are significantly & positively correlated.

Findings:

From tables- 3, 4 & 5 it is found that Retained null hypotheses are: H01, H05 & H06 Rejected null hypotheses are: H02, H03, H04 , H07 Hence,

- (1)Boys and girls do not differ significantly in attitude towards Geography
- (2) Urban and rural students do not differ significantly in

attitude towards Geography

(3) Urban boys and girls differ significantly in attitude towards Geography

(4) Rural boys and girls differ significantly in attitude towards Geography

(5) Urban and rural boys do not differ significantly in attitude towards Geography

(6) Urban and rural girls do not differ significantly in attitude towards Geography

(7) Students' attitude and achievement in Geography are significantly correlated.

#### Limitation of the study:

More dimensions could be added to the attitude test (or the no. of test items could have been increased in lieu of that) to ensure increased reliability of the test. But that could consume more time for administration, which the schools do not generally want to spare.

#### Discussion:

(1) Students of different habitats differ in attitude scores. The boys of rural schools show higher attitude towards geography.

(2) More dimensions were not added with the test because those dimensions immediately do not concern the students of this lower class. Moreover, more items unusually take away the active class-hours of the students.

(3) No easy explanation is available for the significant difference between urban boys and girls in their mean scores of attitude towards geography.

(4) Preferences of the students for Geography are highly correlated with their attitude scores towards the subject. Therefore, 'Preference' may be used as a predictor of 'attitude'

In Indian schools it is not always possible to apply the full form of 'Attitude of the Students towards Geography' test on the students on account of the factors of time and administrative complications in the schools. In that case a very short form of attitude test is desirable. With that intention each student were asked to record own preference for all the seven school subjects. While finding the relation between the preference ranks for geography and the corresponding attitude scores, it was found that students having higher attitude scores ( $>P75$ ) for Geography have also preference rank (above rank 4). Similarly it was found that students having lower attitude scores ( $<P25$ ) have also lower preference rank (below rank 4). Top scorers in attitude in 100% cases have higher preference (above rank 4) for geography and low scorers in attitude in 100% case have lower preference rank (below rank 4)

High and low attitude scorer groups, their preferences for geography are shown in the following table

**Table-6 Attitude & Preference towards Geography**

Groups	No. of students	No. of students preferring geography	Their %	*Critical Ratio(CR)	Significance
Higher attitude	50	50	100	1000( $>1.96$ )	S( $p<0.05$ )
Lower attitude	50	0	0		

\*[ For interpretation of the table ref:H.E.Garret (2007): Statistics in Psychology and Education. Paragon International Publisher, New Delhi,12th Indian Reprint; Pp 235-36]

CR being significant ( $p<0.05$ ), it may be stated that the students with higher and lower attitude scores differ significantly in their preference ( $p<.05$ ). So a rating scale of preference might serve as an alternative to an attitude scale for Geography subject.

(6) Researches on Attitude towards science have recently has revealed that there is a greater need for engaging students towards engagement in schools and as such more importance to be given on motivation in the subject(s) concerned. Another pointer is that the students do not differ much sex-wise and habitat-wise in many subjects particularly science.(Osborne ,2003;Anwer & Iqbal;2012)

#### Suggestions for further research:

(1) The reason for significant difference between urban boys and girls in attitude scores is worth investigating particularly through interviews.

(2) The test may be further administered on the students of class X and lower classes of secondary schools.

(3)The test may also be applied on the students of HS classes studying with Geography as one of the elective subjects and to determine the preference of the students for the subject. In that case the present test should be edited and enlarged with a few more dimensions like: social appreciation for the subject, job market of the subject, scope of higher study in the subject etc.

(3) The attitude scale may be replaced by 5 response-scale and may be administered on the students to find whether there is any potential variation of the result from the present one(three response type).

(4) Students of different boards with different media of instruction may be included in the test.

(5) Cronbach's alpha may used to find the internal consistency of the Attitude Test.

#### Conclusion:

1. Habitats of the students have significant influence on the attitude in comparison to influence of sexes.

2. Students' attitude and achievement in Geography are significantly and positively correlated

3. Researches on Attitude towards science have recently revealed that there is a greater need for engaging students towards school activities and as such more importance to be given on motivation in the subject(s) concerned. Another pointer is that the students do not differ much sex-wise and habitat-wise in many subjects particu-

larly science. (Osborne ,2003;Anwer & Iqbal;2012). So researches in 'motivation' in geography go side by side with 'attitude'.

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