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PLAN AND PROCEDURE

The academic achievement of students is dependent on the factors like intelligence, creativity, aptitude, interest, study habits, quality of the teaching staff, syllabus and infrastructure of educational institution. Academic achievement is closely related with the study habits and educational interest. So, to develop right study habits in the students is essential for better achievement. Similarly the educational interest play very significant role in educational performance. Lack of educational interest result in poor study habits and this is true, it is a major cause of educational backwardness. Interest is one of the key factors among the non-intellectual factors for educational success. Therefore, the identification and measurement of interest is essential for the better achievement.

In this study, the researcher has studied interest and academic achievement of the XI standard students.

RESEARCH DESIGN

The present research work is a descriptive research and the researched has used survey method for the present study.

SAMPLING DESIGN

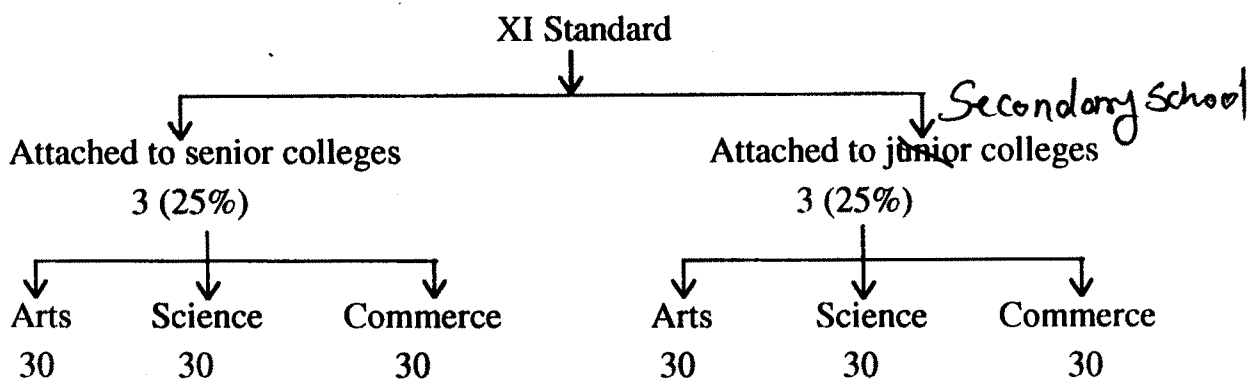Random sampling method was used to draw the sample in this study.

SAMPLE

Selection of Colleges

In Kolhapur city there are 22 junior colleges of which 12 are attached to the senior colleges and 10 are attached to highschool. For the purpose of this study XI standard Arts, Science and Commerce students of the junior colleges both attached to highschools and senior colleges were taken as the sample. Out of 22 junior colleges only 6 were attached to senior college and 5 were highschool having all the three faculties that is Arts, Science and Commerce. Out of these, 6 (i.e. 50%) junior colleges were selected randomly.

Selection of Students

In a division of the XI standard approximately 60 students were available for each of the faculties of Arts, Science and Commerce. By random selection 50 percent of the students were drawn from each class, Thus, a total of 540 students were drawn as sample from six junior colleges, for this study.

XI Standard

Attached to senior colleges
3 (25%)

Attached to junior colleges *Secondary School*
3 (25%)

Arts	Science	Commerce	Arts	Science	Commerce
30	30	30	30	30	30

TOOLS USED FOR THE STUDY

To find out the effect of study habits and educational interest on academic achievement the following tools were used.

i. Study Habit Inventory (SHI)

ii. Educational Interest Record (EIR)

Description of the tools

i) Study Habit Inventory (SHI)

The construction and standardisation of the study habit inventory was done by M. N. Palsane.

Study habit inventory is only a small attempt making teachers, students, parents and counsellers aware that certain habits of study are good and conductive for better achievement. The study habits of an individual cover mainly reading habits, learning techniques, memory, time schedule, physical condition, examination and evaluation.

The inventory has 45 items and belongs to the following areas :

Budgeting time, Physical conditions for study, Reading ability, Note-taking, Factors in learning motivation, Memory, Examination, Preparation for examination, Use of examination result and Health.

This tool is in Marathi and was administered in Marathi itself, as the XI standard students are familiar with Marathi and have Marathi as a compulsory subject. Therefore the tool was administered in Marathi. Thus, the study habit inventory was administered and responses collected for scoring.

Weightage to Items

In this inventory weightage of 2, 1, 0 assigned to the positive item and 0, 2, 1 assigned to the negative item.

Scoring

The separate scoring stencil was used to obtained the score by super imposing of the completed study habit inventories of the students.

Thus, the study habit score was obtained for each student. Finally the obtained raw score was interpreted in following manner as given in the study habit inventor manual.

Table No. 1

Study habit Inventory Raw score and Interpretation

Raw score	Interpretation
Above - 75	Excellent
64 - 74	Good
54 - 63	Average
43 - 53	Unsatisfactory
Below - 42	Very Unsatisfactory

ii)   Educational Interest Record (EIR)

The construction and standardisation of EIR was done by Dr. S. P. Kulshrestha.

Description of the tool

The purpose of EIR is to help students to adjust themselves to their education by making wise choices of the subjects of study.

The present record contain 98 educational subjects / activities belonging to seven different educational interest areas as follows.

Agriculture (AG)   The Agriculture interest area includes the subjects like Animal Husbandary, Farming, Fruit Preservation, Darying, Agriculture Extention, Veterinary Science and Agricultural Botany.

Commerce (CO)	It has includes subject like - Elements of Commerce, Transport Principles, Typing, Commercial Mathematics, Shorthand, Accounting, Banking, Insurance and Foreign Trade.
Fine Arts (FA)	It has includes subjects like - Sculptures, Music Songs, Toymaking, Wood Craft, Art, Drawing and Painting.
Home science (HS)	It has included the subjects like General home science, Home Budget, Hygiene, Cooking, Home Decoration, Sewing, Embroidery, Knitting and Childcare.
Humanities (HU)	It has includes subjects like - Hindi, Logic, Civics, History, Anthropology, Philosophy, Sociology, Education and Geography.
Science (SC)	Science area includes the subject like - Chemistry, Physics, Zoology, Botany, Geology, Metrology, Science of Atoms, Surgery and Physiology.
Technology (TE)	Technology field of interest is represented by the subjects like - Fitters Job, Electric, Civil Engineering, Welding, Engineering - Drawing, Radio / T. V. Engineering, Applied Mathematics, Indian Technology and Science of metals.

This tool is in Hindi and was administered in Hindi itself, as the XI standard students are familiar to Hindi and have Hindi as a compulsory

subject or as a record language till XI standard. However, the meaning of certain words were told to those who had difficulties in understanding. Instructions were given as per the manual as to how to mark the responses with suitable examples. Thus, the EIR was administered and responses collected for scoring.

Weightage to Item

In this EIR one mark was assigned to right ( ) mark and zero to wrong (x) mark.

Scoring

The maximum possible score under each educational interest areas is 14 and minimum zero. Raw score for each educational interest area was derived by sum up all right marked responses vertically for the first figure and horizontal for the second figure.

After obtaining the raw score for all the seven different educational interest areas the scores were entered area-wise in the table for interpretation. The percentage of students was calculated some had educational interest has in a single area, some in two areas and three areas.

Academic Achievement (AA)

For the Academic Achievement score, the final examination marks obtained by the XI standard students were considered. The marks were taken from the school / college records.

PROCEDURE OF DATA COLLECTION

Data was collected by the researcher from the sample of XI standard students of the faculty of Arts, Science and Commerce of all the six selected junior colleges attached to highschools and senior colleges of the Kolhapur city after obtaining due permission from the heads of the institutions drawn for this study.

The data was collected in the month of March, 2000 regarding Study Habits, Educational Interest and Academic Achievement of the XI standard students.

The standardized tools : Study Habit Inventory by M. N. Plasane and the Educational Interest Record (EIR) by Dr S. P. Kulshrestha were administered as per the instructions given in the manuals of the tools on the sample and data was collected.

The Academic Achievement score of the XI standard students were collected from the highschools and senior colleges office records. Thus data was collected.

METHODS OF ANALYSIS OF DATA

The raw scores obtained by administering the study habit inventory were classified for interpretation as per the manual and presented in Table No. 1. The raw score of the educational interest was also obtained by

administering the EIR and educational interest areawise and facultywise distribution of the students is presented in the Table No. 2 of this dissertation.

All the scores were analysed statistically in pursuance of the objectives of this study coefficient of correlation 'r', critical value (tr), ANOVA and critical difference (CD) were calculated and results drawn.

Statistics and formula used in this dissertation

1) Correlation of coefficient 'r'

Were calculated to find out the relationship between academic achievement, study habit and educational interest by using Pearson's 'r'

$$r = \frac{\Sigma XY - nXY}{\sqrt{SD_1^2 + SD_2^2}}$$

ΣXY = Sum of cross product of variables. X and Y for n subjects.

SD_1 = Standard Deviation of first sample.

SD_2 = Standard Deviation of second sample.

The test of the significance of 'r' was determined by using following formula.

$$tr = \frac{r\sqrt{N-2}}{\sqrt{1-r2}}$$

tr = 't' Critical value

r = Coefficient of correlation

N = Sample size.

ANOVA   ANOVA test were used to see the significance difference between study habit and educational interest facultywise.

C. D.   (Critical difference)

It was calculated to find out in which pair of faculties differ significantly. For this instead of calculating student's 't' for different pairs of faculties mean. Researcher had calculate the least significant difference at the given level of significance. C. D. was calculated by following formula.

$$C.\ D. = t\alpha\% \text{ for error df x SE } \sqrt{2/N}$$

SE = Difference between two treatment mean.

$t\alpha\%$ = 't' table value at 0.05 / 0.01 level of degree of freedom.

2   = Constant

n   = Sample size