CHAPTER II

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INTRODUCTION

For any worthwhile study in any field of knowledge, the research worker needs an adequate familiarity with the work, which has already been done in the areas of his choice. In review of related studies, the researcher attempts to determine what others have learned about similar research problems and to gather information, relevant to the research problems at hand. The review of related literature serves multiple purposes and is essential to a well-designed research study. One of the early activities and an essential aspect of a research project, is the review of related literature. The term "Review" means revision or glances over or refers back on.

IMPORTANCE OF REVIEW

Review of related literature is the abstract or a brief summary of previous researchers, which provides evidence for the researcher, what is already known and what is still unknown and untested. In this way related literature is a necessary aspect of a research project. According to Aggarwal J. C (1966), "The study of related literature implies locality, reading and evaluating the report of research as well as reports of casual observation and opinion that are related to the individuals planned research project".

In the words of John W Best and James V. Khan (1992), "A summary of writings of recognized authorities and of previous researches, provides evidence that the researcher is familiar with what is already known and with what is still unknown and untested. Since effective research is based upon past knowledge, this step helps to eliminate the duplication of what has been done and provides useful hypothesis and helpful suggestions for significant investigation."

Examining the strengths and weakness of many research reports prevents the investigator from plunging into procedural pitfalls. It promotes a greater understanding of the problem and its crucial aspects and ensures the avoidance of unnecessary duplication.
Good (1959) summarized the value of related literature as follows: "The key to the vast store house of published literature may open doors to sources of significant problems and explanatory hypotheses and provides helpful orientation for definition of the problem, background for selection of procedure and comparative data for interpretation of results. In order to be truly relative and original, one must read extensively and critically as stimulus thinking".

The research worker must acquire up-to-date information about what has been done in the particular area from which he intends to take up a problem for research. The study of related literature provides a data, evidence, and inspiration for understanding a study and also it provides a greater understanding of the problem and has an insight into the closely related problems that have been investigated. Thus it provides data on the basis of which, to evaluate and interpret the significance of one's findings.

STUDIES REVIEWED

The investigator has reviewed the studies, which were pertaining to the objective of the present study. The studies were arranged in the chronological order from 1944 to 2000. The investigator has reviewed a number of studies, both by Indian and foreign authors, related to general ability and intelligence. Among them, he gives below the summary of twenty three Indian and twenty five foreign studies as reviewed by him.

REVIEW OF RELATED INDIAN STUDIES

CHOU DHURI AND SINHA (1959) conducted a comparative study of concrete intelligence of the tribal and non-tribal school girls of Ranchi.

The sample included 50 tribal and 50 non-tribal girls of Ranchi. The age of the girl students ranged from 6 to 16 years and they belonged to different grades. The tribal girls were drawn from the Munda and Oraon tribes and all of them were Christians. The battery of performance tests used included Alexander Pass Along, Cube Construction and the Block Design Tests along with the Dearborn Form Board Tests. Mean, standard deviations, t - value, co-efficient of correlation and variation, were computed.
The major conclusions were:

1. There was basically no difference in the concrete intelligence of the tribal and non-tribal groups and

2. At the earlier age level, between 6 and 10 years, the tribal children exhibited less capability in exercising the power of mental analysis and synthesis than the non-tribal children, but later, between 11 and 16 years, both the groups showed about the same degree of concrete intelligence in all aspects.

NOMANI (1964) conducted a comparative study of concrete intelligence of the Christian and non-Christian Munda school boys and girls of Khunti.

The main aim of the study was to carry out a comparative assessment of concrete intelligence of Christian and non-Christian individuals, with religion and sex as variables. Alexander's Battery of Intelligence Test was administered to 240 Christian (catholic) and non-Christian Munda boys and girls between 9 and 16 years of age. The samples included 60 Christian Munda boys, 60 girls, 60 non-Christian Munda boys and 60 girls. All the samples were selected at random, from a number of schools of Khunti subdivision, which was predominantly a Munda area. Mean, standard deviation and standard error of mean were computed. Student t-test was applied to find out the significance of differences. Product moment co-efficients of correlation between the subjects were computed.

The major conclusions were:

1. There was no significant difference in the concrete intelligence of the Christian and non-Christian boys and girls.

2. Non-Christian boys were better on the Alexander's Battery than the non-Christian girls. But the difference was significant only at 0.05 level.

3. There was no difference between the Christian boys and Christian girls on Alexander's Battery.

4. On the subtests of the Alexander's Battery of Intelligence Test all the boys and girls (both Christian and non-Christian) were almost equally good.

5. The sub tests of the battery were positively correlated.

PILLAI (1978) conducted a study on the construction and standardization of a Verbal Test of Intelligence in Tamil (for the age group 10+ to 15+).
The main purpose of the study was to construct and standardize a test in Tamil to measure the intelligence of children in the age group 10+ to 15+. The study was also designed to relate intelligence to age, grade residence, and the socio-economic status of pupils.

The standardization of the test was carried out by selecting 100 pupils for a pretryout from three schools in Chidambaram, 750 pupils were selected for try out. For the final administration 5000 pupils were selected from thirty-four schools of the fourteen districts of Tamil Nadu, using stratification proportionate sampling. The test included seven subjects Synonym, Antonym, Analogy, Classification, Mixed words, Reasoning (verbal) and Reasoning (numerical). There were, on the whole 110 test items. The test retest reliability was found to be 0.84 and the split half reliability was 0.88. The content validity was considered on the basis of the various types of behaviours assessed by the subjects. Norms were determined in respect of the total sample, grades, and age groups.

The study revealed that the differences in the means, in respect of the following combinations were significant:

1. Difference in the means for pupils in respect of combinations of different grades.
2. Difference in the means for pupils in respect of combinations of different age groups (10 to 10+).
3. Difference in the means for pupils in respect of combinations of different management.
4. Difference in the means for rural urban pupils.
5. Differences in the means for rural pupils in respect of combinations of different socio economic subgroups.
6. Differences in the means for the urban pupils in respect of combinations of different socio economic subgroups.

SINGH R. P (1979) conducted a study on creativity in relation to adjustment, frustration, and level of aspiration.
The major objectives of the study were:

1. To find out the nature and extend of the relationship between creativity and level of aspiration.
2. To find out what extend the high and low creative students differ in level of aspiration.

The sample consisted of 600 male students of class IX and X from literacy and scientific group of the secondary schools of Agra city. Tools used were the Test of Creative Thinking by Mehdi and Level of Aspiration Test by Shan and Bhargava. Statistical techniques used included t-test, product moment correlation and multiple regression analysis.

The major findings were:

1. No significant relationship was found between creativity and the level of aspiration.
2. The high and low creative students were not found to differ significantly in their level of aspiration.

TARA P. (1980) conducted a study on self concept, level of aspiration and interests among preadolescents of various socio-economic groups.

The major objective of the study was to study the influence of socio-economic status on three aspects of personality, namely, self concept, the level of aspiration and interests at the preadolescence stage.

The sample consisted of 100 students of classes V and VI representing the urban and rural areas of Varanasi district. The tools used in the study were the Hindi Adaptation of Piers-Harris Children's self-concept scale and the L. A. Coding test by Ansari and Ansari and Interest Record by Singh. Statistical techniques such as t-test, biserial correlation, tetrachoric correlation, Chi-square were used to analyse the data.

The major findings were:

1. Negligible relationship existed between self concept, the level of aspiration and interest at the preadolescent stage.
2. Rural and urban differences with regard to aspiration level of children were negligible.
PANDEY (1981) conducted a study on social aspects of academic achievement and aspirations of scheduled tribe students.

The objectives of the study were:

i) to analyse the socio-cultural factors that determined the academic achievement of scheduled tribe students,

ii) to find out their academic aspirations and analyse them in the context of socio-cultural background,

iii) to analyse their occupational aspirations in the light of their academic aspirations, achievement and social environment,

iv) to identify teacher-taught relationship and analyse it in the context of tribal student's socio-cultural background, academic aspirations and achievement and

v) to identify interaction patterns among tribal and non-tribal students' academic achievement and social environment.

Out of 264 students, 250 studying in high schools, intermediate and graduate classes in the educational institutions of Mirzapur district, belonging to six scheduled tribes - Gond, Kol, Khervan, Chero, Banga and Panika were included in the sample. For the collection of the data an interview schedule constructed by the researcher was used. The investigator maintained a field diary in which various observations were noted. In addition, various government documents, gazettes, census hand books of 1961 and 1971 of Mirzapur district and statistics provided by district inspector of school of Mirzapur were also consulted. Statistical analysis of the data was done by calculating percentage and by applying the Chi-square test.

Major findings of the study were:

i) The poor economic condition of the tribal forced them to do manual labour. This was responsible for low achievement,

ii) The bitter and negative interaction pattern between non-tribal and tribal students was also responsible for poor academic achievement and

iii) The analysis of occupational aspirations revealed that their selection area was becoming gradually more extended, variegated and modernized.
From the findings of the study it is evident that there should be some special type of educational system to provide tribal students better educational opportunities and thus accelerate the process of socio-economic development.

**PATEL (1981)** conducted a study on construction and standardization of General Ability Test for standards XI and XII.

The main objective of the investigation was to develop a non reading test of general mental ability for Gujarathi speaking students of the higher secondary schools of Gujarat State.

The test consisted of two parts: Part one tested the student's familiarity with the world around him through his experiences in Home and School, and knowledge in Science, Social Science, Community affairs and arts. Part two avoided any cultural content. It presented geometric drawings, designed to test the student's power of abstract reasoning. This part of the test presented an equal challenge to all students, regardless of their cultural background. The standardization sample consisted of 5,725 students, studying in higher secondary schools of Gujarat State.

The co-efficient of reliability ranged between 0.71 and 0.87 by different methods. The test gave co-efficient of validity against teacher's ratings as other testes of intelligence as 0.68 and 0.79. Factor loading revealed that the test was heavily loaded with a factor, Age norms and grade norms were established and deviation. IQs and percentiles for the test were computed.

**SAXENA S (1981)** conducted a study on need achievement in relation to creativity, values, level of aspiration and anxiety.

The major objectives were:

1. To find out the nature of relationship between n-Ach and creativity, values, the level of aspiration and anxiety.
2. To find out the sex difference in n-Ach as regards to creativity, values, the level of aspiration and anxiety.
The sample consisted of 300 male and 300 female students of classes IX and X selected from different schools at Agra city. The tools used were the Achievement Motivation Test (Prayag Mehtoe), Verbal Test of Creative Thinking (Mehdi), level of Aspiration Test (Shah an Bhargava) and Sinha Anxiety Scale. An Expost facto design was adopted.

The major findings of the study were:

1. There was relationship between n-Ach and the level of aspiration.
2. Sex differences were significant as far as level of aspiration were concerned.

INDIAN INSTITUTE OF PSYCHOMETRIC (1982) conducted a study on level of General Knowledge of young graduates.

The main study was in investigating the level of general knowledge of a group of young graduates. The sample included 600 young graduates, who appeared for a selection test in connection with the recruitment of management trainees. They were all first class honors graduates, in disciplines like History, Philosophy, Economics, English, Physics, Chemistry and Mathematics etc. Their age varied from 20 - 25 years and they came from all over India. The selection test was conducted in Bombay, Calcutta, Delhi and Madras. There were 100 marks in the general knowledge paper, distributed over eight broad questions. Each question had several sub questions. The time allotted for the entire test was 90 minutes. In all, sixteen questions were picked up where the responses varied widely. The responses obtained were examined and the critical ratio was calculated to study the significance of the differences.

The findings of the study were:

1. The proportion of correct responses were reasonably high for seven questions, while for the nine questions very few could give correct answers. A large proportion of the candidates gave absurd answers that indicated not only that the respondents had poor general knowledge but also that they were not serious.
2. The applicants from the north had not only less general knowledge but were also less. Larger proportion of them answered at random when they did not know the correct answer.
3. The level of general knowledge was very low, especially with reference to their academic background.

**INDIAN INSTITUTE OF PSYCHOMETRIC (1982)** conducted a study on effects of some socio-economic factors upon the performance in selection tests.

The purpose of the study was to assess the effects of socio-economic and environmental factors, upon the selection test scores empirically and to investigate the basis of dissatisfaction, growing up against the procedure of selection through objective tests. Data on economic status of the family, education level of the parents, medium of instruction at school and rural urban background were collected, from three groups of candidates (N + 180) in Group 1, N = 116 in Group II and N = 154 / 143 in Group III), who had applied for admission to different courses or jobs. To each group suitable selection tests were administered. Ratings of the subjects on different traits were obtained from three raters, which were finally converted into a consolidated rating group task and group discussion procedure were followed. Biographical and socio-economic information was collected through a questionnaire.

The findings of the study were:

1. Cultural and educationally progressive home environment helped the candidates to achieve success in selection test significantly, but not uniformly in different tests.

2. The effects of the socio-economic factors were more pronounced on the development of verbal factors and certain temperamental characteristics than on numerical or allied areas.

**MISHRA (1985)** conducted a study on construction and standardization of a verbal group test of intelligence in Oriya for the Age group 12+ and 15+.

The objectives of the study were:

i) to standardize two parallel forms of intelligence test

ii) to ensure highest possible test validity and adequate reliability and

iii) to ensure better judgment in identifying intellectually advanced children using both forms of the test.
The item areas of the test were verbal analogy, verbal reasoning, vocabulary, general information, and numerical relations. The test was tried out on samples of 1200 boys and girls of the target group. The final test was standardized on the sample of 2000 boys and girls chosen on stratified random basis split half, test retest other reliability co-efficient were calculated. The inter item correlation and factor analysis with varimax rotation were used for a study of validity of the test. Age norms, percentile norms, and other norms were calculated.

The study resulted in developing a verbal group test of intelligence in two parallel forms test had five sub test areas of 50 items and required 30 minutes for administration in the classroom situation using answer sheets. The reliability indices were split half 0.89 and 0.90 test re test 0.79, 0.81, 0.80 age wise parallel form 0.74, 0.73 , 0.78 and K. R. Reliability Form A: 0.84 to 0.84, Form B: 0.82 to 0.86, and whole 0.90 to 0.92. The concurrent validity with Raven's Standard Progressive matrices were Form A: 0.73, Form B : 0.52 and whole 0.55. The concurrent validity with Cattle's Culture-Fare Test Form Scale II was 0.63, 0.58 and 0.58 for form A, B and whole test respectively. The factors identified through factor analysis were general reasoning and verbal comprehension.

VERMA (1985) conducted a study on the factors affecting academic achievement.

It was a cross-cultural study of tribal and non-tribal students at junior high school level in Uttar Pradesh. The study was designed to find out whether students from the scheduled tribes differed from the students, belonging to scheduled castes with respect to academic achievement, socio-economic status, self-concept and adjustment in school.

The sample consisted of 1049 randomly selected junior high school students of which 557 belonged to scheduled tribes, 63 belonged to scheduled caste and 429 were from other castes. Aggregate marks in junior high school examination were taken, as the criterion of academic achievement. Pareek and Trivedis scale was used for measurement of socio-economic status of the pupil's family. The Hindi translation of Peers-Harris childrens' self-concept inventory was used for measurement of self-concept and Bhagia's adjustment inventory was used for measurement of adjustment.
Some of the major findings were:

1. The mean achievement of the scheduled caste students was significantly lower than that of tribal students and students from the other castes. However, there was no significant difference in the mean achievement of students belonging to scheduled tribes and those belonging other castes.

2. Students from the scheduled tribes had higher socio-economic status when compared to students from the scheduled castes or other castes.

3. There was no significant difference between tribal and other caste students as regards self-concept and

4. The mean school adjustment score of the tribal group was significantly lower than that of the non tribal group. However, there was no significant differences between the mean adjustment of score of the scheduled caste students and other groups.

**SUJATHA and YESHODHARA (1986)** conducted a comparative study of some educational variables of SC / ST students.

The major objectives of the study were:

i) to study the level of academic achievement, school adjustment and personality factors of SC / ST and non-SC / ST high school students,

ii) to make intergroup comparison with respect to the above mentioned variables,

iii) to find out the relationship between academic achievement and other educational variables selected for the study. School adjustment and personality factors and

iv) to find out the relationship between academic achievement and schools adjustment, personality factors, background variables like socio-economic status and type of school.

The sample consisted of 1340 class IX Kannada medium students, selected by the stratified random sampling method, giving proportionate representation to SC / ST and non - SC students and also to boys and girls. It was drawn from 27 high schools and of that 13 were private. The study was a descriptive-cum-correlational type. The study was a descriptive-cum-correlational type. The required data were collected by using a Kannada version of N. M. Bhagia's school adjustment inventory, a Kannada version of Cattell's junior senior high school personality questionnaire and a revised version of Kuppusamy's SES scale (Urban).
The major findings were:

1. SC / ST students were low in their achievement. They had relatively poor adjustment compared to non-SC / ST students.

2. Both SC and ST and non-ST students were low on the personality factors.

3. A significant association between academic achievement and school adjustment was found in the case of SC / ST students, but not in the case of non-SC / ST students.

4. In the case of SC / ST as well as non-SC / ST groups, a significant relationship was found between academic achievement and SES of the students, whereas, school adjustment and SES are found to be independent of each other and

5. There was a significant association between academic achievement and type of school in the case of SC / ST students but not in the case of non-SC / ST students.

CHAKRABARTHI (1988) conducted a critical study on Intelligence, socio-economic background in the family, and quality of schools in children of standard V. A case study of some schools in and around Pune.

The major objectives of the study were:

i) to study the socio-economic background on the performance of students of standard V from rural and urban areas,

ii) to find out whether the educational environment in the family affected the school quality,

iii) to find out the relationship between academic achievement and quality of school and

iv) to study the effect of mental ability of students on their academic achievements.

The study was conducted in 12 schools in and around Pune. The sample consisted of 500 students, both boys and girls from rural and urban areas. The data were collected with the help of the socio-economic, status scales (urban and rural) by S.P. Kulshrestha, Educational environment in the family questionnaire by A. S. Wadkar, tool for evaluating primary schools in Maharashtra. Achievement Test in English, Arithmetic and general knowledge developed by the researcher and progressive matrices for measuring mental ability of children. The information regarding family background, socio-economic status and educational environment of families
was collected through home visits. Administering the tools to students in twelve schools collected other data. The collected data were analysed by computing means, t-values and co-efficient of correlation.

The major findings of the study were:

i) students from urban areas were found to be significantly better than students from rural areas,

ii) students from private schools scored better than Zilla Parishad and Corporation schools,

iii) students from 'C' class (as suggested by the Graduation of schools test) scored better than D and E classes of schools,

iv) marathi medium schools students scored better than those of English medium schools and

v) there was no significant difference in the achievement of boys and girls.


The major objective of the study was to study the effect of academic aspiration and intelligence on scholastic success of XI class students.

The sample of the study comprised 400 students studying in class XI. The tools used to collect the data included Raven's Standard Progressive Matrices and Academic Aspiration scale of Sinha. The collected data were analysed statistically with mean, SD, t-test and coefficient of correlation.

The major findings were:

1. It was found that the rural students were significantly less intelligent and academically less aspirant than the urban students.

2. It was found that both intelligent and academic aspiration correlated positively with scholastic success of both rural and urban students.

NAGAPPA. P. SHAHAPUR AND VENTATARAH. N (1995) conducted a study on study habits of secondary school students of Mysore city.
The major objectives were:

1. To study the relationship between different areas of study habits scale.
2. To compare the study habits of boys and girls of class IX high school students in Mysore city.
3. To compare the study habits of class IX high school students of government and private high schools.

The sample of the study comprised 196 students, studying in class IX of three private and three government schools. Study habits scale constructed and standardized by the investigator was used to collect data. The collected data were treated with mean, median, mode, Pearson's product moment correlation and Chi-square.

The major findings were:

1. There was significant inter correlation among the seven different areas of the study habits scale.
2. It was found that the good study habits group was the smallest in size compared to other two categories of average study habits group and the poor study habits group.
3. There was significant relationship between the level of study habits and the sex of the students.

PATEL M. R (1996) conducted a study on study habits of pupil's and its impact upon their academic achievement. The major objective was to study the qualitative aspect of study habits of the pupils and its impact on the school achievements.

The sample of the study comprised 5788 pupils of standard VIII of Kheda District. The tools used to collect the data included study habits Inventory of B. V. Patel, General Ability Test of M. T. Patel and annual results of the schools. The collected data were treated with mean, ANOVA and Newman Keul's squaretail range tests.

The major finding were:

1. Those pupils who had good study habits did get significantly more achievement scores than those of poor study habits group.
2. It was found that sex and study habits interacted significantly in the production of achievement scores.
VERMA B. P. (1996) conducted a study on study habits locus control and academic performance. The main objective was to ascertain the main and interaction effects of study habits and locus of control on academic performance in five schools. The sample for the study comprised 500 students studying in class X in ten government secondary schools of Delhi. Tools used for data collection included Patel's study habit inventory and Roller's locus of control scale by Anand Kumar and S. N. Srivastava.

The major findings found that study habits had significant main effect on academic performance.

VERMA B. P (1996) conducted a study on tool anxiety and study habits. A study of their main and interacting effects on academic achievement. The major objective was to study the main and interaction effects of test anxiety and study habits on secondary school students performance in five different school courses namely Hindi, English, Mathematics, General Science and Social Studies. The sample of the study comprised of 500 male students studying in class X in ten secondary schools of Delhi. The tools used to collect the data were test Anxiety Inventory of Sharma and Study Habits Inventory by Patel. The collected data were treated with mean, SD and two way analysis of variance.

The major findings were:

1. The main effects of study habits were found to be significant for English, Hindi and Social Studies.
2. As regards interactions effects, there was no significant joint effect of test anxiety and study habits on students' academic performance in Hindi, English, Mathematics, General Science and Social Studies.

VERMA B. P., SHEIKH SANGITA (1997) conducted a study on study habits of adolescent students as related to academic motivation and test anxiety.

The major objective was to find out the relationship of study habits of adolescent students with academic motivation and test anxiety.
The sample of the study comprised of 105 students studying in class XI from higher secondary schools of Sikar district of Rajasthan. The tools used to collect data included the Keele Academic Motivation Questionnaire by B. P. Verma, Test Anxiety Inventory of Spiel Berger by Sharma, Sud and Spiel Berger and Test of study habits and Attitude test by Joshi and Pandey. The collected data were treated for mean, SD and t-test.

The major finding were:

1. It was found that adolescent students having high level of academic motivation scored more on study habits than adolescent students, possessing average level of academic motivation and low level of academic motivation.

2. Students belonging to the high test anxiety group scored significantly less study habits scores than their counterparts with average test anxiety and low test anxiety.

KAUR KANWALJIT, GOYAL GEETA (1997) conducted a study on academic aspiration of rural tenth class girls.

The major objectives were:

1. To determine the factors related to the academic aspirations of rural X class girls.

2. To find out the association between socio-personal characteristics and academic aspiration.

The sample for the study comprised 275 girl students of class X from Faridkot district of Punjab. A questionnaire was developed to collect the data for the study. The collected data were treated with mean, standard deviation, t-test and Chi-square and percentages.

The major findings were:

1. Majority of the students has low academic performance, were born later in order of birth, belonged to high caste and nuclear families.

2. There was no significant association between academic aspiration and caste of the respondents.

MAVI N. S & PATEL ISWAR (1997) conducted a study on academic achievement in relation to selected personality variables of tribal adolescents.
The major objectives were:

1. To examine the nature of relationship among academic achievement, personality adjustment, intelligence, self-concept and level of aspiration of tribal high school students.
2. To find out the variance in academic achievement due to the influence of personality adjustment, intelligence, self-concept and level of aspiration of tribal high school students.

The sample of the study comprised 720 students from 25 secondary schools located in Sundergan district of Orissa. The tools used to collect the data included Adjustment Inventory of Reddy, Level of Aspiration Test by Patel, self-concept by Deo and academic achievement scores of class VIII. The collected data were treated with mean, SD, product moment correlation, multiple correlations, multiple regression analysis and critical ratio.

The major findings were:

1. There was a significant positive correlation between academic achievement and personality adjustment, intelligence, self-concept and level of aspiration.
2. There was a significant positive correlation between personality adjustment and intelligence and level of aspiration.
3. There was a significant positive correlation between intelligence and level of aspiration.
4. There was an insignificant positive correlation between self-concept and level of aspiration.

RAMACHANRA REDDY. B. (1999) conducted a study on influence of sex and locality on study habits of X class pupils.

The major objectives of the study were:

1. To identify the differences in the study habits between boys and girls
2. To study the differences in the rural and urban school pupils study habits.

The sample was consisted of 200 pupils of X class from few schools of Kurnol district in Andra Pradesh. The study habits inventory was used to collect data. Mean, Median, Mode and SD of the scores obtained on study habits inventory for different groups were calculated.
The major findings were:

1. Urban pupils differ from the rural pupils in their study habits.
2. There is no significant impact of sex on the study habits.
3. There is no interaction effect of sex and locality on the study habits.

**Review of Related Foreign Studies**

**George G. Thompson and Clarence W. Hunnicutt (1944)** conducted a study on the effect of repeated praise or blame on the work achievement of "introverts" and "extroverts".

This study was conducted to determine the effects of repeated application of praise or blame on the work of achievement of "introverts" and "extroverts". Fifth grade pupils from five classes in the Syracuse Public schools were selected as subjects for his study. One class of twenty seven pupils was used for the control group. The remaining four classes (comprising ninety seven pupils) were subdivided into various experimental groups. One hundred and twenty introversion and extroversion section of a personality test by Pintner and others, was used to classify the pupils into two groups with regard to introversion and extroversion. Cancellation tests were employed to measure the effects of repeated praise or blame on the experimental groups. Praise or blame was administered by the teacher's placing a mark of "G" (good) or "P" (poor) on the subject's test paper. A Control group was employed to test the effects of repeated applications of praise or blame on an unclassified population of fifth grade pupils (introverts and extroverts grouped together).

The findings were:

1. When introverts and extroverts are grouped together; praise and blame are equally effective in motivating the work achievement of fifth grade pupils. Either praise or blame is more effective in increasing the work output of fifth grade pupils than no external incentives.
2. If repeated often enough, praise increases the work output of introverts until it is significantly higher than that of introverts who are blamed or extroverts who are praised.
3. If repeated often enough, blame increase the work output of extroverts until it is significantly higher than that of extroverts who are praised or introverts who are blamed.

BERNARD BORISLOW (1962) conducted a study on self-evaluation and academic achievement.

A questionnaire, consisting of the student behaviour description, four adjective scales (Self, student self, ideal student, in the order) and a personal history page was distributed to the entire September 1958 freshman class of the College, University of Pennsylvania, immediately prior to their first semester. Just after the semester, the scales were redistributed to the pre-semester respondents.

The experimental population was the freshman class that entered the College of Arts and Science in September of 1958. Out of 361 students, 197 completed both a pre-semester and a post-semester questionnaire and became the sample used in this study. The sample was divided in to two groups, Achievers and Underachievers. This classification was based upon the extent to which the student achieved or failed to achieve a first-semester grade-point average (GPA) concordant with his aptitude test score (SAT total score). Specifically, the correlation between SAT total score and GAP was computed for the entire freshman class. This proved to be .39 (P < .01). By regression analysis, estimates of GAP were calculated for each level of scholastic aptitude (SAT total score).

Summary and conclusions:

1. Regardless of an intention to strive for scholastic achievement as a prime goal, students who underachieve scholastically cannot be distinguished from those who achieve scholastically on the basis of general self-evaluation, prior to or subsequent to their first semester in college.

2. Students who underachieve scholastically have a poorer conception of themselves as students than low achievers subsequent to their scholastic performance, regardless of initial intention to strive for scholastic achievement as a goal.
3. Where students exhibit an intention to strive for scholastic achievement as a prime goal, underachievers have more pessimistic conception of themselves as students than low achievers prior to their actual scholastic performance. This does not hold true where scholastic achievement is not a prime goal.

4. Where scholastic achievement is a prime goal, where the student has a good conception of himself as a student, and where he does achieve pre-to-post semester assessments. This does not hold true where scholastic achievement is not a prime goal.

MARTIN B. FINK (1962) conducted a study on the self-concept as it relates to academic underachievement.

This study was conceived as the result of a clinical impression that self-concept is related to academic achievements; that is, that an adequate self-concept is related to high achievement and an inadequate self-concept is related to low achievement (under achievement). All subjects were selected from the freshman class of a rural high school located in the central Valley of California. For the purpose of this study and academic achievements were determined by grade-point average. Self-concept was measured by instruments generally used by school psychologists in clinical situations. Data were collected for each child, using the following devices:

1. California Psychological Inventory

2. Bender Visual Motor Gestalt Test

3. Draw-a-person Test

4. Gough Adjective Check List (completed by pupils)

5. Gough Adjective Check List (completed by teacher)

6. Personal data sheet

7. Brief essay describing - "What I will be in 20 years."
Based on the grade point average, pairs of achievers and underachievers were formed, matched sex and IQ. The study group consists of eighty-eight students from the freshman class of a rural California high school, 20 matched pairs of boys and 24 matched pairs of girls. The results clearly bear out the hypothesis for boys. They are considerably less positive for girls.

WILBUR B. BROOKOVER, SHAILOR THOMAS, AND ANN PATERSON (1964) conducted a study on the self-concept of ability and school achievement:

Self-concept is developed through interaction with significant others which in turn influence one's behaviour. When applied to the specific school-learning situation, relevant aspect of self-concept is the person's conception of his own ability to learn the accepted types of academic behaviour; performance in terms of school achievements is the relevant behaviour influenced. The student role is composed of several sub roles, including one involving academic achievements; the student self-concept similarly is a complex of several segments, including self-concept of ability in school and academic achievement.

The study tests three major hypotheses:

1. Self-concept of ability in school is significantly and positively related to the academic performance of students even with an ability dimension controlled.
2. Self-concept of ability in school is differentiated into specific self-concept which correspond to specific subject areas in the school, program, and these specific self-concept are better predictors of academic performance in the relevant area than in the general self-concept of ability.
3. Self-concept of ability is significantly others hold of one's ability.

Method of Research: The sample consisted of 1,050 seventh-grade students (513 males and 537 females) in an urban school system. Negro students were excluded from this analysis on the assumption that their self-concept of ability and its relation to achievement would differ from those of the white population. Subsequent analysis verified this assumption.
"Self-concept of Ability scale" was administered in two parallel forms: first was designed to measure the student's self-concept of ability in general; the second, to measure self-concept of ability in each of four specific school subject areas - Arithmetic, English, Social Studies, and Science. Though the references were changed, the substance of the questions remained the same in both forms.

Since it has been said, particularly in the school situation, that "innate ability" determines performance, IQ was controlled, even though it may also be affected by self-concept of ability. Intelligence scores were obtained from the "California Test of Mental Maturity" administered in the 4th and 6th grades. Since an average of IQ scores for two test administrations would tend to be more stable than a single assessment, an average of two total scores on the CTMM was used in this study. Grade Point Average (GPA) in the four subjects, Arithmetic, English, Social Studies and Science, was used as an index of academic performance.

Using seventh-grade students in an urban school system, it was found that:

1. There is a significant and positive correlation between self-concept and performance in the academic role; this relationship is substantial even when measured IQ is controlled.

2. There are specific self-concepts of ability related to specific areas of academic role performance, which differ from the general self-concept of ability. These are, in some subjects. Significantly better predictors of specific subject achievement than in the general self-concept of ability.

3. Self-concept is significantly and positively correlated with the perceived evaluations that significantly others hold of the students; however, it is the composite image rather than the image of specific others that appears to be most closely correlated with the student's self-concept in specific subjects.

BERRY, WEST, AND DENNEHEY (1989) conducted a study on the belief of self-efficacy and intellectual efficacy.

They found that beliefs of self-efficacy predict performance when both tap similar cognitive functions. They also found that a long time lapse between appraisal of self-efficacy and performance changes the results. The studies showed that older adults who believed in their
memory capabilities, spent more time processing memory tasks cognitively. Those who believed memory declines with biological aging made little effort with the task.


"In the academic domain, students high in self-efficacy feel they can complete any assignments, learn any material, or master any concepts." Intrinsic motivation focuses on "task- focused " goals. Students, who focus on relative ability and extrinsic rewards, or how their performance compares with others, have "performance goals".

The schools studied were attempting to move away from performance goals and toward task- focused goals. The sample included 341 third through fifth grade students in 15 classrooms in 2 elementary schools in the same district. HLM was used because they examined classroom-level practices on student-level outcomes.

They found that self-efficacy relates significantly to:

i) the belief that intelligence is a changeable entity,
ii) the personal adoption of learning-focused goals and
iii) the use of deep cognitive strategies.

GAGNE E. D., YEKOVICH C. W. & YEKOVICH F. R (1993) conducted a study on various parts of human cognition as identified and contrasted with the information-processing of computers.

The brain is a complex organ that organizes cognition processes in different areas of it. Information is received by the brain when receptors send impulses, via neurons, to the central nervous system. Here the information goes to the immediate memory and, if worthwhile, into the working memory. The working memory holds information for about 10 seconds and is limited to about 5 different units of information. Material that is kept is stored in long-term memory. This information is stored for a lifetime, but may not always be retrievable if there is not a good retrieval cue used to remember the information. Control processes let us facilitate the information-processing events.
Cognitive dimensions are a broad brushed evaluation technique for a restricted set of systems called notations, which are used to design information structures, for example programming languages, spreadsheets and visualizations. Instead of examining surface features the technique examines the structure of the system.

LOGIE, JANE JAASKELA (1994) conducted a study on the examination of comprehension process used by readers as they complete multiple choice tests.

The purpose of this study was to obtain and analyze verbally reported reading / thinking process used by average sixth grade readers as they are test passages and answered literal, inferential and evaluative reading comprehension questions on the Connecticut Mastery Test (CMT), a multiple choice test of reading comprehension. A sample of 25 average sixth grade readers with average scores on the Stanford Achievement Test attending middle schools in one Connecticut sub urban schools district were studied. Each object was interviewed individually by the researcher on four separate occasions as he / she read four expository test passages from the Connecticut while the subjects read the test passages and answered the multiple choice questions concurrently).

The interviewing resulted in protocols of verbal report data for analysis. The protocol analysis resulted in a set of dependent variables consisting of process scores, which were counts of cognitive processes reported by subjects.

LANDRUM, FED RAY (1995) conducted a study on new insights into cognitive abilities of adjudicated youths.

The purpose of the study was to investigate the justification of using full-scale IQ scores as the principal means of determine whether adjudicated youths are as capable of engaging in higher order thinking processes as youths in public schools. This study examined the performance of a group of adjudicated youths (N = 50) in a correctional training school and a comparative group in a public schools district (N = 50) on 4 of 10 mandatory sub tests that comprise the Winchester Intelligence Scale for Children (Wise -R WISC - III).
For each of the selected sub tests, an inferential statistical analysis was made, data at 0.01 level of significance using independent sample two tailed t tests to compare difference between the means of sub tests scaled scores for subjects from the correctional training school and the public school district.

The finding was that the use of a full scale IQ score from a standardized intelligent test may not accurately reflect the individual cognitive abilities of adjudicated youth to engage in higher order thinking processes.


This study examined how "diverse sources of influence, including socio-economic, familial, peer, and self processes, operate in concert to shape the course of academic achievement". The students studied were sixth and seventh graders in two middle schools near Rome.

They found that parents' sense of academic efficacy and aspirations for their children were linked to scholastic achievement. The children's self-efficacy was linked to academic achievement. Children's perceived social-efficacy to control peer pressure contributed to academic success. Perceived self-regulatory efficacy influenced academic achievement both directly and through conduct and problem solving behaviour. Socio-economic status was only indirectly involved because of the influence of the parents' aspirations.

MULLER, MICHELLE MAUREEN (1996) conducted a study on the educational implications of multiple intelligence groupings within a co-operative learning environment.

The purpose of this study was to research social interactions and acquisition of content knowledge, within a heterogeneous multiple intelligence co-operative group and homogeneous multiple intelligence co-operative group, based on Howar Gardners theory of multiple intelligence and the Johnson and Johnson co-operative learning strategy. A science unit on the human body, from a science lesson designed by David Lazoor, was used in Fourth grade children.
The findings were that the tools did not indicate individuals with a particular strength, but instead, often provided with two or more strength per student. Each student in the homogeneous group assumed their role, took responsibility for the groups, and succeeded in all the requirements for the project. The heterogeneous group had a more difficult time attending to the task and taking responsibility for this assigned roles. No strong leader emerged in the group but each member worked on some part of the task, members were satisfied with their individual and group efforts to complete the project successfully.

SMIST J. & BARKMAN R (1996) conducted a study on the self-efficacy of adolescents to give quantitative evidence, not just anecdotal, to the belief that it is more effective to teach in a way that the brain has to extract patterns, rather than have them imposed on them.

Using a curriculum developed to teach to this belief, the authors wanted to determine the effectiveness of this middle school science curriculum, to inspire students to think about science, through studying the patterns of humans. The effectiveness of the curriculum was determined by using an instrument, developed to measure the self-efficacy of young adolescents to recognize patterns in the natural world.

The results showed a difference in pattern recognition between genders. Females were more confident in recognizing patterns in people and males more confident in seeing patterns in natural events. This seems to support observations that girls approach problem solving from the perspective of interdependence and relationships than from the isolated skill analysis viewpoint favoured by boys. This suggests that males and females should be trained differently to compensate for their weaker skills. Because female middle school students appear to have more confidence in discovering patterns about people, relating science to people patterns could contribute to encouraging higher female interest in science.

BONG M. (1997) conducted a study on measurement instruments to measure the relationship between self-efficacy and academic performance.

Most of the tools in use were task specific and not reliable predictors of general level efficacy and their relationship to general achievement as defined by course grades. The
two most commonly used types of academic self-efficacy scales were compared: 1. Confidence ratings for a set of specific problems in each school subject, and 2. A composite score of the self-efficacy scale of the Motivational Strategies for Learning Questionnaire (MSLQ) for each school subject.

The results showed the MSLQ self-efficacy results were a better predictor of effort and grades than the problem-referenced efficacy. There was also a stronger relationship shown between the verbal subjects than the quantitative ones.

HARRISON A., RAINER K., HOCHWARTER W. & THOMPSON K. (1997) conducted the study on the self-efficacy and performance with computers in a work setting with 776 employees from various American universities.

They found that increased performance with computer-related tasks was significantly related to higher levels of self-efficacy; decreased performance with computer related tasks was significantly related to lower levels of self-efficacy.

SAWYER THOMAS PAUL (1997) conducted a study on differential prediction of cognitive ability measured by sex.

The study is focused on differential prediction of the general cognitive ability component of the General Aptitude Test Battery (GATB) when used to predict job performance across a wide variety of jobs. Particular attention was paid to the ratio of men and women in each job classification and the effect of this ratio on differential prediction. In addition, it was hypothesized that job complexity would also have an effect. Jobs were categorized by sex ratio (dominated by men, neutral, dominated by women) and complexity (high, low), specific hypothesis concerning expected differences in the regression line of men and women between and within conditions were made. A comparison was made between the prediction of the taken hypothesis and the gender-status hypothesis. Differences in the slope (validity), intercept, and standard error of estimate were analysed across and within conditions.

The findings, that there was no support for differences in slopes or standard error estimates within conditions and between conditions. There was some support for differences in
intercepts within and between the conditions. Differences that were found did not clearly support either the taken hypothesis or gender status hypothesis. Although there was some support for the taken hypothesis for the high complexity jobs, further tests performed between cells of the design did not support this hypothesis. The results of this study raise questions concerning the generalisability of the findings of bias in specific situations.

WANDS, KIMBERLY (1997) conducted a study on differences between the old and young on measures of intelligence and capability.

The current research project focused on the differences between the old and the young old in terms of levels of intelligence and capabilities. The purpose of this research was to study how measures of capability and intelligence by Sung Sutz Mogul WAIS-R, cognitive competency test (CCT) and Direct assessment of functional status (DAFS). Individuals of both genders comprising two age groups (55-74, 75-91) and two residential options (Community dwelling and institutionalized) were subjects.

The findings were highly significant differences between age groups on measures of capability and intelligence. Older adults performed worse on capability and intelligence measures than younger adults even when the effects of health, and education were controlled. Institutionalized individuals performed worse on measures on capability and Intelligence than non-institutionalized individuals. Gender did not have a significant effect on test performance on intelligence measures but men scored slightly worse than women on one capability measures (DAFS).

WILLIAMS. J (1997) conducted a study on determining the specific learning strategies particularly for students at risk for school dropouts.

The findings indicate that both strategy domains appear necessary to provide a comprehensive picture of self-regulated learning, particularly affective motivation and concentration and cognitive self-testing. Recommendations to rural educators include prompting students to record the work they complete during class to foster motivation, breaking study periods
into short sessions to aid student concentration, and having students create questions about the material to encourage self-testing.

Bowen N., Bowen G. (1998) conducted a study on focusing on the direct and indirect effects of home academic culture on student's achievement.

The study aimed at determining if educational meaning had a mediating role between home academic culture and school performance, for a sample of 538 middle and high school students. Study findings indicate the existence of relationships between home discussion of school-related topics and educational meaning, and between educational meaning and academic achievement.

These findings imply the need to promote parent-child discussion of school related topics to increase educational meaning in students.

Deonaraire, Vidyartree Vijiyalaxmi (1998) conducted a study on meta-cognition under dimensional relation of cognitive style.

The purpose of this study was to investigate dimensions underlying meta-cognition, and assess meta-cognition's relationship to field dependence / independence. The cognitive style is most critical to education. To measure meta-cognition, an inventory was compiled based on items from existing inventories. The group embedded figures test and the quick word test were used to measure field dependence / independence and verbal intelligence respectively. The sample was 168 female New York City high school students.

The findings were the factor analysis of this study confirmed what previous researchers found that meta-cognition, is a multi dimensional construct. A significant contribution of this study is that it used a more diverse batch of item, relating to meta-cognitive processes than that used in previous factor analyses and that pertained well to the breadth of meta-cognitive activities of the subjects tested. Pearson's Product Moment Correlation, Multiple Regression Analysis and the Step-down Analysis of the MANOVA procedure with verbal intelligence as a mediating variable indicated no significant relationship between meta-cognition and field dependence / independence a finding similar to that of previous researchers. This study
used a comprehensive measure of meta-cognition while previous researchers focused on narrower aspects of meta-cognition such as strategy use, planning / monitoring and evaluation. Also, none of these previous studies had verbal intelligence as a medicating variable.

EGAN. S., MONSON. T. & PERRY. D (1998) conducted a study on social cognitive influences on change in aggression over time.

Based on the social cognitive theory that children's performance of a behaviour is largely determined by the children's beliefs that they are capable of performing the behavior and that the behaviour will yield valued outcomes, this short-term longitudinal study investigates the influence of cognition on change and continuity in preadolescent aggression over the course of a school year.

The study investigated five categories of cognition: perceptions of self-efficacy for aggression, expectations that aggression will lead to statues rewards, expectations that aggression will cause pain in the victim, the value placed on the reward and the value placed on the pain that the victim suffers. The study included 189 3rd -7th grade students of both sexes. Results of the study found that cognitions affect behavioural development mainly when the child's transactions with the social environment support the use of the cognitions as guides for behaviour.

NAUTA M., EPPERSON D., KAHN J. (1998) conducted a study on a multiple-groups analysis of predictors of higher-level career aspirations among women in mathematics, science, and engineering majors.

Based on a social cognitive theory, the authors hypothesis that ability, self-efficacy, positivity of role model influence and role conflict would influence the higher level career aspirations of women in a sample of 546 women students in mathematics, science and engineering majors.

The findings of the research support this hypothesis, but in contrast to the women in mathematics, physical sciences, and engineering majors, the relationships between ability and self-efficacy were found to be lower in magnitude for women in the biological sciences.

Phye focuses on the identification of self-regulation components linked to academic problem solving. The underlying assumption of the study is that learner characteristics involving self-regulation foster executive functioning, such as decision-making and judgments, which promotes adaptability to new problem situations. This study involved 63 undergraduate students enrolled in introductory psychology courses.

Using path analysis, it was found that self-efficacy and monitored working memory play important roles in the self-regulation within domain problem solving performance. Educative mental activity was found to influence between domain problems solving performance.

GIBSON C. (1999) conducted a study on group efficacy and group effectiveness across tasks and cultures.

In this article Gibson studies the relationship between group efficacy beliefs and group effectiveness in the workplace. This relationship is expected to differ as a function of task and contextual characteristics. Gibson conducted two intercultural studies to investigate this.

Findings of the research indicate that group efficacy did predict a significant portion of the variance in group effectiveness. It was also found that the relationship between group efficacy and group effectiveness was associated with specific types of tasks and the cultural context, in which the groups operated.

PAJARES F., MILLER M. & JOHNSON M. (1999) conducted a study on Gender differences in writing self-beliefs of elementary school students.

The findings: The girls in the sample expressed their belief that they were better writers than others more than the boys did. Only writing self-efficacy beliefs and aptitude predicted writing performance in the path model that was used and which included writing apprehension, self-efficacy for regulation, and perceived usefulness of writing.
It was found that writing self-concept was higher and apprehension lower for students in grade 3 than in grade 5, as students self-efficacy beliefs about their own writing capabilities had a direct effect on their essay writing performance and partially mediated the effects of self-efficacy for self regulation and writing aptitude both on writing apprehension and on writing performance.

It was also found that boys and girls used a different metric when responding to traditional self-efficacy scales.

ROBERSTON NICHOLE (2000) conducted a study on difference in eleventh grade students' perceptions of the condition affecting students' aspiration in Mississippi.

The major objective was to find out the relationship between students' perception of the conditions affecting students aspiration in Mississippi public high school.

The sample included 357 U.S. History students from 17 public high schools in Mississippi. Data for this study were computed from responses to survey instrument student speak, by education of variance tests, t-tests and one factorial analysis of variance test.

The major finding was that the conditions affecting students' aspiration were belonging sense of accomplishment, leadership and responsibility and school environment.

CRITICAL REVIEW

The investigator has given here forty eight related reviews. In these reviews twenty three are Indian studies and twenty five are foreign studies. Of all these reviews twelve studies are about intelligence, Eight studies are about cognitive ability, twelve studies are about academic achievements and study habits, eight studies are about self-concept and motivation and eight studies are about general awareness and general ability.

In most of the studies survey, interviews and experimental methods are employed in collecting data and the data are analyzed by means of t-test, MANOVA, multiple regression analysis and factor analysis. Most of the studies are based on differences in variables sex, age, group, and social academic status.
The above studies noted here cover one or the other aspects of educational psychology of learning cognitive behaviour, self efficacy of learning, intrinsic motivation and self concept and its influence on scholastic performance. Hence the present study differs from the above studies in terms of area, population and samples. It is clear from the review of related literature, that none of the studies are conducted on the influence of cognitive self-management, academic intrinsic motivation and general awareness on scholastic performance of tenth standard students.