vii. There is no significant difference between rural and urban within high, average, and low achievers.

viii. There is no significant difference between tribal and non-tribal within high, average, and low achievers.

1.7 Delimitation of the Study:

The study is limited to:

1. The students of class X (now studying in class XI) level belonging to different secondary schools of East Khasi Hills District in Meghalaya under M.B.O.S.E.

2. The study will be delimited to only some Psycho-social variables like personality dimensions, intelligence and a socio-economic component.

CHAPTER: II

REVIEW OF RELATED LITERATURE

2.0 Introduction:

The review of related literature is an important part of any scientific research. A review of related literature provides the researchers an insight into the problem that the investigator is going to undertake. It also helps in
determining objectives and formulating hypothesis. Therefore, the main objective of a review of related literature is to have an understanding of the trends of research in the field and about the gaps in research if any.

In this chapter an attempt is made to survey the earlier works done in India and abroad. These studies will help the investigator in planning and designing the present research. So, this chapter is divided under the following headings:

(i) Studies done abroad.
(ii) Studies done in India.
(iii) Resume of the Past Researchers.
(iv) Present Study.

2.1 Studies Done Abroad:

(a) Intellectual Factor and Academic Achievement:

Studies that use intellectual factors to correlate with the academic achievement are in abundance. Extensive data are available regarding general intelligence and differential ability as related to academic achievement of students. Jordan (1923), Chauncey (1929), Edds and McCall (1933), Durflinger
(1943) and Harper (1967) have reported that there are significant correlations (ranging from .315 to .600) between intelligence and scholastic success\textsuperscript{38}. Thompson (1934)\textsuperscript{39}, Spinelle and Nemzek (1944)\textsuperscript{40} have reported low correlations between intelligence and scholastic achievement. Bradley (1943)\textsuperscript{41} found that correlation between intelligence and teachers’ marks for 1500 junior and senior high school pupils ranged from 0.33 to 0.64. Emmett (1945)\textsuperscript{42} concluded that intelligence is the best predictor of academic success. Super (1949)\textsuperscript{43} pointed out that there exists a relationship between intelligence and academic achievement.

Carter (1950)\textsuperscript{44} found a correlation of .78 between I.Q. and measures of achievement in school. Gough (1953) obtained correlations which range from 0.62 to 0.80 with three samples of high school seniors\textsuperscript{45}. Nason (1958)\textsuperscript{46}

\textsuperscript{38} As quoted by R.R. Sharma: \textit{Enhancing Academic Achievement-Role of Personality Factors}, New Delhi, 1985.
observed correlation of 0.34 for boys and 0.39 for girls, using intelligence as a predictor of grades. Carter (1959)\(^{47}\) found correlation of about 0.60. Edwards and Tyler (1965)\(^{48}\) found a correlation of 0.70 between intelligence and academic achievement.

Gandry and Bradshaw (1970)\(^{49}\), Ogunlade (1978)\(^{50}\), suggest that intelligence plays a vital role in the determination of an individual’s academic achievement. Antonak (1988)\(^{51}\) examined relationship between scores of intelligence test and achievement test grades at 2, 4 and 6, and found that the intelligence co-varied ineffective as predictors of achievement at a later stage.

Smith and Smith & Dobbs (1991)\(^{52}\) reviews provided evidence that high correlation exist between intelligence and scholastic achievement. Accordingly, several researchers examined the relationships between

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academic achievement and intelligence, Allik & Realo (1997)\textsuperscript{53}, Kossowska (1999)\textsuperscript{54}. Al-Saleh, Nester, Vol, Shinwari, Munchari & Al-Shahri (2001)\textsuperscript{55}, Gagné & StPère (2002)\textsuperscript{56}, Koke & Vernon (2003)\textsuperscript{57} found a direct relationship between intelligence and academic achievement. Naglieri and Bornstein (2003)\textsuperscript{58} demonstrated that intelligence consistently had the highest correlations with achievement.

Rohde and Thompson (2005)\textsuperscript{59} found that the measures of general cognitive ability continued to add to the prediction of academic achievement. Colom and Mendoza (2006)\textsuperscript{60} conducted a study in Brazil and found that

\begin{itemize}
  \item J.A. Naglieri and B.T. Bornstein: “Intelligence and Achievement: Just how Correlated are they?” Journal of Psycho Educational Assessment, Vol. 21, No. 3, California, 2003, pp 244-260.
\end{itemize}
intelligence does predict the children differences in scholastic achievement. The results emphasised personal intelligence as a genuine predictor of individual differences in scholastic achievement.

Further, the studies of Fraine, Damme and Onghena (2007)\textsuperscript{61}, Ehrmann and Massey (2008)\textsuperscript{62}, have maintained that students having higher intelligence are high achievers in academic performance than the students having low intelligence. Habibollah et al (2009)\textsuperscript{63} showed that there is no significant relationship between academic achievement and intelligence. Steinmayr et al. (2010)\textsuperscript{64} reported that intelligence serves as predictors to academic achievement.

(b) Non-Intellectual Factors:

(i) Personality and Academic Achievement:

\textsuperscript{62} N.Ehrmann & D.S.Massey:“Gender-Specific Effects of Ecological Conditions on College Achievement”, \textit{Social Science Research}, Vol.37, No.1, Newton, Massachusetts, 2008, pp 220-238.
Many studies have attempted to find the relationship between personality characteristics and academic achievement. But it is of greater concern to find out how personality characteristics influence academic achievement. A brief account of some of the studies is given below:

Harris (1931) had published a review of 147 studies conducted. In many of these studies an attempt was made to correlate selected personality characteristics of students with their college grades. Tiebout (1943) found that there is an association between some personality characteristics and academic achievement.

Reviewing the literature of personality dimensions, Remmlein (1936), Sumption (1941), Holland (1960) were those who concluded that leadership was observed in superior students. A study of Morgan (1952) revealed that high achieving students showed maturity and seriousness, awareness and concern of others, a sense of responsibility more than the low

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achievers. McGhee and Lewis (1942), Bonsall and Steflre (1955) in their study of comparison found that high achievers are moralistic, responsible, persevering, while undesirable personality traits were found among those who are low achievers\textsuperscript{71}. Terman and Oden (1947) finding show fair support to the results that high achievers and low achievers differ significantly in tension\textsuperscript{72}. Barry & Plecha, (1999)\textsuperscript{73} Simon & Eachus, (2000)\textsuperscript{74} supported that self-control were observed more in high achievers student than the low achievers student.

The role of personality’s dynamics with regards to school achievement is significant and thus Garrett (1949)\textsuperscript{75} proclaimed that although enough progress had been made in discovering and attempting to measure the factors which contributed to scholastic success in school but scholars agree that there still remain a gap of some factors which need to be investigated. The study of

\textsuperscript{71} As quoted by S.P. Suri: “A Study of Differential Traits in Intellectually Superior, Average and Below Average Students”, \textit{Quest in Education}, Vol. XV, No 4, New Delhi, Oct 1978, pp 291-301.

\textsuperscript{72} \textit{Ibid.} pp 291-301.


\textsuperscript{75} As quoted by Ucharan Deka: \textit{Factors of Academic Achievement}, Northern Book Centre, New Delhi, 1993, p 19.
Pierce (1952) revealed that high achieving students are less aggressive, possessing more leadership ability whereas low achieving students are more aggressive, possessing more leadership ability.

Elva Burgess (1953) studied the personality of over achievers and under achievers. The over-achievers scored significantly higher on achievement, aggression, status and self-improvement need. The under-achievers scored significantly higher on dependency needs and need to be free from restraint. No significant differences were found on P.F, M.M.P.I or Bernreuter test. As a group, over-achievers were found to be more intellectually adaptive, more constricted and inhibited, more cautious and realistic in approach to problems and having greater need for achievement and self-improvement.

According to Entwistle (1968) personality traits, motivation, interpersonal relations and such other factors play a significant role in the academic achievement of students. The findings of Teraoka (1958),

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Witherspoon and Melberg (1959)\textsuperscript{80}, relate to varieties of personality characteristics, and they point to the association between some of the personality characteristic and academic achievement.

Holland (1960)\textsuperscript{81} noted that only high achieving girls were characterised by lack of tension and that the results was not valued for boys. Warburton (1961)\textsuperscript{82} has also found that personality factors are related to academic achievement. Another study conducted by R.D. Savage (1962) revealed that neuroticism and introversion scores on the Maudsley personality inventory are significantly related to academic performance\textsuperscript{83}.

A number of studies like Robert (1962)\textsuperscript{84}, Butcher, Ainsworth and Nesbit (1963)\textsuperscript{85}, Webb (1965)\textsuperscript{86} using the junior, senior high school personality questionnaire observed that thirteen variables of the questionnaire were

\begin{itemize}
\item \textsuperscript{80} P. Witherspoon and M.E. Melberg: “Relationship between Grade Point Average and SectionalScores of Guildford Zimmerman Temperament Survey”, \textit{Educational and Psychological Measurement}, Vol. 19, California, 1959.
\end{itemize}
correlated with academic achievement. The studies of Aimsworth (1967)\textsuperscript{87} revealed that high achieving students, in comparison to the average and low achieving student, excelled in self-sufficient dimension.

There has been a vast amount of research into the relationship between personality and academic performance: Eysenck (1967)\textsuperscript{88}, Hamilton & Freeman (1971)\textsuperscript{89}, have reported a significant relationship between personality characteristics and academic achievement, while, Eysenck and Cockson (1966) indicated low but significant correlation between pupil’s achievement and scores on various personality scales\textsuperscript{90}. Goodstein, Crites and Heilbrun Jr (1968)\textsuperscript{91} concluded that personality does contribute to college achievement but in a more general than specific way.

Abraham (1969)\textsuperscript{92} found that the personality factors evolved in the analysis had significant loadings on the personality variables and so the

influence of personality on academic achievement could be described in
terms of the personality factors. Barton, Dielman and Cattell (1972) using
HSPQ on sixth and seventh grade students found personality factors to be
associated with academic achievement.

Kifer (1975) relates patterns of academic achievement to the
personality characteristics of learners, the results of the study provide strong
evidence for a model which emphasises the influence of histories of successful
academic achievement on personality characteristics.

Chorro (1981) reported that personality is significantly related to
academic achievement. Dyer (1987) and Hogan & Hogan, (1989) found
that certain personality traits consistently predict academic achievement.

Tett, et al (1991) has found personality to be related to academic

93 R.B. Cattell, K. Barton, T.E. Dielman: “Prediction of School Achievement from Motivation,
94 Edward Kifer: “Relationships between Academic Achievement and Personality Characteristics: A
Quasi-Longitudinal Study”, American Educational Research Journal, Vol. 12, No. 2, California,
pp 155–166.
96 E.D. Dyer: “Can University Success and First-year Job Performance be Predicted from Academic
Achievement, Vocational Interest, Personality and Biographical Measures?” Psychological Reports,
98 R.P. Tett, D.N. Jackson & M. Rothstein: “Personality Measures as Predictors of Job Performance: A
performance. Results have continued to support the conclusion that certain personality traits consistently predict academic performance, (Furnham 1993\textsuperscript{99}, Wolfe & Johnson, 1995\textsuperscript{100}, Hoschl & Kozeny, 1997\textsuperscript{101}).

Further, the recent studies conducted by Rau & Durand, (2000)\textsuperscript{102} Rindermann & Neubauer (2001)\textsuperscript{103} found that personality and academic achievement are closely related to each other. Diseth (2002)\textsuperscript{104} investigated the relationship between personality and academic achievement and his results showed the expected significant correlations between the personality factors of openness and neuroticism but negatively correlated with agreeableness.

Mahmood (2003)\textsuperscript{105} found that all the eight factors of personality ascendancy, responsibility, emotional stability, sociability, cautiousness,

\begin{itemize}
\item \textsuperscript{100} R. Wolfe & S. Johnson: “Personality as a Predictor of College Performance”, \textit{Educational and Psychological Measurement}, Vol. 55, California, 1995, pp 177-185.
\end{itemize}
original thinking, personal relations and vigour do correspond generally with academic achievement. Chamorro-Premuzic & Furnham (2003)\textsuperscript{106} found that personality is significantly related to academic performance. Caspi, Robert and Shiner (2005)\textsuperscript{107} revealed in their studies the relationship between personality and academic achievement. Barrick and Mount (2005)\textsuperscript{108} and Bratko, Premuzic and Zaks (2006)\textsuperscript{109} concluded that personality contributes to the prediction of school performance. Yahaya et al (2009)\textsuperscript{110} found that there is no significance between the whole personality types with the student’s academic achievement.

(ii) Socio-Economic Background and Academic Achievement:

Research evidence and writings of many psychologists have found that

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Socio-economic background of the pupils influences the academic achievement. Several studies of socio-economic background viz, education, income and occupation are studied in relation to their academic achievement which may now be reviewed.

Clark (1927)\textsuperscript{111} found that students whose parents had college education ranked higher in scholarship. Bear (1928)\textsuperscript{112} found parental occupation related to academic success. Shaw (1943)\textsuperscript{113} found significant relationship between socio-economic status and academic achievement.

Frasier (1959)\textsuperscript{114} in her study found high correlation between father’s education, income and scholastic achievement. Watson’s (1965)\textsuperscript{115} attempted to predict achievement and found that father’s educational level was related to academic achievement.

Hurlock (1973)\textsuperscript{116} in his study found that socio-economic status of the pupils influence their academic achievement. Sewell & Hauser (1980)\textsuperscript{117}.

Teachman (1987)\(^{118}\), showed that parent’s educational level has been consistently reported to be highly correlated with academic achievement. Parents’ level of education is a predictor of children’s achievement. Milne (1989)\(^{119}\) and Gorman (1998)\(^{120}\) suggested that a mother’s educational level is a more potent predictor of a child’s achievement than a father’s educational level. Thus, parents’ educational level to a certain extent influences academic achievement.

Benbow & Arjmand (1990)\(^{121}\) revealed that Parents’ educational level is the main source of influence that determined a child’s academic achievement.

Sandefur, McLanahan & Wojtkiewicz (1992)\(^{122}\) showed that parents’ educational level may foster higher parental involvement in adolescents’ school achievement which in turn may influence high school completion. Ford

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concluded that family’s achievement orientation is very influential in determining the academic outcome. Brooks-Gunn & Duncan (1994) found that mothers educational level were found to be significantly related to children’s performance in school compared to children whose mothers were less educated. Haveman & Wolfe (1995) in their studies they have indicated that parents with higher educational level could motivate the intellectual potential within children that may lead them to perform better in school and in return strive for further education. Chall (1996) in her studies concluded that there are large differences between higher- and lower-socioeconomic status children. Patrikakou (1997) revealed that parents’ educational level play an important role in determining a child’s intellectual

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performance. Smith, Brooks-Gunn & Klebanov (1997)\textsuperscript{128} reported that family income contributed to children’s academic achievement.

Kim, Hong, Gong-Soog & Rowe (2000) in their studies pointed out that students raised by parents with higher income were likely to have access to quality educational resources\textsuperscript{129}. Sander (2001)\textsuperscript{130} compared Chicago schools with those in the rest of Illinois and found that the low-income students had lower achievement. Seong (2002)\textsuperscript{131} found a positive relationship between academic achievement of the pupil’s and parental education, income and occupation. Jeynes (2002)\textsuperscript{132} and Eamon (2005)\textsuperscript{133} reported that the socio-economic status affects students’ outcome.

Holmquist (2003)\textsuperscript{134} revealed that a significant and positive relationship exists between socio-economic status and academic achievement of the students. Frempong (2004)\textsuperscript{135} concluded that parental income, education and occupation are related to academic achievement. Wolfram Schulz (2005)\textsuperscript{136} revealed that one of the consistent findings of educational research studies is the effect of the student’s family socio-economic background on their achievement. Jennifer (2006)\textsuperscript{137} indicated that the strongest predictor of students’ performance is their socio-economic status. Zahyah Hanafi (2008)\textsuperscript{138} findings support that parents’ level of education are related to children’s academic achievement.

(iii) **Sex and Academic Achievement:**

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\textsuperscript{138} Z.B.T. Hanafi: *Relationship between Socio-Economic Status, Parental Involvement, Parenting Style and Academic Achievement*, University Utara Malaysia, Sintok, Kedah, 2008.
Various studies have been conducted to examine the relationship between Sex (male/female) and academic achievement. The following are some of the studies:

Mellon, Schmitt and Bylenga (1980)\textsuperscript{139} studies suggested that the educational achievement might be more predictable for girls than boys. Dornbusch et al. (1987)\textsuperscript{140} reported that girl students tended to get higher grades than boys.

Bulcock, Whitt and Beebe (1991)\textsuperscript{141}, Epstein, Elwood, Hey and Maw (1998)\textsuperscript{142} revealed that girls earn better school grades than boys. Catsambis (1994)\textsuperscript{143} showed that male and female eighth graders attained similar achievement. Fennema (1998)\textsuperscript{144}, Hosenfield, Koller and Baumer (1999)\textsuperscript{145}

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concluded that there is no sex difference in academic achievement. Donahue et al. (1999)\textsuperscript{146} revealed that females outperformed males.

William et al. (2000)\textsuperscript{147} has reported that no significant gender differences exist in academic achievement. Ezeameyi (2002)\textsuperscript{148} reported the dominance of males over females in academic achievement.

Eccles (2002)\textsuperscript{149}, Wong, Lam and Ho (2002) found that girls had a significantly higher academic achievement\textsuperscript{150}. Chambers and Schreiber (2004)\textsuperscript{151} have found little and no difference in achievement between the


sexes. Ceballo, Mc Loyd and Toyokawa (2004)\textsuperscript{152} found that girls exert more efforts at school, leading to better school performance. Elitle (2005)\textsuperscript{153} reported that sex has an effect on the students’ academic achievement. Herbert and Stipek, (2005)\textsuperscript{154}, concluded that there is no sex difference in academic achievement. Ruban and McCoach (2005)\textsuperscript{155} in their studies suggested that the educational achievement might be more predictable for girls than boys.

Burni et al (2006)\textsuperscript{156} indicated significant difference between males and females. Birenbaum & Nasser (2006)\textsuperscript{157} reported similar gender effect on achievement. Asimeng and Boahene (2006)\textsuperscript{158} found that academic

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achievement favour male dominance over the feminine gender. Deary et al. (2007)\textsuperscript{159} found that there were sex differences in educational attainment.

Penner and Paret (2008)\textsuperscript{160} reported that there is no significant difference between male and female in academic achievement. Steinmayr and Spinath (2008)\textsuperscript{161} found that sex differences are consistent in high school and college students’ achievement. Freudenthaler, Spinath and Neubauer (2008)\textsuperscript{162} in their results showed that girls attained a higher level of school achievement than boys. Barkatsa, Kasimatis and Gialamas (2009)\textsuperscript{163}, Naderi et al. (2009)\textsuperscript{164} showed that there is no significant difference between academic achievement and gender.

(iv) Rural/Urban and Academic Achievement:


Educational research has examined rural/urban differences in academic achievement and some of these studies are presented below:

McCormick (1932) found that the urban/rural background had no bearing on grades. Sander, Osborn and Green (1955) observed that urban students were found better than rural student. Nicholas and Davis (1961) have found that achievers tend to come from urban background than rural background\textsuperscript{165}.

Edington and Martellaro (1984)\textsuperscript{166} revealed no gap between rural and urban students. Ward and Murray (1985)\textsuperscript{167} found that student in rural area performed as well as those in urban area. Monk and Haller (1986)\textsuperscript{168} found that students from rural area achieved as well as students from urban area. Edington and Khoehler (1987)\textsuperscript{169} reported that the rural students are


\textsuperscript{166} E.D. Edington and H.C. Martellaro: “Variables Affecting Academic Achievement in New Mexico Schools” New Mexico Centre for Rural Education (Eric documentation Reproduction Service No. 271), 1984, p 67.


achieving more inspire of greater obstacles. Young (1998)\textsuperscript{170} found that rural students were disadvantaged in terms of their achievement. Roscigno and Crowley (2001)\textsuperscript{171} reported that the academic performance of rural children typically lags behind that of urban children. Howley (2002)\textsuperscript{172} reported there is no difference between rural and urban education.

2.2 Studies Done in India:

(a) Intellectual Factor and Academic achievement:

Intelligence is considered to be a significant factor affecting the achievement of students. Many studies have revealed that intelligence relates strongly to students achievement than any other characteristics.

A number of studies have been undertaken in India to study the relationship between intelligence and academic achievement.


\textsuperscript{172} C. Howley: “Research about Mathematics Achievement in Rural Circumstance”, \textit{Working Paper, No. 4}, Appalachian Collaborative Centre for the Study of Learning, Assessment and Instruction in Mathematics, Athens, Ohio University, Ohio, 2002.
Mishra (1962)\textsuperscript{173} studied academic achievement of engineering students found that high and low achievers do not differ in intelligence. Rao, (1963) \textsuperscript{174} claims that correlation between intelligence and academic achievement has been reported to be ranging between 0.10 to 0.90.

Dhaliwal (1970)\textsuperscript{175} found that intelligence measured on non-verbal intelligence tests correlated with achievement to the degree of .53. Hundal and Agrawal, (1972)\textsuperscript{176} found a significant relationship between intelligence and academic achievement. The study done by Das (1975)\textsuperscript{177} revealed that academic achievement have been contributed a lot by intelligence. Dhaliwal and Sharma (1976)\textsuperscript{178} correlated the measure of achievement with intelligence test scores and found correlation co-efficient to range from 0.26 to 0.46.

\textsuperscript{173} M.B. Buch (ed.): \textit{First Survey of Research in Education}, Centre of Advanced Study in Education, M.S. University, Baroda, 1974, p 335.
\textsuperscript{174} Ibid.; p 343.
\textsuperscript{177} M.B. Buch (ed.): \textit{Second all India Educational Survey}, Centre of Advanced Study in Education, M.S. University, Baroda, 1979, p 443.
Other investigators like Girija (1980)\textsuperscript{179}, Shah and Kishan (1982)\textsuperscript{180}, Das (1986)\textsuperscript{181} and Sharma (1988)\textsuperscript{182} reported that academic achievement of the students was positively correlated with intelligence. Sibia (1989)\textsuperscript{183} found a significant relationship between verbal intelligence and achievement in science.

Chadha, Chandna and Sunanda (1990)\textsuperscript{184} and Venugopal (1994)\textsuperscript{185} in their studies found that there was a positive and significant correlation between intelligence and scholastic achievement. V.P Garg and Seema Chaturvedi (1992)\textsuperscript{186} found that there appeared to be a linear relationship between IQ and academic performance which held good both for rural and urban students.

Begum and Phukan (2001)\textsuperscript{187} revealed that the correlation between academic achievement and intelligence was greater in the case of girls than [references]
that of boys. Chaudhary (2004)\textsuperscript{188} found that there was a highly significant correlation between intelligence and academic achievement. Panigrahi (2005)\textsuperscript{189} maintains that students having higher intelligence are high achievers in academic performance than students having low intelligence. Panda (2005)\textsuperscript{190} in his study reveals that there is low relationship between intelligence and academic achievement in different categories of school. Begum and M.Phukan (2005)\textsuperscript{191}, Vaidharani and Chamundeswari (2006)\textsuperscript{192} revealed that intelligence and academic achievement are positively correlated to each other. Nalini and Bhatta (2009) found a significant relationship between academic achievement and intelligence\textsuperscript{193}. Gurubasappa (2009)\textsuperscript{194} in this study found that the academic achievement of the students is certainly influenced by psychological factor intelligence.

\begin{itemize}
\item M. Panda: “Correlation between Academic Achievement and Intelligence of Class IX Students”, \textit{Edutracks}, Vol. 5, No.1, Hyderabad, September 2005, pp 36-37.
\item V.S. Vaidharani and S. Chamundeswari: “General Mental Alertness and Intelligence in Relation to Academic Achievement of Students at the Secondary Level”, \textit{Jr. of Educational Research and Extension}, Vol. 43 (2), Coimbatore, April-June 2006, pp 32-45.
\end{itemize}
(b) Non-Intellectual Factors:

(i) Personality and Academic Achievement:

A good number of studies have been conducted in India on the relation between personality and academic achievement of the students. Some of the important studies are presented below:

Mishra (1962)\(^{195}\) made a comparative study of non-academic background and personality structure of high and low achievers in engineering education. The study revealed that personality patterns of the two groups differed in traits like anxiety, judgement and neuroticism. The groups did not seem to differ in other dimensions either. Bhatnagar (1967)\(^{196}\) conducted a study of some personality variables as predictors of academic achievement of high school students. Their study also aimed at predicting academic achievement on the basis of personality and they found that correlation co-


efficient were found to be significant.

Studies have also been conducted to compare the personality characteristics of over achievers and under achievers or high achievers and low achievers. Wig and Nagpal (1972)\textsuperscript{197} found that the high achievers and the low achievers student were significantly different on mental health. Srivastava (1976)\textsuperscript{198} revealed in his study that high achieving students, in comparison to the average and low achieving student, excelled in self-sufficient and have more social warmth than the low achievers. Suri (1978)\textsuperscript{199} found that high achievers tend to be sociable, bold, ready to try new things, spontaneous and abundant in emotional responses, while low achievers tend to be shy, having inferior feelings, withdrawn, cautious and tense.

Tolam (1985) supported the study and found that high achievers have more social warmth than the low achievers\textsuperscript{200}. Khan (1983)\textsuperscript{201} found that high achievers are more excitable than the low achievers. He also found that high achievers and low achievers differ significantly in guilt proneness, sensitivity

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\item \textsuperscript{197} N.N. Wig and R.N. Nagpal: “Mental Health and Academic Achievement: A Comparison of Success and Failed Students”, \textit{Education and Psychology and Review}, Vol.12, Agra, 1972, pp 31-39.
\item \textsuperscript{198} G.P.Srivastava: “A Study of Personality Factors as Predictors of Academic Achievement of High School Students”, \textit{Doctoral Thesis} (Edu.), BHU, Varanasi, 1976.
\item \textsuperscript{199} S.P. Suri: “A Study of Differential Personality Traits in Intellectual Superior, Average and Below Average Students”, \textit{Quest in Education}, Vol. XV, No. 4, Oct., New Delhi, 1978, pp 291-301.
\item \textsuperscript{200} Tayek Tolam: “A Study of Personality Traits of High Achievers and Low Achievers, XI Grade Students of Arunachal”, \textit{Unpublished Dissertation of Education Department}, NEHU, Shillong, 1985.
\item \textsuperscript{201} M.B Buch, (ed.): \textit{Fourth all India Educational Survey}, NCERT, New Delhi, 1991, p 381.
\end{enumerate}
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and tension. Jahan (1985)\(^\text{202}\) revealed in his studies that high achieving students, in comparison to the average and low achieving students are mature, serious, aware and concerned of others, have a sense of responsibility, and are self-sufficient, self-controlled, excitable, enthusiastic and competitive. Khatoon (1988)\(^\text{203}\) found that high academic achievers were adventurous, active, impulsive, socially bold and tough-minded, whereas low academic achievers were shy, timid, threat, sensitive and tender minded. Deka (1993)\(^\text{204}\) found that achievement does not differ significantly with regard to the creativity and individualism of the students, but he indicates that achievement of the high and low achievers differ significantly.

Gupta (1980)\(^\text{205}\) in his study reaffirmed the importance of personality characteristics and rich environment in academic achievement. Verma and Upadhyay (1981)\(^\text{206}\) indicated that certain personality factors are determiners of the educational achievement of the individual. Personality characteristics are also measured by using personality questionnaires or inventories.


\(^{203}\) Fifth All India Educational Survey, NCERT, New Delhi, 2000, p 896.

\(^{204}\) As quoted by D.Ucharan: \textit{Factors of Academic Achievement}, Northern Book Centre, New Delhi, 1993.


Khanam (1983)\textsuperscript{207} and Lall (1984)\textsuperscript{208} happen to be such studies. All of them worked on school students and found that personality factors were consistently associated with achievement.

Khurshid and Fatima (1984)\textsuperscript{209} found that high achievers stand quite apart from low achievers in respect of their personality structure and dynamics. Ramasamy (1988)\textsuperscript{210} found that academic achievement was found to be positively related to personality among high and low achieving boys and girls and a significant difference was found between high and low achievers in personality. Kumar (1989)\textsuperscript{211} found that personality factors significantly influenced educational achievement.

Ayishabi (1990)\textsuperscript{212} found that men and women differed in eight of the nine personality variables viz, Social adjustment, introversion, masculinity, ach-motivation, self concept, general anxiety, manifest anxiety and examination anxiety selected for academic achievement. Singh (1994)\textsuperscript{213} found personality to be related to academic performance. Verma and Sheikh

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\textsuperscript{207} M.B Buch (ed.): \textit{Fourth All India Educational Survey}, NCERT, New Delhi, 1991, p 830.
\textsuperscript{208} \textit{Ibid.}, p 833.
\textsuperscript{209} K.Khurshid and R.Fatima: “A Comparative Study of Personality Traits of High and Low Achievers”, \textit{The Asian Jr of Psychology and Education}, Vol. 13, No. 2,3 & 4, Agra, 1984, pp 41-44,
\textsuperscript{210} Fifth All India Educational Survey, NCERT, New Delhi, 2000, pp 1903-1904.
\textsuperscript{211} \textit{Ibid.} pp 1871-1872.
\textsuperscript{212} \textit{Ibid.} pp 1861-1862.
\end{footnotesize}
found that personality has significant association with academic achievement. They concluded that some personality traits and personality needs contribute towards academic achievement.

Suneetha and Mayuri (2000) showed that significant differences were observed in almost all dimensions of personality except in self-control and tension with academic achievement. Laavanya (2000) found that some personality dimensions have significant difference with academic achievement and others have no significant differences. Nagarjuna and Mamidenna (2008) results showed that there were no significant differences among students in the personality profiles based on academic background.

(ii) Socio-Economic Background and Academic Achievement:

Socio-economic background and academic achievement proved to be an area of interest for some investigators. While reviewing the studies on

correlation of achievement it appears that socio-economic background in India has an influence on academic achievement. The following available research evidence showed that socio-economic background has an impact on academic achievement of the pupils:

Mathur (1963)\textsuperscript{218} has studied the effect of S.E.S on the behaviour and achievement of secondary school students. He states that S.E.S. is significantly correlated to educational achievement, intelligence and conduct of students. On the basis of parents’ education, occupation and family income Satyanandam (1969)\textsuperscript{219} highlighted two sub–aspect of socio-economic status viz, educational level of parents and economic status of parents. According to him, the children of graduate parents performed far better than the children of matriculate parents.

Chatterji, Mukherjee and Banerjee (1971)\textsuperscript{220} found that parents’ education level was directly related to the achievement of their children. Chandra (1975)\textsuperscript{221} found that correlation between socio-economic


status and academic achievement was positively correlated. Goswami’s (1978)\textsuperscript{222} also found that scholastic achievement correlated highly with socio-economic status. Ojha (1979)\textsuperscript{223} concluded that the higher the socio-economic status the better would be the academic achievement at high school level.

Homchandhuri (1980)\textsuperscript{224} reported a positive correlation between socio-economic background and academic achievement. Sharma (1984)\textsuperscript{225} concluded that parents’ education, occupation and income affect the academic achievement of the students. Sontakey (1986)\textsuperscript{226} showed that the high achievers had a high socioeconomic status and they hailed from highly educated families. Ramasamy (1988)\textsuperscript{227} found that academic achievement was found positively related to socio–economic status among high and low achieving boys and girls and there was significant difference found between high and low achievers in socio–economic status.

\textsuperscript{221} M.B Buch (ed.): \textit{Second All India Educational Survey}, Centre of Advanced Study in Education, M.S. University, Baroda, 1979, p 343.
\textsuperscript{222} P.K. Goswami: “A Study of Self-Concept of Adolescents and its Relationship to Scholastic Achievement and Adjustment”, \textit{Ph.D.Thesis in Education}, Agra University, Agra, 1978.
\textsuperscript{226} V.V. Sontakey: “A Comparative Study of Personality and Achievement Motivation of High and Low Achievers in Natural and Biological Sciences”, \textit{Unpublished Thesis in Education}, Nagpur University, Nagpur, 1986.
\textsuperscript{227} \textit{Fifth All India Educational Survey}, NCERT, New Delhi, 2000, pp 1930-1931.
Vijayalaxmi and Natesan (1992)\textsuperscript{228} reported that socio-economic status influence achievement. Govinda & Varghese (1993)\textsuperscript{229}, Saxena, et al, (1995)\textsuperscript{230} found that socio-economic status has either significant positive relationship with students’ academic achievement or a significant impact on achievement. Lekhi and Kaur (1995) concluded that parents’ education, occupation and income affect the academic achievement of the students\textsuperscript{231}. Balasubramanyan (1997)\textsuperscript{232} reported that socio-economic status was the domineering variable in the cluster of environmental variables.

Pandey (2001)\textsuperscript{233} revealed that parents’ education, occupation and income have an impact on the academic achievement of the students. Devi and Mayuri (2003)\textsuperscript{234} reported that socio-economic status significantly

\begin{footnotesize}
\begin{enumerate}
\item Ibid.: pp 157-170.
\end{enumerate}
\end{footnotesize}
contributed to academic achievement. Pandey and Maikhuri (2003)\textsuperscript{235} in their studies concluded that there exists significant relationship between academic achievement and socio-economic status. Panigrahi (2005)\textsuperscript{236} maintains that there exists a low positive correlation between academic achievement and socio-economic status.

Dills (2006)\textsuperscript{237} revealed that socio-economic status affects the academic achievement of students. Zora (2008) also found that socio-economic status affects the academic achievement of students\textsuperscript{238}. Alam (2009)\textsuperscript{239} revealed that a significant positive relationship exists between socio-economic status and academic achievement of the students. Mohanty (2009)\textsuperscript{240} study revealed that socio-economic status was found to be a potential social correlate of academic achievement. Gurubasappa (2009)\textsuperscript{241} found that there is no

significant difference between students’ academic achievement and socio-economic status.

(iii) **Sex and Academic achievement:**

Various studies have been conducted to examine the relationship between Sex (male/female) and academic achievement in India. The following available research evidence showed that sex has an impact on academic achievement of the pupils:

Sahai (1985)\(^{242}\) showed that there is sex difference in academic achievement. Raghawan (1986) reported that males were found to have significantly higher academic achievement than females\(^{243}\). Chakrabarti (1988)\(^{244}\) revealed that there is no sex difference in academic achievement. Deve (1990)\(^{245}\) found that girls had a significantly higher academic achievement than boys. Rani (1992)\(^{246}\) reported that there is significant

\(^{244}\) *Ibid*, pp 350-351.
\(^{245}\) *Fifth all India Educational Survey*, NCERT, New Delhi, 2000, pp 1869-1870.
difference between male and female. Tinku and Biswas (1994)\textsuperscript{247} found that girls are more involved in their studies than boys and get more marks.

Suneeta and Mayuri (2000)\textsuperscript{248} revealed no significant difference was observed among boys and girls in academic achievement. Meena (2000)\textsuperscript{249} indicated significant difference between males and females. Begum and Phukan (2001)\textsuperscript{250} in their studies obtained that there are differences in correlation between boys and girls in academic achievement. Nagaraju el at (2003)\textsuperscript{251} found that girls had a significantly higher academic achievement than boys. Panigrahi (2005)\textsuperscript{252} maintains that there is no significant difference between boys and girls with respect to academic achievement. Varte, Zokaitluangi and Lalhunlawma (2006)\textsuperscript{253} found that there is no sex difference in academic achievement.

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\textsuperscript{247} A.N.Tinku & P.C.Biswas: “Student’s Involvement in Studies to Prolonged Deprivation”, Psychologia-
\end{flushleft}
Pandey and Ahmad (2008)\textsuperscript{254} conclude that there is no significant difference between male and female on the measure of academic performance. Gurubasappa (2009)\textsuperscript{255} found that there is a significant difference in the academic achievement of students’ sex. Joshi and Srivastava (2009)\textsuperscript{256} revealed that significant gender differences were found in academic achievement. Girls were significantly higher on academic achievement as compared to boys.

(iv) Rural / Urban and Academic Achievement:

Educational research has examined rural/urban differences in academic achievement in India and some of these studies are:

Lalithama (1975)\textsuperscript{257} reported that the achievement of the pupils from urban area was better than the achievement of the rural area. Pandey (1981) has reported that urban atmosphere was more conducive to achievement


\textsuperscript{257} M.B. Buch (ed.): \textit{Second all India Educational Survey}, Centre of Advanced Study in Education, M.S. University, Baroda, 1979, p 349.
than rural environment\textsuperscript{258}. Mishra (1986)\textsuperscript{259} reported that the achievement of the pupils from urban areas was better than the achievement of pupils from rural areas. Joshi (1988) found that there appeared to be a linear relationship between IQ and academic performance which held well for both rural and urban students\textsuperscript{260}.

Garg, Chaturvedi and Seema (1992)\textsuperscript{261} found that there appeared to be a linear relationship between IQ and academic performance which held good for both rural and urban students. Ganga (1993)\textsuperscript{262} and Nagaraju et al (2003)\textsuperscript{263} reported that the achievement of the pupils from urban areas was better than the achievement of pupils from rural areas.

Usha (2007)\textsuperscript{264} revealed that urban pupils were found superior to rural pupils in their achievement. Sangeeta and Surekha (2008)\textsuperscript{265} found that achievement of the pupils from urban areas were better than the

\textsuperscript{259} M.B. Buch (ed.): \textit{Fourth All India Educational Survey}, NCERT, New Delhi, 1991, p 402.
\textsuperscript{261} \textit{Fifth All India Educational Survey}, NCERT, New Delhi, 2000, p 1875.
achievement of pupils from rural areas. Pushpalata, Dhanda and Singh (2009)\textsuperscript{266} found that urban area surpassed children from rural area in intelligence. Shobhna Joshi and Rekha Srivastava (2009)\textsuperscript{267} reported that the achievement of the pupils from urban areas was better than the achievement of pupils from rural areas.

(v) \textbf{Tribal /Non–Tribal and Academic Achievement:}

Some studies have been attempted to find out the influence of academic achievement on Tribal /Non–tribal. A brief account of some of the studies is given below:

Gokulnathan and Mehta (1972) found that the tribal boys showed significantly greater achievement than non-tribal boys\textsuperscript{268}. Mubayi (1976) found that non-tribal students were significantly higher achievers than tribal students in academic achievement\textsuperscript{269}. Gokulnathan (1979)\textsuperscript{270} found that

\begin{itemize}
  \item M.B Buch (ed.): \textit{Second All India Educational Survey}, Centre of Advanced Study in Education, M.S. University, Baroda, 1979, p 187.
\end{itemize}
tribal students achieve higher than the non-tribal. Aruna (1981)\textsuperscript{271} found that non-tribal students were significantly higher achievers than tribal students in academic achievement. Lalitha (1982)\textsuperscript{272} found that there was no significant difference between tribal and non-tribal in school achievement. Deshpande (1984)\textsuperscript{273} found that tribal students were more educationally backward than non-tribal. Verma (1985)\textsuperscript{274} reported that there was no significant difference in academic achievement of students belonging to the scheduled tribe. Tripathy (1986)\textsuperscript{275} found that tribal and non-tribal were not significantly different in academic achievement.

Annaraja (1993)\textsuperscript{276} in his findings revealed that the academic achievement of non-tribal students were better than the tribal students. Manjulata (1993)\textsuperscript{277} showed that non-tribal students have shown better performance than their tribal counterparts. Govinda & Varghese (1993) and Varghese (1994) found that the achievement of students belonging to the

\textsuperscript{271} M.B Buch (ed.): \textit{Third All India Educational Survey}, Centre of Advanced Study in Education, M.S. University, Baroda, 1987, p 658.
\textsuperscript{272} M.B Buch (ed.): \textit{Fourth All India Educational Survey}, NCERT, New Delhi, 1991, pp 392-393.
\textsuperscript{273} \textit{Ibid.}: p 360.
\textsuperscript{274} \textit{Ibid.}, pp 866-867.
\textsuperscript{275} \textit{Ibid.}, pp 451-452.
\textsuperscript{276} \textit{Sixth All India Educational Survey}, NCERT, New Delhi, 2007, p 468.
\textsuperscript{277} \textit{Ibid.}, pp 501-502.
tribal community was very low\textsuperscript{278}. Sujatha (1998)\textsuperscript{279} found that tribal students have lower achievement compared to non-tribal.

\textbf{2.3 Resume of the Past Researchers:}

The above review reveals that many scholars have studied the different factors which affect academic achievement of the students. However, a comprehensive yet concise research work focusing on those closely related to psycho-social variables namely personality, intelligence and socio-economic background could not be located. So, from these reviews it is very difficult to draw common conclusion because of their unexpected findings and use of diverse tools and techniques. The similarity of the present study and the results found in some studies is apparent rather than real because the variables in these cases have not been measured by the same tests.

Thus, the following conclusions may be drawn after reviewing the literature related to the present study.

1. Majority of the study covers only a small sample and it does not seem possible to draw a definite conclusion.

2. Most of the investigators have used foreign tools to test the personality and intelligence. Such tools were not suitable for the Indian students.

\textsuperscript{279} \textit{Ibid.}, pp 88-94.
3. For the socio-economic background of the students, most of the investigators have used a scale measuring socio-economic status which does not provide the true picture of socio-economic background with respect to Meghalaya as required.

4. Diversity of results seems to be due to the use of a wide variety of tools, heterogeneous groups of subjects with regard to characteristics like age, ability, and class.

It is under this background that a separate study needs to be planned for the study of academic achievement in relation to personality, intelligence and socio-economic background with respect to the state of Meghalaya.

2.4 Present Study:

Though different researches have taken up various studies regarding academic achievement in India and abroad, but no full-fledged study could be traced out with respect to the students in Meghalaya. The review of the related literature with regards to the problem under investigation indicate that there are very few studies in which such large number of variables like intellectual and non-intellectual factors including sex, rural and urban, tribal and non-tribal have been studied in relation to the academic performance of the students. Considering this in view the present study has been undertaken which is different from the previous investigation in respect of the following aspects:
1. The present study covers a large sample on the basis of which definite conclusions can be drawn.

2. The Multi-Dimensional Assessment of Personality Series (MAPS) Form-T, a standardised test of Indian version, has been used which includes a wide variety of personality dimensions, which is more suitable to Indian students.

3. For the Socio-Economic background of the students, a questionnaire was framed by the investigator which takes into consideration the socio-economic scenario of the state of Meghalaya.

4. The study intends to find out tribal and non-tribal differences (along with sex and locale) in the academic achievement of students.

CHAPTER – III

RESEARCH DESIGN OF THE STUDY

3.0 Introduction:

The research design is the conceptual structure within which research is conducted. It constitutes the blue print for the collection, measurement and analysis of data. It is needed for the smooth sailing of the various research