Educational institutions, to a great extent, are dependent on achievement as a measure of pupils' knowledge and skill in conformity with the societal expectations. Achievement speaks for both the child and the society. Both out of the school, assessment of academic achievement plays a vital role as in selection of candidates for employment, promotion, appointment, etc. Along this line, Lamszus (1984) says:

Awarding marks and certificates (assessing academic achievement) to the teacher means to have to act not only as a defender of the child or young persons against the claims of society on the one hand, but also as the exponents of norms and requirements of society vis-a-vis the pupil on the other hand. (Lamszus' study [cited in Okafor, 1989]).

Today, with the emergence of modern society and its resultant change in the social, economical, political, and religious values, the educational environment has undergone a considerable change. The values, needs, preferences for education have also undergone a complete change. Education is no longer viewed from its long-range
objectives and from the quality of life it tends to foster, but purely from a utilitarian angle. This type of education is a practical training for the affairs of life as in getting job, making a living to earn one's bread and butter, and capability improvement. Getting a job, and securing admission into professional institutions and institutions of higher learning is linked with performance at all levels of education. Therefore, success in public examination has become the dominant purpose in instruction.

Low achievements, failures, and under-achievements are the issues that call for the urgent attention of the educationists as these have led to the alienation of the students. These have also restricted the students from developing an awareness toward social consciousness. It is likely to denigrate the youth further to selfishness, egotism, rivalries, frustrations, powerlessness, and helplessness.

Empirical and scientific investigations tend to support the widely held view that intellectual capacity of an individual plays an important role in determining the limits of his academic achievement (Hollingworth & Cobb, 1923; Freeman, 1942; Crawford & Burnham, 1946; Gowan, 1955; Vernon, 1970).

Intelligence tests offer a place to an aristocracy of
academic talent. Owing to their impact on scholastic achievements, they are otherwise known as "scholastic aptitude tests". Still there is no "a priori" (Thorndike, 1963) P. 183), justification, no consistency in the relationship between intelligence and achievement. High IQ does not always lead to high academic achievement. Several studies have reported correlations between the two to range from .90 to -.01 (Stephens, 1960; Green & Farguhar, 1965). But it is pertinent to point out that it smacks of utter falsity to infer that correlations between intelligence and academic achievement are always high. Several studies have reported that correlations between intelligence and academic achievement are generally low. Majority of researchers have reported that the correlations between the two range from .50 to .70 (Freeman, 1942; Dibble, 1967; Pandey & Singh, 1970). In view of these high correlations, predictions of academic brilliance are often made on the basis of intellectual brilliance. However, sometimes, it is observed that even two pupils, possessing equal intellective endowments differ widely in educational accomplishments, when they are assessed objectively by the same teacher. These variations are due to the intervening non-intellective behavioral and environmental correlates which exercise a considerable influence on their achievements. An investigation into the effect on academic achievement of
these non-intellective variables is necessary in order to unravel the intricacies of variations in educational performance of individuals, exactly alike in intellectual endowments.

Several factors have been identified as non-intellective correlates of academic achievement. They include personality, aptitude, styles of learning, socioeconomic status, achievement motivation, study habits, aspiration, test-anxiety, locus of control, cognitive styles, parental encouragement, etc. Of these factors, many of them have already been explored exhaustively, while a few others have not been studied intensively. All efforts have been made here to review the variables on which less emphasis has been laid by researchers.

Research in the area of styles of learning revealed that culture exercises a considerable influence on styles of learning. There is a clear evidence of the relationship between learning styles and culture (Cole & Means, 1981; Anderson, 1988; Swisher & Deyhle, 1989; More, 1990). N.J. Entwistle and D. Entwistle (1970), Entwistle and Brennaan (1971), Pask (1976), and Ramsden and Entwistle (1981) espoused the viewpoint that one of the explanations of discrepant academic achievement lies in learning styles of the students. Cultivating poor style of learning inhibits learning and therefore, may be detrimental to scholastic

Another important area of concern to researchers, in the recent time, is that of achievement motivation as it affects academic achievement. Without a motive power, students cannot be expected to achieve to their maximum. Several studies have been undertaken by researchers to show that achievement motivation or need-achievement (n-Ach) is a potent factor in academic achievement (McClelland, Atkinson, Clark & Lowell, 1953; McClelland, 1958, 1961; Atkinson, 1964; Mukherjee, 1965; Atkinson & Feather, 1966; Heckhousen, 1967; Khan, 1968; Ruhland, Gold & Feld, 1978).

A perusal of the studies on styles of learning, locus of control, and achievement motivation as correlates of academic achievement showed that although there has been a proliferation of research on locus of control and achievement motivation, yet there is a growing need for further investigations as the research findings have
always been characterized by inconsistencies. 

In Indian context, very little research has been conducted in the area of learning styles. It would be expedient to attempt to study learning styles in order to understand cultural differences in the way students perform their learning task. It is a worthy project in this country with increasing number of African nationals visiting India for the purpose of higher studies. It is an effort directed towards solving the puzzle faced by educators in India who are beginning to show concern over the varied achievements of African students enrolled in most institutions of higher learning. Some African students, on the average, achieve higher than their Indian counterparts in some areas, while some achieve much lower. Varied achievements of the African students could depend, possibly, on their peculiar styles of learning. The students' learning styles are of utmost importance and still more important is the teachers' understanding of each and every student's unique styles of learning. The concept of learning style has been treated as a potential individual difference which must be employed by the teacher to enhance students' learning. The teacher, by identifying the learning style for each student, can use this information in grouping the students, motivating the students, in selecting appropriate teaching method, and in designing curriculum so that each of his or her students
may get education according to his or her unique style. Undoubtedly, identifying the characteristic learning styles of the African students would serve to improve their learning and enhance their academic performance.

Moreover, a perusal of the results of investigations into the non-intellective behavioural correlates of academic achievement revealed that not much has been done, by way of research, to study the effect of styles of learning on academic achievement. It is further revealed that of a few studies undertaken on styles of learning, only one or two styles have been separately studied by the investigators. Learning styles have never been studied in a global fashion except by Ramsden and Entwistle (1981), Keefe (1990), and a few others. The investigator's interest on learning styles was fully aroused by the thought that if all 16 subscales of Ramsden and Entwistle's (1981) Approaches to Studying Inventory are taken together and studied in India where conditions are different, they might present quite a different picture from the type which are reported often when these variables are studied separately.

Besides, Indian and African students represent, two different culture groups, and the espousal by many a researcher to the viewpoint that culture influences the way one perceives, thinks, organizes, stores, and
retrieves information, has raised the issue in the mind of the investigator that the syndrome of these traits might be different for Indian and African students on the aggregate, as well as when examined at different levels of intelligence. "Culture is first last and always learned [SIC]... [but] a few people have any notion of how little is really known about the microcultural details of how learning proceeds - the implicit cultural matrix of learning in different cultures." (Hall, 1988, 22-23).

Similarly, high-, average-, and low-achievers are heterogeneous groups, and are compared at different levels of intelligence for both males and females, and Arts and Science students. The question raised by these factors, in the mind of the investigator, is whether the composite character of these traits would be different for high-, average-, and low-achievers, on the whole, as well as when considered at different levels of intelligence. The investigator has also envisaged that in its entirety, these traits might be different for males and females, and also for Arts and Science students belonging to high-, average-, and low-achieving groups. All this has led to the title of the present study as "Styles of learning, Locus of Control, and Achievement motivation of High-, Average-, and Low - achieving College Students at different levels of Intelligence".
Need of the study

The explosion of enrolment in schools, and booming of higher education in India, in the recent time, has put heavy financial pressure on India's educational system. Besides, the commitment of the Government of India to eradicate illiteracy by 1995, expressed in the National Policy on Education NPE, (1986) has yielded a vast programme of adult and continuing education through various ways including the establishments of centres in rural areas for continuing education, workers' education through the employers, trade unions, and concerned agencies of the Government. This "Programme of Action" also lays a claim to a major chunk of the total educational budget. The concomitant effect of the heavy financial pressure on India's educational system is the inadequacy of educational facilities for both the formal and nonformal education.

Thus, firstly, the liberal policy of expanding admissions has led to influxes into the educational institutions. Secondly, as a corollary, the teacher-pupil ratio has gone up to the extent that individual attention to pupils is not possible. Lastly, limited resources of the country have not been able to grapple with the increasing financial burden on its exchequer for education. Cumulative effect of these factors has brought
about a decline in the quality of educational achievement. The examination results in the State of Punjab for the high-and higher-secondary schools for the past 5 years present a very depressing picture of the overall educational level and performance of pupils in the public examination at the end of school stage.

Table 1.
Details of Results of High and Higher Secondary Classes for the Period 1978-1982

<table>
<thead>
<tr>
<th>Class Year</th>
<th>Percentage of Students Passing the examination marks, i.e., getting 33% or more</th>
<th>Percentage of Students getting first division, i.e., getting 60% or more marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th 1978</td>
<td>55.12</td>
<td>11.11</td>
</tr>
<tr>
<td>10th 1979</td>
<td>67.41</td>
<td>15.07</td>
</tr>
<tr>
<td>10th 1980</td>
<td>60.19</td>
<td>14.91</td>
</tr>
<tr>
<td>10th 1981</td>
<td>67.52</td>
<td>15.74</td>
</tr>
<tr>
<td>10th 1982</td>
<td>66.29</td>
<td>16.66</td>
</tr>
<tr>
<td>11th 1978</td>
<td>53.34</td>
<td>13.01</td>
</tr>
<tr>
<td>11th 1979</td>
<td>61.08</td>
<td>13.60</td>
</tr>
<tr>
<td>11th 1980</td>
<td>62.47</td>
<td>7.34</td>
</tr>
<tr>
<td>11th 1981</td>
<td>65.29</td>
<td>14.81</td>
</tr>
<tr>
<td>11th 1982</td>
<td>64.59</td>
<td>20.12</td>
</tr>
</tbody>
</table>


From Table 1, it could be educed that approximately one-third of the total population of the students is not getting through the examination in their first attempt.
This amounts to an enormous waste of the human resources. The rest of the students have academic achievements either below average or just average. It seems that pupils do not fully benefit from the teaching-learning activities of the classroom. Even when the pupils have the potentials to achieve high, it may not be possible for some of them to achieve well due to the factors already discussed. As a result, there are always chances of pupils falling in the category of low-achievers. In a developing country like India, it is necessary that its resources are utilized to the fullest extent and with minimum of wastage. Where a large proportion of the students fails to benefit fully from the educational facilities made available to them, a need would naturally arise for investigation into this phenomenon.

Succinctly stated, the need is urgent in the modern times to investigate into the psychology of correlates of academic achievement which is in a disturbed state and needs some kind of reorientation. This need has been felt for the individual students, the parents, and guardians; for the administrators, the psychologists, the counsellors, the research workers, and the educationists; for the nation as a whole and for the fast-changing world at large. Of course, anybody who is genuinely interested in the intellectual growth of the students' community would
naturally desire an intensive probe into this field.

In this era of survival of the fittest, when admissions are selective, and job opportunities meagre, better performance in terms of grades or marks, on the part, of the students, becomes a necessity, and an important criterion for progress. High-achievers are an invaluable asset to any modern society. There is a dire need for a concerted effort of all concerned with the formulation and implementation of educational policies to evolve suitable measures to enhance the academic performance of the students. Low achievement and failures, it is generally accepted, alienate and frustrate the students. These should be combated with all the might at the disposal of the state so that low-achievers, given proper attention, could shine in life and also reach their maxima in academic pursuits.

Moreover, low achievement could be a direct result of nonpossession of certain traits which go with the high-achievers. Magnitude of the problem of wastage, stagnation, and failures can be gauged by the fact that usually only one out of eight adolescent pupils in the age group 14-17 year reaches secondary education and out of this highly selective population, sizeable proportion of student community (approximately 50%) fail to qualify every year." (Kohli, 1975, P.8). If some of these variables
which go with high-achievers are provided to the average- and low-achievers, that could mean the difference between high- and low-achievement, as low-achievers would, invariably, be geared to a higher level of achievement.

The need to reorder the priority and interest of the student community makes such studies all the more important. Coleman's study (cited in Jersild, 1963) examined about 8,000 high-school students and reported the observation that there was nonchalance and negative attitude among these students towards educational matters. Majority of modern youths are now drifting away from academic pursuits and are embracing activities other than academics. Obviously, it is expected from this growing trend that the number of low-achievers would shoot up buttressing the urgency of the need to attend to the low-achievers.

The study was designed in such a way as to address itself to several variables at the same time and study them at different levels of achievement. In brief, the present study has been taken up with following objectives in view:

1. To identify high-, average-, and low-achieving groups of college students on the basis of their academic achievement.

2. To identify high-, average-, and low-IQ groups
of college students on the basis of their deviation intelligence quotient-combined.

3. To ascertain whether the dynamic interplay of styles of learning, locus of control, achievement motivation, and intelligence on academic achievement examined globally, accounts for differences among groups representing: (a) The entire range of intelligence and achievement by taking the representative total sample, and (b) same ability (intelligence) level and three levels of discrepant academic achievement, i.e., high-, average-, and low-achievement.

4. To see whether the analytical picture of correlates of academic achievement differs among groups which represent (a) the total range of ability and achievement, and (b) same ability level and three levels of discrepant achievement.

5. To determine whether the analytical picture of styles of learning, locus of control, and achievement motivation is different for three levels of discrepant academic achievement (high-, average-, and low-achievement) at "different levels of intelligence."

6. To ascertain whether the comparative analytical picture of styles of learning, locus of control, and achievement motivation is different for groups representing (a) the total range of ability and achievement, (b) high-, average-, and low-achievement and
Plan of the Research Report

In this thesis, there are 15 chapters including the running chapter of introduction. Chapter 2 deals with the various theoretical views regarding academic achievement, high-, average-, and low-achievement; different approaches to identify high-, average-, and low-achievers; the concepts of styles of learning, locus of control, achievement motivation, and intelligence. Chapter 3 deals with the review of related literature and the hypotheses. Chapter 4 discusses the method and procedure adopted for the conduct of research including design, sample, tools and the collection of data. Chapter 5 deals with the description of data. Attempts to identify, globally and analytically, the characteristic styles of learning, locus of control, and achievement motivation of high-, average-, and low-achievers at different levels of intelligence have been made with the help of varied statistical techniques in the next nine chapters (Chapters 6 through 14). The last chapter (Chapter 15) contains the compendium and conclusions of the present study giving the overall view of the entire research report along with the educational implications of the present study and suggestions for further research. As usual, bibliography and appendices have been given at the end of the research report.