Qualitative education is fundamental to whole process of human development it empowers the individuals to become self-reliant so that they can contribute optimally in the development of the nation. As laid down in the National Policy on Education (1986) the union government has the responsibility to reinforce the national and integrative character of education and to maintain its quality and standards up to mark. Naderi (2010) viewed success in higher education is not only essential for furthering one’s own education but also ensures a more educated and productive society.

Sharma et al. (2011) focused that one of the most important concerns of education is to ensure that the child is able to make use of most of his abilities and capabilities to achieve to his maximum level. Naderi (2009) viewed that each individual student is unique and has his or her own educational needs. The accomplishment of these needs is vital for an individual's endeavour and pursuit to achieve the academic excellence.

Asthana (2011) opined that mental ability plays significant role in academic success of the students. Fahim (2007) suggested that psychometric and verbal intelligence are strongly related to academic achievement.

Bank et al. (1990) and Kazmi et al. (2011) opined that parents are responsible for shaping students’ aspirations, persistence and achievement. According to Merchant et al. (2001) parental involvement in school activities is also crucial for their children’s academic achievement and socio-emotional development. Ghaji (2010) stated that parental involvement in children’s education relates positively to achievement motivation and children’s perceptions of competence. Newswire (2010) stated that children whose parents are more involved in education have fewer behaviour problems and better social skills.

Manjuvani and Anuradha (2011) opined that achievement motivation is acquired tendency and one of the most important social needs that sets the individual to strive for success. Chowdhury et al. (2007) opined that achievement motivation is inner
drive that directs students' behaviour towards the fulfilment of their goal. Extrinsic and intrinsic motivation found to have positive relationship with academic achievement. Arini (2009) reported that it is not only motivation that influences academic achievement but also it is the joint influence of motivation and intelligence.

Spinatha (2006) reported that general cognitive ability proved to be the strongest and only predictor on academic achievement. Dhall (2005) and Asthana (2011) opined that intelligence has positive and significant relationship with academic performance. Watkins (2007) believed that intelligence has casual influence on future achievement. Whereas Stump et al. (2009) and Naderi (2010) stated that intelligence has no relationship with academic achievement. Sunitha (2005) and Sharma and Tahira (2011) have investigated relationship between numerous predictors and academic performance.

Academic achievement is a multidimensional activity concomitantly Furnham et al. (2004), Chaturvedi (2009), Asthana (2011) and Sharma et al. (2011), suggested that intelligence, personality, learning method, school environment, home environment and motivational variables are responsible for total academic performance. Chaudary (2004) suggested that academic achievement is the knowledge attained or skills developed by pupils usually in schools, measured by test scores or by marks assigned by teachers pertaining to school subjects or to fields of liberal arts or to sphere of ideas and abstractions. Rajamnickam and Vasanthal (1993) stated that scholastic achievement means achievement of the students in terms of marks in the examination.

Asthana (2011), Sharma et al. (2011) and Lounsbury (2004) hold the view that intellectual ability or intelligence is a primary determinant of achievement of college students. Lounsbury et al. (2004) explored that general intelligence predicted both academic achievement. Spinatha (2006) and Rohde (2006) focused that general cognitive ability continued to add to the prediction of academic achievement. Fahim (2007) reported that verbal intelligence is strongly related with academic achievement. Asthana (2011) suggested that mental ability was positively and significantly related with academic achievement. Academic achievement as mentioned in Colin’s English Dictionary (2005) is excessively concerned with intellectual matters and lacking experience of practical affairs.
Zellman and Waterman (1998) confirmed that it is not parental encouragement on the whole but the parenting styles are the better predictors of academic achievement. Parenting styles that have been mentioned by Pate et al. (2006) under the term parental involvement as viewed by McNeal (1999) Yan (2000) Murphy (2009) associated with academic success of the students. Lamborn et al. (1991) opined that more specifically authoritarian and permissive parenting styles have been associated with poor academic grades, poor college adjustment and poor self-esteem of adolescents. Hickman et al. (2000) suggested that high achievers often described their parents as understanding, approving, trusting, affectionate, encouraging and not overly strict discipline conversely, under achievers described their parents as very strict and demanding, lax or punitive in disciplinary technique. Some researchers such as Hickman (2000) and Murphy (2009) reported that parental attitude of encouragement; parental warmth and verbalization were positively related with academic competence.

Acharya (2009) deduced that achievement motivation is the integration of affect aroused by cues in situations involving standards of excellence. Such standards of excellence typically learned from parents who urge the child to compete against the standards. Parents with high education set high standards and influence positively the achievement motivation. Children coming from different home environments are affected differently by such variations. Atkinson and Feather (1966) observed that the achievement motivation of children whose fathers have attained high educational level tend to be high. Ghazi (2010) suggested that parents frequently discuss importance of education and educational affairs, appreciate the children on better performance, insure good health providing balanced diet and protect them from various social evils, this all in turn cause achievement motivation. Muola (2010) reported positive relationship between academic achievement motivation and home environment.

Aremu et al. (2006) investigated the relationship among emotional intelligence, parental encouragement and academic achievement of the students. A sample of 500 adolescents consisting 250 males and 250 females was drawn through randomized process from 10 senior secondary schools of Ibadan in Nigeria. Data were gathered through parental involvement rating scale developed by the researchers themselves and from the school records. The results indicated there was a positive and significant relationship between parental encouragement and academic achievement of the adolescents.
Lakshmi and Minakshi (2006) studied perceived parental behavior as related to students’ academic school success and competence on a sample comprised of 500 high school students consisting 250 male and 250 female students of Varanasi city. Data were collected by administering adolescents’ perception of parental behavior questionnaire and academic competence scale developed by the researcher and associates. School success was assessed by marks obtained in high school board examination. Results of the study revealed that parental acceptance and encouragement scores were positively related with academic success. The results indicated that parents who were perceived as being more acceptant and using less restrictive and hostile psychological control tended to have adolescents with higher academic success and competence.

Codjoe (2007) studied the importance of home environment and parental encouragement in the academic achievement of African-Canadian youth. The data was gathered by conducting individual and focus group interviews from a sample of 12 students drawn from a population of black students in Edmonton in Canada. The researcher confirmed that parental encouragement and supportive home environment laid positive influence on educational achievement of the black students.

Wang (2008) examined the motivational beliefs, parents’ educational level and other characteristics related to the class room incorporated and used to build achievement model of the students. Data were collected from 224,503 students, their parents and teachers from four countries namely United States, Russian Federation, Singapore and South Africa. Results indicated that students achievement was positively related to achievement in mathematics in all the four countries. The results also indicated that parental education was significantly related with motivation of the students.

Razmjoo (2008) examined the strength of the relationship between language proficiency in English and the 9 types of intelligences. As such, the objectives of this study were three-folded. The sample constituted 278 male and female Iranian Ph.D. candidates. The results indicated that there was not a significant relationship between language proficiency and the combination of intelligences in general and the types of intelligences in particular. Moreover, none of the intelligence types was diagnosed as the predictor for language proficiency. The results of this investigation pointed to have
no significant relationship between multiple intelligences and English language proficiency in the Iranian context.

Umunadi (2009) explored the relationship between the male and female students’ academic achievement in the subject of television on a sample 731 students from urban and rural technical colleges in Delta State of Nigeria. The results of board examinations revealed that males performed better than their female counterparts. It was also revealed that urban students performed better than their rural counterparts.

Chaturvedi (2009) investigated the effect of school environment and certain demographic variables on achievement motivation and academic achievement of young adolescents. The respondents of the study were 300 students in the age range of 12-15 years of Bhopal. Percentages of marks obtained by the students in last three years were used as measures of academic achievement. The results indicated significant gender difference in academic achievement, the girls scored higher than boys significantly.

Umunadi (2009) explored the relationship between the male and female students’ academic achievement in the subject of television on a sample 731 students from urban and rural technical colleges in Delta State of Nigeria. The results of board examinations revealed that males performed better than their female counterparts. It was also revealed that urban students performed better than their rural counterparts.

Arini et al. (2009) aimed at testing whether intelligence and motivation jointly influence high school students' academic achievement. The subjects of this research were 180 students of grade II, Jakarta. Data analysis was conducted and the result of the analysis showed that intelligence and motivation influence significantly the students’ academic achievement. This was also confirmed through the results that intelligence effected academic achievement positively and significantly.

Karnilova (2009) undertook a study to investigate the relationship of the predictive value of subjective evaluation of intelligence and academic self-concept with academic achievement of college students. Likert type instrument and group estimation of intelligence was employed on 300 undergraduate students of Moscow state university in Russia for the data collection. Academic achievement was taken as the score on grade point average of three semesters of the students. The findings indicated positive and significant relationship of general intelligence (0.27) and verbal intelligence (0.24) with academic achievement of students.
Ghazi et al. (2010) examined parental involvement in their children’s academic motivation in rural areas at primary level. The study was conducted on a sample of 250 students from Bannu in Pakistan. Data were collected through structured interview from students and their parents. The results showed that parents’ encouragement, discussion of importance of education and educational affairs had direct positive influence on achievement motivation. The findings also revealed that most of the parents were not well aware of their role for their children’s education.

Garikai (2010) empirically predicted the causes of poor academic performance of the school students on a sample of 200 high school students of Zimbabwe. Data were gathered through interview conducted with the students. The findings indicated that there was a difference in academic performance of male and female students with male students performing better and education of parents had significant effect on academic achievement of the students.

Muola (2010) investigated the relationship between academic achievement motivation and home environment among standard eight pupils. The sample comprised of 235 standard eight Kenyan pupils from six urban and rural primary schools from Machakos district. The results indicated a low but positive relationship (0.15) of parental education with academic achievement of the students that revealed a positive relationship between parental education and academic achievement of their children.

Sarsani and Ravi (2010) investigated achievement in mathematics of secondary school students in relation to selected variables. The sample of the study consisted of 480 boys and girls, drawn from the various private and government high school of Warangal city in Andhra Pradesh. Data was collected by administering scholastic achievement test of mathematics to the sample. The findings indicated significant difference between the mathematics scholastic achievement of the boys and girls. The result also showed that girls were higher achievers than boys.

Singh and Praveen (2010) studied the relationship of social maturity with academic achievement of high school students. The study was conducted on a sample of 400 high school students consisting 200 boys and 200 girls studying in tenth class of New Delhi. The aggregate scores of the selected students in the board examinations were taken as the measures of academic achievement. The results indicated that there were no significant differences between the academic achievement of boys and girls.
The findings also revealed no significant difference in academic achievement of rural and urban students.

Al-Shabatat (2010) investigated the contribution of motivational factors to the development of giftedness by conducting test. A total of 180 university high scoring students of Malaysia were selected as sample by employing culture fair test. Structural equation modelling was employed to determine the direct and indirect effects of achievement motivation factors on intellectual giftedness. The findings showed significant and strong direct and indirect effect of motivation on giftedness.

Majzub (2010) investigated the relationship between achievement motivation and self-regulated learning strategies among the university students. A sample of 300 undergraduate students from Malaysia participated in the study. The results indicated that there existed a positive and significant relationship between achievement motivation and the self-learning strategies.

Day et al. (2010) undertook three year longitudinal study on hope uniquely predict objective academic achievement above intelligence, personality and previous academic achievement. The sample comprised of 129 graduate students consisting 52 males and 77 females from the universities of United Kingdom. Raven’s advanced progressive matrices were used to measure intelligence and marks of final class of the degree were taken as academic achievement of the students. The result (r=.46) revealed a significant positive relationship between intelligence and academic achievement of the students.

Adetayo and Kiadese (2011) investigated emotional intelligence and parental involvement as predictors of students’ achievement in financial accounting. Data were collected from 200 senior secondary school students from Nigeria by using survey method. The results of the study revealed significant relationship between parental involvement and academic achievement of the students. The findings also indicated that parental involvement predicted students’ achievement in financial accounting.

Kazmi (2011) conducted the study to evaluate the impact of fathers’ style of dealing with their children at home and their academic achievements at school. The sample of the study consisted of 300 students, 300 fathers and 20 teachers which were drawn randomly from urban and rural areas of district Mansehra of Pakistan. The indigenously designed questionnaire was used to collect the data and academic
achievement was taken from classroom records. The results of this study revealed fathers’ involvement had positive significant relationship with academic achievement for the academic achievements.

Bahago (2011) investigated the influence of achievement motivation and demographic characteristics on academic performance of nomadic Fulani girls in Adamawa state. The data were collected from a sample of 300 girls selected from nomadic primary schools. The results indicated that students with high achievement motivation performed higher in academics that revealed significant relationship between achievement motivation and academic achievement. Achievement motivation was found to be influenced by parents’ level of education.

Bakhtiarvand et al. (2011) investigated the moderating effect of achievement motivation on relationship of learning approaches and academic achievement of 200 college students. The findings of the study revealed that achievement motivation moderated the relationship of learning approaches and academic achievement. The results also indicated that achievement motivation indirectly effected the relation of learning approaches and academic achievement.

Thijs (2011) took a study to examine ethnic differences in teacher oriented achievement motivation among early adolescent students in Netherland. The sample consisted of 165 girls and 150 boys of Marrocan and Dutch culture. The results of the study revealed that Marrocan students’ teacher oriented achievement motivation was significantly and positively related with intrinsic motivation and perceived academic achievement of the students.

Asthana (2011) conducted a study on a sample of 300 students consisting 150 male and 150 female students of secondary education from Varanasi, with a view to assess to gender difference in scholastic achievement. Scholastic achievement was measured on the basis of an average of marks obtained in three previous annual examinations. The findings revealed that there was a significant difference in academic achievement of male and female students. Girls were found to be better performers than boys.

By reviewing all the researches, which have been discussed in the foregoing pages, the investigation reaches to the point that academic achievement, serve as means to satiate one’s needs and derives with the desired success. Hence it is very important to
enhance academic success to enable the college students attain the optimum level of education for their entire satisfaction. Hence, in the perusal of review of related literature clears the image of the impact of parent encouragement, achievement motivation and intelligence on the academic achievement of student at all levels of education.

5.1 OBJECTIVES OF THE STUDY

- To know the academic achievement of college students.
- To study the parental encouragement among the college students.
- To recognise the achievement motivation among the college students.
- To know the intelligence of the college students.
- To study academic achievement of college students in relation to of gender and locale.
- To examine the academic achievement of college students having high and low parental encouragement.
- To study the academic achievement of college students revealing high and low achievement motivation.
- To investigate the academic achievement of college students with high and low intelligence.
- To explore the relationship among academic achievement, parental encouragement, achievement motivation and intelligence.
- To make out the recommendation and suggestion on the basis of findings and outcomes of the study.

5.2 HYPOTHESES

Synchronizing with the above objectives the following hypotheses were framed.

- There is no significant difference in academic achievement of male and female college students.
- There exists no significant difference between the academic achievement of rural and urban college students.
- There is no significant difference between academic achievement of the students having literate and illiterate parents.
• There prevails no significant difference between academic achievement of students having high and low parental encouragement.
• There lies no significant difference between academic achievement of college students revealing high and low achievement motivation.
• There exists no significant difference between academic achievement of college students with high and low intelligence.
• There is no significant relationship among academic achievement, parental encouragement, achievement motivation and intelligence.

5.3 DELIMITATIONS OF THE STUDY

The present investigation was delimited with respect to following.

• The study was confined only to B.A. second year college students.
• The study was limited to the variables namely academic achievement, parental encouragement, achievement motivation and intelligence only.

5.4 THE PROBLEM

Visualising the importance of academic achievement of the college students and realising the need to study academic achievement of the college students of Punjab in relation to parental encouragement, achievement motivation and intelligence, the following problem was selected for the investigation.

A STUDY OF PSYCHOLOGICAL CORRELATES OF ACADEMIC ACHIEVEMENT OF COLLEGE STUDENTS IN PUNJAB

5.5 OPERATIONAL DEFINITIONS OF THE TERMS USED

The key terms used in the study were operationally defined as under:

**Psychological correlates**

The factors that influence the behaviour of the students to perform academic activities to their maximum potentials that contributes towards academic achievement.

**Parental Encouragement**

Parental encouragement is the treatment provided by the parents to the child with a view to enhance the possibilities of future occurrences of good behaviour by
care, concern, approval and guidance. Parental encouragement is assessed by scores obtained by the respondents on parental encouragement test. (Kusum Agarwal, 2002)

**Achievement Motivation**

Achievement motivation refers to an organismic state that mobilizes activity which in some sense selective or directive. The achievement motivation is measured by the scores secured by individual on achievement motivation scale. (Deo-mohan, 1986)

**Intelligence**

Intelligence is mental power or ability to deal with vocabulary, classification number series, analogies and reasoning. It is assessed by the total score obtained by the individual on group test of general mental ability. (S. Jalota, 1984)

**Academic Achievement**

Academic achievement is the success obtained by the individual during the academic session in terms of aggregate marks secured in various subjects in the annual examination conducted by the Universities.

5.6 **METHODOLOGY**

Descriptive method of research was used in the conduct of present study.

5.6.1 **Sample**

Data were collected from 600 college students comprising equal number of male and female college students selected from the three districts of Punjab. A list of the districts of Punjab along with the literacy rate (Census 2001) was obtained. The groups of the districts were made on the basis of literacy: high, middle, low literacy rate. From these groups, three districts: Ludhiana (high literacy rate), Patiala (middle literacy rate) and Mansa (low literacy rate) were selected randomly. Further five colleges from each district were selected on random basis. As the focus of the study was on the college students studying in B.A. second year, a representative sample of 600 college students were taken from these 15 colleges selecting 200 students from each district. In the sample selected for the study 150 male students and 150 female students belong to the urban areas, whereas 150 male and 150 female students belong to the rural areas.
5.6.2 Research Tools

The following tools were used for data collection.

- Personal data form.
- Agarwal Parental Encouragement Scale by Dr. Kusum Agarwal (1999).
- Deo-Mohan Achievement Motivation Scale by Deo-Mohan (1986).

5.7 PROCEDURE

The purpose of the present study as mentioned earlier was to explore the influence of parental encouragement, achievement motivation and intelligence on the academic achievement of the college students in Punjab. The data collection was done by administering all the four tools to the college students by visiting the colleges personally by taking prior permission from the principles of the colleges. In each college, students were selected randomly from the class. After establishing a rapport with the students all the instruments were administered to the students. The students were instructed properly to give responses. To obtain students’ academic achievement, there previous year’s final examination marks (percentage) were considered. The college office record holders were requested to provide the marks of the students. The filled in questionnaires or answer sheet were collected from each respondents. The scoring was done strictly according the directions and instructions given in the respective test manuals. The class interval and distribution of 600 college students was plotted and Q1 and Q3 were calculated to get low and high values of different variables such as academic achievement, parental encouragement, achievement motivation and intelligence.

5.8 ANALYSIS AND INTERPRETATION OF DATA

Keeping in view the objectives of the study, results were interpreted under the following sub headings.

- Academic Achievement of College Students

The mean score of college students on academic achievement was 55.5 with median and mode 55 and 54 respectively whereas range of the scores came out to be 54.00. That indicated that the scores were nearly in normal distribution.
- **Academic Achievement of Male College Students**
  
The mean score of the male college students on academic achievement was 53.15 with range of 36. Median and mode were came out to be 53 and 52.70 respectively. That indicated that the scores were nearly in normal distribution.

- **Academic Achievement of Female College Students**
  
The mean score of academic achievement of female students came out to be 57.84 with the range of 39. Median and mode are calculated as 58 and 58.32 respectively. That indicated that the scores were nearly in normal distribution.

- **Academic Achievement of Rural College Students**
  
The mean score of the academic achievement of rural college students was 54.46 with the range of 33. Median was derived as 55 and mode came out to be 56.08 that revealed that the scores were lying in normal distribution approximately.

- **Academic Achievement of Urban College Students**
  
The mean score of urban college students came out to be 56.54 with the range of 42. Median was calculated as 56 and mode was derived to be 54.92, it indicated that the scores lie nearly in normal distribution.

- **Academic Achievement of College Students Having Illiterate Parents**
  
The mean and median of the students having illiterate parents were 54.41 and 54 respectively with the range 35. The mode was calculated as 53.18, it was found that the scores were nearly in normal distribution.

- **Academic Achievement of College Students Having literate Parents**
  
The mean and the median of students having literate parents are 56.06 and 55.0 respectively whereas mode came out to be 52.8 that revealed that the scores were nearly in normal distribution.

- **Parental Encouragement of College Students**
  
The mean score of the college students on parental encouragement was 310.82 with the range of 202. Median came out to be 313 and mode was calculated as 318.86, so the scores were approximately in normal distribution.
- **Achievement Motivation of College Students**

  The mean score of college students on the achievement motivation came out to be 137.59 with the range 129, whereas median and mode were calculated as 138 and 138.82 respectively hence indicated normal distribution of scores.

- **Intelligence of College Students**

  The mean score of intelligence of college students came out to be 48.61 with the range of 64. Median came out to be 48 and mode was calculated as 46.78, it indicated that scores were nearly in normal distribution.

- **Comparison of Academic Achievement of Male and Female College Students**

  The mean values and SDs of male and female college students for academic achievement were 53.15, 57.84 and 6.44, 7.54 respectively. Standard error of mean difference was calculated as 0.58 while the t-ratio came out to be 8.12, which was significant at 0.01 level. So it was evident that male and female college students differ significantly in their academic achievement. It was also inferred from the mean scores of academic achievement that female students were better than male students.

- **Comparison of Academic Achievement of Urban and Rural College Students**

  The mean values and SDs of academic achievement of rural and urban students were 54.46, 56.54 and 6.32, 8.34 respectively with standard error of mean difference 0.60, whereas t-value came out to be 3.44 which were significant at 0.01 level. So it was evident that there existed a significant difference between academic achievement of rural and urban students. From the mean scores it was concluded that urban students had better academic achievement as compared to rural college students.

- **Comparison of Academic Achievement of College Students having Illiterate and Literate Parents**

  The mean values of students having illiterate and literate parents were 54.41 and 56.06 respectively, with standard deviation 6.83 and 7.72. Standard error of mean difference came out to be 0.64 and t-value came out to be 2.58 which were significant at 0.01 level that revealed significant difference in academic achievement of the
students having illiterate and literate parents. From the means scores it was clear that the students belonging to literate parents had high academic achievement than their counterparts having illiterate parents.

- **Comparison of Academic Achievement of College Students Receiving High and Low Parental Encouragement**

  The mean scores of the college students on academic achievement receiving high and low parental encouragement were 53.94, 57.83 and SDs were 6.44, 7.62 respectively with standard error of mean difference was 0.77 and t- value came out to be 5.02 which was significant at 0.01 level. So it may be inferred from the results that there existed a significant difference between the academic achievement of the students receiving high and low parental encouragement. The students receiving high parental encouragement showed better academic achievement than the students receiving low parental encouragement.

- **Comparison of Academic Achievement of College Students Showing High and Low Achievement Motivation**

  The mean values and SDs of the college students on academic achievement showing high and low achievement motivation were 53.82, 57.19 and 7.15, 7.95 respectively. Standard error of mean difference was 0.81 and t-ratio came out to be 4.11 which was significant at 0.01 level. Hence it was interpreted that there prevailed a significant difference in academic achievement of college students showing high and low achievement motivation.

- **Comparison of Academic Achievement of College Students with High and Low Intelligence Level**

  The values of mean and SDs of college students on academic achievement with high and low intelligence was 53.04, 57.49 and 7.06, 7.37 respectively with standard error of mean difference 0.79. The t-ratio came out to be 5.60 which was significant at 0.01 level. The results revealed that there existed a significant difference between the academic achievement of college students with high and low levels of intelligence.

- **Relationship of Academic Achievement with Parental Encouragement**

  The correlation value between parental encouragement and academic achievement was 0.218 that was significant at the level 0.01. The result indicated that
parental encouragement was significantly and positively related with academic achievement of college students.

- **Relationship of Academic Achievement with Achievement Motivation**

  The value of correlation ($r= 0.183$) between achievement motivation and academic achievement was significant at 0.01 level, that indicated that there was a significant and positive relationship between achievement motivation and academic achievement of the college students.

- **Relationship of Academic Achievement with Intelligence**

  The correlation value between intelligence and academic achievement was 0.259 that was significant at the level 0.01, that revealed that intelligence was significantly and positively related with academic achievement of college students.

- **Relationship of Parental Encouragement with Achievement Motivation**

  The value of correlation between parental encouragement and achievement motivation was 0.444 that was highly and positively significant at 0.01 level that indicated that parental encouragement had highly significant and positive relationship with achievement motivation of the college students.

- **Relationship of Achievement Motivation with Intelligence**

  The value of coefficient of correlation ($r=0.148$) between achievement motivation and intelligence was significant at the level 0.01 that revealed a significant and positive relationship between intelligence and achievement motivation. Hence, it was concluded that intelligent students were highly motivated to achieve in academics.

- **Relationship of Intelligence with Parental Encouragement**

  The correlation value between intelligence and parental encouragement was 0.186, which was significant at the level 0.01. The finding indicated that intelligence had significant and positive relationship with parental encouragement.

**TESTING OF HYPOTHESES**

Taking into count the outcomes after processing the data pertaining to different variables belonging to the study as reported in preceding section, hypotheses were tested as mentioned here under.
Hypothesis-I

The results of the study indicated significant difference in academic achievement of male and female students. The results also revealed that female college students had higher academic achievement than male college students. So the hypothesis “There is no significance difference in academic achievement of male and female college students” stands rejected.

Hypothesis-II

As the results of the study indicated that the rural and urban college students differ significantly in academic achievements. Hence the hypothesis “there exists no significant difference in academic achievement of rural and urban college students” was rejected. The findings of the study also revealed that urban college students had higher academic achievement than rural college students.

Hypothesis-III

The findings of the study indicated significant difference between the academic achievement of students having illiterate and literate parents. So, the hypothesis stating “there is no significant difference between the academic achievement of the students belonging to illiterate and literate parents” was rejected. The results also revealed that the students having literate parents were better in academic achievements than the students having illiterate parents.

Hypothesis-IV

The hypothesis “there prevails no significant difference in academic achievement of college students receiving high and low parental encouragement” was rejected on the basis of outcomes of the study. The findings of the study indicated that the students receiving high and low parental encouragement differ significantly in their academic achievement. The findings also indicated that the college students receiving high parental encouragement surpassed in academic achievement to the students who receive low parental encouragement.
Hypothesis-V

As the results of the study revealed that the students having high and low achievement motivation differ significantly in academic achievement. The hypothesis, “there is no significant difference in academic achievement of college students revealing high and low achievement motivation” was rejected. It was also confirmed through the results that the students having high achievement motivation were better in academic achievement than the students having low achievement motivation.

Hypothesis-VI

The findings of the study revealed significant difference in academic achievement of the students with high and low levels of intelligence. It was also concluded from the results that the students with high intelligence had better academic achievement than the students with low intelligence. Hence the hypothesis stating “there exists, no significant difference in academic achievement of college students possessing high and low intelligence “was rejected.

Hypothesis-VII

The hypothesis “there is no significant relationship among academic achievement, parental encouragement, achievement motivation and intelligence of college students” was not retained, as the results of the study revealed significant and positive relationship among all the variables. The results showed that academic achievement was significantly and positively related with parental encouragement, academic achievement and intelligence of college students. The findings also revealed significant and positive interrelationship among parental encouragement, achievement motivation and intelligence of college students.

4.5 DISCUSSION

The results of the present study revealed that there was significant difference between academic achievement of the male and female students. Results on gender difference also indicated that girls scored significantly better than boys on academic achievement. This difference in academic achievement might be due to some personality traits. The female students are generally considered to have submissiveness, stable and controlled emotions, superior study habits and high verbal ability. Whereas
the boys are more outgoing, have more distractions and are emotionally less matured. Perhaps these differences in personality traits induced by our culture, parenting style and way of bringing up the girls in Indian society that leads the girls to concentrate more on studies and success. More over the girls have an attitude of pleasing their parents and teachers through their academic achievement. The results of present study goes in line with the findings of Vijaylaxmi and Natesan (1992), Muller (1998), Bruni et al. (2006),Deary et al. (2006), Leeson et al. (2008), Wang (2008), Chaturvedi (2009),Sarsani and Ravi (2011) and Asthana (2011) hence lend support to the results of the study. Whereas Beedawat (1984), Ryckman et al. (1988), Krishnamurthy (2001), Halawah (2006), Nuthana (2007), Naderi et.al (2009) and Singh and Parveen (2010) do not lend support to the results of the study as they found no significant difference between the academic achievement of male and female students.

The present study found that there was significant difference between the academic achievement of the urban and rural students. The results of the study also reflected that the urban students had better academic achievement. The main reason for variation in academic achievement might be geographical location, resources, availability of technology and quality of environment. As it has been viewed that students’ achievement is greatly affected by the area in which they live and exposed. The students residing in rural area may not get required congenial home environment and may not had good learning experiences during their school times. Hence they lag behind in academic achievement. Urban student instead have more facilities and congenial environment around them. Urban students may also have better learning experiences at the time of their schooling than rural students. Nuthana (2007), Umunadi (2009) and Lai et al. (2011) lend support to results of the present study, as they found significant difference in academic achievement of rural and urban students. While Krishnamurthy (2001) and Waters et al. (2006) found no significant difference in academic achievement of urban and rural students hence do not lend support to the present study. On the contrary Elizabeth (2009) found significant difference in academic achievement of the student but inconsistent to the results of the study and found rural students have higher academic achievement than urban students.

The findings of the present study demonstrated significant difference between the academic achievement of the students having literate and illiterate parents. The findings also indicated that the students having educated parents had higher academic
achievement than the students having illiterate parents. The difference in the academic achievement of this group may be due to the reason that the students with literate parents receive congenial home environment, adequate parental encouragement and good parental support. As it has been considered that the students are more motivated and engaged towards the studies when they live in intellectually challenged and socially supportive environment. Moreover the educated parents have different techniques of interacting with their children which may in turn motivate the students to develop their own skills upto the optimum level. On the contrary illiterate parents have scarce knowledge of the educational world and to transfer into their children. So the students having illiterate parents may have low academic achievement than the students having literate parents. Saini(1977), Singh and Srivastava (1983), Sharma (1984), Chakrabarti (1986), Bhatnagar and Sharma (1992), Cherian (1992), Shah (1993), Felner and Minsuk (1995), Pal et al. (1998), Kohl et al. (2000), Tavani and Losh (2003), Garikai et al. (2010) and Sharma and Tahira (2011) go in line with the findings of the present study, as they found difference in academic achievement of the students having illiterate and literate parents. Whereas Moula (2010) lend partial support to the present study as he concluded that parental education had low but positive relationship with academic achievement of the students.

The present study indicated a significant difference between academic achievements of the student receiving high and low parental encouragement. The results also explored that the students receiving high parental encouragement had better academic performance than the students who received low parental encouragement. The findings also indicated that parental encouragement had positive and significant relationship with academic achievement. The reason behind the variation in the academic achievement may be the parental encouragement and quality of home environment including parenting styles that exert positive influence in determining magnitude of achievement motivation for high level of academic achievement. Parental encouragement boosts achievement motivation and better cognitive engagement of their children. Therefore who receive better parental encouragement and congenial home environment in which they may show superior cognitive abilities and academic competence hence adopt better learning habits and perform better in academics. Baker and David (1986), Astone and Sara (1991), Dubois et al. (1994), Catsambis (2001), Lakshmi et al. (2006), Codjoe (2007), Ghazi et al. (2010) and Kazmiet al. (2011) go in line with the results of present study as they determined that parental encouragement
was positively and significantly related to the academic achievement. Baker and David (1986) explored that mothers’ encouragement have positive impact on the academic achievement of their children. While Keith and Lichtman (1994) and Singh et al. (1995) partially supported the results of the present study as they concluded that parental encouragement had moderate but positive effect on students’ academic achievement. Whereas Muller (1998), Zellman and Waterman (2000), Okpala et al. (2001), Muola (2010) confirmed that parental control and involvement had no significant effect upon the academic achievement, hence do not lend support to the findings of the present investigation. While Mau (1997) presented inconsistent results as he found that parental encouragement was negatively associated with academic achievement of the students.

The present study revealed that students with high achievement motivation had good academic results. Hence, there was significant difference between academic achievement of the students having high and low achievement motivation. The difference in academic achievement on the basis of achievement motivation might be due to the reason that students with high achievement motivation are more involved in the studies and are able to do their task more efficiently. On the other hand, low motivated students find it difficult to engage themselves and employ their all cognitive abilities in the studies. The results of the study also revealed positive and significant relationship between academic achievement and achievement motivation. Krishnamurthy (2001), Tavani and Losh (2003), Sharma et al. (2006), Ilogu (2007), Chaturvedi (2009), Umadevi (2009), Sakiz (2011) explored positive impact of achievement motivation on academic achievement therefore lend support to the outcomes of the study. Whereas Halawah (2006) inferred non-significant relationship of achievement motivation and academic achievement, hence partially stand in line with the results of the study. Reddy (1990), Niebuhr (1995) and Sidhu and Parminder (2005) found no relationship between achievement motivation and academic achievement, hence do not lend support to the results of the present study.

The findings of the present study revealed that there was a significant difference between the academic achievement of the students with high and low intelligence. The mean values also indicated that the students with high intelligence scored better in academics. So it is interpreted that intelligence is robust factor that play key role in academic achievement whereas different levels of intelligence determine the variations
in academic achievement. High intelligent persons may have the ability to plan well, learn well and understand the concepts and content in a better way. The results of the study also indicated a positive and significant relationship between intelligence and academic achievements. Busato et al. (2000), Deary et al. (2004), Furnham et al. (2007), Dhalland Praveen (2005), Spinatha et al. (2006), Fahim and Reza (2007), Douglas et al. (2008), Ong et al. (2010) and Asthana (2011) also confirmed the positive relationship of intelligence and academic achievement and go in line with the results of study. Watkins et al. (2007) also showed casual influence of intelligence on the academic performance hence lends partial support to the results of the study. On the contrary Murray (2003), Beedjies (2008), Razmjoo (2008), Steinmayr et al. (2009) and Naderi et al. (2010) are not in agreement with reports of present study as they reported no significant relationship between intelligence and academic achievement of the students.

Results of the present study explored significant and positive relationship between parental encouragement and achievement motivation. Therefore it may be concluded from the findings of the study that parental encouragement act as force that reinforce their children to achieve to the maximum level of their capabilities. Bansal et al. (2006), Halawah (2006), Wilkins (2009), Ghazi (2010) and Manjuvani and Anuradha (2011) lend the support to the results of the study as they concluded parental encouragement was positively and significantly related with the achievement motivation of the students.

The findings of the study demonstrated significant and positive relationship between achievement motivation and intelligence. Hence it is inferred from the results of the study that intelligent students are more motivated to learn and achieve in academics. Hence they adopt good study habits and employ better cognitive engagements. Walker (2006), Froehlich (2007) and Al-Shabatat (2010) inferred that achievement motivation and intelligence were positively related with each other, hence lend support to the finding of the present study, whereas Sidhu and Parminder (2008) and Wang and Xing (2009) do not lend support to the finding of the present study as they found no significant relationship between intelligence and achievement motivation and achievement goals respectively.

The results of the investigation showed that parental encouragement and intelligence had significant and positive relationship. Therefore it may be interpreted
that parental encouragement acts as a catalyst that foster growth and development which further enables their children to recognize their cognitive abilities and apply them in required direction to the optimum extent that could contribute in their academic achievement. The finding of the present study corroborates the reports of Singh (1986), Nommay (1988) and Verma and Gupta (1990), as they found that parental encouragement and intelligence were significantly related with each other.

5.9 CONCLUSIONS:

- Majority of the students score nearly mean value of the academic achievement scores.
- More than half of the male college students score nearly mean value of the academic achievement scores.
- Nearly half of the female college students score nearly mean value of the academic achievement score.
- Majority of the rural college students and nearly half of the urban college students score nearly mean value of the academic achievement scores.
- Majority of college students having literate parents and half of the students having illiterate parents score nearly the mean value of the academic achievement scores.
- Nearly half of the college students score nearly mean value of parental encouragement scores.
- Nearly half of the college students score nearly mean value of achievement motivation.
- Majority of the college students score nearly mean value of intelligence scores.
- The students having literate parents had high academic achievement than the students having illiterate parents.
- The academic achievement of female college students is thus significantly high than their male counterparts.
- The academic achievement of urban college students is significantly more as compare to rural college students.
- The academic achievement of the students receiving high parental encouragement was more as compare to students receiving low parental encouragement.
• The academic achievement of the students having high achievement motivation were better than that of students showing low achievement motivation.

• The academic achievement of college students’ possessing high intelligence were more as compare to the students possessing low intelligence.

• Academic achievement and parental encouragement were found to be significantly and positively related.

• Academic achievement was found to be significantly and positively related with achievement motivation.

• Academic achievement was found to be significantly and positively related with intelligence.

• Parental encouragement and achievement motivation were found to be significantly and positively related.

• A positive and significant relationship was found between achievement motivation and intelligence.

• A positive and significant relationship was found between intelligence and parental encouragement.

5.10 EDUCATIONAL IMPLICATIONS
Any educational research is worthwhile if the results produce fruitful educational implications. As so far the present investigation is concerned, it can be claimed that useful information obtained could be useful in enhancing the educational success of the college students.

• The results of the present study reflect that male college students lag behind female counterparts in academic performance. It may due to autonomous nature of the boys or may be due to nurturing style and liberty provided by the parents and society. So it is recommended that self-discipline among male college students so that they could perform well in their academics.

• Urban students are found to be better in the academic achievement than the rural students through the results of the study. This might be due to their past educational experiences, environment and family attitude toward the educational aspirations. So it is highly recommended that there should be good schools in rural areas also. Awareness should be provided to parents and
families through awareness camps, seminars or workshops to provide encouragement to their children for better results in academics.

- The present study points out that the students who receive high parental encouragement are better at academic performance than the students who receive less parental encouragement. Hence it is recommended that parents should take interests in the educational activities of their children. By implicating this, the educational achievement of the students could be enhanced.

- From the findings drawn, it is reflected that college students who have high level of achievement motivation perform better at academics that the students who have low level of achievement motivation. Achievement motivation is said to be the products of the environment and the parental encouragement that tends to decrease as the students enters college. So it is recommended that good institutional environment should be provided to the students, as well the parents are advised to provide full support and encouragement to the students that could in turn improve the academic achievement of the students.

- The results of the present study have indicated that students who possess high level of intelligence are better at academic performance than the students who are less intelligent. Although intelligence is considered to be hereditary but the impact of environment and nurturing cannot be refuted. So it is recommended and healthy food and salubrious environment should be provided to the students. So that they could develop to their maximum and show good results in the academics.

5.11 SUGGESTIONS FOR FURTHER RESEARCH

A meaningful research always provides cause and paves the way for the further investigation. Also every investigator after accomplishing his or her task may feel inspired to do more researches through his or her own efforts. The researcher may feel greatly motivated, for showing the new areas of the research to the future researchers.

Based on this research the following suggestions are made for the further work.

- The study was confined only to Punjab state, so it cannot claim to have comprehensiveness. Conclusions may not be universally valid. It is therefore
suggested that study may be conducted on other states also to establish the results fairly.

- The study was conducted only on 2\textsuperscript{nd} year college students. It may be conducted on school students, students of technical institutions and university students.

- In the present study the sample taken was rather small. The study may be carried out with a large sample to make broader generalizations.

- More psychological correlates could be included in the study as the present study is confined to few variables such as parental encouragement, achievement motivation and intelligence.

- Perceptions if students and opinions of parents should be included by using interview method.