CHAPTER-II

REVIEW OF RELATED LITERATURE

Review of related literature refers to study the literature available specifically the variables undertaken to conduct particular study. Koul, L. (1984) in his book ‘Methodology of Educational Research’ wrote that “review of related literature allows a researcher to acquaint herself/himself with current knowledge in the field or area in which she/he is going to conduct the research.” According to him, “review of related literature serves the following purposes”

i) It enables the researcher to define the limits of her/his field and also delimit her/his problem.

ii) It helps the researcher to be up-to-dated regarding the work done by other researchers for clarity and conciseness.

iii) It helps the researcher in avoiding unfruitful and useless problem areas so that the researcher may select a problem which can add something new to the already existing problems”.

iv) Unintentional duplication can also be avoided of well established facts as it is no use to replicate a study when the stability and validity of its results have been clearly established.

v) The review of related literature gives the researcher an understanding of the research methodology which refers to the way the study is to be conducted. It helps the researcher to know about the tools and instruments which proved to be useful and promising in the previous studies. It has the advantage of providing insight into the statistical methods through which validity of results is to be established.

vi) It gives the knowledge about the recommendations of previous researchers listed in their studies for further research.”
The very first step involved in review of related literature is identifying the related literature through two sources: primary and secondary. For the present study, the investigator consulted various books and encyclopaedia of educational research, current index of the journals in education to see the studies, which have been conducted in this field. Few studies which could be made available are given as under in the following manner:-

i) Studies conducted in the field of Metacognition

ii) Studies conducted in the field of Self-system

iii) Studies conducted in the field of Motivation

iv) Studies conducted in the field of Locus of Control

v) Studies conducted in the field of Self-efficacy

vi) Studies conducted in the field of Home Environment

vii) Miscellaneous studies

2.1 STUDIES CONDUCTED IN THE FIELD OF METACOGNITION:

Jacobs & Paris (1987) and Wittrock (1983) studied “the use of metacognition and found that it is related with academic achievement and leads to enhanced learning outcomes”.

Palmer and Goetz (1988) found that “motivation is a powerful predictor of academic achievement and higher metacognitive awareness did not lead to higher scores academically”.

Pressley and Ghata (1990) studied “the reading comprehension of university and elementary school students. The students at both the levels i.e. at the university level and at the elementary school level were asked to read something and judge their performance on questions about the reading. The results indicated that cognition is not very effective. However, the students monitor their study. Poor monitoring further leads to poor performance. Another research conducted in
the same year showed that higher metacognitive awareness was not a predictor of getting higher scores academically”.

Chan (1991) examined “the metacognition among children with learning difficulties and found that majority of the students experience difficulties in their school learning which were related to their non-strategic, inappropriate and casual approach to learning for academic success or failure in school tasks which in another way refers to lack of use of metacognitive skills”.

Snyman & Viljoen (1992) found that “teaching young children with metacognitive strategies had positive results”.

Viljoen (1993) found that “students who had learning problems use metacognitive strategies less while planning and executing their learning. They need assistance of a competent teacher for applying different cognitive strategies for solving specific learning tasks”.

Schraw & Moshman (1995) conducted an experiment and observed that child’s cognition starts developing and improving with the passing age. As soon as he or she reaches the age of four, they start to think about their thinking from a very basic level and then leading to regulation of their learning”.

Kumar & Susumu (1996) conducted “a study on fifth grade students on the basis of cooperative learning and found that teaching and learning through metacognitive approach was more in students than the conventional approach”.

Everson; Tobias & Laitusis (1997) studied “the relationship between metacognitive knowledge, learning study strategies and academic achievement on the basis of verbal ability and mathematics. The results indicated that verbal and mathematical domains were based on metacognitive knowledge. It has also been found that there was a positive relationship between knowledge monitoring approaches and students’ confidence levels”.

Maqsud (1997) studied “the effect of metacognitive skills used and non-verbal ability on the academic achievement of high school students. The results
showed that students’ metacognitive ability was positively related with their academic achievement”.

**McLeod (1997)** found that “the ability of metacognition was present even in pre-school children in terms of planning and monitoring their progress in achieving their goals and persistence while performing different tasks”.

**Everson and Tobias (1998)** studied “the accuracy of knowledge monitoring which is one of the components of metacognition. For this, the ability of knowledge monitoring was examined through verbal standardized test and their knowledge estimates of verbal domain. It has been found that there was a relationship between students’ knowledge monitoring ability and the course end scores. Also, the knowledge monitoring ability was related to academic achievement. Thus, it has been concluded that knowledge monitoring ability as part of metacognitive regulation was a good predictor of academic success”.

**Ford et al. (1998)** found that “there was no relationship between metacognition and academic performance”.

**Wotlers (1998)** found that “there was a negative relationship between metacognition and academic performance”.

**Donaldson & Graham (1999); Hofer, Yu & Pintrich (1998)** found that “the component of metacognition which involves the ability of monitoring and regulating the use of cognitive activities affects academic performance”.

**Tobias; Everson; & Laitusis (1999)** found that “knowledge monitoring as a component of metacognition had a significant relationship with school grades”.

**Van Kraayenoord and Schneider (1999)** found that “metacognition was responsible in enhancing the comprehension performance of the subjects”.

**Kaniel, Licht & Peled (2000)** studied “the effect of metacognitive instruction or reading and writing strategies on positive transfer and concluded that the management operations of planning, control and evaluation are metacognition
process that helps learners to control their thought process which occurs when a person applies previous ideas to current situations. Also the use of present metacognitive process enhances positive transfer of new learning”.

Taraban, Rynearson, and Kerr (2000) conducted “a study on college students and found that their use of comprehension strategy was significantly related to their academic performance”.

Zulkiply et al. (2000) studied “the relationship between students’ academic performance and five components of metacognitive regulation, i.e. planning, information management strategies, comprehension monitoring, debugging strategies, and evaluation for their sample of students, who attended a private secondary school. The results showed that there was a significant positive relationship between students’ academic performance and metacognitive awareness on the basis of three components, i.e. planning, evaluation, and debugging strategies”.

Justice and Dornan (2001) conducted “a study on the adults studying in higher education and classified them into two groups, i.e. traditional aged students from 18-23 years of age and non-traditional age students from 24-64 years of age”.

Hwang and Vrongistinos (2002) conducted “a study on high achieving in-service teachers and low achieving in-service teachers and found that the group of high achieving teachers used self-regulated learning strategies than that of low-achieving teachers group”.

Mokhtari & Reichard (2002) conducted “a study on reading comprehension and found that students while reading remain metacognitively aware and use their comprehension processes. This helps in making an easy difference between skilled and unskilled readers. With metacognitive awareness, students’ thinking gets enhanced and teachers on the other hand, can involve students in problem solving activities and by discussing the features of thinking”.

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Peklaj and Pecjak (2002) found that “metacognitive keeps on increasing from low achieving students to high achieving students”.

Sperling et al. (2002) studied “the relation between achievement and metacognition. The findings revealed that there was no relationship between the two variables involved. The investigators also did a literature review and concluded that the relationship between achievement and metacognition is not clear”.

Dunning, Johnson, Ehrlinger & Kruger (2003); Kruger & Dunning (1999) concluded that “students who have good metacognition scored good in academics on the other hand, the students who had poor metacognition scored poor in academics. The findings further revealed that the students who have poor metacognition can be benefitted with the help of training in the field of metacognition which can be further helpful in enhancing their academic performance. The concept of individual differences was also used by the investigators to give focus that the metacognitive abilities vary from person to person and those who are poor in metacognition are termed as ‘incompetent’ as they are unable to perform any task as compared to their counterparts. Metacognition is beneficial for students as it makes them strategic learners as they learn more information instead of only studying it”.

Phakiti (2003) investigated “studied the relation between metacognitive and cognitive strategy with EFL reading achievement. The findings revealed that there was a positive relation between reading test performance and cognitive and metacognitive strategies. Also, those who had better performance were better in using metacognitive strategies than their counterparts”.

Rysz (2004) studied “the adult students in terms of their metacognitive thoughts related to concepts of elementary probability and statistics. The results indicated that students who used metacognitive awareness scored average than those who do not use metacognition. The students who use metacognition were
reported to have better understanding of concepts of elementary probability and statistics”.

Sperling et al. (2004) studied “the relationship between knowledge of cognition and regulation of cognition and found a significant relationship between the two. Also, they studied about the relationship between metacognition and academic achievement and found no relationship between the two”.

Mason & Nadalon (2005) studied “the relationship between metacognitive competence and achievement in various subjects and found significant correlation between the two”.

Coutinho (2006) studied “the relationship between metacognition and performance of students and found that the students having good metacognition performed better than those who had poor metacognition”.

Coutinho (2007) studied “the relation between mastery goals, performance goals and academic success. The results revealed that academic performance was not related with performance goals. Through regression analysis, it has been found that there was a partial mediation effect between mastery goals and academic performance”.

Md. Yunus and Ali (2008) studied “the relation between metacognition and students’ Cumulative GPA in mathematics and found that metacognition was a good predictor of students’ achievement to a certain extent”.

Topcu and Tuzun (2009) investigated “the relationship between science achievement, metacognition and epistemological beliefs; and also studied the relationship between gender, socio-economic status, metacognition and epistemological beliefs among students of 4th, 5th and 6th through 8th classes. The results revealed that knowledge of cognition, regulation of cognition and quick learning were responsible for good achievement in science among 4th and 5th grade students. The science achievement of 6th through 8th class students was enhanced through knowledge of cognition, regulation of cognition, innate ability and quick
learning. Overall results showed that metacognition was related to gender and socio-economic status, whereas epistemological beliefs were related to gender only”.

**Whitebread et al. (2009)** studied “metacognition among young children of 3 to 5 years and found that they showed verbal and non-verbal metacognitive behaviours while problem-solving which includes cognitive regulation, articulating cognitive knowledge and emotional and affective regulation”.

**Kummin & Rahman (2010)** studied “the relationship between metacognitive strategies and achievement of students and found a positive correlation between the two”.

**Rahman et al. (2010)** conducted “a study to see the impact of metacognitive awareness on the performance of students and found that there was a significant relationship between metacognitive awareness and performance of students. The students who scored high on metacognitive awareness inventory also performed well in test. Also, no significant difference was found in the metacognitive awareness of boys and girls”.

**Dixit (2011)** investigated “the readiness in the use of metacognition in the learning processes among higher secondary school students and found that there was a significant difference in the readiness in the use of metacognition of higher secondary students in terms of gender. Also, there was no significant difference in the readiness in the use of metacognition among higher secondary school students in terms of their academic streams. The findings further revealed that there was a positive relation between the readiness in the use of metacognition and academic achievement of higher secondary school students”.

**Lilliana and Lavinia (2011)** studied “the metacognitive skill in learning on the basis of gender and found that both male and female students use metacognitive skills in learning. Also, the findings revealed that there was significant differences in gender (i.e. male and female) on various components like perception of performance which is the outcome of one’s will and effort, the
perceptions about what teachers expect regarding the learning outcomes, using one’s prior knowledge in solving problems, planning, knowing about one’s weaknesses and strengths, using various learning strategies and monitoring the learning processes”.

Muhittin & Ali (2011) found that “metacognitive skills enhance academic achievement”.

Shokrpur et al. (2011) investigated “the effect of training on the cognitive and metacognitive strategies on test anxiety and educational performance and found that the training on cognitive and metacognitive strategies had positive effect, reduces test anxiety and enhances educational performance of girl students”.

Gul and Shehzad (2012) studied the relationship between metacognition, good orientation and academic achievement among graduate students studying in public and private universities and found a moderate relation between metacognition as well as in goal orientation and academic achievement. The findings also revealed that there was a weak relationship between metacognition and achievement”.

Al-Khayat (2012) studied “the difference between creative and metacognitive thinking and performance of students and found that there was a statistical difference among male and female students in terms of their creative and metacognitive thinking and performance”.

Eluemuno and Azuka-Obieke (2013) studied “the relation between metacognitive skills and academic performance of senior secondary school students of Anambra state of Nigeria. The findings revealed that there was a positive relationship between academic performance and metacognitive skills as the students having metacognitive skills performed better academically in English language test”.

Jagadeeswari and Chandrasekaran (2013) found that “the level of metacognitive awareness was high in students belonging to higher secondary
schools in terms of gender and type of school management. No significant difference was found in the metacognitive awareness in terms of locality and family income. The mean scores of girls were higher than that of boys. There were no significant differences in metacognitive awareness of higher secondary school students on the basis of locality (rural and urban). Also, there were no significant differences in the metacognitive awareness of higher secondary school students on the basis of type of school management (government aided and private). Further the findings revealed that there were significant differences in the metacognitive awareness of higher secondary school students on the basis of gender and type of school management”.

**Khan and Khan (2013)** studied “the relation between metacognitive strategies and achievement in science and found that there was a positive relationship between metacognitive reading strategies and achievement in science. The findings further revealed that girls were better in using metacognitive strategies than that of boys”.

**Narang and Saini (2013)** investigated “the impact of metacognition on the academic performance of adolescents of rural area and found that students with high level of metacognition performed well academically. The findings based on different components of metacognition, i.e. knowledge of cognition and regulation of cognition found to be significant in terms of adolescents’ academic performance”. Results revealed that the major proportion of subjects with high level of metacognition also performed above average in academics. Further, analysis depicted that both the components of metacognition viz. ‘Knowledge of Cognition’ and ‘Regulation of Cognition’ significantly contributed towards the academic performance of the adolescents.

**Rani and Govil (2013)** studied “the relationship between metacognition and gender, place of living, academic achievement and parents’ education. The findings showed that there was no significant impact of gender on metacognition. Also, there was significant difference in the metacognition among students and their locality. The findings further revealed that there was significant difference in
the undergraduate students belonging to high and low achieving groups. There was no significant impact of father’s qualification and metacognition of students; on the other hand, there was a significant impact of mother’s qualification on the metacognition of students”.

Said (2013) studied “the academic performance of students in relation to their executive functions, academic self-efficacy, self-reported study strategies and metacognitive skills. The findings revealed that executive functions, self-efficacy and self-reported study strategies were not predictors of academic performance”.

Smith (2013) investigated “the relationship between metacognition and academic performance. Metacognition was studied taking into consideration its three components, i.e. declarative knowledge, procedural knowledge and conditional knowledge. The results showed that metacognitive awareness levels were not predictors of students’ performance. The findings concluded that it is not necessary that a student who had high metacognition perform better in academics”.

Shahrouri (2014) found that “there was a significant relationship between metacognitive thinking in mathematics and general intelligence in tenth grade school students. Also, there was no significant relation between metacognitive thinking in mathematics and general intelligence on the basis of gender and level of academic achievement in the tenth grade students”.

Bhalla (2015) studied “the relationship between academic motivation and metacognition among college students and found that girls were better in academic achievement motivation than that of boys. Also, there was a positive relationship between academic achievement motivation and metacognition among college students”.

Jaleel and Chandran (2016) found “no significant difference was found in the metacognitive awareness of secondary school students on the basis of locality. Also, there was no significant difference in the metacognitive awareness of secondary school students on the basis of gender. The findings also revealed that
there was no significant difference in the metacognitive awareness of secondary school students on the basis of type of management of school”.

**Kadian (2016)** found that “the executive functioning and metacognition awareness had a positive relationship with academic achievement. As far as the type of schools was concerned, the mean score of private school students came out to be higher than that of government school students on the basis of intelligence, executive functions, metacognition and academic achievement”.

**Nongtodu and Bhutia (2017)** studied “the relation between metacognition and academic achievement among college going students and found that the students had average metacognition. Locale and streams affect metacognition. Also, there was a high relation between metacognition and academic achievement. There was no significant effect of metacognition on the gender. The findings also revealed that students belonging to urban areas were better than that of students belonging to rural areas”.

The studies given above shows that there is a gap in the studies conducted in the variables concerned i.e. “metacognition in relation to academic achievement” which leads to formulation of null hypothesis in the present study.

**2.2 STUDIES CONDUCTED IN THE FIELD OF SELF-SYSTEM OR SELF-CONSTRUCTS:**

**Guay et al. (1999)** studied “the role of self-system on the social relations of children and academic achievement. It has been found that self-system had a mediating role in enhancing children’s social relations and academic achievement”.

**Eccles & Wigfield (2002)** studied “the self system and mastery goals and found that it has been related with variables like self-competence, effort attributions and persistence in performing difficult tasks, using cognitive strategies linked to monitoring, problem solving, deep information processing and self-regulation”.

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Henkel (2010) studied “difference between motivational disposition and motivation to study foreign language and found that there was presence of ideal, self-the ought to and self and learning experiences in the self-system of learners”.

Al-Qaisy and Turki (2011) studied “self-concept in relation to achievement motivation among creative adolescents and found that achievement motivation and self-concept of highly creative male and female students was less than that of low creative group”.

2.3 STUDIES CONDUCTED IN THE FIELD OF MOTIVATION:

Amalaha (1975) and Moen and Doyle (1977) studied about “academic achievement motivation and found that students’ needs and drives as part of motivation lead to their academic success”.

Sandven (1975) found that “motives, forces, drives and urges works as activators for achieving good academic results”.

Abrol (1977) studied “the relation between achievement motivation, intelligence, vocational interests, sex and socio-economic status. Variables like type of institutions and scholastic achievement were also studied. The findings revealed that there was significant difference in achievement motivation on the basis of type of institutions, i.e. unaided schools, aided schools and government schools. Overall results showed that there was a positive and significant relation between achievement motivation and scholastic achievement of students”.

Mehta (1981), Hernandez (1998), Kaur (2000) studied “the relation between academic achievement and achievement motivation and found no significant relation between the two variables”.

Elias and Long (1984) conducted “a study on the achievement motivation, area of residence, intelligence, socio-economic status, parental encouragement and school milieu and found that there was a relation between achievement motivation and performance of students in the examination. Overall results of the variables
showed significant correlation between socio-economic status, intelligence, school milieu, parental encouragement and performance in the examination”.

**Gottfried (1985)** conducted “a study on the academic intrinsic motivation and education of students and found that there was a significant and positive relation between intrinsic motivation and education of students. Students with high academic intrinsic motivation had high academic achievement”.

**Indrani (1985)** studied “the relation between academic achievement and achievement motivation among ninth grade students and found that there was a significant and positive relation between academic achievement and achievement motivation”.

**Haynes et al. (1988)** conducted “a study on the motivation and academic achievement of students and found that there was significant differences in the high, average and low achievers on the basis of motivation”.

**McCombs & Whisler (1989); Palmer & Goetz (1988)** found “a significant relationship between motivation and academic achievement. Motivation had the tendency to predict academic achievement of students”.

**Cairns, McWhirter, Duffy & Barry (1990)** studied “motivation in relation to gender and found that there were no differences on the basis of gender and motivation. Also, male students were more internally motivated than their female counterparts”.

**Gottfried (1990)** studied “motivation among elementary school children and found that the intrinsic motivation among children was important and significant. The findings also revealed that the students having high intrinsic motivation were better in academics than that having low intrinsic motivation”.

**Harneek and Kaur (1990)** conducted a study “to find the relation between achievement motivation and achievement in science and mathematics. The findings revealed that there was no significant relation between the two major variables. The two groups of students were bifurcated on the basis of academic
achievement, i.e. over and under achievers had no significant difference in the achievement motivation among the students”.

Boggiano, Main, and Katz (1991) studied “motivation in relation to gender and found that females had high extrinsic motivation as compared to their male counterparts”.

Boggiano et al. (1992) studied “relation between academic motivation and academic performance and found a positive relation between the two variables. Academic motivation was a strong predictor of academic success. Students who had high intrinsic motivation scored high in all the achievement tests than those with extrinsic motivation. Deterioration in the performance of students was found in the students who were extrinsically motivated. Overall results showed significant relation between academic motivation and academic achievement”.

Schiefele, Krapp, and Winteler (1992) conducted “a study on motivation and academic achievement and found that male students were highly motivated than female students. Also, their interest level predicts their academic success”.

Verma (1992) conducted “a study on the achievement motivation, anxiety and learning styles in relation to demographic variables, i.e. age, gender, caste, residence and socio-economic status of parents. The findings of the study revealed that there were significant gender differences in achievement motivation on the basis of anxiety, learning styles and parental educational level”.

Watkins and Hattie (1992) studied “relation between motivation and academic achievement. The findings revealed that students who used learning strategies as part of motivation scored high academically”.

Niebuhr (1995) studied “the relation between motivation, family environment, school climate and academic achievement and found that there was no significant effect of motivation on the academic achievement. Family environment and school climate, on the other hand showed an impact on the academic achievement of students”.

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Albaili (1997) found that “motivation was a strong predictor of academic achievement”.

Lange & Adler (1997) studied “the relationship between motivation, self-efficacy and academic achievement and found that the students who had intrinsic motivation tend to score high academically and also had high self-efficacy”.

Stipek and Ryan (1997) studied “the relation between motivation and academic achievement among young children and found a very weak relation between motivation and achievement among young children. Hence, concluded that motivation was a weak predictor of academic achievement”.

Goldberg and Cornell (1998) studied “the relation between motivation and academic achievement and found a contradictory result that intrinsic motivation did not influence academic achievement directly”.

Sudhir (1998) studied “the relation between achievement motivation, selected personality factors and socio-educational factors among high school students and found that there was a positive relation in test anxiety and achievement motivation. Also, there was a negative relation between self-reliance and achievement motivation. Further, the students having high family relation had high achievement motivation”.

Tuckman (1999) studied “the relation between achievement motivation and academic achievement and found that achievement motivation was a strong predictor of academic achievement”.

Gesinde (2000) investigated “the need to achieve better among students and found that the urge or drive to achieve better varies from person to person. In some person these urge of doing and achieving better is high and in others it is low. The role of family has found to be a major one and it fosters the motivation in the children to achieve academic success. Also, through socialization process children set their role models and based on their role models they achieve high and low in life”.

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Kushman, Sieber and Harold (2000); Sandra (2002) and Broussard and Garrison (2004) studied “the relation between achievement motivation and academic performance and found that there was a positive relation between achievement motivation and academic performance among students”.

Amare, (2001); Yalew & Witruk, (2006); Zenawi (1997) studied “the relation between academic motivation and academic performance among students and found a positive and significant effect on the academic performance among students”.

Broussard and Garrison (2004) studied “the relation between classroom motivation and academic achievement among young elementary school aged children and found that achievement motivation was related academic achievement in mathematics and reading grades”.

Akbas and Kan (2007) studied “the relation between motivation and anxiety in chemistry course among high school students in ten different high schools of Mersin. The findings showed that students of second grade were highly motivated for chemistry course. On the other hand, first grade students had high anxiety in chemistry course. Overall, results showed that motivation was a strong predictor of achievement in chemistry course”.

Navarrate et al. (2007) studied “cultural and socio-economic factors in relation to motivational factors and academic achievement among high school students and found that all the variables involved had a mediating effect on the academic achievement of students”.

Tella (2007) studied “the impact of academic achievement in mathematics among secondary school students of Nigeria and found that there significant gender differences in the impact of motivation on the academic achievement in mathematics among secondary school students”.

Van de Gaer, Eva; et al. (2007) studied “the impact of achievement motivation among students on their status and growth in Mathematics and
Language achievement in relation to their gender. The results showed that there was a positive effect of achievement motivation on the achievement of students in Mathematics and Language.

**Panday and Ahmed (2008)** studied “the relation between achievement motivation, academic performance, socio-economic status and intelligence among adolescents studying in class ninth. The findings of the study showed that there was no significant difference in female and male students in terms of achievement motivation, academic performance, socio-economic status and intelligence”.

**Aboma (2009)** studied “the relation between achievement motivation and academic achievement among first year students studying in Adama University and found that there was no significant effect of achievement motivation on their academic achievement”.

**Sangeeta (2009)** investigated “the impact of academic achievement motivation and self-concept on the academic performance of secondary school students and found that academic performance was highly impacted by their academic achievement motivation. Also, academic achievement motivation was found to be significantly related with academic performance of students”.

**Gok and Silay (2010)** investigated “the effect of problem solving strategies on the strategy level, attitude, achievement motivation and academic achievement in physics among tenth standard students and found that the strategy level, attitude and achievement motivation were high in experimental group than that of control group. It has also been found that the physics achievement of students was not affected by gender”.

**Kenny et al. (2010)** investigated “the work-based beliefs and autonomy support as predictors of adaptive achievement related beliefs and found that theoretical knowledge base which comprised of work-based learning fosters academic motivation in adolescents”.

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Strobel (2010) studied “the relation between motivational beliefs and achievement of students and found that the motivational beliefs of the students were strong predictors of students’ performance, caring and learning environment in the classrooms enhances motivation of the students which further leads to high academic achievement. Also, the findings revealed that any modification in classroom practices leads to greater motivation among students”.

Aydın and Coskun (2011) studied “the relation between achievement motivation, gender, grade level, parental education level and level of family and found that achievement motivation in geography was significant in terms of grade level of the students. No significant difference was found in achievement motivation on the basis of gender, parental education level and level of family”.

Jena (2011) studied “the achievement motivation and memory in relation to gender and locality among secondary school students of Sikkim. Significant differences were found in the memory of rural boys and girls; whereas no significant differences were found in the achievement motivation of urban boys and girls. The findings further revealed that there were no significant differences in achievement motivation of rural boys and girls”.

Sood (2012) studied “the relation between socio-demographic variables, need for achievement and academic achievement among high school students and found that the academic achievement was affected significantly by need for achievement. The students having high need for achievement had high academic achievement as compared to their average and low counterparts. It was also found that girls had high need for achievement scores than boys. The findings also revealed that there were no significant differences in need for achievement in terms of locality (urban and rural) and type of family (joint and nuclear)”.

Azar (2013) studied “academic self-efficacy, achievement motivation and academic procrastination in relation to academic achievement of pre-college students and found that there were significant gender differences on the basis of
academic self-efficacy, achievement motivation and academic achievement among pre-college students”.

Kaur (2013) studied “the relation between achievement motivation and academic achievement among high school students and found that there was a significant relation between achievement motivation and academic achievement. Also, there were no significant gender differences in academic achievement of students on the basis of achievement motivation. Overall results showed that achievement motivation was a strong predictor of academic achievement”.

Chetri (2014) studied “the relation between achievement motivation and academic achievement and found that there were no significant differences in motivation were found on the basis of locale and gender. On the other hand, there were significant differences in the achievement motivation on the basis of type of management. Also, there were significant differences in the academic achievement of students on the basis of type of management and locale. Overall results showed that there was a strong relation between achievement motivation and academic achievement of students”.

Sandhu (2014) studied “the relation between achievement motivation, study habits and academic achievement of adolescents and found that there was a significant and positive relation between achievement motivation and academic achievement, also there was a significant and positive relation between study habits and academic achievement”.

Korantwi-Barimah, et al. (2017) studied “motivation in relation to gender and found that female students were highly motivated than their male counterparts”.

The studies given above shows that there is a gap in the studies conducted in the variables concerned i.e. “motivation in relation to academic achievement” which leads to formulation of null hypothesis in the present study.
2.4 STUDIES CONDUCTED IN THE FIELD OF LOCUS OF CONTROL:

Bailer (1961) found that “locus of control has the tendency to be more internal with growing age and this development process helped in bringing particular positive outcomes of individuals”.

Chandler (1976) studied “the relationship between locus of control and self-image and found that there was a negative correlation between internal and external locus of control and poor self-image”.

Lefcourt (1976) studied “the effect of internal and external locus of control and found that internal locus of control was more dominating in performing various mundane activities with awareness of knowledge of surrounding environment”.

Phares (1976) studied “the relation between locus of control beliefs and academic achievement and found that there was a positive correlation between locus of control beliefs and achievement. Internal and external locus of control beliefs both differs significantly. The difference between the two beliefs directly or indirectly affects academic success”.

Bar-Tal & Bar-Zohar (1977) studied “the relation between locus of control and academic achievement and found that there was a significant relation between locus of control and academic achievement. Also, the students with internal locus of control beliefs had high academic achievement than that of external locus of control beliefs”.

Parsons (1981) studied “locus of control beliefs in relation to gender and found that males had a tendency to transfer the responsibility of their failure to external causes whereas; females had the tendency to transfer the responsibility of their failure to their own internal weaknesses”.

Findley and Cooper (1983) studied “locus of control in relation to academic achievement and found that there was a relation between locus of control and academic achievement. Individuals with high locus of control score high in
academics and also found that locus of control was related to academic achievement. The persons with internal locus of control had high academic achievement than that with external locus of control. Female students had high locus of control than their female counterparts”.

**Lochel (1983)** studied “locus of control in relation to sex and academic achievement and found that there was significant sex differences in locus of control and achievement scores. Male students did not take the responsibility of their failure on the other hand females lack reviewed sex differences in achievement. She suggested that females were more inclined to take responsibility of their failure and were less confident to manage failure”.

**Whang and Hancock (1994)** studied “locus of control beliefs and academic achievement among students and found that they believed their academic failure was the result of their own weaknesses like lack of effort and hard work. On the other hand, they tend to believe their academic success as a result of their good luck, ability and effort”.

**Eachus & Cassidy (1997)** studied “locus of control in relation to academic achievement and found that individuals with internal locus of control had high academic achievement and the ones having external locus of control had low locus of control. Also, the findings revealed that internal locus of control works as a strong predictor of high academic achievement and external locus of control on the other hand was not a predictor of high academic achievement”.

**Kalechstein and Nowicki (1997)** conducted a “study on locus of control and academic achievement and found that there was significant difference in the academic achievement of students on the basis of locus of control. Internal locus of control was significantly and positively related to academic success”.

**Sherman and Higgs (1997)** studied “locus of control in relation to gender and found that there were gender differences in locus of control beliefs. Also, girls scored high on external measures of locus of control than boys”.

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Coleman and Deleire (2000) studied “locus of control in relation to academic achievement from high school till graduation and found that academic achievement was strongly related to locus of control”.

Uguak, Elias, Uli & Suandi (2007) studied “locus of control in relation to academic achievement and found that internal locus of control was related significantly with academic achievement”.

Adeyinka et al. (2011) studied “locus of control in relation to interest in schooling, self-efficacy and academic achievement among junior secondary school students and found that all the variables i.e., locus of control, interest in schooling and self-efficacy were related to academic achievement”.

Ghasemzadeh & Saadat (2011) studied “locus of control in relation to academic achievement and found that there was a positive relation between internal locus of control and academic achievement”.

Ogunmakin and Akomolafe (2013) studied “the relation between academic self-efficacy, locus of control and academic performance among secondary school students and found that self-efficacy was a strong predictor of academic achievement. On the other hand, locus of control was not a predictor of academic achievement”.

Rastegar and Heidari (2013) studied “locus of control in relation to gender and found that there were no significant differences between male and female students on the basis of locus of control”.

Hasan and Khalid (2014) studied “locus of control in relation to academic achievement and gender. The findings revealed that girls were high in internal locus of control. Also, locus of control found to be related with academic achievement. Also, students with both high and low academic achievement had internal academic self belief system towards academics”.

Razmefar (2014) conducted “a study on locus of control, self-efficacy and academic achievement and found that there was a significant and positive relation
between self-efficacy and academic achievement. On the other hand, there was a negative and significant relation between locus of control and academic achievement”.

**Choudhury and Borooah (2017)** studied “the relation between locus of control and academic achievement and found that there was no positive and significant relation between external locus of control and academic achievement of college students”.

**Nongtodu and Bhutia (2017)** studied “the relation between locus of control and academic achievement and found that there was a significant difference between internal and external locus of control on the basis of gender and streams. Overall results of the study indicated that there was a strong and positive relation between internal locus of control and academic achievement among adolescents”.

The studies given above shows that there is a gap in the studies conducted in the variables concerned i.e. “locus of control in relation to academic achievement” which leads to formulation of null hypothesis in the present study.

**2.5 STUDIES CONDUCTED IN THE FIELD OF SELF-EFFICACY:**

**Schunk (1989)** studied “the relationship between self-efficacy beliefs and academic performance of students and found that there was a positive relationship between the self-efficacy beliefs of students and the number of problems solved in arithmetic lesson. Inter correlation between self-efficacy beliefs and the proportion of problems solved correctly was studied and a relationship between the two was found”.

**Shell, Murphy & Burning (1989)** studied “the relationship between self-efficacy beliefs and reading and writing skills of college students and found a strong relationship between the two”.

**Smith (1989)** studied “the predictive utility of locus of control measures, self-efficacy and academic performance of students. The finding of the study
revealed that locus of control was not a predictor of academic performance whereas self-efficacy was a predictor of academic performance”.

Pintrich & DeGroot (1990) studied “the relationship between self-efficacy, metacognition and educational performance and found that students who had self-efficacy get benefitted with the use of cognitive and metacognitive strategies which lead to better educational performance”.

Zimmerman, Bandura & Martinez-Pons (1992) studied the influence of self-efficacy and self-regulated learning on academic achievement. The findings revealed that academic self-efficacy influences the academic achievement of students in a direct or indirect manner”.

Bandura (1995) found that “students who have high self-efficacy perform their tasks easily, they work harder, ready to participate and continue to exist as compared to students with low self-efficacy”.

Pajares (1996) studied “the relationship between self-efficacy beliefs, motivation constructs, academic choices, changes and achievement and found that self-efficacy was related with all the variables. Also, self-efficacy beliefs as a general measure were a weak predictor of academic performance”.

Byrne, (2000); Spivak & Shure, (1985); Stark, Spriito, Williams & Guevremant (1989) studied “the self-esteem in relation to gender and found that boys had high self-esteem than that of girls”.

Maciejewski (2000) found that “there was a significant difference in the academic achievement of senior secondary school students on the basis of high and low level of self-efficacy. Also, there was a significant difference in the academic achievement of male and female students”.

Zimmerman (2000) studied “the role of self-efficacy in predicting the motivational outcomes like students’ choice of activities, efforts, persistence and emotional reactions. The findings of the study revealed that self-efficacy beliefs
were responsible for bringing changes in students’ performance and self-regulated learning processes which leads to academic success among students”.

**Pajares & Schunk (2001)** found that self-efficacy beliefs were related to and influence academic achievement”.

**Latifian (2003)** studied “the impact of self-efficacy on the academic achievement in mathematics among students and found that there was a positive relationship between both the variables”.

**Bassi, Steca, Fave & Caprara (2007)** studied “self-efficacy in context with students’ interest, motivation and management of academic stress. The results revealed that self-efficacy predicts and affects the interest, motivation and academic stress among students”.

**Phan (2007)** conducted a study on “the relationship between self-efficacy and educational performance of the students and found that self-efficacy directly and indirectly affects the educational performance of the students”.

**Liem et al. (2008)** studied “self-efficacy in relation to task value and achievement goals in English test scores and found that self-efficacy was a strong predictor of English test scores”.

**Ayotola & Adedeji (2009)** studied “the relationship between performance of the students and mathematics self-efficacy. The findings revealed that there was a relation between students’ performance in mathematics and their mathematics self-efficacy”.

**Motlagh et al. (2011)** studied “the relationship between academic achievement and self-efficacy among high school students and found that various components of self-efficacy, i.e. self-evaluation, self-directing and self-regulation had a relation with academic achievement. The findings further revealed that self-efficacy was a strong predictor of academic achievement”. 

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Purzer (2011) studied “the relation between self-efficacy and achievement and found that self-efficacy was positively and significantly related with academic achievement”.

Yurtseven & Altun (2011) found that “perception of self-efficacy had an impact on the choices of task that people perform which they find difficult or which are out of their capabilities. On the other hand, students with good self-efficacy beliefs usually do not ignore the difficult tasks and remain continuous in the effort of performing tasks”.

Abdolwahab Samavi et al. (2012) studied “the relationship between self-efficacy self-regulation, application of cognitive strategies and found that there was a positive relationship between all the variables. As compared to the students with low level of self-efficacy, the students of high level of self-efficacy showed greater level of problem solving and self-monitoring abilities”.

Arslan (2013) studied “the self-efficacy beliefs in relation to gender and academic achievement and found that there was a significant relation between self-efficacy beliefs and gender; and self-efficacy beliefs and academic achievement”.

Shkullaku (2013) “studied the relation between self-efficacy and academic achievement in terms of gender and found that there was a significant difference between girls and boys in terms of self-efficacy. Also, there was no difference between boys and girls in academic performance; and there was a significant relation between students’ self-efficacy and academic achievement”.

Mahdyeh and Arefi (2014) studied “the relationship between critical thinking, self-efficacy and academic performance of students of two groups of humanities and technical engineering streams and found that there was a significant difference in the critical thinking and academic performance in the two groups involved in the study. Also, there was no difference in terms of self-efficacy between the two groups”.

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Vanita and Sharma (2015) studied “academic achievement and self-efficacy among senior secondary school students and found that there was significant relation between academic achievement and self-efficacy among senior secondary school students. The students with high self-efficacy had high academic achievement whereas; students with low self-efficacy had low academic achievement. Male students had high self-efficacy than that of female students”.

Meera and Jumana (2016) found that “there was a significant difference in the performance in English language test and self-efficacy in terms of locality. Also, type of management and gender showed no significant difference in self-efficacy on the basis of gender and type of management”.

Shekhar and Kumar (2016) studied “self-efficacy in relation to government and private high school female students and found that there was a significant difference belonging to government and private school female students. The mean scores showed that the female students belonging to private schools had high self-efficacy than that of government school students”.

Bala, Kaur and Singh (2017) studied “the self-efficacy of senior secondary school students in relation to age, gender, locality, type of school and streams. The result revealed that there was a significant difference in the self-efficacy of senior secondary school students in terms of gender, locality, type of school and streams; whereas, age showed no significant difference in terms of self-efficacy”.

The studies given above shows that there is a gap in the studies conducted in the variables concerned i.e. “self-efficacy in relation to academic achievement” which leads to formulation of null hypothesis in the present study.

2.6 STUDIES CONDUCTED IN THE FIELD OF HOME ENVIRONMENT:

Bloom (1964) studied “the impact of families from different socio-economic groups on the academic achievement of students. The results revealed
that students coming from different socio-economic groups had an impact on their academic achievement”.

**Jain (1965)** studied “the influence of home environment on the academic achievement of students and found that there was a positive influence of home environment on the academic achievement of students”.

**Gillman et al. (1977)** studied “the relation between parental involvement and reading achievement among students studying in elementary schools and found that parental involvement proved to be a good predictor of achievement of students”.

**Bhatnagar (1980)** studied “the relation between parental involvement and academic achievement among tenth grade students and found that there was a positive relation between parental involvement and academic achievement of students”.

**Walberg, Bole and Waxman (1980)** studied “the importance of family in developing interests in hobbies, various cultural activities and games. A relation between interests in hobbies, various cultural activities were studied on the basis of parental involvement and found that parental involvement was significantly related to academic achievement of students”.

**Collins et al. (1982)** investigated “the parental involvement and the academic success of students and found that there was a positive relation between academic success, improved behaviour, reduced absenteeism and restored confidence among students”.

**Graue et al. (1983)** indicated that “parents’ cooperative intervention and modified academic conditions were responsible for good academic records of children”.

**Hattie (1984)** studied “the relation between self-concept, home environment and academic achievement and found that self-concept works as a mediating variable as far as home environment and academic achievement was
concerned. The findings showed contradictory results that there was no direct influence of home environment on the academic achievement of students”.

**Shaha and Sharma (1984)** studied “the relation between family environment and academic achievement and found positive and significant relation between the two variables involved”.

**Veerabhadramma (1984)** studied “the factors involved in poor academic achievement of students and found that poor environment at homes, lack of motivation and poor communication skills were responsible for poor performance. These factors do not let the children study and thus affects their academic achievement. The school environment also found to be one of the factors involved in poor performance of students. The respondents reported that lack various facilities at school also affects the academic achievement of students”.

**Jagannadhan (1985), Rodriguez Castellano (1986) and Narang (1987)** studied “the relation between family climate with adaptation, maturity and other variables. The results revealed that family climate had a positive relation with adaptation, matured, stable and integrated subjects”.

**Pandey (1985)** investigated “one of the various components of home environment, i.e. punishment and its relation with academic achievement was studied and found that there was a negative impact of home environment on the academic achievement among girls. Other components of home environment like control, permissiveness, conformity, protectiveness, nurturance, reward and deprivation of privileges found to be insignificant with academic achievement. Role of rewards was also found to be effective in academic success of students. Overall, results showed that a positive and affectionate parental involvement leads to good academic achievement of students”.

**Jagannathan (1986)** studied “the relation between home environment and academic success and found that students with high home environment had high academic success than the students having middle and low home environment”.
Keith et al. (1986); Natriello and McDill (1986) studied “the relation between parental involvement and school performance of adolescents and found that there was no or we can say that very little effect of parental involvement and school performance of adolescents. Home environment was not only related with academic achievement but with family-school relations also”.

Dornbusch et al. (1987) and Lamborn et al. (1993) studied “the relation between academic achievement and family environment and found that there was a positive relation between authoritative parenting style and school performance of student. It has also been found that student with high academic achievement showed to have parents who show warmth, who supervise and have psychological autonomy. Overall results showed that there was a positive relation between family environment and school achievement of adolescents”.

Estrada et al. (1987) studied “various components of home environment and found that good home environment was responsible for good academic achievement. On the other hand, the component of control and punishment found to be detrimental in the development of cognition and affects badly the academic achievement of students”.

Epstein (1992) studied “the relation between parental involvement and academic achievement of students and found that there was a positive relation between the two and parental involvement also influences motivation among students to learn more”.

Steinberg et al. (1992) studied “the relation between parenting style and school performance of adolescents and found that there was a positive relation between both the variables involved and it has also been found that the role of home environment in the academic success of adolescent students and found that authoritative home environment promotes good academic success among adolescent students”.

Dauber and Epstein (1993) and Janosz, (1994) studied “the influence of home environment on the academic achievement of students and found that both
the variables were correlated as it also in preventing drop out among high school students”.

**Keith et al. (1993)** studied “the relation between parental involvement and students’ academic achievement and found that parental involvement influences the academic achievement of students”.

**Shukla et al. (1994)** studied “home factors in relation to academic achievement among children and found that learning facilities available at home influences the academic achievement of students. These facilities at home had a significant relation with the level of academic achievement among school children”.

**Henderson and Berla (1994)** studied “the impact of family involvement on the achievement of students and found that parental involvement involved high grades, high test scores, ability of homework completion, enhanced school attendance, positive attitudes, less problems related to discipline, good rate of school completion, less rate of leaving school and higher rate of participation in post secondary level. Parental involvement was found to be a good predictor of academic achievement of students”.

**Paulson (1994)** found that parental involvement, responsiveness and demandingness had a positive effect on the academic achievement of students”.

**Raj (1995), Bajwa and Kaur (2006), Williams (2008), Ewnetu and Fisseha (2008), Houtenville and Conway (2008), Chan and Koo (2010)** studied “the relation between parenting styles and academic achievement of children and found that there was a strong relation between the two. Also, home environment was found to be a strong predictor of academic achievement of students”.

**Srivastava (1995)** found that parental love, discipline and dominance had a positive relation with the academic achievement of students. On the other hand, punishment and rejection as components of home environment had a negative effect on the academic achievement of students”.

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Paulson (1996) reported that “there was a positive effect of parental involvement on the academic achievement of adolescents”.

Deslandes et al. (1997) studied “the influence of parental involvement and parenting style on the academic achievement of students studying in secondary schools and found that all the variables were related to each other. Overall results showed that home environment predicts academic achievement of students”.

Baharudin & Luster (1998) studied “the relation between home environment and academic achievement of students and found that students coming from supportive and caring home environment showed good academic achievement. The results depicted that quality of home environment was responsible for good academic success”.

Cartejon and Perez (1998) studied “the relation of home environment with academic achievement and found that academic achievement was directly related with home environment”.

Catsambis (1998) studied “parental involvement in relation to educational achievement of high school students. The findings revealed that there was a positive effect of parental involvement on the educational achievement of students. Also, the students who scored high in academics due to the fact they had the encouragement and affection of their parents”.

Gottfried et al. (1998) studied “home environment and its relation with academic achievement and found that there was a positive and statistically significant effect of home environment on the academic intrinsic motivation of the students. Also, home environment was related to academic achievement”.

Ichado (1998) studied “the relation between home environment and performance of the students and found that home environment influences the performance of students. The results revealed that family’s spiritual, moral and psycho-social foundations were helpful in the all-round development of children.
The role of mothers was of utmost importance in influencing the academic scores of the students”.

Agulanna (1999) studied “the impact of father-child relationship with development of child and found a positive and significant influence between the two”.

Buote (2001) found that “family environment was a predictor of academic performance”.

Dietzman (2002) studied “the influence of culture of family on the academic achievement of students and found that there was a relationship between home environment and academic achievement of students”.

Marchesi and Martin (2002) studied “the role of parental expectations on the academic success of students and found a positive relation between the two”.

Joshi et al. (2003) studied “the relation between parenting style and academic scores of college students and found that both the variables were not related to each other”.

Vijayalakshmi (2003) studied “the relation between home environment and academic achievement and found a negative relation between the two”.

Ahuja and Goyal (2005) observed “high parental involvement leads to high achievement and low parental involvement resulted in low achievement”.

Hickman & Crossland (2005), Assadi et al. (2007) and Abar et al (2009) found that “home environment had a great influence on the economic, psychological, social and emotional state of students. Overall results showed that parenting style of authoritative kind resulted in good or high academic performance”.

Pathani (2005) studied “the relation between home environment, school environment and socio-emotional adjustment and found that home environment effect the academic achievement of students”.

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Vamadevappa (2005) studied “the relation between parental involvement and academic achievement among higher primary students. The findings revealed that parental involvement was positively and significantly related to academic achievement of students. Students having high home environment had high academic achievement. Also, girls had high home environment and thus academic achievement as compared to boys”.

Bansal et al. (2006) studied “the relation between home environment and academic achievement and found that students with high home environment had high academic achievement. Also, good home environment had positive and significant relation with achievement motivation among high achiever students”.

Lakshmi and Arora (2006) studied “the relation between parental behaviour and school academic success and found that there was a positive relation between parental acceptance and encouragement on the school academic success of students. Other component of parental behaviour, i.e. parental control comprising both psychological and behavioural, indicated a negative correlation in terms of competence and academic success among students. Overall findings showed that the students whose parents who were supportive and less authoritative showed better academic results”.

Sunitha and Khadi (2007) studied “the learning environment at home and school in relation to their academic achievement and found that students coming from good home environment tend to exhibit good academic performance. Home learning environment was related to school learning environment”.

Ajila and Olutola (2007) found that “home environment was directly and indirectly related to academic performance of children”.

Daulta (2008) investigated “the impact of home environment on the scholastic achievement of students and found that quality of environment at homes showed positive and significant relation with scholastic achievement. It has been found that home environment was a predictor of scholastic achievement as the students with high home environment showed high scholastic achievement. Also,
boys with high home environment showed high scholastic achievement than that of girls”.

Uwaifo (2008) studied “the relation between parenthood and family structure on the academic performance of university students and found that there was significant difference in the academic performance of students coming from single parent family and structure of the family. There were gender differences also in the academic achievement of children coming from single parent family and both parents family”.

Kaur et al. (2009) studied “home environment in relation to academic achievement, locality and gender. The results showed that there was a significant difference between the home environment and gender. Also, there was a significant difference between home environment and locality”.

Mohanty (2009) studied “the relation between home environment and academic achievement and found that there was a positive relation between the two”.

Yousuf et al. (2009) studied “the influence of parenting style on the performance of students in social studies and found that parenting style influences the performance of children. Also, the students with authoritarian parents showed better performance in academics.”

Muola (2010) studied “the relation between home environment and academic achievement motivation among eighth class students and found that there was a positive and significant relation between the two variables. Home environment and its components were significantly related to academic achievement motivation. This includes occupation of both the parents, size of the family, learning facilities at home and academic achievement motivation. Students having good home environment and good academic achievement motivation forces a child to study more. Parental involvement and academic achievement motivation were not related significantly to each other”.

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Kazmi et al. (2011) studied “the relation between home environment and academic achievement and found that involvement of parents especially fathers was favourable contributor to the academic performance of the children”.

Kumar (2012) studied “the relation between home environment, academic achievement and gender. It has been found that there was significant difference in home environment on the basis of gender. Also, there was a significant difference in home environment on the basis of locality”.

Viswanathan and Ramani (2012) studied “home environment in relation to social skills among secondary school students and found that there was no difference in the students in terms of home environment”.

Rafiq et al. (2013) studied “the relation between parental involvement and academic achievement and found that there exists significant between both the variables”.

Rani (2013) studied “parental encouragement among senior secondary students and found that there was no significant difference between parental encouragement and type of schools, i.e. public and private schools. Also, the mean scores showed that girls had high parental encouragement than boys”.

Dhall (2014) studied “the relation between academic achievement, achievement motivation and home environment and found that there was a significant and positive relation between academic achievement and achievement motivation. The findings also revealed that there was no difference in achievement motivation and home environment on the basis of gender. Also, significant gender differences were found on the basis of home environment”.

Doley (2018) studied “the effect of home environment on the academic achievement among adolescent students and found that there was a significant and positive relation between home environment and academic achievement among adolescent students”.

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The studies given above shows that there is a gap in the studies conducted in the variables concerned i.e. “home environment in relation to academic achievement” which leads to formulation of null hypothesis in the present study.

2.7 MISCELLANEOUS STUDIES

Elias and Rehman (1995) studied “achievement motivation in relation to ethnic group, gender and place of origin. Locus of control, attitude towards learning and study habits, were also examined. The findings revealed that there was significant difference in achievement motivation in students based on faculty, year of study and ethnic group. As far as locus of control was concerned boys were more internal than that of girls”.

Watkins (1997) studied “the relation between parental involvement and motivation and children learning and found that parental involvement influences motivation and children learning”.

Landine (1998) studied “the relation between metacognition, certain personality variables and academic achievement and found positive and significant relation between metacognition, motivation, locus of control, locus of control, self-efficacy and academic average of students. Overall results showed that metacognition and certain personality were related with academic achievement”.

Mulugeta (1998) studied “sex differences on the basis of academic self-efficacy, achievement motivation and academic achievement among university students and found that was significant sex differences on the basis of achievement motivation and academic achievement. Also, boys found to be superior to girls on all the variables”.

Haine, Ayers, Sandler, Wolchik, & Weyer (2003) observed that “locus of control and metacognition are self-system beliefs”.

Anderson and Hamilton (2005) studied “the relation between motivation and locus of control and found that students who had high motivation tend to have
internal locus of control. Students with internal locus of control performed better in academics than that of external locus of control”.

Vandergrift (2005) studied “the relation between motivation orientations, metacognitive awareness and proficiency in L2 listening among students. It has been found that the students who use Metacognitive strategies had greater motivation, as supported by the patterns of responses gathered. Listening proficiency found to have negative correlation with motivation. Also, the relation between intrinsic and extrinsic motivation was not as high as it was hypothesized”.

Adsul and Kamble (2008) studied “the effect of caste difference, gender and economic background on achievement motivation among college and found that there was a significant difference between scheduled caste and nomadic tribes, scheduled caste and other backward castes students and between male and female students on the basis of achievement motivation. Male students had high achievement motivation than that of female students who had below average achievement motivation. No significant interactional effect was found on the basis of caste, gender and economic background of family, which means that all these variables did not jointly affect achievement motivation among college students”.

Abesha (2012) studied “the influence of parenting styles, academic self-efficacy, and achievement motivation on the academic achievement of students and found that students of Ethiopia University had high academic self-efficacy and achievement motivation but low academic achievement”.

Arslan and Akin (2014) studied “the effect of metacognition on the locus of control of students and found that internal locus of control predicts positive metacognition whereas; negative relation was found in metacognition with external locus of control. Also, metacognition had an effect on academic locus of control of students having internal academic locus of control as high and are more likely to adopt metacognition than the students having external academic locus of control”.

The above mentioned studies indicated that metacognition involves ability to monitor and regulate the use of cognitive activities which affect academic
performance as studied by Donaldson & Graham (1999); Hofer, Yu & Pintrich (1998). Research conducted in the field of motivation indicated that it is a powerful predictor of academic achievement (McCombs & Whisler (1989); Palmer & Goetz (1988)). Researchers like Findley & Cooper (1983) found that locus of control leads to academic achievement. Roman & Ceustas (2007) conducted study in the field of self-efficacy and found that it leads to educational achievement and encourages learners’ to reach their goals and face hardships and challenges. Daulta (2008) studied the impact of home environment on the scholastic achievement of children and found that quality of home environment had significant positive correlation with high level of scholastic achievement in boys than among girls. It is evident from the above studies that no specific study on the effect of metacognition, motivation, locus of control, self-efficacy and home environment has been conducted in the field of academic achievement. So, the investigator studied the effect of these variables on the academic achievement.