CHAPTER -II
CHAPTER II

REVIEW OF LITERATURE

Review of related literature plays a vital role or major step in research. It must precede any well planned research study. One of the early step in planning a research work is to review the studies done in the relevant area of interest. It gives the researcher an indication of the direction to proceed; it provides an understanding of the status of research in the field.

The reviews of literature provide the rationale or basis for formulating hypotheses providing explanations and suggesting further researches. It provides dues of methodology and instrumentation. It helps the investigator to proceed on his work in the light of previous work or similar work and minimizes wrong move.

According to Aggarwal (1966), “study of the related literature implies locating, reading and evaluating reports of research as well as reports of casual observation and opinion that are related to the individual’s planned research project” (p.87). According to Good (1959), “The keys to the vast house of published literature may open doors to sources of significant problems and explanatory hypothesis and provide helpful orientation for definition of the problem, background for selection of procedure, and comparative data for interpretation of results. In order to be creative and original, one must read extensively and critically as a stimulus to thinking”. (p.112)
According to John W. Best (2009), “Practically all human knowledge can be found in books and libraries. Unlike other animals that must start a new with each generation, man builds up on the accumulated and recorded generations; man builds upon the accumulated and recorded knowledge of the past. His constant adding to the vast store of knowledge makes possible progress in all areas of human endeavour”.

Koul Lokesh (1984) says, “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 promoting in the previous study it also to provide insight in to the statistical methods through which validity of result is to be established” (p. 89)

Research takes advantage of the knowledge which has accumulated in the past as the result of constant endeavour. It can never be undertaken in isolation of the work that has already been done on the problems which are directly or indirectly related to a study proposed by a researcher. Hence the investigator has tried to collect relevant information from literature related to her topic. The investigator visited a number of libraries, made use of research journals, books, dissertations, internet and collected materials from Indian and International Research Abstracts.
2.1 NEED FOR THE REVIEW OF RELATED LITERATURE:

Review of the related literature, besides allowing the researcher to acquaint herself with current knowledge in the field or area in which she is going to conduct the research, serves the following specific purposes.

(1) The review of related literature enables the researcher to define the limits of her field. It helps the research to delimit and define her problem.

(2) The knowledge of related literature brings the researcher up-to-date on the work which others have done.

(3) It helps to state the objectives clearly and concisely.

(4) By reviewing the related literature, researcher can avoid unfruitful and useless problem area. She can select only the positive findings and her endeavour would be likely to add to the knowledge in a meaningful way.

(5) Through the review of related literature, the researcher can avoid unintentional duplication of well established findings.

(6) It helps the researcher an understanding of the research methodology, tools and instrument which proved to be useful and promising.

(7) The final and important specific reason for reviewing the related literature is to know about the recommendations of previous researchers listed in their studies for further research.
The reviews are presented in the following five parts

**Part I**: Studies on Academic Achievement

**Part II**: Studies on Internet Use by Adolescents

**Part III**: Studies on the relationship between Anxiety, Internet Use and Academic Achievement

**Part IV**: Studies on the relationship between Internet Use and Academic Achievement of Adolescents

Educational achievement of students demands urgent attention to attain their goals. A numerous researches have been conducted to contribute to determine the predictors of educational success of male and female adolescents. A research work always takes the advantages of the information and the knowledge that had been accumulated in the past as a result of constant research endeavour by mankind. According to Koul (2009) research can never be undertaken in the isolation of the work that has already been done on the problems related to the study proposed by any researcher. Every researcher reviewed the related literature from the different resources that includes research journal, articles, books, magazines, encyclopedias, dissertations, abstracts, international year books, theses and most important in the present era the internet access. The detailed account of review of related literature pertaining to variables under study, namely academic achievement, internet use, anxiety and adolescents are presented here under.
PART I: STUDIES ON ACADEMIC ACHIEVEMENT

Foen Ng et al. (2014) This research investigated the contribution of time use among students to academic achievement. The sample of secondary school students was stratified to ensure balance of gender, school type and grade level. Correlation analyses were conducted to determine the associations among the variables identified in the study. Participants completed the Daily Record of How I Use My Time each day for seven consecutive days. Cooperating schools provided copies of the academic transcript of each participant. This information was used to establish the overall secondary school academic achievement of each participant. The data collected were subjected to bivariate comparison of means and t-test comparisons of means to yield correlations among the target variables. The findings of this research supported those of some previous studies and contradict those of other studies, many conducted with non-Malaysian populations. In sum, this study may help to develop a conceptual framework for guiding efforts to improve academic performance, as it relates to time use, as a contribution to accomplishing the national agenda of Malaysia.

Raju (2013) studied on “Impact of Gender and Locality on Academic Achievement of secondary school students in Social Studies. The objective of this study was to investigate the relationship between gender and locality on academic achievement of secondary school students. A sample of 120 boys and girls was collected from rural and urban schools in Puttur mandal, Chittoor dist, A.P. The collected data was statistically analyzed; for this purpose ‘t’ test was calculated. Based on the findings of the study revealed that gender and locality has significant
influence on academic achievement of students in social studies. The researcher suggested that care and interest may be taken in respect of parents' background and educational economic background and their motivation. It was also suggested that proper steps may be taken in appointment of specialized teachers and reorientation programmes and overall supervision of the government inspecting officers. The role of parent teacher association in the rural areas should neither be neglected nor ignored. Teaching of third language English should be given emphasis in the light of modern trends and its due impact in the present day world.

Ganai and Mir (2013) compared the study of adjustment and academic achievement of college students. The sample for the study comprised of 80 students who were on rolls in various higher secondary schools of district Baramulla. The tools used for data collection was Mental Health Battery by A.K. Singh and Alpana Sengupta which was the battery of six tests including Emotional Stability (ES), Overall adjustment (OA), Autonomy (AY), Security- Insecurity (SI), Self – Concept(SC), Intelligence Quotient (IQ). Data was analyzed by using mean, SD and t-value. The findings revealed that the male and female adolescents differ significantly on mental health. However the two groups showed no difference on academic achievement. Further the two groups showed difference on various dimensions of the Mental Health Battery including Emotional Stability (ES), Overall Adjustment (OA), Security Insecurity (SI) and General Intelligence. The main difference favored the male adolescents in case of these dimensions. However, the two groups showed no difference on Autonomy (AY) and Self Concept dimension (SC). Based on the
findings of the study recommendations were made to provide guidance and counseling facilities in the higher secondary schools of district Baramulla.

Attri and Neelam (2013) studied academic anxiety and achievement of secondary school students—a study on gender differences. The study was undertaken with a view to find out the academic anxiety and academic achievement of secondary school students. It was hypothesized that there exists a significant difference in academic anxiety and academic achievement of male and female secondary school students. For verification of these hypotheses, the data was collected from 200 secondary school students of Mandi district of Himachal Pradesh by adopting lottery method of random sampling by administering AASC and their marks of class 9th were taken as academic achievement. The statistical technique used was t-test. The findings of the study revealed that there exists significant differences in academic anxiety and academic achievement of male and female secondary school students. Girls found to be more academically anxious and had better academic achievement than boys.

Krishnamurthy and Subramanian (2012) attempted to know the level of mental health of post graduate commerce subject students and their achievement in commerce subject. In this study, the investigator has used normative survey method and random sampling technique. The data was collected from 600 post graduate commerce students in various colleges from Cuddalore district. The findings of the study reveal that the post graduate commerce subject students are having above average level of mental health and average level of achievement in commerce subject. The sub samples of gender, type of institution and community shows significant
difference in their mental health and achievement in commerce subject but the remaining variables under study do not show any significant difference in it. The mental health level of female students was not as much of male students, so concern authorities should give special initiative to female students to develop their mental health.

Bandhana and Sharma (2012) investigated the study of home environment, mental health and academic achievement among higher secondary school students. The impact of home environment and academic achievement on mental health were investigated in a 12th grade higher secondary school students sample consisting of 300 participants, 150 of whom were females and 150 were males. The data was collected by Home Environment Inventory developed and validated by Dr. Karuna Shankar Misra Prof. & head, department of Education, Allahabad University, Allahabad and Mental Health Battery which was developed and validated by Arun Kumar Singh and Alpana Sen Gupta. Data collected was analyzed using mean, standard deviation and Three-Way ANOVA (2x2x2 Factorial Experiment). Results revealed that mean value of mental health of girls was 74.76 and boys was 70.76. Therefore, this was revealed after analyses that the mean value of mental health of girls was more in comparison to boys.

Muola (2010) investigated the relationship between academic achievement motivation and home environment among standard eight pupils. The study was carried out on 235 standard eight Kenyan pupils from six urban and rural primary schools randomly selected from Machakos district. Their age ranged between
13 and 17 years. Two questionnaires, the simple profile (SP) and home environment questionnaire, were used to provide information on the pupil’s levels of academic motivation and home environment. A significant ($p < 0.05$) positive relationship was found between six of the home environmental factors, that is fathers’ occupation ($r = 0.22$), mothers’ occupation ($r = 0.26$), fathers’ education ($r = 0.15$), mothers’ education ($r = 0.14$), family size ($r = 0.26$) and learning facilities at home ($r = 0.23$) and academic achievement motivation. Parental encouragement was the only factor that was not significantly ($r = 0.03$) related to academic achievement motivation. Although these correlations are low, they showed that pupils’ motivation do well in academic work and it extends to be dependent on the nature of their home environment.

Nagaraj et al. (2006) study attempted to identify the ‘best’ cognitive and affective factors affecting the academic achievement of students in Mathematics at XII level. To meet the objective, required data were collected from 1000 students drawn from 30 schools by giving due representation to the school–related factors like type of management, type of school and board of affiliation. Students related factors like gender, subject group, community and parental educational were also given due representation while selecting the sample. Four tools namely Index of Learning Style Inventory, Locus of Control Scale, Human Information Processing Scale and Attitude to Mathematics Scale were used to measure the factors (Decision variables) affecting academic achievement. To measure the students academic achievement in mathematics an objective type test was given to students. Data collected were used to formulate a linear programming Problem and the problem was solved using TORA software and the best factors that maximize the academic achievement were
identified. Applying Linear programming technique to optimize (maximize) the academic performance of higher secondary students in Mathematics was a pioneering attempt in the field of Mathematics Education.

Anuradha, Bharathi and Jayamma (2006) summaries that the study was an attempt to study the television viewing behaviour of adolescents and its impact on their academic achievement. The sample consisted of 48 adolescents (24 boys and 24 girls) selected randomly from Government Telugu medium schools (8th, 9th and 10th standards) in Tirupati town and their mothers. Adolescents TV viewing behaviour was collected from students as well as their mothers by using two tools ‘Omnibus Schedule for Parents’ and ‘Omnibus Schedule for Children’s (both developed by Anuradha and Bharathi, 1998). Academic achievement was obtained form school records. The results revealed that the Mean T.V. viewing time for boys was 166.47 mts (S.D. = 98.97) and the same for girls was 182-89 mts (S.D. = 93-820). However, adolescent did not differ significantly in their T.V. viewing behaviour according to sex, grade and type of family. The percentage of marks was found to be more for adolescents with cable connection than those without cable connection.

Muthumanickam (1992) The study addresses the problem of the relationship between the academic achievement of students and socio-economic status. The objective of the study was to find out the socio-economic status and also to find out the relationship, if any, among commerce achievement and socio-economic status. The sample comprised 377 plus-two commerce students (195 boys and 182 girls) belonging to the academic stream of the 14 higher secondary schools (eight
urban and six rural) who were selected as subjects. The random sampling technique was used in the selection of the sample. The relevant data were collected using school marks register and the Socio-economic Status Scale prepared by the investigator. The correlational analysis and multi-variate analysis were used to treat the data. Major Findings of the study that Boys and girls did not differ in their achievement in commerce. There was a positive significant correlation between achievement in commerce and socio-economic status.

Harikrishnan (1992) examined academic achievement in relation to achievement -motivation and socio-economic status of students. To find out the relationship between academic achievement and socio-economic status among students. A sample of 300 students was selected at random. The tools used in the study were school marks, Socio-economic Status Scale developed by the researcher. For data analysis ‘t’ and correlation coefficients were used. It was found that socio-economic status was significantly related to academic achievement.

Garg and Chaturvedi Seema (1992). This study attempts to measure the contribution of intelligence (IQ) and socio-economic status (SES) in determining academic achievement. To measure the academic achievement among rural and urban higher secondary students, and (ii) to assess the relationship of IQ and socio-economic status with academic achievement. A sample of 535 students, 179 from two higher secondary schools of tribal blocks of Harrai and Amarwara in district Chhindwara(M.P.) and the rest from 14 higher secondary schools in Bhopal City were selected for the study. The Socio-economic Status Scale, apart from Class X
examination results of the M.P. Board (1987-88). Statistical techniques used in treating the data included multivariate analysis and regression analysis. Academic performance was related to socio-economic status and also has a linear correspondence. This position also held good for both rural and urban students.

Arora (1988) investigated the role of parent-child and the teacher-student relationship in the academic achievement of higher secondary students.

Objectives:
(i) To study the relationship between educational standard and parent-child relationship,
(ii) To study the relationship between the types of schools and backwardness,
(iii) To study whether any difference exists in the educational achievement in different types of schools namely public schools, privately managed schools and centrally administered schools,
(iv) To study whether there was any difference in the intellectual level of the three types of schools, namely public, private and central schools, and
(v) to study the relationship between the teacher-student and educational standard.

Methodology: The sample comprised 450 students studying in different types of schools of Agra City. The tools used to collect data included PARQ by Jai Prakash and Bhargava, MGII by P.N. Mehrotra and SLS by S.P. Malhotra and B.K.Passi. The collected data were treated with ‘t’ test and coefficient of correlation.
Major Findings:

(1) No significant relationship existed between educational achievement of students and parent-child relationship.

(2) Educational standards of students and teacher-student relationship were found to be significantly related.

PART II: STUDIES ON INTERNET USE BY ADOLESCENTS

In recent years, the number of internet users has increased worldwide. In 2011, 30.2% of the world’s population were internet users (2095 million). Of those, 44% were in Asia, 22.7% in Europe, and 13% in North America (Internet World Statistics, 2011). Recent statistics indicate that adolescents today spend a great deal of their time on the internet for communication, educational and entertainment purposes (Lenhart, Madden, and Hitlin, 2005). Not only do children gain knowledge and information on the internet, they also engage with their friends in social conversation and participate in cyber communities (Ito, Horst, Boyd, Stephenson, Lange, et al., 2008). Since the internet allows youngsters to become more open to experimentation and social exploration (Ito et al., 2008), the internet can be considered an important tool in adolescent socialization (Kremar and Strizhakova, 2007). Adolescents also favour instant messaging, text messaging and social networking websites v.i.z. Facebook and My Space as modes of communication (Lenhart, Madden, and Hitlin, 2005).
Some gender differences although inconsistent on adolescents’ daily use of internet have been reported (Haythronthwaite and Wellman, 2002). Numerous previous studies have documented that overall boys use the internet more frequently for longer and for a wider variety of uses than girls do (Gross, E.F., Juvonen, J. and Gable, S.L., 2002). Girls also report using text messaging more frequently than boys (Jennings and Wartella, 2009; Lenhart, Madden and Hitlin, 2005) and are more likely to be involved in other online social interaction, v.i.z., using e-mail, than are boys (Subrahmanyam et al., 2001). Gender differences in adolescent internet use have been reported across countries. Several studies have reported about the gender differences in internet usage. Weiser (2000) reported significant gender differences in internet usage. He reported that, males tend to be more familiar with the computers and internet as compared to females.

Educational sector has been strongly influenced by the emergence of Internet Technologies since the growth of internet has changed how knowledge is developed, acquired and delivered (Sookram, 2006). In a study, A. Purushottaman (2011), it was seen that women were found to use the modern means of technology only when they are aware of its availability and facilities. It also explains the fact that, empowerment for women can be achieved through internet usage by reduced fear, improved confidence level and reduced ignorance. Information and Communication Technology (ICT) has been widely recognised as a tool for human development (UNDP, 2001).
Long and Chen (2007) in a study examines the impact of Internet usage on the self-identity development in 10 students between the ages of 12 and 18. Using Erickson's Ego Identity Theory, the computer mediated communication (CMC) practices of students from private and public schools were evaluated through in-depth interviews. All students were frequent users of instant relay chat (IRC) and had a minimum of one year of experience with Instant Messenger. Identity development was examined using questions generated from a modified form of the Objective Measure of Ego Identity Status developed by Adams and Ryan (2000). The four dimensions of Identity Development examined were avoidance decision-making, identity formation, self-reflection and ego strength or fidelity. Results indicated Internet usage impacts each of the dimensions in the adolescents studied.

Erdur, B (2010) attempted to study cyber bullying and its correlation to various factors in which the results revealed that 32% of the students were victims of both cyber and traditional bullying, while 26% of the students bullied others in both cyber and physical environments. Compared to female students, male students were more likely to be bullies and victims in both physical and cyber-environments. The multivariate statistical analysis indicated that cyber and traditional bullying were related for male students but not for female students. Moreover, the multiple regression analysis revealed that both frequent and risky usage of Internet account for a significant variance of cyber bullying but their contributions differ based on genders.
Heuvel (2010) attempted to study the Influence of Adolescents’ Psychosocial Wellbeing and Internet-specific Parenting on Meeting Online Contacts in Real Life in which he found that low self-esteem and low feelings of loneliness predict a larger chance to meet online contacts. For depression and social anxiety only cross-sectional relations were found, indicating depressed feelings that are related to a larger chance to meet online contacts, but this is no causal relationship. In addition, negative longitudinal relations were found between parental rules about the content of Internet use, parental monitoring and the quality of communication about Internet use on meeting online contacts. Cross-sectionally, positive relations were found between the parental rules about the duration of Internet use and the frequency of the communication about Internet use. It was suggested that when parents want to prevent their children from meeting online contacts, it would be wise to impose strict rules and monitor their children’s Internet use and it required high quality communication.

Koovakkai and Muhammwd (2010) viewed that the adolescents in Kerala revealed that the habit of changing/manipulating information on the Internet, habit of downloading vulgar pictures/pornographic items, plagiarism and tendency of sending unwanted messages are comparatively high among the adolescents in rural areas. Comparatively higher percentage of the adolescents in rural areas was found giving false information on the Internet as fun. The rural adolescents were behind the urban adolescents in understanding that giving false information on the Internet is unethical and a criminal offence. As compared to the urban adolescents, the Internet abuse was more among the rural adolescents. This may be because of their ignorance about the seriousness of the matter. With the rustic innocence they found it a fun, and this calls for proper education and awareness programmes to the adolescents.
especially in rural areas. The study suggests that parents’ involvement in guiding the young generation is also important.

Mikamki et al(2010) viewed that youths who were better adjusted at 13-14 years were more likely to be using social networking web pages at ages 20-22 years, after statistically controlling for age, gender, ethnicity, and parental income. Overall, youths' patterns of peer relationships, friendship quality, and behavioural adjustment at ages 13-14 years and at ages 20-22 years predicted similar qualities of interaction and problem behaviour on their social networking websites at ages 20-22 years. Findings were consistent with developmental theory asserting that youths display cross-situational continuity in their social behaviours and suggest that the conceptualization of continuity may be extended into the online domain.

Lei, Zhou and Wang(2009) found that there was a significant differences in online activities between American students and Chinese students were found in school, but not at home. There were significant school/home differences in Internet use for American students, but not much school/home difference was found for Chinese students. Salient similarities between American students and Chinese students were found in terms of the most popular activities they engaged in inline and Internet use in teaching and learning in school had some influence on students’ interest in learning specific subjects. Further analysis suggests that different pedagogical practices in these two cultural contexts led to the different uses of the Internet in school between American students and Chinese students.
Aslanidou and Menexes (2008) conducted a study in four Greek cities in which he found that (a) Internet access remains at a very low level and is insufficiently used for school purposes, (b) younger students use it more frequently than older ones for information seeking concerning school work, (c) the Internet is an indicator of social and economic stratification since most young people with access to it come from family environments with a higher educational and socioeconomic background and live in urban and semi urban areas, (d) boys make up the majority of systematic users, mainly for entertainment purposes, (e) the Internet is a place and space safeguarding the “privacy” of young people with the majority of them preferring to surf alone, (f) parental supervision and monitoring seems to be absent largely from the relationship between youth and the Internet, and (g) in general, the frequency and type of Internet use are not significantly affected by students places of residence or educational level or profession of the parents.

Erdogan (2008) found that Turkish adolescents’ loneliness was associated with both increased Internet usage and Internet attitudes. Multivariate Analysis of Variance found adolescents who reported excessive uses of the Internet for web surfing, instant messaging, emailing and online games had a significantly higher mean score of loneliness than those who did not. In addition, male adolescents reported a higher frequency of Internet usage and more loneliness than females. Male adolescents reported a higher frequency of web surfing and online games than females. However, females reported a higher frequency of e-mailing. Turkish adolescents reported average time per week spent on the Internet as 6.84 hours.
Bayraktar and Gun (2007) in a study found that the Internet was used primarily by male students. Adolescents used the Internet generally for entertainment and communication. It was found that adolescents generally introduce themselves differently while chatting. Mostly violent games were played on the Internet and playing these games was related to anti-social aggression and aggression toward the self. Research findings indicated that 1.1% of the students who used the Internet were pathological Internet users. These users visited significantly more chat sites, mp3 sites, pornographic sites, and shopping sites than other users. Also, it was found that students’ grade point average (GPA) decreased when pathological Internet usage increased.

Peter, Valkenburg and Schouten (2006) mentioned that early adolescents were most prone to talk with strangers on the Internet. Introversion was not related to adolescents’ tendency to talk with strangers. The motives of entertainment, meeting new people, and social compensation increased adolescents’ online communication with strangers. Adolescents’ online communication with strangers did not enhance their probability to establish online romantic relationship.

A.A Ceyhan (2013) in a study that was carried out to determine the internet motives of adolescents pointed out various factors. In addition, the relationships between adolescents’ internet motives and their gender, academic achievement, duration of internet use, locus of control and problematic internet use levels were investigated. A total of 351 adolescents participated in the study. The findings revealed that adolescents’ stated their basic internet motives as obtaining information (18.20%), chatting (17.5%), spending free time/using the internet due to boredom (17.2%), having fun (16.9%), playing games (11.4%), using for both
homework and other activities (10.1%), and doing homework (8.8%), respectively. Moreover, the findings pointed out that female adolescents preferred internet to do homework more while male adolescents preferred the internet to play games more. In addition, the adolescents’ basic internet motives differed in terms of the duration of internet use, locus of control, and problematic internet use level significantly while there was no significant difference in terms of academic achievement.

Seepersad (2004) viewed that there was a strong relationship between avoidant coping strategies offline and entertainment Internet use. Further, study indicated that adolescents who considered communication as the most important use of the Internet also coped with loneliness through emotional expression and social coping. Results suggest that online and offline coping behaviours are strongly related especially if they are avoidant.

Vaizoglu et al. (2004) viewed that 86.5% of the students used the Internet at home. Significant differences between boys and girls were found in terms of hours spent on the Internet and purpose of use, and changes over time in hours spent. Daily and weekly Internet use is more frequent among boys than girls. Boys visit cyber-sex sites more than girls. Those whose weekly Internet use was 4 hours or more were found to have been using the Internet for 36 months or more; they had irregular eating habits; and their relatives complained more frequently on the amount of time they spent on the Internet.
PART III: STUDIES ON THE RELATIONSHIP BETWEEN ANXIETY, INTERNET USE AND ACADEMIC ACHIEVEMENT OF THE ADOLESCENTS

Despite great concerns over isolation and depression teens report an optimistic picture about the social use of the internet (Lenhart, Rainie and Lewis, 2005). For example, Khayel and colleagues (2006) found that online communication technologies encourage communication with existing friends and families. In addition, some researchers demonstrated that internet use is positively related to time spent with existing friends and family members (Kraut, Boneva and Crawford, 2002) to the closeness of existing friendships and to the wellbeing of friendships and to the wellbeing of adolescents (Morgan and Cotton, 2003).

Those who have been online for three years become even more interpersonally engaged and gain more social support than new users (PEW Internet and American Life Project, 2000). Mohdshakir (2014) emphasised that senior secondary stage is the most important stage as it is the base for further education. He explained that anxiety is the most widely experienced emotion and one of the most essential constructs of all human behaviour. This study was conducted to study the relationship and effects of academic anxiety on the academic achievement of the students. Research findings revealed an inverse relationship between academic achievement and the academic anxiety of the students.
The effects of internet on youngsters can also be seen to vary as a function of the motivation and the type of the internet usage (McKenna & Bargh, 2000). For example, the social use of the internet has been found to be related to depression, while non-social use of the internet v.i.z. information seeking and entertainment have not been found to be related to adolescent depression (Bessiere, Kiesler, and Boneva, 2008). Supportive relationships with friends can positively contribute to adolescents’ sense of well being, self esteem, connectedness and ability to cope with stress (Eisenberg, Stevens, 2007).

In the year 2004, it was found that the youths who exhibit offensive behaviours in Cyber Space are also more likely to report poor emotional bonds with their parents than other internet users. Adolescents who do not have open communication about their parents are more likely to be involved in risky internet behaviours, such as, having a face-to-face meeting with a stranger who they encountered online (Khoo & Ang, 2005). Shepherd, R.M. and Edelmann, R.J. (2005) points out that socially anxious individuals might find it easier to interact online where anonymity can be maintained rather than engage in face to face interaction where being observed by others might induce a fear of negative evaluation.

In recent years with the growth of sophistication in the mental health professions and the behavioural sciences, man has begun to realize the enormous impact of anxiety on human life. Theorists consider anxiety as an important factor in producing discrepancy between achievement and potential. In the present study, the sample was comprised of 300 male and female senior secondary school students from District Sirsa, Haryana. In the present study, only one tool Sinha’s Comprehensive Anxiety Test (SCAT) was used for data collection and In this study, the statistical
techniques Mean, Standard Deviation & 't' test were used. In this study it is found that there is significant difference in anxiety of the of senior secondary school students having arts and science and arts and commerce streams. There is no significant difference of anxiety of senior secondary school students having commerce and science streams. It revealed that the anxiety level of senior secondary school students having arts stream is low as compared to senior secondary school students having commerce and science streams. But senior secondary school students having commerce and science streams have the same anxiety level. Hence the research hypothesis which states that there is significant difference in anxiety of senior secondary school students having arts, commerce and science streams is accepted in the arts and science, arts and commerce streams but rejected only between the senior secondary school students having science and commerce streams.

In a study, Whitty, M. T. & McLaughlin, D. (2007) found that 150 undergraduates answered questions about their Internet usage and completed loneliness and an Internet self-efficacy questionnaire. A factor analysis of the Internet usage items revealed three facets of online recreation, including, using the Internet for: computer-based entertainment, to facilitate offline entertainment, and for information about the entertainment world. Those who scored higher on loneliness were more likely to use the Internet for computer based entertainment, as well as, use the Internet to obtain information about the entertainment world. Individuals higher in Internet self-efficacy were more likely to use the Internet for computer-based entertainment and to facilitate offline entertainment.
Chinta, R (2005) conducted a study on exam anxiety effects on exam performance and the findings were as follows: Significant relationship was not observed between expected course grade at the start of the academic term and the level of anxiety experienced at the time of the final exam. Significant relationships were observed between performance expectations at the time of the final exam and level of anxiety at that time. Positive relationships were found between test anxiety exhibited at the time of the final exam and the scores received on the first two exams.

Rizwan Akram Rana and Nasir Mahmood (2010) found that there was a significant negative relationship exists between test anxiety scores and students’ achievement scores. Result showed that a cognitive factor (worry) contributes more in test anxiety than affective factors (emotional). Test anxiety is one of the factors which are responsible for students’ underachievement and low performance but it can be managed by appropriate training of students in dealing with factors causing test anxiety. Tuncay Ergene (2011) conducted a study in which he found that –

1. Significant correlation was found between test anxiety and academic success.

2. Significant correlation was found between scores of study habits and level of academic success.

3. A positive relationship was found between study habits and level of achievement motivation.

4. No correlation was observed between achievement motivation and academic success.
Test anxiety and study habits were associated positively with academic success and there was no association with achievement motivation.

Amichai, Y.H., Ben Artzi, E. (2003) viewed that the Internet is becoming increasingly influential, but some observers have noted that heavy Internet users seem alienated from normal social contacts and may even cut these off as the Internet becomes the predominate social factor in their lives. Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay, and Scherlis [American Psychologist 53 (1998) 65] carried out a longitudinal study from which they concluded that Internet use leads to loneliness among its users. However, their study did not take into account that the population of Internet users is not uniform and comprises many different personality types. People use the Internet in a variety of ways in keeping with their own personal preference. Therefore, the results of this interaction between personality and Internet use are likely to vary among different individuals and similarly the impact on user well-being will not be uniform. One of the personality characteristics that has been found to influence Internet use is that of extroversion and neuroticism [Hamburger & Ben-Artzi, Computers in Human Behavior 16 (2000) 441]. For this study, 89 participants completed questionnaires pertaining to their own Internet use and feelings of loneliness and extroversion and neuroticism. The results were compared to two models (a) the Kraut et al. (1998) model which argues that Internet use leads to loneliness (b) an alternative model which argues that it is those people who are already lonely who spend time on the Internet. A satisfactory goodness of fit was found for the alternative model.
Sharma, G and Pandey, D (2017) in a study found that psychological disorders like anxiety, depression and stress significantly exacerbate the pressure on students to perform better. The factors collectively hamper their performance leading to low academic achievement. In Chhattisgarh state few studies have looked especially in the field of mental health and academic achievement of the students in last decades. This study aimed to fill that gap and find out the relationship among anxiety, stress, depression and academic achievements. For this purpose 120 (60 boys & 60 girls) students of 11th standard studying in government schools located in rural area of Mahasamund district of Chhattisgarh state were taken randomly. The ADSS (anxiety, depression and stress scale) was used to measure the anxiety, depression and stress among students. To analysis data Co-relational research design will be used. Hierarchical multiple regression analysis revealed significant negative association between depression and anxiety for criterion variable academic achievement. Furthermore, stress and academic achievement found to be significant positive association with each other. It is concluded that mental health condition of the students affect academic achievements.

Singh, S (2015) conducted a study to find out the impact of anxiety on Academic Achievement of U.G Students in which he found that

(i) Low level of anxiety was found to be positively correlated with academic achievement,

(ii) High level of anxiety was found to be negatively correlated with academic achievement,
(iii) Significant difference was not found between the students, who scores high and low on academic anxiety scale,

(iv) Gender of the students significantly affects scores on academic achievement, i.e., female students score high on academic achievement as compared to male students.

PART IV: STUDIES ON THE RELATIONSHIP BETWEEN INTERNET USE AND ACADEMIC ACHIEVEMENT

Over the last couple of decades, personal computers have spread rapidly in our country, provoking thoughts that those who do not have access to home computers may become disadvantaged. According to the National Survey, over 60% of households having children aged 3 to 7 possess a home computer (Indian Census Bureau, 2012). The Indian govt has made its efforts to provide all Indian children with access to schools.

Many schools consider home computers a tool that reinforces school learning and are concerned that a lack of access to a home computer may be related to lower educational achievement. Most parents also believe that computers are an important educational resource that allows their children to discover fascinating and useful things, and that children without access are disadvantaged compared to those with access (Jha-K, 2011). As a result, a growing number of parents are providing their children with access to computers at home.
In a study, Siraj, H. Halizah et al found that medical students with high internet usage are associated with high academic performance. Internet acted as a supplement to the information given by the lecturers. A survey of a large Australian university by Foster (2000) revealed that 88% students used the internet for course related research. Shields, N. and Kane, J. (2011) views that there is a positive relationship between use of internet and rise of academic scores. The students were found to use the internet for acquiring academic related information besides social networking sites.

Given the increased prevalence of access to computers and the internet in homes and schools, the potential value of a personal computer in overall development has been debated consistently among parents, educators and researchers for decades. Students’ computer use can be conceptualised in two ways-
(a) Home computer use for socializing, entertainment and educational purpose;
(b) School computer use primarily with computer based instruction and as a learning assistance tool. Despite positive expectation about computer technology, a positive relationship between the use of computer technology and academic outcomes has only partially been supported through inconsistent research findings (Angrist and Lavy, 2002; Blanton, Moorman, Hayes and Warner et al., 1997). A particular study has revealed a positive correlation between the use of computer and visual spatial skills (Subrahmanyam, et al., 2000). Home computer use has been linked to improvements in literacy and general academic performance (Attewell, 2005). It was found that children who had access to a computer had shown better performance in school readiness and cognitive tests.
These positive effects are not always the result of computer and internet use. Internet use can be a source of non-productive activities according to displacement hypothesis. Students with home computers are more likely to live in families with higher incomes and education, which are highly correlated with better academic performance (Li and Atkins, 2004).

Sawyer A. Hunley, James H. Evans, Maria Delgado-Hachey, Judy Krise, Tammy Rich, Connie Schell (2005) conducted a research on computer usage patterns among teens, including use of the Internet in United States. The purpose of the study was to investigate the relationship of home computer usage patterns to academic grade for tenth-grade students in three high schools in Ohio. The study revealed that 39% of all high school students used computer in school. 20% of the same students used computer at home. Over the years the percentage of students who used computer at home and school was found to be increasing. The findings of the research suggested that the gender gap in internet usage patterns appeared to be decreasing over time. The investigation also indicated that increasing levels of income corresponded to an increased likelihood of owning a home computer regardless of race and the researchers concluded that access translated into usage. 20% of all teens were found to have the highest access to computers at home and the highest at-home access to the internet. Those youth spent an average of seven hours per week on the computer, with about half of that on the internet were found to be in the top quarter of their schools in overall achievement, they were also found to be involved in afterschool activities and had the highest educational aspirations after high school. The result suggested that the race for the digital divide seemed to be increasing.
Based on these studies, the hypotheses of the research are as follows-

(i) There is no significant difference among the adolescent boys and girls in Kamrup rural areas in the usage of internet.

(ii) There is no significant difference among the adolescent boys and girls in Kamrup metro areas in the usage of internet.

(iii) There is no significant difference of academic scores among the adolescent boys and girls in Kamrup rural area.

(iv) There is no significant difference of academic scores among the adolescent boys and girls in Kamrup metro area.

(v) There is no significant difference of anxiety scores among the adolescent boys and girls in Kamrup rural area.

(vi) There is no significant difference of anxiety scores among the adolescent boys and girls in Kamrup metro area.

B.T. Sampath Kumar, G. Manjunath (2013) in a study found that high use of the internet sources and services by teachers and researchers in university setup. Most of them used internet in support of their study and teaching. Majority of respondents learnt to use the internet through self-
instruction and trial and error, with the help of friends and by reading books or papers. Study results also indicated that internet has made an impact on their academic performance (i.e. in writing more research papers, in doing better research, better learning experience, etc.).