CHAPTER I

INTRODUCTION AND CONCEPTUAL FRAMEWORK
CHAPTER I

INTRODUCTION AND CONCEPTUAL FRAMEWORK

1.1 Introduction
1.2 Education
1.3 Four Pillars of Education
1.4 Higher Education
1.4.1 Significance of Higher Education
1.4.1.1 Pursuance of true knowledge
1.4.1.2 Preparatory ground for experts and professionals
1.4.1.3 Development of leadership quality and work efficiency
1.4.1.4 Development of broad attitude among youth
1.4.1.5 All-round development of the nation
1.4.2 Higher Education in India: After Independence
1.4.3 Current Scenario of Higher Education in India
1.5 Arts and Science College Students
1.5.1 Characteristics of Adolescence
1.5.1.1 Adolescence is an important period
1.5.1.2 Adolescence is a transitional period
1.5.1.3 Adolescence is a period of change
1.5.1.4 Adolescence is a problem age
1.5.1.5 Adolescence is a time of search for identity
1.5.1.6 Adolescence is a dreaded age
1.5.1.7 Adolescence is a time of unrealism
1.5.2 Developmental Characteristics of Adolescence
1.5.2.1 Physical development
1.5.2.2 Cognitive development
1.5.2.3 Social development
1.5.2.4 Emotional development
1.5.3 Role of Colleges in the Optimum Development of the Adolescents
1.5.3.1 Opportunities for the full development of the adolescents
1.5.3.2 Recognition of individual differences
1.5.3.3 Responsibility for moral education
1.5.3.4 Freedom for self-development
1.5.3.5 Development of a scientific attitude
1.5.3.6 College life closely connected with outside
1.5.3.7 Value of interdependence
1.5.4 Significance and Understanding of Arts and Science College Students
1.5.4.1 Learning enhancement factors
1.6 Study Skills
1.7 Basic Study Skill Techniques
1.8 Developing Good Study Skills
1.8.1 Time Scheduling
1.8.2 Concentration
1.8.3 Listening and Note Taking
1.8.4 Reading Skill
1.8.5 Preparation for Examination
1.8.6 Writing Skill
1.9 Metacognition
1.9.1 Models of Metacognition
1.9.1.1 Knowledge of cognition
1.9.1.2 Regulation of cognition
1.9.2 Assessment of Metacognition
1.9.3 Significance of Metacognition
1.10 Metacognition and Study Skills
1.11 Social Intelligence
1.11.1 Dimensions of Social Intelligence
1.11.1.1 Social-information processing
1.11.1.2 Social skills
1.11.1.3 Social awareness
1.11.2 Cognitive Performance Model of Social Intelligence
1.11.2.1 Social understanding
1.11.2.2 Social memory
1.11.2.3 Social perception
1.11.2.4 Social creativity
1.11.2.5 Social knowledge
1.12 Social Intelligence and Study Skills
1.13 Significance of the Study
1.14 Statement of the Problem
1.15 Title of the Problem
1.16 Operational Definitions of the Terms
1.17 Objectives
1.17.1 General Objectives of the Present Study
1.17.2 Specific Objectives of the Present Study
1.18 Null Hypotheses
1.19 Delimitations
1.20 Conclusion
CHAPTER 1
INTRODUCTION AND CONCEPTUAL FRAMEWORK

1.1 INTRODUCTION

Education is the formal process by which society deliberately transmits its accumulated knowledge, skills, customs and values from one generation to another. One of the aims of education is to foster genuine understanding of problems and possible solutions. It helps people to understand the nature, causes and implementations of developmental processes that take place either in the formal system or in the wide range of non-formal educational programmes. Higher Education is called as a long-term social investment in the promotion of economic growth, culture, social cohesion, equality and justice. There will always be a deep and wide chasm between what one knows and what ought to be known and nothing can bridge this gap better than original thinking and capacity to learn aided by careful and well planned study.

Generally higher education learners are in the stage of adolescence. Adolescence is the period of transition when the individual changes, physically and psychologically from a child to an adult. It is the period when rapid physiological and psychological changes demand for new social roles to take place in global. Due to these changes, arts and science college students of adolescent stage face a number of crises and dilemmas. It is the period when a child moves from dependency to autonomy and this marks distinctly the developmental stage that takes place between childhood and adulthood. It demands significant adjustment to the physical and social changes. It is the period of rapid revolutionary changes in the individual’s physical, mental, moral, spiritual and social outlook and it is the most crucial and significant period of an individual’s life.

1.2 EDUCATION

Education is a vital human activity and is considered as the most rewarding investment. It is the foundation stone of intellectual power which shapes the power profile of a nation in the community of nations. Therefore it is rightly said that progress of a country, particularly a democratic country, depends upon the quality of its system of education. “By education, I mean the all round drawing out of the best in child and
man body, mind and soul”, says M.K.Gandhi. Swami Vivekananda says, “Education is the manifestation of perfection already present in man”. Therefore, education is a process of identifying the hidden talents of the individuals and providing training to the individuals. The training can be given to the individuals according to their abilities. Thus, the present day education brings about change through the inculcation of values, tastes and habits.

1.3 FOUR PILLERS OF EDUCATION

Education is a social experience through which children learn about themselves, develop interpersonal skills and acquire basic knowledge. According to United Nation Education, Science and Cultural Organization (UNESCO) Report to International Commission on Education for the twenty-first century, “Education must be organized around four fundamental types of learning”. It insists on opportunities for both learning and doing. One would imagine a society in which each individual would be in turn both teacher and learner. In this context, the commission visualizes that learning throughout life will be one of the keys to meeting the challenges of the twenty-first century. It proposes the building on the Four Pillars of Education:

a. **Learning to Know:** It encompasses the tools one needs in order to become life-long learners. These include being able to read and work with numbers. One typically understands the progress of literacy by talking about first learning to read that must progress to reading to learn.

b. **Learning to Do:** It is the acquisition of the practical skills needed in the workplace along with the ability to contribute as part of a team and to demonstrate initiative.

c. **Learning to Live Together:** It refers to the development of understanding about others through dialogue which leads to empathy, respect and appreciation.

d. **Learning to Be:** It is the conviction that education should contribute to every individual’s complete development—mind and body, intelligence, sensitivity, aesthetic appreciation and spirituality. All people should receive in their childhood and youth an education that equips them to develop their own, critical way of thinking and judgment
so that they can make up their own minds on the best courses of action in the different circumstances in their lives. Education should enable people to live fulfilling lives.

1.4 HIGHER EDUCATION

Higher education in our country had its origin in the early Vedic age. Gradually crossing over different ages, today it is in the 10 + 2 + 3 national uniform structure of educational system. Higher Education is a long-term social investment aiming at promoting economic growth, culture, social cohesion, equality and justice. Education, being in the concurrent list, is jointly managed by the central and the State governments. Ministry of Education is the apex body that controls education at the central levels and Ministry of Education at the State level.

Higher Education should be individualised and personalised to the utmost and should constitute a preparation for self-learning. There will always be a deep and wide chasm between what one knows and what ought to be known and nothing can bridge this gap better than original thinking and capacity to learn aided by careful and well planned study. Education today has reduced itself into a ritual and a mediocre process of making students pass examination without any basic transformation within their inner personality as such. So, for excellence, proper motivation and the use of suitable study strategies are necessary.

Higher education opens multiple avenues to pursue education and to have specialized knowledge in the chosen area of study, after the completion of +2 systems. It is of great importance to pursue research and for the development of the nation.

1.4.1 Significance of Higher Education

Higher education is the culmination of the educational system and the fruits of education are enjoyed by the society and the nation only because of the entrants of higher education who are equipped with special knowledge, skill and attitude to solve the problems, be it a technological solution, sociological solution, psychological solution, or ideological solution. The highest form of learning ‘Problem Solving’ as propounded by Bruner’s theory of learning is attained by the general stream of learners at the school level finds its fulfillment only at the higher education. Further, acquiring
the basics of education is not enough to lead an economically prospective life in this world of globalization. It is in this context, higher education has its own privileged significance for varying value-added reasons and a few are highlighted below.

1.4.1.1 Pursuance of true knowledge

In higher education, the youth are provided learning opportunity to search for new knowledge and to find out the true facts. In pursuit of truth, an intensive and ardent attempt is made to establish the truth by making systematic investigative research efforts to prove the right knowledge, apart from acquiring the knowledge that forms the basis for research at the undergraduate and the post graduate levels.

1.4.1.2 Preparatory ground for experts and professionals

Subject experts and highly skilled work force is prepared at the higher education level. Higher education, prepares experts in the field of religion, philosophy, science, engineering, medical, law, teaching and administration. In the absence of higher education all this is not possible.

1.4.1.3 Development of leadership quality and work efficiency

Through higher education youth are prepared, to skillfully perform any work of their interest, aptitude, ability and capacity. It is generally the highly educated people are provided with leadership in different fields of life. From this perspective too, higher education is of great importance.

1.4.1.4 Development of broad attitude among youth

General education provides ordinary knowledge to people whereas higher education provides knowledge of international standard. A person with higher education develops the attitude and feelings of social equality, cultural and religious tolerance and internationalism. In this age of globalisation, higher education has become more important.

1.4.1.5 All-round development of the nation

Two fundamental resources are required for the development of a nation-first, natural resources and second, human resources. It is observed that more the availability
of high standard human resources in a country more is the development of the nation. The economic development of a country depends on industrialisation and industrialisation depends on scientists and technicians, engineers and administrators; and they are moulded through higher education. In this way higher education is a means for all round development of a nation.

1.4.2 Higher Education in India: After Independence

After Independence, this coincided with the post-second world war era. India made concerted efforts to improve higher education and the system grew rapidly after independence. By 1980, there were 132 universities and 4738 colleges in the country enrolling around five percent of the eligible group in higher education. Up to 1980, the growth of higher education was largely confined to liberal arts and science and commerce. Not only the government supported higher education by setting up universities and colleges, but also took over the responsibility of running the institutions set up through private sector, which were known as grant-in-aid institutions or private aided institutions. In such institutions, though the private sector financed major part of the capital costs, public subsidies were provided to them to meet a part of the recurrent costs and occasionally for some capital works. Public funding was accompanied with considerable regulation of private institutions by the Government (World Bank, 2003).

1.4.3 Current Scenario of Higher Education in India

Higher Education in India has evolved in distinct and divergent streams with each stream monitored by an apex body, indirectly controlled by the Ministry of Human Resource Development. 433 universities or institutions are mostly funded by the state governments. However, there are 44 important universities called Central Universities, which are maintained by the Union Government and because of relatively large funding, they have an edge over the others. Higher education is assuming a growing significance for developing countries, especially countries including like, India experiencing service-led growth. Higher education is all about generating knowledge, encouraging critical thinking and imparting skills relevant to this society and driven by its needs. Education general and higher education in particular, is a highly nation-
specific activity, determined by national culture and priorities. The growth of India's higher educational institutions has indeed been spectacularly rapid. The numbers of Universities have doubled since 1990-91 and enrolment has become more than doubled. But this has been at the expense of quality, increased rigidity in course design, poor absorption of knowledge and growing lack of access to laboratory facilities, journals and opportunities for field work, etc. The average Indian graduate compares poorly with her or his counterpart in most countries, including many developing ones. The so-called elite institutions are extremely selective and well-funded, but pose the problem of relevance and drain of talent. All this calls for reform, administrative changes, more funding, greater flexibility and quality improvement, etc.

1.5 Arts and Science College Students

Adolescence is the bridge between childhood and adulthood. It is a stage in development marked by amazing spurts in physical cognitive and social developments. The arts and science college students are at the adolescent stage that takes place between childhood and adulthood. Adolescence is the most crucial and significant period of an individual’s physical, mental, moral, spiritual, sexual and social outlook. According to Rabindranath Tagore, in the world of human affairs, there is no worse nuisance than a boy at the age of fourteen. He is neither ornamental nor useful. Stanley Hall describes the period of adolescence as a period of great stress and strain, storm and strife. Adolescence does not necessarily have to be a period of tension, anxiety, frustration and strains. These stresses and strains are the result of restrictions imposed by the culture on the adolescents.

1.5.1 Characteristics of Adolescence

Adolescents experience numerous developmental challenges at varying pace, including: increasing need for independence; evolving sexuality; transitioning through education and beginning employment; consolidating advanced cognitive abilities; negotiating changing relationships with family, peers and broader social connections; assuming legal responsibilities; and developing personal ethics and a healthy identity. There are particular characteristics of adolescent development, such as individuality from one’s parents and the development of cognitive reasoning abilities that can
influence the choice of interventions and mode of service delivery for a young person. Some young people may not be ready to face their difficulties along yet may also be in the process of separating from their parents and uncovering their own thoughts, beliefs and values and will discover that their beliefs are different from those of their parents. It can be challenges for both caregivers and caseworkers to support a young person’s path to independence. Knowing when to intervene in decision-making and exercise control versus when to allow the young person to make their own decision and experience the consequences create challenges.

1.5.1.1 Adolescence is an important period:

This is a crucial period of life as it has immediate effects on attitudes and behaviour. Some periods are important for their physical and some for their psychological effects. This period is important for both physical and psychological.

1.5.1.2 Adolescence is a transitional period

An adolescent is neither a child nor an adult. There is confusion at this stage of development about the roles one is expected to play. They have ambiguous status.

1.5.1.3 Adolescence is a period of change

The rate of change in attitude and behaviour parallels the rate of physical change. Most of the changes take place rapidly during this stage.

1.5.1.4 Adolescence is a problem age

This is an age of problems as adolescents are unable to cope up with them. Due to their inability, to cope with the problems, many adolescents find that the solutions are not always up to their expectations.

1.5.1.5 Adolescence is a time of search for identity

Adolescence creates an identity crisis and the major task for adolescents is to resolve this crisis successfully through the formation of identity. Failure to complete this process leaves the adolescent confused about roles and unable to cope with the demands of adulthood including the development of mature relationships with members of the opposite sex. Moreover, if the identity crisis is resolved positively, the
adolescent emerges with a firm sense of soft belief. If the crisis is resolved negatively, the adolescent is left in a state of confusion and the diverse roles that must be played by them are not integrated.

1.5.1.6 Adolescence is a dreaded age

Acceptance of such cultural stereotypes of teenagers as sloppy, unreliable individuals who are inclined toward destructiveness and anti-social behaviour also influence the self-concept and the attitudes of adolescents.

1.5.1.7 Adolescence is a time of unrealism

The adolescents have high aspirations which are responsible for the heightened emotionality as their fulfilment is not possible and they become disappointed and angry which, in turn create problems in their adjustment.

1.5.2 Developmental Characteristics of Adolescence

1.5.2.1 Physical development

Physiological changes at puberty promote rapid growth, the maturity of sexual organs and the development of secondary sexual characteristics.

1.5.2.2 Cognitive development

During early adolescence, precursors to formal operational thinking appear, including a limited ability to think hypothetically and to take multiple perspectives. During middle and late adolescence, formal operational thinking becomes well developed and integrated in a significant percentage of adolescents.

1.5.2.3 Social development

Social relationships in early adolescence are centered in the peer group. Group values guide individual behaviour. Acceptance by peers is critical to self-esteem. Most peer relationships are still in the same-sex. Young adolescents become interested in sexual relationships, but most contact is through groups. Some youth may begin to experiment with sexual behaviour, but many early adolescents are not sexually active with other youth. Social roles are still largely defined by external sources.
During middle and late adolescence, values become individualized and internalized after careful consideration and independent thought. Friends are more often selected on personal characteristics and mutual interests. The peer group declines in importance, individual friendships are strengthened and more youth ‘date’ in one-on-one relationships. The youth experiments with social roles explore options for career choice.

1.5.2.4 Emotional development

The early adolescent is strongly identified with the peer group. Youth depend upon their peers for emotional stability and support and to mould the youth's emerging identity. Self-esteem is greatly affected by acceptance of peers. Early adolescents are emotionally liable with exaggerated affect and frequent mood swings. They are very vulnerable to emotional stress. During middle and late adolescence, identity is more individualized and a sense of self develops and stabilizes that is separate from either family or peer group. Self-esteem is influenced by the youth's ability to live up to internalised standards for behaviour. Self-assessment and introspection are common.

1.5.3 The Role of Colleges in the Optimum Development of the Adolescents

The primary concern of the arts and science colleges should be to provide for its pupils a rich, pleasant and stimulating environment which will evoke their manifold interests and make life a matter of joyful experience.

1.5.3.1 Opportunities for the full development of the adolescents

The personality of the adolescent is an individual whole and he is to be educated in body, mind and spirit. A progressive college will aim to provide opportunities to adolescents to develop all the three in co-ordination with one another so as to develop the whole personality.

1.5.3.2 Recognition of individual differences

Individual differences of the adolescents must be appreciated and opportunities provided to them for the growth of their talents in accordance with their capacities. It must be remembered that no two adolescents are alike in native endowment. A college should endeavour to provide for each individual adolescent suitable opportunity to use
and develop his natural aptitude and inclination in the special course of studies chosen by him.

1.5.3.3 Responsibility for moral education

In the modern time, the college has been called upon to cater for moral education. An increasing importance is being given to character-building aspects in the colleges.

1.5.3.4 Freedom for self-development

For development of a creative mind, freedom for self-development and freedom for activity must be given in a college. This freedom will not be the license; it is sometimes supposed to be. It will be the controlled freedom of an individual living in a community of which the individual is one part and his fellow pupils and teachers are other parts. It will be a freedom from an exaggerated force or undue influence on the part of the teacher, a freedom for a particular pupil to use his particular talents and capabilities and to develop his personality along his own line, under the guidance of the teacher.

1.5.3.5 Development of scientific attitude

The college should develop spirit of scientific enquiry in the adolescents. Their ability to use information should be developed. They may be given training to apply information, to judge, to be able to see the consequences of courses of action, to bring an active forward looking intelligence to bear on a solution and to think creatively.

1.5.3.6 College life closely connected with outside

The college life should be closely related to the real life of the community so that the adolescents may be trained to grapple with problems which they will meet in later life.

1.5.3.7 Value of interdependence

A college must provide situations in which the adolescents may be gradually led to understand the relationships in community, country and in the world at large.
1.5.4 Significance and Understanding of Arts and Science College Students

The progress of a country depends on the maximum exploitation of its human resources. In this context, it is great significance to note that a major part of a country’s population ranges between the ages 12 to 19 years. The country’s success, therefore, in various fields of life depends to large extent on the proper education, guidance and training of adolescents. Every teacher and parent must know about the nature and changes that emerge in this transitional period from childhood to adulthood. By understanding the needs and the problems of the adolescents, the parents and the teachers can make efforts to provide a suitable environment for the growth and development of the adolescents. Appropriate curriculum, college policies and methodologies of teaching should be suitably designed so as to meet the many sided requirements of the adolescents.

Learning is one of the fundamental processes underlying college student’s behaviour. It involves acquisition of new behaviour. The individual learns new ways of performing things as well as new ways of thinking to adjust within the environment. Learning of the arts and science college students may influence habits, customs, attitudes and emotional reactions of an individual. Learning requires many things on the parts of learner, like his ability to schedule his time, the plan of study, concentration and mental review. Learning can and should be a lifelong process and it should not be defined by what happened early in life or at the college. The learners have the ability to transfer what they have learnt in one situation to another. This relationship has a great significance for any educational practice as it lends importance and faith to the usefulness of formal education. Learning becomes functional only when it enables the students to feel confident that they would use their experiences and skills obtained in the school and colleges in their day-to-day life. The very existence of educational institutions is based on the assumption that the knowledge, skills and attitudes developed by them in the students will be transferred to life situations.
1.5.4.1 Learning enhancement factors

The knowledge, skill, trait, motive and self concept learnt by people that bringing out a specific behaviour for performance can be learnt. But there are certain factors which encourage the learning. If such factors are favourable then the learning is likely to be positive. Such factors can be classified into five, namely (i) Learners Characteristics, (ii) The Study Design, (iii) The Teacher Capabilities, (iv) Classroom Environment and (v) Transfer of Learning.

(i) Learners characteristics

Learners characteristics are trainability, attitude and self concept of the learners. Trainability means the learners preparedness for the learning to happen. The previous education and experience contribute to the preparedness.

(ii) The study design

The features of the study design play an important role in maximizing the learning. The programme should have been designed scientifically by keeping in mind the learning objective, the learners’ characteristics and the contextual constraints so as to ensure the targeted learning.

(iii) The teacher capability

The teacher or facilitator is an important person in the learning process. The knowledge, skill, trait, self concept and motive that he brings with him to the learning environment can make or break the success of learning. Even in a self study learning approach, the teacher or facilitator plays a role in the way he has developed the learning materials. Therefore, the teacher should be selected scientifically, trained appropriately, motivated enough with proper service conditions and provided with development opportunities and feedback to improve their capabilities continuously.

(iv) Classroom environment

The classroom environment includes both physical environment and psychological environment. The things like surroundings, settings and location are the components of physical settings.
(v) Transfer of learning

Transfer of learning means realizing the learned abilities of training in the form of performance in the classroom or the ability of the learner to successfully use the learned capabilities for task performance in the society.

1.6 STUDY SKILLS

Study skills is a term referring to any kind of methods or approaches in learning. Study skills are often referred to study strategies. In other words, study skills are the ability of any learner to study successfully depends to a great extent on his fundamental study skills, that is, his ability to concentrate, to perceive correctly and accurately, as well as the ability to remember what has been perceived. Study skills are very important in helping students to learn and achieving good gadgets. These skills are easy to learn in short time and applicable to all kinds of subjects.

Study skills encompass a wide range of behaviour that students can perform before, during and after learning to help them retain and apply information presented in the classroom or at home. It is important for teachers and parents to promote and monitor the development of these skills, because study skills are most effective when students use them to come up with their own ways of organizing their studying.

As per the feeling of educators, the study process can be more productive, if learners are taught specific skills and techniques which will formalize the study process and there by make it more efficient. In the traditional sense, study skills would be the tools through which the college student acquires subject knowledge. Study skills are defined as those techniques such as summarizing, note-taking, outlining or locating material which learners employ to assist themselves in the efficient learning of the material at hand.

Dechant (1970), listed study skills in five categories: (a) dictionary, (b) location and reference, (c) use of graphics, (d) use of library resources and (e) organisation. Hamblin (1981) listed that the study skills are listening, reading-for recall and generation of new ideas, presentation of work, active methods of homework, planning and target-setting, essay writing and answering questions, revision and exam
techniques, note-taking, motivation, raising aspirations and evaluation of one’s own work.

Gettinger and Seibert (2002) contributed a significant perspective by proposing that “study skills be grouped into four clusters are (a) repetition-based, (b) procedural, (c) cognitive-based and (d) metacognitive skills”. Amenkhienan and Kogan (2004) equated student achievement with the student’s level of persistence, which parallels effective work habits and study skills. Sedlacek (2005) defined that “study skills and learning styles are good predictors of college success”. Merriam-Webster's Online Dictionary (2007) defined study skills as the "application of the mental faculties to the acquisition of knowledge."

1.7 BASIC STUDY SKILL TECHNIQUES

Studying is the primary factor in school and college learning. It takes place through home-work, self study, assignments, supervised study and special projects under the guidance of a teacher of counsellor. Study skills are cognitive skills amenable to manipulation and improvement through cognitive training. The need of the pupils to develop their study skills is implicit in the case of autonomous study as an educational goal. The most commonly taught study skill techniques are Robinson’s (1940) SQ3R method. It is useful from junior high school age to adults. SQ3R and SQ4R consist of the following steps.

(a) Survey: Read the preface, table of contents and the chapter summaries. Read all the main headings and subheadings within the chapters. Carefully examine any graphs or pictures and read the captions.

(b) Question: After completing survey, again one goes through the same parts in just surveyed and ask ourselves questions about each headings can be converted into a question form.

(c) Read: Read and search the answers for the posed questions.

(d) Recite: Reciting means to ask and answer questions about the information. At the end of every section or paragraph recite the answer of the above questions.
(e) **Review:** The review consists of reciting your way through the material again. After successful completion of the chapter, read the notes and recite the major points under each heading or topic.

The fourth R (SQ4R) is added by Thomas and Robinson in 1972. They expanded the ‘recall’ into Reflect and Recite.

(f) **Recite:** Explain aloud to our self or another person what we have read. Use study guide; answer question at the end of the chapter.

(g) **Reflect:** It is to jot down cue phrases in outline form on a sheet of paper. Make these notes very brief.

### 1.8 DEVELOPING GOOD STUDY SKILLS

Learning is modified through experience. The process of learning is influenced by a variety of personal factors such as sensation and perception, fatigue and boredom, age and maturation, emotional conditions, needs, interests, motivations, attention, intelligence, attitude, aptitude etc. Besides personal factors, the environmental factors also influence the learning. The relationship of the member with the society and the surroundings may effect the development of a child and the way the child learns. Effective learning depends upon the learner’s ability of time scheduling, concentration, listening skill, note-taking skill, reading skills, writing skills, efficient method of learning, underlining the use of adequate skills in examinations. There is evidence that systematic study skills instruction does improve academic performance. Study skills entail a beneficial study environment, self management and time and stress management as well as more traditional skills of effective listening, reading, comprehension, note taking and sophisticated writing skills. Motivation is an essential for instilling study skills. Development of good study skills should be addressed at every educational level. Programmes to enhance teachers’ preparation to teach study skills dissipate quickly demanding a strong commitment from schools and colleges, administrators, teachers, parents and students to make study skills instruction maximally effective.
1.8.1 Time Scheduling

Scheduling of the time is one of the difficulties for students. This is threefold (1) the students waste their time in shifting from one activity to another, (2) they have a difficulty in settling down to work and (3) they feel guilty because their thought is that they don’t study enough. Proper study methods help to overcome these problems. To overcome these problems, it is necessary to draw a study schedule. It shows their punctuality. For planning the time schedule, some principles can be followed:

(i) Fix up periods of study session for a day.
(ii) Study the same subject at the same time of the day and also fix the time for every subject in the schedule.
(iii) Clear the assignment work after the class in which it is given.
(iv) Allot more time to difficult subjects than easy ones.
(v) Utilize the leisure periods for study.

1.8.2 Concentration

Concentration is the ability to train the mind to focus all its attention exclusively on one point. It comes naturally to some people, while others have to work to build them up. Concentration ability can be acquired by any of us. Concentration is the backbone for effective learning. Concentration can be acquired through good environment and also depends upon one’s aptitudes. Concentration also depends upon some skills. Yoga and Dhyana also improve the concentration.

1.8.3 Listening and Note Taking

Listening to lectures is a concentrated activity. The college students try to anticipate the teachers comments or instructions and determine the structure of the lecture. If they listen well they may improve their study, speaking and writing skills. Note taking is one of the keys to succeed in the college. The college students should devote a considerable amount of time reviewing information discussed during classroom lectures. It is very difficult remembering specific details from classroom lectures without good notes. Proper note taking is a part of study skills and has to be improved and developed. Formerly the notes should be written on loose-leaf sheets.
This is easy to arrange and rearrange in whatever way it is desired. Now-a-days, they write every topic or different subjects on the same paper. With that they face many problems and it proves to be a wasted effort. Note taking is a crucial aspect of the study process. Some of the main characteristics of note taking are:

(i) Write it clearly and legibly, show that they can be understood even after a lapse of time.
(ii) Use coloured pencils for underlining the main lines and diagrams wherever necessary.
(iii) Keep the text as reference, while making notes, because no point should be over looked.
(iv) Divide the whole notes into some meaningful portions.
(v) Prepare a brief note on the same day with the points that have been noted down.
(vi) Notes should be prepared with all available sources latest facts and pictures.

1.8.4 Reading Skill

Reading skill is one of the important factors to cultivate the study skills. One who reads what, where, how and when gives us an idea concerning the study habits of a person. At the college level, reading should be cultivated assiduously. Reading gives both power and pleasure. Reading is ultimately individual attainment and it puts the learner firmly on his feet. Efficient library services create an interest in reading. The teachers and parents should take patience and they have to see to it that their children acquire good reading habits at their formative period of life.

1.8.5 Preparation for Examination

Preparing of examination involves a high release of energy and an unusual degree of focus, which produces a very intense kind of learning. The pressure of exams stimulates the students to draw together the strands of learning and to acknowledge areas that need more work: This pressure can be viewed as negatively as a stress and the likelihood of failing and positively as a challenge encouraging one to heighten his own expertise.
Steps for Preparing for Examination

(i) *Timetable of Study:* Timetabling study periods is a vital part of exam preparation as it is a good way to get “down to business”.

(ii) *Organisation of Notes:* Begin the task of systematically structuring of notes. This may involve re-writing them so that they are easier to read and more accessible.

(iii) *Revision:* Revision must be a regular part of study routine, right from day one of the course.

(iv) *Select what to Revise:* Select which topics are to be revised.

1.8.6 Writing Skill

Writing is also an important part of the study. It abstracts what is read and therefore needs concentrated attention. Some of the features or characteristics of good writing skills are:

(i) Write the expressions correctly.

(ii) Keep in the mind, sense of responsibility at the time of written work.

(iii) Command over language, structure and vocabulary through writing compositions.

(iv) Learn good writing skills under proper guidance and effective supervision.

(v) Find out wrong usage of terms and in order to over come them practice correct forms.

In general, most efforts directed at improving study skills and indirectly academic achievement, implicitly, assume that study skills are cognitive skills amenable to manipulation and improvement through cognitive training. Cognitive skills in general includes different tasks, such as memory tasks, reading text, writing, language acquisition, problem solving, but also performing calculations, measurements, mathematical modeling, drawing, etc. Cognition not only includes the observation and manipulation of objects, entities, reality, but also the processing of information that is, of signs like words or figures, often coupled to previously learned skills.
1.9 METACOGNITION

Metacognition is the art and science of knowing or cognition of cognition. It is the process of thinking and also regulation of one’s own thinking process and learning process. It is always identified in terms of thinking, knowing and learning and in interrelation and integration of these components. Metacognition is probably the most actively invested cognitive process in contemporary research in developmental psychology. Metacognition is a form of cognition which involves active control over cognitive process. Metacognition is an individual’s knowledge of their own cognitive processes and their ability to control these processes by organizing, monitoring and modifying them as a function of learning. It refers to the ability to reflect upon the task demand and independently select and employ the appropriate reading, writing, mathematics or learning strategy.

Metacognition refers to the self-monitoring by an individual of his or her own unique cognitive processes. Generally, metacognition refers to having both awareness and control over one’s learning and thinking. Specifically, a learner must have awareness over what one brings to the learning experience, such as his one’s own cognitive ability and learning styles and preferences.

According to John Dewey (1910) proposed two distinct metacognitive phases of reflective thought conscious recognition of a state of perplexity, active thinking process to relieve this difficulty. According to Merriam Webster’s Collegiate Dictionary (1977), Metacognition is awareness or one’s own learning or thinking processes.

J. H. Flavell (1976) invented the word ‘Metacognition’. He describes it in these words: Metacognition refers to one’s knowledge concerning one’s own cognitive processes or anything related to them. For example, the learning-relevant properties of information or data. Ann Brown (1978) described that a well-known researcher in the field of psychology defines metacognition as the understanding of knowledge, an understanding that can be reflected in either effective use or overt description of the knowledge in question. Anderson (2001) defined that empirical support for the value of this educational emphasis is derived from the finding that metacognition constitutes
a fundamental predictor of academic achievement. Marchant (2001) equated that the metacognitive skills involve knowing what to do and how and when to do it.

1.9.1 Models of Metacognition

According to the model presented by Gregory Schraw and David Moshman (1995), metacognition is a multidimensional phenomenon and it is domain-general in nature and metacognitive knowledge and regulation can be improved using a variety of instructional strategies. Gregory Schraw makes a distinction between two components of metacognition, knowledge of cognition and regulation of cognition.

1.9.1.1 Knowledge of cognition:

It refers to what an individual knows about their own cognition or about cognition in general knowledge involves the ability to understand how to match a particular task with one's own ability. To make this match, learners must have explicit knowledge of three aspects of learning: (i) they must understand the educational task involved, (ii) they must be aware of their skills, abilities, strength, weaknesses and particular learning styles and preferences and (iii) they must know how or when to apply this knowledge to various tasks.

It usually includes three different kinds of metacognitive awareness: declarative, procedural and conditional knowledge

(i) **Declarative knowledge:** It refers to knowing about things. It includes knowledge about oneself as a learner and about what factors influence one’s performance.

(ii) **Procedural knowledge:** Procedural knowledge refers to knowing how to do things. It refers to knowledge about the execution of procedural skills. Individuals with a high degree of procedural knowledge use skills more automatically, are more likely to sequence strategies effectively and use qualitatively different strategies to solve problems.

(iii) **Conditional knowledge:** It refers to knowing the why and when aspects of cognition. Conditional knowledge refers to knowing when and why to apply various
cognitive actions. It may be thought of as declarative knowledge about the relative utility of cognitive procedures.

1.9.1.2 Regulation of cognition: It refers to metacognitive activities that help control one’s thinking or learning. Although a number of regulatory skills have been described in the literature, three essential skills are included in all accounts: planning, monitoring and evaluation.

(i) Planning: Planning involves the selection of appropriate strategies and allocation of resources affecting performance.

(ii) Monitoring: Monitoring refers to one’s continuous awareness comprehension and task performance.

(iii) Evaluating: Evaluation refers to the process of appraising the final outcome of learning. It involves an assessment of one’s initial goals and final conclusions, judging whether the learning strategy employed brought about the expected outcome. Next time, it also affects the learner’s plans for another learning experience.

1.9.2 Assessment of Metacognition

Metacognitive assessment depends on self-reports. While assessing one’s metacognition, the individual may be asked to report an event. With the retrospective type of report, it may be asked to report concurrent or conversant recording on the life
experience, may be asked to answer a questionnaire to record their thinking. After the completion of the task, they evaluate one’s self through their self-estimations. Brown states the regulatory skills relatively unstable, rarely stable and age independent. Mostly all metacognition assessment tools depend on:

(i) **Feeling of knowing judgment:** The feeling of knowing, after failing to answer a test item, individuals are asked to judge how well they think would do in a multiple choice recognition test in which one of the alternatives was the correct answer.

(ii) **Ease of learning judgment:** Ease of learning, also called confidence judgments or self-estimates are another measure of metacognition individuals predict, given a test’s requirements, how well they think they will perform on it.

(iii) **Judgment of learning:** Judgment of learning have individual does predict how well he/she did on a test just completed. Predicted and actual performances are compared on each of these measures of which the absence of a discrepancy is assumed to indicate access to knowledge, about one’s self and cognitive abilities self-estimates are far better than the verbal written reports.

### 1.9.3 Significance of Metacognition

Metacognition is an essential component of successful learning because it enables individual to better manage cognitive skills and enables them to determine weaknesses. It can be corrected through the construction of new cognitive skills. There are marked differences in the metacognitive abilities of capable and less capable learners. The most effective learners are self-regulating learners, the adaptation of learners are able to plan, to monitor and to modify cognition at various stages during knowledge acquisition.

The learners with effective metacognitive skills accurately estimate their knowledge in a variety of domains, monitor on-going learning strategies, update knowledge and develop effective plans for future learning opportunities. Helping individual is to understand what they will bring in the learning experience and that the metacognitive process can be developed through the use of relevant learning strategies.
that are planning, monitoring and regulating behaviour, learning performance often dramatically improves. By utilising and modeling metacognitive processes during instruction, a learner can achieve more durable and transferable learning. Many students come to college without the knowledge or skills to properly engage in metacognitive learning.

1.10 METACOGNITION AND STUDY SKILLS

Study skills can be described as ‘learning how to become an effective learner and how to manage learning. Leaning is the acquisition of knowledge, skills and values which is continuous process from the cradle to the grave. A day-to-day learning of students at home, school, community or college consist that study skills are cognitive skills amenable to manipulation and improvement through cognitive learning. According to Webster’s dictionary, cognition as ‘the act or process of knowing in the broadest sence; specifically, an intellectual process by which knowledge is gained from perception or ideas’. Metacognition is a form of cognition which involves active control over cognitive process.

Metacognition is primarily concerned with reasoning processes that are necessary to solve problems that do not have any completely developed or automated procedures to be followed. It is totally related to individual capacities. Here, the college students should be motivated to develop certain study skills which instigates achievement. The college students who have metacognition would have developed study skills. They do not get affected by the peer group behaviour. They direct themselves towards their knowledge thirst, whereas the teachers could observe the rest as timid, keeping themselves aloof and have little participation in classroom discussion, such behaviours indicates the prevalence of fear and inferiority complex among students. It does not help them to have learning in metacognitive way. They look at the learning components as figures and numbers. They do lack interaction with the material they are to learn. This learning or study behaviour will take them to prepare a lot of notes whenever they read books, for they tend to use it during examinations. By now, they might have shed off fear and shyness. They start listening to the subject discussions of their friends and gather important points from them. No more they
hesitate to approach their teachers, if they face any doubt in texts. They do develop repeated reading to make sure that they are thorough in a particular subject. They will stop articulating the whole text in the twelfth hour of the examination. Rather they make use of the summary they had prepared for last minute brushing up while preparing for examinations, they do collect previous year question papers, analyse the pattern, attend the most repeated and pickup confidence to face the examinations. According to Flavell, metacognition refers to one’s knowledge concerning one’s own cognitive process or anything related to them. It is necessary for the college students’ ability to think about their thinking and to be aware of their learning goals promoting a more authentic leaning environment in the arts and science colleges.

1.11 SOCIAL INTELLIGENCE

Social intelligence is the ability to get along well with others and to get them to cooperate with you. Sometimes referred to simplistically as "people skills," Social intelligence includes an awareness of situations and the social dynamics that govern them and knowledge of interaction styles and strategies that can help a person achieve his or her objectives in dealing with others. It also involves a certain amount of self-insight and a consciousness of one's own perceptions and reaction patterns.

Social intelligence is a combination of awareness of the feelings; needs and interests of others-sometimes called our social radar- plus an attitude of generosity and consideration and a set of practical skills for interacting successfully in various situations. Social intelligence is one of at least six distinct 'intelligences' or dimensions of human performance now recognized by scientists and educators. Social intelligence is the mental ability to understand the motives, emotions, intentions and actions of other people and to motivate and influence the behaviour of (groups of) people. Persons with high social intelligence are usually good in recognizing subtle facial, verbal and behavioural clues in other people that can indicate their emotions and intentions. Social intelligence includes the following abilities:

(a) The ability to observe and interpret very subtle facial expressions that signal particular emotions or intentions in other people;
(b) The ability to detect and understand hidden meanings in verbal expressions of other people - such as when people say one thing, but actually mean the opposite;
(c) The ability to interact with other people verbally and through gestures in such a way that these partners feel comfortable relaxed and understood.
(d) The ability to intentionally provoke other people through cynicism, mockery or insults;
(e) The ability to tell and understand jokes;
(f) The ability to motivate other people to actions by providing verbal encouragement;
(g) The ability to incite rage, fanaticism or (religious) ecstasy in other people;
(h) The ability to coordinate one's actions with the behaviour of other people.

According to Edward L. Thorndike (1920), social intelligence was first defined in 1920 as the ability to act wisely in human relationships. Edward L. Thorndike defined social intelligence as the ability to understand others and act wisely in human relations. Human relations as commonly visualized, are day to day dealings with other people at house and at work. The success or failure of a task depends on our handling the situation and the people involved with the situation. Thorndike and Stein (1937) defined that “Social intelligence as the ability to understand and manage people. Marlowe (1986) expanded the definition of social intelligence to include cognitive aspects such as empathy skills and indicated the multidimensional nature of cognitive social intelligence. Gardner (1993) stated that social intelligence is identified as the capacity to relate with others, while emotional intelligence is more about awareness and management of oneself. Goleman’s (2007) social intelligence model identifies two key components: (i) social awareness, which includes empathy for and attunement with others and knowing how the social world works and (ii) social facility, which mediates effective social interactions by getting in sync with others and having the presence to shape social outcomes.

1.11.1 Dimensions of Social Intelligence

Social intelligence is comprised of three different dimensions, namely social information processing, social skills and social awareness.
1.11.1.1 Social-information processing

Social information processing models have been proposed to understand links between children’s cognitions and their behaviours. Much attention has been paid to the social information processing patterns of aggressive children. However, these models may also prove useful in understanding the social development of other groups of maladjusted children.

1.11.1.2 Social skills

Social Skills are most often thought of as a set of skills that allow people to communicate, relate and socialize with others. One should note that these skills may be defined differently from one culture to another. Social skills include both verbal and nonverbal forms of communication. They often are the way others determine a person's status, consider people as potential friends or mates and consider them for employment or promotions in the workplace.

1.11.1.3 Social awareness

Social awareness is awareness of the social situation in a group or community in a shared environment, which can be physical, virtual or both: people’s roles, activities, positions, status, responsibilities, social connections and group processes. Social awareness encompasses awareness of social situation in general and social situation at a certain moment. The knowledge about the general social situation can be achieved by answering questions about the group structure, relations and interactions between group or community members, their roles and associated resources. The awareness or knowledge of a general social situation is acquired by collecting and analyzing awareness information from social situations at a certain moment and
answering questions like who is present, who is available and who is doing what and talking to whom at the moment.

1.11.2 Cognitive Performance Model of Social Intelligence

According to the German Psychologists Weis et al. (2008) proposed a performance model of social intelligence that incorporated the aforementioned structure of cognitive abilities. The classifications of cognitive operations and further taxonomic considerations of the content will be addressed subsequently.

1.11.2.1 Social understanding

Social understanding requires individual to understand or interpret social stimuli against the background of the given social situation. The present definition excludes the more initial cognitive functions of recognizing or, in other words, perceiving social stimuli that are classified as social perceptual abilities.

1.11.2.2 Social memory

Guilford (1967) specified memory of behavioural contents as social memory. In other words, the social memory was the storing and recall of objectively given social information that can vary in complexity.

1.11.2.3 Social perception

The social perception represents a relevant ability domain. Both social understanding and social memory require the prior perception of relevant stimuli. In real life, this perception usually happens within a very short period of time or with restricted access to the relevant cues.
1.11.2.4 Social creativity

The social creativity refers to ‘the ability to imagine possible outcomes of a setting or to create recognizable categories of behavioural acts’.

1.11.2.5 Social knowledge

Every social entity has its own social standards so that possibly diverse social contents are taught as the “correct” knowledge. Thus, what is correct can only be judged with respect to the present social contexts and the social group. This implies that the construction of a social knowledge test requires a thorough definition of the social entity of which knowledge should be specified, a comprehensive classification of possible social situations within this entity and subsequently, a rule according to which knowledge contents can be judged as right or wrong.

1.12 SOCIAL INTELLIGENCE AND STUDY SKILLS

According to Charles E. Skinner, “Learning is the process of progressive behaviour adoption”. The success of this process depends only upon the group factors related to the learner. Intelligence is the main factor that influences learning. The proof for this factor is very commonly found in the classroom. Intelligence is the ability to adapt to the environment and to solve problems. Besides the personal factors, the environmental factors also influence the learning. The relationship of the member with the society and surrounding may give effect for the development of a child and the way he learnt. The psychologists may able to tell to how effectively learning takes place. Effective learning depends upon the learners’ ability of learning by reading skills, writing skills, efficient method of learning, memory, concentration, under lining and use of adequate skills in examinations. The study skills are strategies and techniques that enable to make the most efficient use of time, resources and academic potential and social intelligence is the mental ability to understand the motives, emotions intentions and actions of other people and to motivate and influence the behaviour of the people. The investigator studied whether the study skills is related to social intelligence of arts and science college students. The social intelligence which influences the quality and quantity of the arts and science college students can be improved by creating good study skills, which students can stimulate towards study. The study attempted to
identify the relationship between social intelligence and study skills of arts and science college students.

1.13 SIGNIFICANCE OF THE STUDY

Generally, higher education is called as a social investment of economic growth, culture, social interaction, social cohesion, equality and justice. In this regard, arts and science colleges provide the students with essential skills in oral and written communication but more importantly with the ability to think critically, to integrate a wide range of areas of knowledge and to engage in more sophisticated modes of analyses and interpretations. Ultimately, education in the colleges gives the students courage and passion to bring their creativity and wisdom to their communities, nation and world at large. This prepares them to make new inventions in the field of knowledge and sciences, since higher education is of higher standards than the general education and the intrinsic meaning of higher education is a specialised education of highly talented pupils; being cognitively sound, showing rich amount of social intelligence and expressing various kinds of skills with special reference to study behaviour. Also the primary concern of the colleges is to provide the learners with rich, pleasant and stimulating environments which would grant them opportunities to use and develop their cognitive abilities. Besides, a college must provide situations in which the students be gradually led to understand the relationships in community in the name of social intelligence.

Bearing in mind the nature of the arts and science colleges, the present scenario of higher education and the current requirements of the higher educands, the investigator, being a teacher educator with an idea of undertaking a research on the arts and science college students have taken three interrelated variables namely metacognition, social intelligence and study skills. Generally, metacognition refers to having both awareness and control over one’s learning and thinking, since metacognition among higher education learners has been linked to a wide variety of positive academic outcomes namely better results and better performance in the various tests of intelligence. So, it is important for the teachers to be aware of the metacognition, the pattern of measuring the metacognition and the methodology of
inculcating those skills in the college students. The study conducted by Jayapraba (2008) revealed that training in metacognition had positive effects on the academic achievement in biology. Also the study indicated that the biology learners who were to develop skills in learning found an enhancement in their self learning competency and an improvement in their performance. The study confirmed that metacognitive process could be developed through the use of relevant learning strategies namely planning, monitoring and regulating behaviour. By utilizing the metacognitive process during instruction, a learner could be made to achieve more suitable and transferable learning.

Apart from this, to be a good student, it is necessary to be able to read, memorise and write fastly and effectively. It encompasses a wide range of behaviour that students could perform during and after learning. It is an implied fact that study skills are cognitive skills amenable to manipulation and improvement through proper cognitive training. From a teacher’s point of view, study skills could be more productive if learners are taught and trained in specific study skills which would formlise the study process and study habits and thereby enable the learners to express themselves more efficiently. This is so evident that systematically instructed study skills improve academic performance among college students. The study conducted by Thomas Alexander and Annaraja (2009) revealed that there was a significant influence of study skills on the scholastic performance of problem students.

By accepting ‘study skills’ as an influencing factor on learning, it is necessary to study whether it is related to the other research variables namely metacognition and social intelligence. On the one hand, the intelligence of various kinds influences the learning and on the other hand, the relationship of the learners with the society effects the development of the learners and the way they learn. Apart from numerous personal factors and various other environmental factors, the intelligence of a learner about the society profoundly influences the process of learning as it is the mental ability to understand the motives, emotions and actions of others and also to influence their behaviour. The study conducted by Khudaverdyan (2009) indicated that there was significant relationship between social intelligence and academic outcomes of secondary school students. Based on the above discussion regarding the variables
namely metacognition, study skills and social intelligence and by examining a few selected demographic characteristics of arts and science college students, the investigator makes an attempt to gain valuable insight into the relationship that exists among the above mentioned variables and to find out the influence of metacognition and social intelligence on study skills of arts and science college students.

1.14 STATEMENT OF THE PROBLEM

Metacognition is the awareness of one’s cognitive process as well as the ability to develop a plan for achieving and evaluating one’s effectiveness of reaching a goal. Social intelligence is the mental ability to understand the motives, emotions, intentions and actions of others and to motivate and influence their behaviour and the study skills are cognitive skills amenable to manipulation and improvement through cognitive training. Bearing all the values and the significance of metacognition, social intelligence and study skills of arts and science college students, the investigator wishfully makes an attempt of finding out the influence of metacognition and social intelligence on study skills of arts and science college students.

1.15 TITLE OF THE PROBLEM

The title of the study is precisely stated below.

“Influence of Metacognition and Social Intelligence on Study Skills of Arts and Science College Students”

1.16 OPERATIONAL DEFINITIONS OF THE TERMS

The investigator adopted the following definitions for the terms used in this title.

Influence

It refers to the relationship of metacognition and social intelligence with the study skills of arts and science college students.

Metacognition

‘Metacognition’ refers to one’s knowledge concerning one’s own cognitive processes or anything related to them (J.H. Flavell, 1976).
According to the investigator, metacognition refers to the knowledge, control and awareness of arts and science college students in their learning process and self-monitoring.

**Social Intelligence**

“Social Intelligence as the ability to understand others and act wisely in human relations” (Edward L. Thorndike, 1926).

According to the investigator, the social intelligence refers to the awareness of situations and the social dynamics that govern them and the knowledge of interaction styles and strategies that can help arts and science college students to achieve their objectives in dealing with others.

**Study Skills**

‘Study skills’ is a term referring to any kind of methods or approaches in learning. Study skills are often referred to study strategies. In other words, study skills are the abilities of any learner to study successfully and they depend to a great extent on his fundamental study skills; his ability to concentrate, to perceive correctly and accurately and to remember what has been perceived. These skills are easy to learn in short time and applicable to all kinds of subjects.

By the term ‘Study Skills’, the investigator means about the study strategies, methods and abilities of the arts and science college students in managing the time and other resources to meet the demands of the academic tasks.

**Arts and Science College Students**

The arts and science college students, who are doing graduation and post graduation in the colleges in Tiruchirappalli that are affiliated to Bharathidasan University, Tiruchirappalli, Tamil Nadu State, South India.
1.17 **OBJECTIVES OF THE STUDY**

The study was conducted with the following objectives.

1.17.1 **General Objectives of the Present Study**

1. To find out the level of metacognition of arts and science college students.
2. To find out the level of social intelligence of arts and science college students.
3. To find out the level of study skills of arts and science college students.
4. To find out the relationship between metacognition and social intelligence of arts and science college students.
5. To find out the relationship between metacognition and study skills of arts and science college students.
6. To find out the relationship between social intelligence and study skills of arts and science college students.
7. To find out the influence of metacognition and social intelligence on study skills of arts and science college students.

1.17.2 **Specific Objectives of the Present Study**

1.0 **Metacognition of Arts and Science College Students**

1.1 To find out whether there is any significant difference between men and women students of arts and science colleges in their knowledge of cognition, regulation of cognition and metacognition in general.

1.2 To find out whether there is any significant difference between arts group and science group students of arts and science colleges in their knowledge of cognition, regulation of cognition and metacognition in general.

1.3 To find out whether there is any significant difference between students from rural and urban arts and science colleges in their knowledge of cognition, regulation of cognition and metacognition in general.

1.4 To find out whether there is any significant difference among the students of Men, Women and Co-education arts and science colleges in their knowledge of cognition, regulation of cognition and metacognition in general.

1.5 To find out whether there is any significant difference among the students of Government, Government aided and Self-financed arts and science colleges in
their knowledge of cognition, regulation of cognition and metacognition in general.

1.6 To find out whether there is any significant association between fathers’ education and knowledge of cognition, regulation of cognition and metacognition of arts and science college students.

1.7 To find out whether there is any significant association between mothers’ education and knowledge of cognition, regulation of cognition and metacognition of arts and science college students.

1.8 To find out whether there is any significant association between fathers’ annual income and knowledge of cognition, regulation of cognition and metacognition of arts and science college students.

1.9 To find out whether there is any significant association between mothers’ annual income and knowledge of cognition, regulation of cognition and metacognition of arts and science college students.

2.0 Social Intelligence of Arts and Science College Students

2.1 To find out whether there is any significant difference between men and women students of arts and science colleges in their social information processing, social awareness, social skills and social intelligence in general.

2.2 To find out whether there is any significant difference between arts group and science group students of arts and science colleges in their social information processing, social awareness, social skills and social intelligence in general.

2.3 To find out whether there is any significant difference between the students from rural and urban arts and science colleges in their social information processing, social awareness, social skills and social intelligence in general.

2.4 To find out whether there is any significant difference among the students of Men, Women and Co-education arts and science colleges in their social information processing, social awareness, social skills and social intelligence in general.

2.5 To find out whether there is any significant difference among the students of Government, Government aided and Self-financed arts and science colleges in
their social information processing, social awareness, social skills and social intelligence in general.

2.6 To find out whether there is any significant association between fathers’ education and social information processing, social awareness, social skills and social intelligence of arts and science college students.

2.7 To find out whether there is any significant association between mothers’ education and social information processing, social awareness, social skills and social intelligence of arts and science college students.

2.8 To find out whether there is any significant association between fathers’ annual income and social information processing, social awareness, social skills and social intelligence of arts and science college students.

2.9 To find out whether there is any significant association between mothers’ annual income and social information processing, social awareness, social skills and social intelligence of arts and science college students.

3.0 Study Skills of Arts and Science College Students

3.1 To find out whether there is any significant difference between men and women students of arts and science colleges in their time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills in general.

3.2 To find out whether there is any significant difference between arts group and science group students of arts and science colleges in their time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills in general.

3.3 To find out whether there is any significant difference between the students from rural and urban arts and science colleges in their time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills in general.

3.4 To find out whether there is any significant difference among the students of Men, Women and Co-education arts and science colleges in their time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills in general.
3.5 To find out whether there is any significant difference among the students of Government, Government aided and Self-financed arts and science colleges in their time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills in general.

3.6 To find out whether there is any significant association between fathers’ education and time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills of arts and science college students.

3.7 To find out whether there is any significant association between mothers’ education and time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills of arts and science college students.

3.8 To find out whether there is any significant association between fathers’ annual income and time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills of arts and science college students.

3.9 To find out whether there is any significant association between mothers’ annual income and time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills of arts and science college students.

4.0 Relationship between Metacognition and Social Intelligence of Arts and Science College Students

4.1 To find out whether there is any significant relationship between knowledge of cognition, regulation of cognition of metacognition and social intelligence of arts and science college students.

4.2 To find out whether there is any significant relationship between knowledge of cognition, regulation of cognition of metacognition and social intelligence of men students of arts and science colleges.

4.3 To find out whether there is any significant relationship between knowledge of cognition, regulation of cognition of metacognition and social intelligence of women students of arts and science colleges.
4.4 To find out whether there is any significant relationship between knowledge of cognition, regulation of cognition of metacognition and social intelligence of arts group students of arts and science colleges.

4.5 To find out whether there is any significant relationship between knowledge of cognition, regulation of cognition of metacognition and social intelligence of science group students of arts and science colleges.

5.0 Relationship between Metacognition and Study Skills of Arts and Science College Students

5.1 To find out whether there is any significant relationship between knowledge of cognition, regulation of cognition of metacognition and study skills of arts and science college students.

5.2 To find out whether there is any significant relationship between knowledge of cognition, regulation of cognition of metacognition and study skills of men students of arts and science colleges.

5.3 To find out whether there is any significant relationship between knowledge of cognition, regulation of cognition of metacognition and study skills of women students of arts and science colleges.

5.4 To find out whether there is any significant relationship between knowledge of cognition, regulation of cognition of metacognition and study skills of arts group students of arts and science colleges.

5.5 To find out whether there is any significant relationship between knowledge of cognition, regulation of cognition of metacognition and study skills of science group students of arts and science colleges.

6.0 Relationship between Social Intelligence and Study Skills of Arts and Science College Students

6.1 To find out whether there is any significant relationship between social information processing, social awareness, social skills of social intelligence and study skills of arts and science college students.
6.2 To find out whether there is any significant relationship between social information processing, social awareness, social skills of social intelligence and study skills of men students of arts and science colleges.

6.3 To find out whether there is any significant relationship between social information processing, social awareness, social skills of social intelligence and study skills of women students of arts and science colleges.

6.4 To find out whether there is any significant relationship between social information processing, social awareness, social skills of social intelligence and study skills of arts group students of arts and science colleges.

6.5 To find out whether there is any significant relationship between social information processing, social awareness, social skills of social intelligence and study skills of science group students of arts and science colleges.

7.0 Influence of Metacognition and Social Intelligence on Study Skills of Arts and Science College Students

7.1 To find out whether there is any significant influence of metacognition and social intelligence on study skills of arts and science college students.

7.2 To find out whether there is any significant influence of metacognition and social intelligence on study skills of men students of arts and science colleges.

7.3 To find out whether there is any significant influence of metacognition and social intelligence on study skills of women students of arts and science colleges.

7.4 To find out whether there is any significant influence of metacognition and social intelligence on study skills of arts group students of arts and science colleges.

7.5 To find out whether there is any significant influence of metacognition and social intelligence on study skills of science group students of arts and science colleges.
1.18 NULL HYPOTHESES

The following are the null hypotheses formulated for the present study.

1.0 Metacognition of Arts and Science College Students

1.1 There is no significant difference between men and women students of arts and science colleges in their knowledge of cognition, regulation of cognition and metacognition in general.

1.2 There is no significant difference between arts group and science group students of arts and science colleges in their knowledge of cognition, regulation of cognition and metacognition in general.

1.3 There is no significant difference between students from rural and urban arts and science colleges in their knowledge of cognition, regulation of cognition and metacognition in general.

1.4 There is no significant difference among the students of Men, Women and Co-education arts and science colleges in their knowledge of cognition, regulation of cognition and metacognition in general.

1.5 There is no significant difference among the students of Government, Government aided and Self-financed arts and science colleges in their knowledge of cognition, regulation of cognition and metacognition in general.

1.6 There is no significant association between fathers’ education and knowledge of cognition, regulation of cognition and metacognition of arts and science college students.

1.7 There is no significant association between mothers’ education and knowledge of cognition, regulation of cognition and metacognition of arts and science college students.

1.8 There is no significant association between fathers’ annual income and knowledge of cognition, regulation of cognition and metacognition of arts and science college students.

1.9 There is no significant association between mothers’ annual income and knowledge of cognition, regulation of cognition and metacognition of arts and science college students.
2.0 Social Intelligence of Arts and Science College Students

2.1 There is no significant difference between men and women students of arts and science colleges in their social information processing, social awareness, social skills and social intelligence in general.

2.2 There is no significant difference between arts group and science group students of arts and science colleges in their social information processing, social awareness, social skills and social intelligence in general.

2.3 There is no significant difference between the students from rural and urban arts and science colleges in their social information processing, social awareness, social skills and social intelligence in general.

2.4 There is no significant difference among the students of Men, Women and Co-education arts and science colleges in their social information processing, social awareness, social skills and social intelligence in general.

2.5 There is no significant difference among the students of Government, Government aided and Self-financed arts and science colleges in their social information processing, social awareness, social skills and social intelligence in general.

2.6 There is no significant association between fathers’ education and social information processing, social awareness, social skills and social intelligence of arts and science college students.

2.7 There is no significant association between mothers’ education and social information processing, social awareness, social skills and social intelligence of arts and science college students.

2.8 There is no significant association between fathers’ annual income and social information processing, social awareness, social skills and social intelligence of arts and science college students.

2.9 There is no significant association between mothers’ annual income and social information processing, social awareness, social skills and social intelligence of arts and science college students.
3.0 Study Skills of Arts and Science College Students

3.1 There is no significant difference between men and women students of arts and science colleges in their time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills in general.

3.2 There is no significant difference between arts group and science group students of arts and science colleges in their time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills in general.

3.3 There is no significant difference between the students from rural and urban arts and science colleges in their time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills in general.

3.4 There is no significant difference among the students of Men, Women and Co-education arts and science colleges in their time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills in general.

3.5 There is no significant difference among the students of Government, Government aided and Self-financed arts and science colleges in their time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills in general.

3.6 There is no significant association between fathers’ education and time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills of arts and science college students.

3.7 There is no significant association between mothers’ education and time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills of arts and science college students.

3.8 There is no significant association between fathers’ annual income and time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills of arts and science college students.
3.9 There is no significant association between mothers’ annual income and time scheduling, concentration, listening and note taking, reading skill, preparation of exam, writing skill and study skills of arts and science college students.

4.0 Relationship between Metacognition and Social Intelligence of Arts and Science College Students

4.1 There is no significant relationship between knowledge of cognition, regulation of cognition of metacognition and social intelligence of arts and science college students.

4.2 There is no significant relationship between knowledge of cognition, regulation of cognition of metacognition and social intelligence of men students of arts and science colleges.

4.3 There is no significant relationship between knowledge of cognition, regulation of cognition of metacognition and social intelligence of women students of arts and science colleges.

4.4 There is no significant relationship between knowledge of cognition, regulation of cognition of metacognition and social intelligence of arts group students of arts and science colleges.

4.5 There is no significant relationship between knowledge of cognition, regulation of cognition of metacognition and social intelligence of science group students of arts and science colleges.

5.0 Relationship between Metacognition and Study Skills of Arts and Science College Students

5.1 There is no significant relationship between knowledge of cognition, regulation of cognition of metacognition and study skills of arts and science college students.

5.2 There is no significant relationship between knowledge of cognition, regulation of cognition of metacognition and study skills of men students of arts and science colleges.
5.3 There is no significant relationship between knowledge of cognition, regulation of cognition of metacognition and study skills of women students of arts and science colleges.

5.4 There is no significant relationship between knowledge of cognition, regulation of cognition of metacognition and study skills of arts group students of arts and science colleges.

5.5 There is no significant relationship between knowledge of cognition, regulation of cognition of metacognition and study skills of science group students of arts and science colleges.

6.0 Relationship between Social Intelligence and Study Skills of Arts and Science College Students

6.1 There is no significant relationship between social information processing, social awareness, social skills of social intelligence and study skills of arts and science college students.

6.2 There is no significant relationship between social information processing, social awareness, social skills of social intelligence and study skills of the men students of arts and science colleges.

6.3 There is no significant relationship between social information processing, social awareness, social skills of social intelligence and study skills of the women students of arts and science colleges.

6.4 There is no significant relationship between social information processing, social awareness, social skills of social intelligence and study skills of the arts group students of arts and science colleges.

6.5 There is no significant relationship between social information processing, social awareness, social skills of social intelligence and study skills of the science group students of arts and science colleges.

7.0 Influence of Metacognition and Social Intelligence on Study Skills of Arts and Science College Students

7.1 There is no significant influence of metacognition and social intelligence on study skills of arts and science college students.
7.2 There is no significant influence of metacognition and social intelligence on study skills of men students of arts and science colleges.

7.3 There is no significant influence of metacognition and social intelligence on study skills of women students of arts and science colleges.

7.4 There is no significant influence of metacognition and social intelligence on study skills of arts group students of arts and science colleges.

7.5 There is no significant influence of metacognition and social intelligence on study skills of science group students of arts and science colleges.

1.19 DELIMITATIONS

1. This study is limited to the arts and science college students.

2. Only the arts and science college students from Government, Government aided and Self-financed colleges are included in this study.

3. Data are collected only from the students of arts and science colleges.

4. The survey method is employed and the questionnaires were used to collect the data from the students of ten arts and science colleges.

5. The investigator has used only three variables namely metacognition, social intelligence and study skills for the present research. The Present study has included:
   i. The dimensions of metacognition are knowledge of cognition and regulation of cognition.
   ii. The dimensions of social intelligence are social information processing, social awareness and social skills.
   iii. The dimensions of study skills are time scheduling, concentration, listening and note taking, reading skill, preparation of exam and writing skill.

6. The present study is limited to the arts and science colleges in Tiruchirappalli of Tamil Nadu State, South India.

7. Though there are many techniques for measuring metacognition, social intelligence and study skills, the investigator has used only questionnaire for measuring them.
1.20 CONCLUSION

This chapter introduced the topic for the present study and explained the conceptual framework of the topic “Influence of metacognition and social intelligence on study skills of arts and science college students”. A brief review of literature as “literature scanning” related to this topic will be presented in the succeeding chapter.