

**EMOTIONAL INTELLIGENCE, LEARNING
STYLES AND ACADEMIC ACHIEVEMENT OF
ADOLESCENT STUDENTS OF 10TH GRADE**

**DISSERTATION SUBMITTED TO UNIVERSITY OF KASHMIR
IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR
THE AWARD OF THE DEGREE OF**

**MASTER OF PHILOSOPHY (M. Phil)
IN
EDUCATION**

**BY
NWSHEEN SYED**

**Under the Supervision of
PROF. (Dr.) N.A. NADEEM**
Faculty of Education
University of Kashmir



FACULTY OF EDUCATION

**University of Kashmir
(NAAC ACCREDITED Grade-A)
SRINAGAR- 190 006, J & K**

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**Prof. (Dr.) N.A. Nadeem
(Supervisor)**

**Nowsheen Syed
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2013



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CERTIFICATE

Certified that the dissertation “**Emotional Intelligence, Learning Styles and Academic Achievement of Adolescent Students of 10th Grade**”, which is being submitted by **Nowsheen Syed**, for the award of **M.Phil. Degree** in Department of Education of the University of Kashmir, is a record of her own work carried out under my supervision and guidance.

The candidate has fulfilled all the statutory requirements for the submission of this dissertation. It is also certified that the subject matter reported in this dissertation has not been submitted for the award of any other degree of any university.

Prof. (Dr.) N.A. Nadeem
Supervisor

**FACULTY OF EDUCATION
UNIVERSITY OF KASHMIR**

DECLARATION

This dissertation is the result of an independent investigation. Wherever the work is indebted to the work of others it has been acknowledged and cited.

I declare that this dissertation has not been accepted in substance for any other degree or diploma nor is it concurrently being submitted in candidature or achievement of any other degree at any other university.

**Nowsheen Syed
Investigator**

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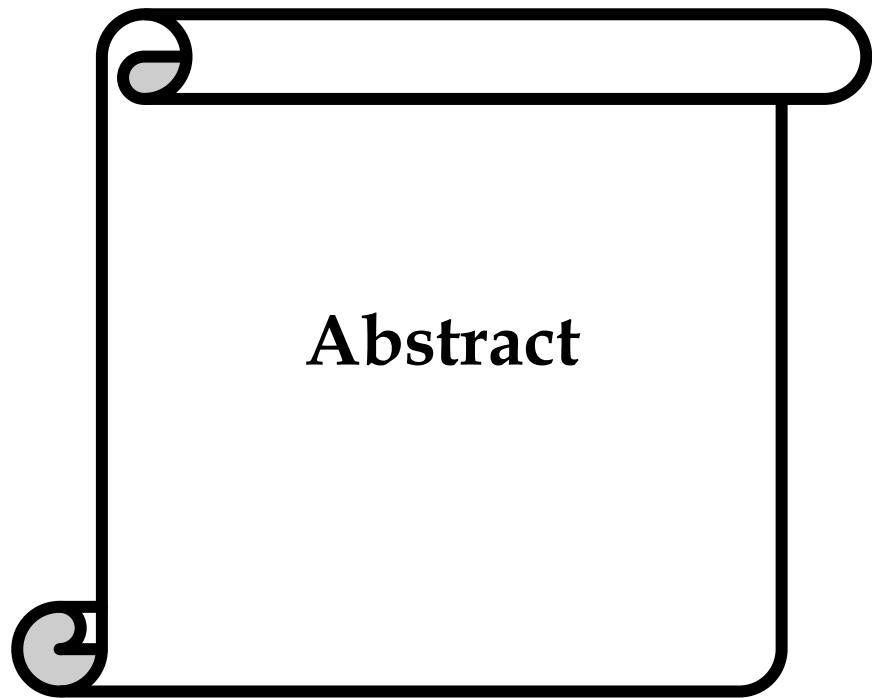
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Interest in emotional intelligence has bloomed over the last few years. That it has become a standard concept in general and applied psychology, as well as in applied business settings, is indubitable. New research in the 90s confirmed that there is an emotional brain: a place called the limbic system where our emotions originate. It is separated from the rational brain (the neocortex) but the two are connected and develop together. This means that our power to reason and our feelings are intended to be used together. Because of the brain's design, all information goes into our emotional center first and then to our thinking center. Emotions come before thought and behaviour. What scientists discovered is that we need our emotions; our feelings fire up the motor in us that drives energy and creativity. If we block or ignore emotions in the workplace, we stifle motivation.

As a result of these findings, it has become important to understand what we are feeling, what others are feeling, how to manage our own feelings and how to manage relationships with others. This is the core of Emotional Intelligence: a term used to describe the complex ability to regulate our impulses, empathise with others and be resilient in the face of difficulties. Therefore, emotional intelligence is a product of the amount of communication between the rational and emotional centers of the brain. This article will examine the history, data and components of Emotional Intelligence.

Emotional intelligence is a dynamic construction influenced by diverse biological, psychological, and social factors. A good deal of research has been conducted on emotional intelligence and it was found to be appearing as an important factor in the prediction of personal, academic and career success.

Studies on emotional intelligence with respect to various psycho-social correlations have been found in a variety of fields. Empirical studies investigating the relationship of emotional intelligence with numerous psychological and psychosocial factors were reported by several researchers and simultaneously revealing the significance of emotional intelligence and its beneficial aspects with remarkable contribution in the field of interpersonal relationships, success in work and personal life, health psychology, managing occupational stress, academic field, improving personality, enhancing performance and many more positive behaviour pattern.

Emotional Intelligence is as important as intellectual quotient when hiring workers in contemporary organizations. Since deficiencies in interpersonal skills abound in the work environment high levels of emotional intelligence are needed to perform adequately. Leaders need to inculcate emotional intelligence skills into their leadership repertoire in order to lead effectively and successfully. Viewing college students as the future workforce, the impetus of the study was to determine whether a correlation exists in use of emotional intelligence between gender and age among Bermudian and Trinidadian college students. In contemporary organizations, the epitome of leadership is leaders' ability to discern, adapt, sense, and internalize the underpinnings of environmental culture. The aforementioned qualities are facets of emotional intelligence. The literature underscores the importance of emotional intelligence in cultivating successful leaders and workers in the workplace.

The mind is uniquely and authentically crafted. Human attributes are designed individually and collectively to encompass divergent degrees of learning and processing information. The ideology of learning styles was adapted to incorporate multiple ways of people respond, to think, see, hear, touch, rationalize, and formulate knowledge or learning (Dunn & Dunn, 1993). Learning styles have gained prime importance in our society. For many years, research has paved a path on the subject of learning styles by experts, educators, psychologists, sociologists, universities, public schools,

private schools, doctors, and lawyers (Bloom, 1956; Dunn & Dunn, 1993; Gregorc, 1982a; Jung, 1971; Kolb, 1985; Schmeck, 1988). By using evidence from learning styles research, learner`s needs are being met, there is an abundance of literature on this subject readily available, educators are better trained, and numerous strategies and techniques are incorporated in classroom instruction.

Once an individual`s learning style has been identified using assessment tools, there is a greater appreciation, deeper insight, and a better understanding by professionals of the numerous ways individuals learn. Meticulously cultivating and nurturing an individual`s style of learning and incorporating an array of methods and learning devices in learning activities, equips the learner with tools to function effectively in the school environment and satisfies intellectual and emotional needs. An awareness of learning preferences and an understanding of individual learning styles can help educators develop instruction using multiple resources. The learner should also be knowledgeable of their learning styles or individual preferences of learning, so that optimum learning will occur and everyone who is involved in the learning process can feel successful (Honigsfeld & Dunn, 2006).

Diversity is a key ingredient in the learning environment. Technology is a method of teaching used by educators to engage students in rich learning experiences and provide creative opportunities for learners to exercise a multitude of learning styles. Colleges, universities, and instructors work cooperatively to design web-based courses to encompass students learning styles. By using online web-based courses, several methods of instruction can be used and students can participate in identifying coursework according to the design that best suits their leaning style and preferences (White & Bridwell, 2004).

The term achievement refers to the degree or the level of success attained in some specific school tasks especially scholastic performance, in this sense academic achievement means the attained ability to perform school tasks, which can be general or specific to a given subject matter. Academic

achievement could be defined as self-perception and self-evaluation of one's objective academic success. Academic achievement generally indicates the learning outcomes of pupil. Achievement of those learning outcomes requires a series of planned and organized experiences. Good (1973), has defined, academic achievement as knowledge attitude or skill developed in the school subject usually designed by test scores or by marks assigned by teacher or by both. Consequently, academic achievement could be defined as self perception and self evaluation of one's objective success.

Need and Importance of the Present Study

The purpose of this study was to examine the Emotional Intelligence, Learning Style and Academic Achievement of Adolescent Students of 10th grade. This will help teachers and adult learners to understand better these findings and use these findings to enhance classroom learning. This examination of these concepts can lead to a better understanding of the impact of emotional intelligence, learning styles and academic achievement of adolescent learners. It can also help adolescent learners to enhance their classroom skills. Understanding one's emotional intelligence and learning styles can help the learner to improve academic achievement in class, but understanding how emotional intelligence, learning styles and academic achievement relatively together can open new doors to an adolescent skills.

STATEMENT OF THE PROBLEM

“Emotional Intelligence, Learning Styles and Academic Achievement of Adolescent Students of 10th Grade”

OBJECTIVES OF THE PRESENT STUDY

The following objectives were formulated for the present study:

1. To study the emotional intelligence of adolescent students of 10th grade.
2. To study the learning styles of adolescent students of 10th grade.
3. To study the academic achievement of adolescent students of 10th grade.
4. To compare adolescent boys and girl students on emotional intelligence, learning styles and academic achievement.

5. To find the relationship between emotional intelligence on one hand and learning styles and academic achievement of adolescent students of 10th grade.

HYPOTHESES

The following hypotheses have been formulated for the present research work:

1. Boys and girls do not differ significantly in their emotional intelligence.
2. Boys and girls do not differ significantly in their learning style.
3. Boys and girls do not differ significantly in their academic achievement.
4. There is a positive relationship between emotional intelligence and learning styles of adolescent students of 10th grade.
5. There is a positive relationship between emotional intelligence and academic achievement of adolescent students of 10th grade.
6. There is a positive relationship between learning styles and academic achievement of adolescent students of 10th grade.

SAMPLE

The sample for the present study consisted of 200 adolescent students of 10th grade (100 boys and 100 girls) was selected randomly from the eight Govt. Schools of district Srinagar.

TOOLS USED

The following tools are used in the present study:

1. Emotional Intelligence Scale prepared by Anokool Hyde, Sanjyot Pethe and Upinder Dhar were used to measure Emotional Intelligence of adolescent students.
2. Learning Styles Inventory prepared by Rita Dunn, Keneth Dunn and Gary E. Price were used to measure Learning Styles of the adolescent students.
3. Academic Achievement of the students was collected by giving them self-constructed information blank in which they had to give the

aggregate percentage of marks of 8th and 9th class for each student were noted from the office records of the sample schools.

Procedure

The list of all the Government Schools were obtained from the office of the Chief Education Officer District Srinagar in order to collect the sample. The investigator visited various Govt. Schools of District Srinagar. The Emotional Intelligence Scale and Learning Styles were administered to the sample subjects of 10th Grade students. These tests were administered on the students in their respective institutions and the scoring was strictly done as per the manuals of the tests. The academic achievement of previous two years i.e. 8th and 9th classes of the sample subject were collected from the official records of the Govt. Schools.

Statistical Analysis

To achieve the objectives of the study, the data collected was statistically analyzed using the following technique;

- 1 Mean
- 2 S.D
- 3 t-test
- 4 correlation

MAJOR FINDINGS

1. It was found that 43% of adolescent students of 10th grade fall in the high category of Emotional Intelligence, 33.5% of adolescent students of 10th grade fall in the average normal category. The data further reveals that 23.5% of adolescent students of 10th grade fall in the low category so far as their emotional intelligence is concerned.
2. It was found that 35.5% of adolescent students of 10th grade fall in the strong preferences category of Learning Style, 25.5% of adolescent students of 10th grade fall in the preferences category, 21% of adolescent students of 10th grade have opposite preferences of learning styles. The data further reveals that 18% of adolescent students of 10th

grade have opposite strong preference category so far as their learning style are concerned.

3. It was found that 15.5% of adolescent students of 10th grade got distinction, 32% of adolescent students of 10th grade got 1st division, while 30% of adolescents students of 10th grade got 2nd division category of academic achievement. The data further reveals that 22.5% of adolescent students of 10th grade got 3rd division category of academic achievement so far as their academic achievement is concerned.
4. It was found that adolescent boys are better in handling interpersonal interaction, conflict resolution, more sharing, cooperation and helpfulness and are more democratic in dealing with others as compared to adolescent girls.
5. It was found that adolescent boys are more popular and better linked by their peers, they are found to be able to handle a number of tasks than the adolescent girls.
6. It was found that adolescent boys are more responsible and they have more control over their feelings and are more aware of their weakness and are also stronger in their beliefs, better linked with their peers and better in maintaining the standards of integrity as compared to adolescent girls.
7. It was found that adolescent girls are careful to their work, able to meet commitments and keep promises as compared to adolescent boys.
8. It was found that adolescent boys have high emotional intelligence in comparison to adolescent girls.
9. It was found that there is significant difference between adolescent boy and girl students on factor 'E' (Managing relations) of Emotional Intelligence.
10. It was found that there is significant difference between adolescent boys and girls on factor 'G' (Self development) of Emotional Intelligence.

11. It was found there is significant difference between adolescent boys and girls on factor 'H' (Value orientation) of Emotional Intelligence.
12. It was found that there is significant difference between adolescent boys and girls on factor 'I' (Commitment) of Emotional intelligence.
13. It was found that there is significant difference between adolescent boys and girls on Emotional intelligence.
14. It was found that adolescent boys have more perception power, intake, time and mobility as compared to adolescent girls.
15. It was found that adolescent boys have high verbal preference, content preference, class preference, learning preferences and interests than adolescent girls.
16. It was found that there is significant difference between adolescent boys and girls on Physical stimulus factor of Learning style.
17. It was found that there is significant difference between adolescent boys and girls on Learning style.
18. It was found that there is significant difference between adolescent boys and girls on Academic achievement. Adolescent girls were found to have better academic achievement as compared to adolescent boys.
19. There is significant relationship between emotional intelligence and learning style.
20. There is significant relationship between emotional intelligence and academic achievement.
21. There is significant moderate relationship between learning style and academic achievement.



Chapter - 1
Introduction

Education continuously builds an ideas and emotions. The flux of human consciousness gives the process of education its distinctive character and makes teaching and learning such a wondrous, ever changing process as thoughts and feelings are built and rebuilt. The children come to school filled with experiences stored in their memories including complex pattern of behaviour that will be built on as they mature. We try to peer inside to find out what learning has taken place and what readiness there is for new learning. But teachers cannot crawl inside and look around we have to infer what is inside from what we can see and hear. Our educated guesses are the substance of our trade as we try, continually, to construct in our minds the pictures of the environment providing tasks, and building pictures of the minds of the students make teaching- the continuous inquiry into mind and environment, provide tasks and try to learn what is going on in those wondrous and unique minds.

Models of teaching are really models of learning. These help students in acquiring information, ideas, skills, values, and ways of thinking and means of expressing themselves. Infact, the most important long term outcome of instruction may be the students increased capabilities to learn more easily and effectively because of the knowledge and skill they have acquired and because they have mastered learning process. Effective learners draw information, ideas and wisdom from their teachers and use learning resources effectively. Thus, major role in teaching is to create powerful learners.

Concept of Emotional Intelligence

Before defining "Emotional Intelligence", it would be desirable to define the term 'emotion' interestingly, we all intuitively understand what the word emotion means, psychologists have described and explained 'emotion' differently, but all agree that it is a complex state of the human mind involving a wide range of bodily changes such as breathing, pounding heart, flushed face, sweaty palms, high pulse rate and glandular secretions. Mentally, it is a state of excitement or perturbation marked by strong feelings.

Emotions originate from exposure to specific situations. Emotions, when combined with the thinking process, result in the experience of feelings' warning systems that alert them to what is really going on around them. Emotion is an 'umbrellaterm' which includes the situation, the interpretation and the perception of a situation, and the response or feeling related to that situation. Emotions are human beings warning systems that alert them to what is really going on around them. They are a complex state of the human mind, involving physiological changes on the one hand and psychological changes on the other. Emotions are our responses to the world around us, and they are created by the combination of our thoughts, feelings and actions. There are hundreds of emotions, along with their blends, variations, mutations and nuances.

Although emotional intelligence has been adopted as a relatively new concept but over the past years, emotional intelligence has generated an enormous amount of interest both within and outside the field of psychology (Salovey & Grewal, 2005). Emotional intelligence describes the ability, capacity, skill, or self-perceived ability to identify, assess, and manage the emotions of one's self, of others, and of groups. People who possess a high degree of emotional intelligence know themselves very well and are also able to sense the emotions of others. The concept of Emotional Intelligence (EI) has generated a broad interest both in the lay (Goleman, 1995) and scientific fields (Mayer & Salovey, 1997; Salovey & Mayer, 1990). It has become a very popular concept for psychological, educational and management

researchers from the past years. Salovey and Mayer (1990) who are credited for coining the term “emotional intelligence” initially defined emotional intelligence as a form of intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions. Later, these authors revised their definition of emotional intelligence as the ability to perceive emotion, integrate emotion to facilitate thought, understand emotions, and to regulate emotions to promote personal growth (1997). Goleman (1998) defines EI as “the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships”.

The roots of emotional intelligence began about 2,000 years ago when Plato wrote, “All learning has an emotional base.” Since then, scientists, educators, and philosophers have worked to prove or disprove the importance of feelings. Emotional intelligence can be traced to Darwin's work on the importance of emotional expression for survival and adaptation. According to him, emotions cannot be stopped, they happen instinctually and immediately in response to situations and people (as cited in Bar-On, 2001). In the field of psychology the roots of emotional intelligence (EI) theory go back at least to the beginnings of the intelligence testing movement.

Similarly, in 1940, David Wechsler described the influence of non-intellective factors on intelligent behaviour. He proposed that the non-intellective factors (i.e., emotional abilities) are essential to determine one's ability to succeed in life. In 1983, Howard Gardner's *Frames of Mind: The Theory of Multiple Intelligences* introduced the idea of multiple intelligences which included both Interpersonal intelligence (the capacity to understand the intentions, motivations and desires of other people) and Intrapersonal intelligence (the capacity to understand oneself, to appreciate one's feelings, fears and motivations). These two types of intelligence form the foundation for most of the models created on Emotional Intelligence. In Gardner's view, traditional types of intelligence, such as IQ, fail to fully explain cognitive

ability. Thus, even though the names given to the concept varied, there was a common belief that traditional definitions of intelligence are lacking the ability to fully explain performance outcomes. The first academic use of the term "emotional intelligence" is usually attributed to Wayne Payne's doctoral thesis, *A Study of Emotion: Developing Emotional Intelligence* in 1985. Greenspan (1989) put forward an EI model, followed by Salovey and Mayer (1990), and Goleman (1995). The distinction between trait emotional intelligence and ability emotional intelligence was introduced in 2000.

Aristotle has said that it is easy to show anger but to be angry with right person to the right degree, at the right time, for the right purpose and in the right way is not easy. This leads us to the education of emotions. Every individual has two minds:

- ❖ Emotional Mind
- ❖ Rational Mind

In 1920 E.L. Thorndike had propounded the term 'Social Intelligence'. Emotional Intelligence is not different from social intelligence. The term emotional intelligence was first introduced by a graduate student of U.S.A. while writing a doctoral dissertation in 1985. Two American psychologists, Peter Salovey from Yale and John Mayer from the University of Hampshire summed up some qualities of human beings in the late 1980's. The qualities were empathy, self awareness, emotional control etc.

In 1995, Daniel Goleman of New York Times adopted it and wrote a book *Emotional Intelligence*. He gave the word a new meaning. According to Goleman intelligence quotient accounts for only 20 percent of a person's success of life. Balance can be attributed to emotional intelligence or EQ. The word EQ is used interchangeably with Emotional Intelligence. This refers to emotional awareness and emotional management skills which provide the ability to balance emotions to reach the maximum level of happiness. People with low EQ are misfit in the social setup.

Hein (2004) defines emotional intelligence as the mental ability we are born with, which gives us our emotional sensitivity and our potential for

emotional learning management skills and which can help us maximize our long term health, happiness and survival. Mayer Salovey and Caruso define it as the ability to process emotional information, particularly as it involves the perception, assimilation, understanding and management of emotion. They further observe that emotional intelligence consists of four branches of mental ability:

- Emotional identification, perception and expression
- Emotional facilitation of thought
- Emotional understanding
- Emotional management

This approach to learning emphasizes the fact that individuals perceive and process information in very different ways. The learning styles theory implies.

Concept of Learning Style

The mind is uniquely and authentically crafted. Human attributes are designed individually and collectively to encompass divergent degrees of learning and processing information. The ideology of learning styles was adapted to incorporate multiple ways people respond, think, see, hear, touch, rationalize, and formulate knowledge or learning (Dunn & Dunn, 1993). Learning styles have gained prime importance in our society. For many years, research has paved a path on the subject of learning styles by experts, educators, psychologists, sociologists, universities, public schools, private schools, doctors, and lawyers (Bloom, 1956; Dunn & Dunn, 1993; Gregorc, 1982a; Jung, 1971; Kolb, 1985; Schmeck, 1988). By using evidence from learning styles research, learner`s needs are being met, there is an abundance of literature on this subject readily available, educators are better trained, and numerous strategies and techniques are incorporated in classroom instruction (Bloom, 1956; Dunn & Dunn, 1993; Gregorc, 1982a; Jung, 1971; Kolb, 1985; Leavitt, 2004; Miles, 2004; Schmeck, 1988).

Research about learning styles began to develop several decades ago from several different directions. These included early studies on cognitive growth, the areas of the brain related to intelligence and behaviour, and the influence

of school environmental and social factors on students (American Association of School Administrators, 1991). Learning styles can be defined, classified, and identified in many different ways. Benjamin Bloom (1956) emphasized learning from cognitive, affective, and psychomotor skills. Anthony Gregorc (1978) based learning on perceptual preferences, concrete and abstract, 20 and ordering preferences, sequential and random. David Kolb (1984) defined the way people learn through .feelings. or through .thinking..

Definitions of Learning Style

1. There are many different learning style definitions. The following is a list of some of the definitions:
2. Learning styles are the ways individual learners react to the overall learning environment. (James & Gardner, 1995, p. 19).
3. Learning styles are .self-consistent, enduring individual differences in cognitive organization and functioning. (Ausubel, Novak, & Hanesian, 1978, p. 203)
4. Learning styles are .distinctive behaviors which serve as indicators of how a person learns from and adapts to his environment. It also gives a clue of as to how a person`s mind operates. (Gregorc, 1979, p. 234)
5. Learning styles are .the way each learner begins to concentrate on, process, and retain new and difficult information. (Dunn & Dunn, 1993, p. 2).
6. Learning styles are .preferences that students have for thinking, relating to others, and for various classroom environments and experiences. (Grasha, 1990, p. 106).
7. Learning styles are .a consistent way of functioning that reflects the underlying causes of learning behavior.

Learning styles differ among students. Some of the ways learning styles between individuals can differ are amongst achievement levels, gender, age, and culture. Individuals. Achievement levels can be high versus low academic achievement. High and low achievers are not likely to perform well

with the same methods of learning (Dunn & Dunn, 1999). Differences in gender also affect learning styles. Males and females learn differently from each other. Males tend to be more kinesthetic and tactual, and if they have third modality strength, it is often visual. Males also need more mobility in a more informal environment than females (Dunn & Griggs, 1995). They are more nonconforming and peer motivated than females. Females tend to be relatively conforming and either self-, parent-, or teacher-motivated (Dunn & Griggs, 1995). Females, more than males, tend to be auditory, authority-oriented, and better able to sit passively in conventional classroom desks and chairs. Females also tend to need significantly more quietness while learning (Pizzo, Dunn, & Dunn, 1990), be more self-motivated, and conform more than males (Marcus, 1977).

Learning styles may change as individuals grow older (Dunn & Griggs, 1995). Some individuals change uniquely and then some do not change at all as they get older. Individuals' sociological, emotional, and physiological preferences change as a person gets older. Sociological preferences could be whether an individual chooses to learn alone or with a group. Emotional preferences can include motivation which fluctuates from day to day, class to class, and teacher to teacher. If a student is interested in a topic and the presenter's teaching style matches the student's learning style, then the student's motivation will be greater. Sound preferences, temperature preferences, and seating preferences also change as individuals get older (Dunn & Griggs, 1995).

The concept of learning styles has a long history though the last century and has its roots in the early pragmatist, philosopher William James and the psychology of Carl Gustav Jung. Learning styles are closely related to and draw upon research in cognitive styles, epistemology, brain physiology, cultural study and learning theory.

Learning styles are the ways in which each person begins to concentrate on, process and retain new and difficult information through different perceptual channels. Learning styles pertain to the person as an

individual and that differentiate him from someone else. The way in which an individual characteristically acquires, retains and retrieves information are collectively termed the individual's learning style. It is generally assumed that learning style refer to beliefs, preferences and behaviours used by individuals to aid their learning in a given situation.

Many learning style theories have been put forward in different ways. James and Gardner (1995) and Brain (1998) put forward, perceptual, cognitive and affective learning style theories.

Perceptual Learning Style Theories

These theories concentrate on the physical and sensory elements that learner uses to interpret the external stimuli. These theories usually include such learning dimensions as visual, auditory, tactile and kinesthetic. Currently perceptual theorists are expanding their research to include cultural and gender differences.

Cognitive Learning Style Theories

These theories are based on the ways the learner processes information. Cognitive learning styles are interested in research into brain, physiology and function. Research into hemispheric brain function, physiological orientation and field articulation are usually incorporated in cognitive learning style theories.

Affective Learning Style Theories

The theories are concerned with all aspects of the learner's personality. In these learning theories, personality traits are the basis for how a learner interprets and absorbs information. Affective [earning theories use research in social and cultural experiences, environmental influences, genetic influences and interpersonal experiences.

Learning Style Models

A. Jungian Psychological Type and Myer-Briggs Type Indicator (MBTI).

In this theory of physiological types, Carl Jung developed a holistic framework for describing differences in human adaptive processes. He began by distinguishing between those people who are oriented towards the external world. Human difference is based on perception and judgment. We are constantly choosing between the open act of perceiving and closed act of judging.

The Myers-Briggs theory of personality type grew out of the work of Carl Gustav Jung and two American women, Katharine Briggs and her daughter Briggs Myers. The Myers Briggs type indicator is a widely used psychological self-report instrument used to assess people's orientation towards the Jungian type.

The four personality dimensions based on MBTI are:

1. Extraversion or Introversion.
2. Sensing or Intuition.
3. Thinking or Feeling
4. Judging or Perceiving.

B. Kolb's Learning Style Model

Based upon Kolb's Learning Style Model (1984) there are four teaching styles:

- a.) The convergent learning style relies primarily on the dominant learning abilities of abstract conceptualization and active experimentation. The greatest strength of this approach lies in problem solving, decision-making, and the practical application of ideas.
- b) The divergent learning style has the opposite strengths from the convergence emphasizing on concrete experience and reflective observation. The greatest strength of orientation lies in imaginative ability and awareness of meaning and values.

c) Assimilation-the dominant learning abilities are abstract conceptualization and reflective observation. Assimilator solves problems by inductive reasoning and ability to create theoretical models.

d) The accommodative learning styles has the opposite strengths from assimilation- The dominant learning abilities are concrete experience and active experimentation. The greatest strength of this orientation lies in doing things, in carrying out plans and tasks and getting involved in new experiences.

C. Dunn and Dunn Learning Style Model

Rita Dunn (1984) defined learning styles as the ways in which person absorbs and retains information or skills; regardless of how that process is described, it is dramatically different for each-person.

Dunn conducted studies to determine whether there is any relationship between cognitive dimensions and student's characteristics that appeared to be more or less responsive to environmental, emotional, sociological and physiological stimulus.

a) Environmental elements of learning styles include sound, light, temperature and design.

b) Emotional elements of learning styles include motivation, persistence, responsibility, structure.

c) Sociological elements of learning styles determine how students react to working alone with an authority, in a pair, on a small group, on a large group or in other varied circumstances.

d) Physiological elements of learning style include food and drink intake, time of day, mobility, perceptual elements (visual, auditory, tactile, kinesthetic).

D. Felder-Silverman Learning Styles Model (1993)

This model classifies learners as:

i) Sensing learners or intuitive learners.

ii) Visual learners or verbal learners.

iii) Inductive learners or deductive learners.

iv) Sequential learners or global learners.

E. Hermann Brain Dominance Model (Whole Brain Model)

Hermann (2004) suggests four quadrants of thinking activities:

- i) Left cerebral-problem solving, mathematical, technical, analytic, logic.
- ii) Left limbic-planning, controlled, conservative, administrative and organizational.
- iii) Right limbic-conceptualizing, synthesizing, imaginative, holistic, artistic.
- iv) Right cerebral-talker, musical, spiritual, emotional, interpersonal.

Learning Styles and Education:

Curriculum: educators must place emphasis on intuition, feeling, sensing and imagination in addition to the traditional skills of analysis, reason and sequential problem solving.

Instruction – Teachers should design their instruction methods to connect with all four learning styles, using various combinations of experience, reflection conceptualization and experimentation. Instructors can introduce a wide variety of experimental elements in to the classroom, such as sound music, visuals, movement, experiences and even talking.

Assessment – Teachers should employ a variety of assessment techniques, focusing on the development of “Whole brain” capacity and each of the different learning styles.

Thus the term 'Learning Styles' is generally assumed to refer to belief, preference and behaviours used by individual to aid their learning under the classrooms or environmental conditions.

Students have different characteristics strengths and preferences in the ways they take in and process information. Their learning styles will be influenced by their genetic makeup, their previous learning experiences, their culture and the society they live in. some students may focus on facts and data; others are more comfortable theories and mathematical models. Some respond strongly to visual forms of information, like pictures, diagrams etc; others get more from verbal forms like written and spoken explanations others function more

introspectively and individually. No single style is better or worse than any other.

Concept of Achievement

A specified level of success on a learning task or a certain level of proficiency in any work is called academic achievement. Educational or academic achievement is a specified level of attainment in academic work as evaluated by teachers or standardized tests or by a combination of both. Achievement test is a test of maximum achievement possible for an individual in an activity. Achievement tests measure the performance of individual after undergoing a course of study.

Academic achievement of pupils refers to the knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in grades or units based on pupils in the academic achievement.

Trow, (1956) defined Academic achievement as " knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in grade or units based on pupil's performance.

Sinha, (1970) observes that academic achievement means, students whose academic performance is superior in the form of high percentage of marks are taken as successful candidates. On the other hand, students who fail in the previous examination and obtain low divisions in their examination are considered as individuals who have failed in their attainments.

Patel, (1987) has found that all the three groups via: scheduled caste, scheduled tribes, advantaged children differed significantly in their intelligence, creativity and academic achievement.

Arora, (1988) conducted study on role of parent-child relationship and teacher-student relationship in the academic achievement of higher secondary school students of both sexes and found that no significant relationship existed between educational achievement of students and parent-child relationship. Educational standard of students and teacher-student relationship were found to be significantly related.

Madhuri, (1988) has conducted a study of factors in pupil academic achievement in different streams of courses at the higher secondary stage. She found that the verbal intelligence, non-verbal intelligence, -intelligence and creativity were positively correlated with academic achievement. Socio-economic status and study habits were positively correlated with academic achievement.

Salgiya, (1988) conducted a comparative study of retention and academic achievement of learners in formal schools and non-formal education centre and found that retention in formal schools was more in comparison to non-formal centers.

Grewal, (1990) emphasize that home environment of the students and planning of schedule was significantly related to their academic achievement. Suggestions and comments were related to habits and interests also influenced their academic achievement.

Ujwala, (1990) has found that girls had significantly higher academic achievement than boys and academic achievement showed a positive and significant correlation with intelligence.

Sood, (1991) has conducted a study on academic achievement of pre-engineering students in relation to their socio-economic status and has found that there was no significant relationship between academic achievement of boys and girls was not found to be statistically significant.

Chand, (1992) has conducted a study on personal values of adolescent boys and girls and academic achievement and social, aesthetic, economic family prestige and health values.

Craighad & Edward (2001) stated that “academic achievement may be defined as a measure of knowledge, understanding of skills in a specified subject or a group of subjects. Thus, academic achievement refers to achievement in a separate subject or total scores of social subjects combined. Hence, academic achievement is concerned with the quantity and quality of learning attained in a subject or a group of subjects after a period of instructions.

Manukhbhai, (1992) has conducted a study on the value , adjustment, attitude towards the teaching profession and academic achievement of student-teacher was related to teaching aptitude , attitude, cooperation, dedication, nationalism, scientific outlook, tolerance and-entry level.

Muthumanickam, (1992) has conducted a study on academic achievement of students of higher secondary commerce group in relation to their reasoning ability, socio-economic status and interest in commerce.

Verma, (1992) has found that out of fifteen traits of temperament only one trait i.e. 'responsible' was found to be significantly in academic achievement.

Pianta and Walsh, (1996) emphasizes importance of home factors and parent involvement influencing academic achievement.

Kinjaran, (1998) has found that the academic achievement of boys and girls was not found to be statistically significant. Academic achievement of studies refers to one knowledge attained and skills developed in the school subjects so, academic achievement means the achievement of students in academic subjects in relation to their knowledge and skills.

It become obvious from the above given studies that studies have been conducted on academic achievement in relation to socio-economic status, intelligence, neuroticism, locus of control, study habits, achievement motivation, reasoning ability, anxiety and formal school and non-formal schools.

NEED AND IMPORTANCE

Emotionally intelligent students are likely to show confidence and self trust. They are also said to have higher capacity to handle problems more easily and to perform better in terms of academics, given that they are also endowed with an ideal level of intellect. All these, when combined will contribute to persons self belief and confidence that will move him to perform better in academics and than in society. Emotional intelligence largely contributes to a person's ability to cope up with his present trends.

Emotional intelligence is emerging with a huge impact in our society. It is a crucial factor in the workplace, in academic performance at school, and at

home (Goleman, 1998). Many people face many challenges in everyday life, so based on Goleman's research (1998), in order to be a well-rounded functioning individual, a person must possess skills to excel in life, such as to plan, motivate, manage feelings, and handle relationships. By approaching life's tasks armed with emotional intelligence skills, an individual should be able to rise above obstacles and adapt to daily encounters appropriately (Goleman, 1998).

"Learning styles is a term used to explain a person's easiest most efficient method of acquiring information."

Many people recognize that each person prefers different learning styles and techniques. Learning style group common ways that people learn. Everyone has a mix of learning styles. Some people may find that they have a dominant style of learning, with far less use of the other styles. Others may find that they use different styles in different circumstances. There is no right mix. Nor are your styles fixed. You can develop ability in less dominant styles that you already use well. Hence the need arises that everyone may be of a great benefit to know what his or her particular style may be.

Using multiple learning styles and "multiple intelligence" for learning is a relatively new approach. This approach is one that educators have only recently started to recognize. Traditional schooling used (and continues to use) mainly linguistic and logical teaching methods. It also uses a limited range of learning and teaching techniques. Many schools still rely on classroom and book-based teaching, much repetition and pressured exams for reinforcement and review. So the need arises to know about the learning style that can help you plan learning strategies to better study, read effectively and get more out of your education.

School teachers are well aware of the importance this has on a child's success in the classroom. Based on each individual child's needs, they develop strategies and techniques for learning that can help each student succeed.

By recognizing and understanding your own learning styles, you can use techniques better suited to you. This improves the speed and quality of your learning.

Experts agree that these are basic type of learning styles:

Visual: Students who learn best from images and graphic representations such as diagrams or maps.

Auditory: This type of learner benefits from hearing information such as lectures, speeches or lessons.

Kinesthetic: Learners of this type learn best from hands-on applications, tending to benefit most from actually doing.

Logical: You prefer using logic, reasoning and systems.

Social: You prefer to learn in groups or with other people.

Solitary: You prefer to work alone and use self-study.

As a learner you probably highly motivate to be successful in continuing your education. Being familiar with your learning style is just one more weapon in your educational arsenal.

In the learning environment, many educators are becoming aware that students. Emotional intelligence should be incorporated and embraced in the classroom. When a student's emotional and social skills are addressed, academic achievement of the student increases and interpersonal relationships improve. In the workplace, there is a great demand for individuals to perform effectively emotionally and cognitively.

In educational institutions, success is measured by academic performance or how well a student meets standards set by the educational institution. As a carrier, competition grows ever fiercer in the working world, the importance of students doing well in schools has caught the attention of parents, legislations and government education departments alike.

Although education is not the only road to success in the working world, much effort is made to identify, evaluate track and encourage the progress of students in schools. Parents care about their child's academic performance because they believe good academic results will provide more carrier choice

and job security. Schools though invested in same reason are also often influenced by concerns about the school's reputation and the possibility of monetary aid from government institutions, which can hinge on the overall academic performance of the school.

The state and central department of education are charged with improving schools, and so devised methods of measuring success in order to create plans for improvement.

Academic achievement is of paramount importance. It has been indicated that a good number of variables such as personality characteristics of the learners, the organizational climate of the school, curriculum planning, teaching-learning set up, variables arising out of home influence achievement in different degrees. Each of them is actually a cluster of variables which individually or on interaction with other have their influence on achievement. In short, we can say that both nature and nurture play a combine role in making an achieving individual.

For the present study the academic achievement has been measured in terms of aggregate of marks percentage obtained in the school subjects.

STATEMENT OF THE PROBLEM

“Emotional Intelligence, Learning Styles and Academic Achievement of Adolescent Students of 10th Grade”

OPERATIONAL DEFINITIONS

1. Emotional Intelligence: Buck (1985) has defined emotion as a process by which motivational potential is realized or readout, when activated by challenging stimuli since 1990, Peter Salovey and John J. Mayer have been the leading researchers on emotional intelligence. In their influential article, “Emotional intelligence”, they define emotional intelligence as, “The subset of social intelligence that involves the ability to monitor one's own and others information to guide one's thinking and actions” 1990.

Mare and Salovey (1993) define emotional intelligence as the ability to monitor one's own and others feelings and emotions to discriminate among them and to use this information to guide one's thinking and action.

In the present study emotional intelligence means the scores gained by the sample on EI inventory Hydel et al; (2001). The scale consists of ten factors. These are: Self awareness, Empathy, Self motivation, Emotional stability, Managing relations, Integrity, Self development, Value orientation, commitment and Altruistic behavior.

2. Learning Styles: Learning Styles may be defined as the individual learner's behavioural characteristics related to how the learner's process information and integrates it into their own knowledge base. For the purpose of the study learning styles inventory is measured by Rita Dunn, Kenneth Dunn and Gary E.

Dunn conceived a learning style model revealing that students are affected by four main factors:

- i. Their immediate environment (sound, light, temperature, seating design).
- ii. Their own emotionality (motivation, persistence, responsibility).
- iii. Their sociological performance (learning alone or in different sized groups).
- iv. Their physiological characteristics (perceptual strengths represented by auditory, verbal, tactile, kinesthetic and sequenced characteristics).

3. Academic Achievement

Academic achievement of boys and girls of 10th grade adolescent students refers to knowledge attained and skills developed in the school subjects. So, academic achievement means the achievement of students in academic subjects. For this purpose, the aggregate marks obtained by the subjects in previous two examinations i.e, 8th and 9th served as measures of academic achievement.

Adolescence: Adolescent boys and girls for the present study meant the school going adolescents falling in the age range of 15-17 years.

OBJECTIVES OF THE PRESENT STUDY

The following objectives were formulated for the present study work:

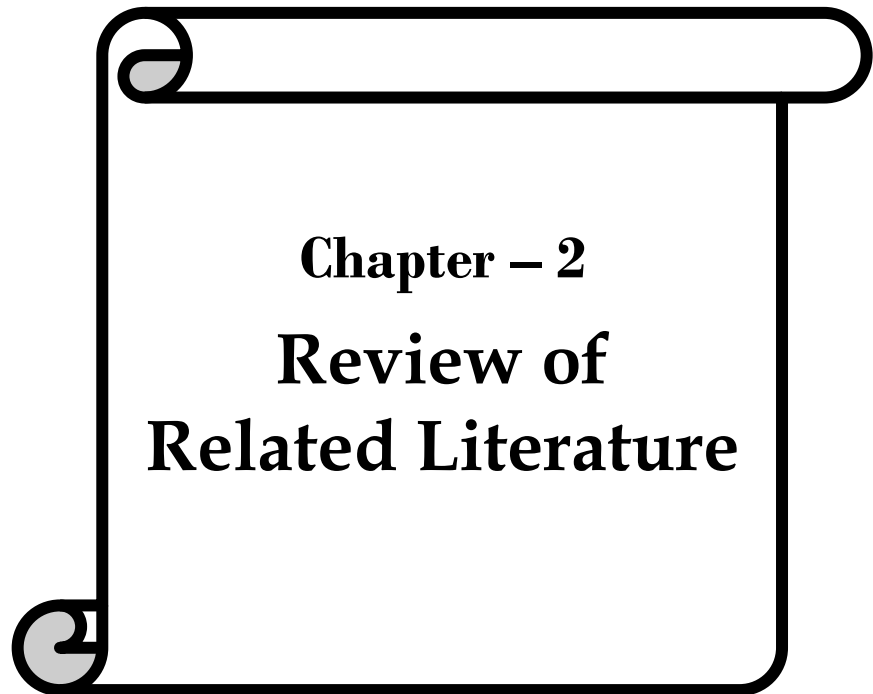
6. To study the emotional intelligence of adolescent students of 10th grade.
7. To study the learning styles of adolescent students of 10th grade.

8. To study the academic achievement of adolescent students of 10th grade.
9. To compare adolescent boys and girl students on emotional intelligence, learning styles and academic achievement.
10. To find the relationship between emotional intelligence on one hand and learning styles and academic achievement of adolescent students of 10th grade.

HYPOTHESES

The following hypotheses have been formulated for the present research work:

7. Boys and girls do not differ significantly in their emotional intelligence.
8. Boys and girls do not differ significantly in their learning style.
9. Boys and girls do not differ significantly in their academic achievement.
10. There is a positive relationship between emotional intelligence and learning styles of adolescent students of 10th grade.
11. There is a positive relationship between emotional intelligence and academic achievement of adolescent students of 10th grade.
12. There is a positive relationship between learning styles and academic achievement of adolescent students of 10th grade.



Chapter – 2
Review of
Related Literature

The review of related literature gives the researcher an understanding of the research methodology which refers to the way of the study is to be conducted. It helps the researcher to know about the tools and instruments which prove to be useful and promising in the previous studies. The advantage of the related literature is also to provide insight into statistical methods through which validity of results is to be established. By reviewing the related literature the researcher can avoid unfruitful and useless problem areas. He can select those areas in which positive findings are very likely to result and his/her endeavours would be likely to add to the knowledge in a meaningful way. The review of related literature enables the researcher to define the limits of her/his field. It helps the researcher to delimit and define her/his problem. To use an analogy given by Ary et.al,(1972, P.56) a researcher might say: The work of A, B and C has discovered truth up to a level to my question, the investigations of D have added this much to my knowledge. I propose to go behind D's work.

The knowledge of related literature brings the researcher up-to date on the work which other have done and thus to state the objectives clearly and concisely. Through the review of related literature, the researcher can avoid unintentional duplication of well established findings. It is no use to replicate a study when the stability and validity of its results have been clearly established. The final and important specific reason for reviewing the related literature is to know about the recommendations of the previous researchers for further research which they have listed in the studies. Helping in evaluating ones research efforts by providing a comparison. Increasing ones confidence in choice of selected topic by viewing interest of others.

The accumulated research in all the disciplines for the last two decades has been accomplished a host of sub-areas with the result that the present day researchers seems to be altogether different from the studies, which were conducted in the past. Therefore, review of the previous literature for the development of objectively based hypotheses and enunciation of the new research design has become essential. The review of the educational literature gives educator an excellent overview of the work that has been done in the fields and helps him in keeping up with recent development. Review of the related literature besides to allow the researcher to acquaint himself with current knowledge in the field or area in which he is going to conduct his research. For a worthwhile research, the researcher needs to acquire up to date information relating t the problem, which is done through the review of the related literature. The survey of the related literature enables the investigator to locate the gaps and find the trends in the research tools employed by the other investigators helps the future investigators to state the problem; to weigh its significance, to work out data gathering devices suggest research design, to identify sources of data, to make effective statistical analysis, to arrive at potent conclusions and avoid duplication.

Knowledge of related literature enables the investigator to define the frontier of his field. It 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 the tools and instruments which proved to be useful and promising in the previous studies. Therefore the survey of such studies to a greater extent forewarns the prospective researcher about the most avowed research problem. It helps the researcher to delimit and define his problem and brings the researchers up to date on the work which others have done and thus to state the objectives clearly and concisely. By reviewing the related literature the researcher can avoid unfruitful useless problem areas. He can select those areas in which positive findings are very likely to result and his endeavors would be likely to add to the knowledge in a meaningful way.

A critical review of the literature enables the researcher to go into greater details and wider applicability of the problem in hand, so as to provide new ideas, explanations and hypotheses. The review forms an important chapter in a thesis where its purpose is to provide the background and justification for the research undertaken (Bruce, 1994) Bruce, who has identified six elements of a literature review. These elements comprise a list, a search; a report. A crucial element of all research degrees is the review of the relevant literature so important is this chapter that its omission represents a void or absence of a major element in research.

Finally we can say that literature reviewed is to expand upon the context and to provide an empirical basis for the subsequent hypothesis. Study of related literature places the researcher in a better position to interpret the significance of his own results. The final and specific reason for reviewing related literature is to know the recommendations of the previous researchers for further research which they have listed in their studies. The length of the review will depend upon the number of relevant articles and the purpose for which the research report is being written. Literature review is not supposed to be just a summary of other peoples work. Keeping their criteria in mind in the present investigations, the investigator surveyed a number of studies which are directly related to the present investigations the same are reported here.

Review of the related literature helps the researchers to acquaint himself with current knowledge in the field or area in which researcher is going to conduct his research. The review of the related literature enable's, the researcher to define the limits of his fields and accordingly delimits or defines his problem.

The final and important specific reason for reviewing the related literature is to know about the recommendations of previous researchers for further research which they have listed in their studies. A selective review of

work done on Emotional Intelligence, Learning Styles and Academic Achievement is briefly categorized into the following studies.

1. Studies on Emotional Intelligence
2. Studies on Learning Styles
3. Studies on Academic Achievement

1. STUDIES ON EMOTIONAL INTELLIGENCE

Karim and Weisz (2011) examined the relationships amongst emotional intelligence, work-family conflict, satisfaction with life, and psychological distress among a sample of employees working in three public sector organizations in Pakistan. Results indicated that emotional intelligence was positively related to deep acting and satisfaction with life and negatively to psychological distress.

Petrides et al. (2010) investigated the relationships between trait emotional intelligence (trait EI; TEIQue-SF) and the Big Five personality dimensions (NEO-FFI) in two Dutch samples. Neuroticism was the strongest correlate of trait EI in both samples, followed by Extraversion, Conscientiousness, Agreeableness, and Openness. Regression analyses confirmed that the overlap between trait EI and the higher-order personality dimensions exceeds 50%, even when the constructs are operationalized via shortened assessments. These results are not only fully in line with trait EI theory, but also support the cross-cultural validity of the TEIQue-SF, and its suitability for the rapid assessment of global trait EI and its four constituent factors.

Nasir and Masrur (2010) in their correlational study intended to examine the relationship of emotional intelligence (EI) with gender, age and academic achievement of students of International Islamic University Islamabad (IIUI). In this study the predictor variable was emotional intelligence and criterion variable was academic achievement as measured by students' Cumulative Grade Point Average (CGPA). Emotional intelligence was measured with the help of BarOn Emotional Quotient Inventory (EQi). Correlation analysis, regression analysis and t-test were performed to test the hypotheses. Results indicated a significant correlation between emotional intelligence and academic achievement. Emotional intelligence was found a significant predictor of academic achievement. No significant correlation was found between age and emotional intelligence. There was no difference in the

mean EQi scores of male and female students except on stress management scale where male students scored higher than female students.

Deniz et al. (2010) in their study examined the relationships between emotional intelligence abilities and life satisfaction of the teachers working at private special education institutions. The sample of the study consisted of 127 teachers, 87 women and 40 men, working at private special education institutions in Konya, Turkey. Bar-On EQ Inventory, Satisfaction with Life Scale and Demographic Information Form were conducted to the participants. Stress management and general mood sub-dimensions were found to have significant positive correlations with life satisfaction, whereas intrapersonal skills, interpersonal skills and adaptability sub-dimensions had no significant correlations with life satisfaction.

Singh and Sharma (2009) in their study, intended to observe the effect of emotional intelligence on neuroticism. It was assumed that emotionally high intelligent subjects would be low on neuroticism while emotionally low intelligent subjects would be high on neuroticism. For the purpose initially an emotional intelligence scale was administered on 400 college going students to select 60 subjects with high emotional intelligence and 60 subjects with low emotional intelligence randomly, on the basis of Q1 and Q3 statistics on the obtained EI scores. These selected subjects were then administered Hindi version of MPI. Average standard score of high EI group on neuroticism was found to be lower than that of low EI group and the obtained CR was statistically significant. The better mental health of high EI group may be attributed to emotional self awareness, self regard, self actualization, stress tolerance, impulse control, problem solving, reality testing, happiness and optimism dimensions of emotional intelligence.

Carmeli et al. (2009) in their study examined the relationship between emotional intelligence and four aspects of psychological wellbeing (self-acceptance, life satisfaction, somatic complaints and self-esteem). Data were collected from employees through two different structured surveys administered at two points in time. The results of four hierarchical regression

models provide, in general, support for the positive association between emotional intelligence and psychological wellbeing components – self-esteem, life satisfaction, and self-acceptance.

Carr (2009) in their study examined Emotional intelligence in medical students: does it correlate with selection measures? sex differences in emotional intelligence among a student sample of medical schools (N= 177). Results indicated that male candidates had higher emotional intelligence scores than females.

Proctor et al. (2009) investigated the characteristics of adolescents reporting very high levels of life satisfaction. Participants (N = 410) were divided into three life satisfaction groups: very high (top 10%), average (middle 25%), and very low (lowest 10%). Results revealed that very happy youths had significantly higher mean scores on all included school, interpersonal, and intrapersonal variables, and significantly lower mean scores on depression, negative affect, and social stress than youths with average and very low levels of life satisfaction. Life meaning, gratitude, self-esteem, and positive affect were found to have a significantly more positive influence on global life satisfaction for the very unhappy than the very happy. Findings suggest that very unhappy youths would benefit most from focused interventions aimed at boosting those variables having the most influence on their level of life satisfaction.

Gallagher and Vella-Brodrick (2008) examined the predictive value of social support (SS) and emotional intelligence (EI), and their interaction effects, on subjective well-being (SWB) beyond variance already explained by personality and socio-demographic variables. Participants were 267 adults (196 female) who anonymously completed measures of satisfaction with life, positive and negative affect, social support, emotional intelligence, personality and social desirability. Exploratory hierarchical multiple regression analyses showed that SS and EI, and their interaction effects, significantly predicted SWB, and explained 44%, 50%, and 50% of the variance in SWL, positive affect (PA), and negative affect (NA) respectively.

This study elucidates the predictive value of SS, EI and their interaction on SWB, and provides the first published insight into a possible conditional relationship between SS and SWB with regard to EI, suggesting that SS may not always be necessary for SWB.

Mishra and Ranjan (2008) have also been studied whether the gender difference affects emotional intelligence of adolescents (N=80, 40 male, 40 female). The results showed that adolescent boys and girls differ significantly on emotional intelligence and boys were found to be significantly higher on emotional intelligence than the girls. The higher scores of adolescent boys indicate that they are better on interpersonal, intrapersonal, adaptability and stress management skills and their overall general mood (happiness and optimism) are of higher order than the adolescent girls.

Chamorro-Premuzic et al. (2007) in their study examined the relationship between the Big Five personality traits (Gosling et al., 2003), trait emotional intelligence (EI) (Petrides & Furnham, 2001) and happiness (Argyle et al., 1989) in a sample of 112 (61 female) student and non-student participants. Strong dispositional determinants of happiness were identified. In line with previous findings, four of the Big Five, namely stability, extraversion, conscientiousness, and agreeableness, were positively correlated with both happiness and trait EI, which explained 18% of unique variance (over and above age and the Big Five) in happiness. Furthermore, a significant amount of shared variance between happiness and the Big Five was explained by trait EI, which partly mediated the paths from stability and conscientiousness to happiness, and fully mediated the link between agreeableness and happiness.

Reinsch (2007) undertook a study, the purpose of their study was to determine what relationship exists between emotional intelligence, lifelong learning and life satisfaction for older adult learners 55 years of age and older. The hypothesis was that life satisfaction increases with higher levels of emotional intelligence and more involvement in lifelong learning. Two hundred and three adults 55 years of age or older participated. Regression

analysis was used to determine the relationships of lifelong learning perspective and emotional intelligence to life satisfaction. Upon inspection of the regression coefficients for these variables, emotional intelligence was found to be the most significantly associated with life satisfaction. Lifelong learning perspective had a significant bivariate relationship with life satisfaction, and was also significantly related to life satisfaction, but not as significantly as emotional intelligence.

Kulshrestha and Sen (2006) carried out a study which was designed to investigate the subjective well being in relation to emotional intelligence and locus of control among executives. The study was conducted on 150 executives of different job strata of Hero Honda Motor Ltd. The Chadda's (2001) Emotional Quotient test, Rotter's (1966) Social Reaction inventory, Bradburn's (1969) Positive and Negative affect scale, Andrews and withey's (1976) life satisfaction scale were used to collect the data . The results of the study reveal that emotional intelligence and locus of control have significant correlation with subjective well being. Subjects with high emotional intelligence and internal locus of control scored significantly high on positive affect and scored significantly low on negative affect. Similarly subjects scored high on emotional intelligence and have internal locus of control scored significantly high on all the three dimensions of life satisfaction scale.

Landa et al. (2006) examined the relationship between Perceived Emotional Intelligence (PEI) and Life Satisfaction in university teachers. To assess the nature of these relationships and to predict the factors implied on life satisfaction, positive and negative affect were used. 52 university teachers (30 men and 22 women) completed the Spanish version of the Trait Meta-Mood Scale for emotional intelligence (TMMS, Fernández-Berrocal, Extremera & Ramos, 2004). Results yielded a strong correlation between life satisfaction and TMMS subscales (emotional Clarity and emotional Repair). Further analyses showed that life satisfaction's most significant predictors were positive and negative affect and emotional Clarity. These results support the incremental validity of self-report measures, as the

TMMS, and the capacity of constructs related to emotional intelligence to explain the differences on life satisfaction independently from personality traits and mood states constructs.

Wong et al. (2005) argued that life satisfaction was one important outcome of people with high EI. The reason is that a person with high EI is able to understand his/her own and others' emotions and to draw upon this understanding to improve behaviours and attitudes for positive results.

Austin et al. (2005) carried out a study on emotional intelligence in which they found that emotional intelligence is more strongly associated with social network size when compared with the Big-Five personality traits. In turn Big-Five traits appeared to be more strongly related to life satisfaction and health status.

Day, Therrian and Carroll (2005) found high emotional intelligence individuals tended to be considerably more extraverted and conscientiousness than low scores on emotional intelligence.

Lounsbury et al. (2005) carried a study in which Big Five personality traits were analyzed in relation to career decidedness among adolescents in middle and high school. Participants were 248 7th-grade, 321 10th grade, and 282 12th grade students. As hypothesized, Conscientiousness was positively and significantly correlated with career decidedness in all three grades. Openness and Agreeableness were found to be positively related to career decidedness for these middle and high school students. Emotional Stability was positively, significantly related to career decidedness for the 12th-grade sample. There were no significant differences in correlational results for males versus females.

Bastian et al. (2005) conducted a study on 246 predominantly first-year tertiary students in which they investigated relationships between EI and a number of 'life skills' (academic achievement, life satisfaction, anxiety, problem-solving and coping). Correlations between EI and academic achievement were small and not statistically significant, although higher EI

was correlated with higher life satisfaction, better perceived problem-solving and coping ability and lower anxiety.

Extremera and Fernandez-Berrocal (2005) investigated the association between Perceived Emotional Intelligence (PEI), measured by the Trait Meta-Mood Scale (TMMS), and life satisfaction in Spanish undergraduate university students. Specially, the predictive and incremental validity of this self-report measure of emotional intelligence was examined. The authors investigated whether PEI would account for variance in satisfaction with life beyond the level attributable to mood states and personality traits. Correlation analysis showed significant associations between Clarity and Repair and higher life satisfaction. Hierarchical multiple regression analysis confirmed these findings and indicated that Clarity accounted further variance in life satisfaction not accounted for by mood states and personality traits. These findings extend previous studies and provide additional support for the incremental validity of the TMMS suggesting that Clarity contribute to life satisfaction independently from well-known mood states constructs and personality traits.

Vakola, Tsaousis and Nikolaou (2004) examined the role of emotional intelligence and personality variables on attitudes toward organisational change. This study explores how emotional intelligence and the “big five” dimensions of personality can facilitate organisational change at an individual level by exploring the relationship between these attributes and attitudes toward organisational change. The sample consisted of 137 professionals who completed self-report inventories assessing emotional intelligence, personality traits and attitudes towards organisational change. The results confirmed that there is a relationship between personality traits and employees’ attitudes toward change. Similarly, the contribution of emotional intelligence to the attitudes to change was found to be significant, indicating the added value of using an emotional intelligence measure above and beyond the effect of personality.

Hunt and Evans (2004) examined the relationship between emotional intelligence and post- traumatic stress and reported in their study on individuals [N=414 (181 male and 233 female)] having traumatic experiences and simultaneously studied on their emotional intelligence level, and the results showed that males have higher EI than females.

Brackett and Mayer (2004) in their study found that emotional intelligence is highly significantly correlated with Neuroticism, Extraversion, Agreeableness and Conscientiousness, but moderately related to Openness to experience.

Warwick and Nettelbeck (2004) conducted a study in which eighty-four tertiary students completed questionnaires measuring emotional intelligence (EI) and personality traits. Among personality variables, extraversion and agreeableness correlated moderately with total Trait Meta-Mood Scale (TMMS) ($p < 0:01$), and weakly ($p < 0:05$) with openness, conscientiousness and neuroticism.

Furnham and Petrides (2003) carried out a study in which participants completed measures of trait emotional intelligence (trait EI), happiness, personality, and cognitive ability. Neuroticism was negatively related to happiness, whereas Extraversion and Openness to Experience were positively related to it. Cognitive ability was not related either to happiness or to trait EI. A three-step hierarchical regression showed that trait EI explained over 50% of the total variance in happiness. The positive relationship between trait EI and happiness persisted in the presence of the Big Five.

Lopes, Salovey and Straus (2002) carried a study on emotional intelligence, personality, and the perceived quality of social relationships. This study explored links between emotional intelligence, measured as a set of abilities, and personality traits, as well as the contribution of both to the perceived quality of one's interpersonal relationships. In a sample of 103 college students, they found that both emotional intelligence and personality traits were associated with concurrent self-reports of satisfaction with social relationships. Results also showed that Global satisfaction with one's

relationships was associated with extraversion, neuroticism (negatively), and the ability to manage one's emotions, as assessed by the MSCEIT.

Palmer et al. (2002) in their study examined the relationship between emotional intelligence and life satisfaction. To determine the nature of this relationship, personality constructs known to predict life satisfaction were also assessed (positive and negative affect). Emotional intelligence was assessed in 107 participants using a modified version of the Trait Meta-Mood Scale. Life satisfaction was assessed using the Satisfaction with Life Scale. Only the Clarity sub-scale of the TMMS (which indexes perceived ability to understand and discriminate between moods and emotions), and the Difficulty Identifying Feelings sub-scale of the TAS-20 were found to significantly correlate with life satisfaction. Subsequent analyses revealed that only the Clarity sub-scale accounted for further variance in life satisfaction not accounted for by positive and negative affect. These findings provide further evidence that components of the EI construct account for variance in this important human value not accounted for by personality.

2. STUDIES ON LEARNING STYLES

Sywelem (2012) Learning Style Preferences of Student Teachers: Mohamed A Cross-Cultural Perspective

This article examines how cultural variability is reflected in the learning style of students in Egypt, Saudi Arabia and United States. In this study, the learning styles of over 300 students in Teacher Education Institutions in Egypt; Saudi Arabia and United States of America were examined. For the Arab students, The Steinbach Learning Style Survey was translated into Arabic. This Arabic version was constructed in the same format as the English version, and was given to two language experts for back translation. A corrected final version of the survey was administered to a group of student teachers in Saudi Arabia and Egypt. The Saudi students group was selected from Jazan University, and the Egyptian group was selected from Suez Canal University. The Steinbach LS survey, consisting of (12) statements with forced choice items with two options (yes, no), was used to gather data. The participants were expected to select the appropriate choice for each statement. Researcher designed demographic information that was used to examine two variables. Demographic data consisted of place (country) and gender (male and female). An estimate of Validity was established using a Q-sort Technique. As a result of the Q-Sort Review, an estimate of validity for what's my Learning Style? Instrument was considered to be appropriate for research purposes. The descriptive statistics shows out of the total 316 respondents, 118 (37.3%) were American students, 94 (29.7%) were Saudi students and 104 (32.9%) were Egyptian students. 208 (65.8%) of the total respondents were males and 108 (34.2%) were females. It is finds that (1) There were no statistically significant differences in the auditory learning ability between the Egyptian and American student. (3) There were no statistically significant differences in Kinesthetic learning ability between the Egyptian and Saudi students

M. Asmaa Sayed (2012) A Comparison of Preferred Learning Styles between Vocational and Academic Secondary School Students in Egypt

The present study is an attempt to find Comparison of Preferred Learning Styles between Vocational and Academic Secondary School Students in Egypt. (1) What are the learning styles preferences between Vocational and Academic Secondary School Students in Egypt? (2) Are there any differences between Vocational and Academic Secondary School Students in relation to learning style preferences? (3) What is the relationship between student's gender and learning style preferences in both academic and vocational secondary schools? (1) To identify learning styles preferences between Vocational and Academic Secondary School Students in Egypt. (2) To identify whether there are differences between Vocational and Academic Secondary School Students in Egypt in relation to learning style preferences. (3) To identify whether there is a relationship between students' gender and their learning style preferences in both academic and vocational secondary schools. The Steinbach LS Survey was translated into Arabic. This Arabic version was constructed in the same format as the English version, and was given to two language experts for back translation. A corrected final version of the survey was administered to High School students in both academic and vocational schools in Egypt. The descriptive statistics show a total of 441 students (161 males and 280 females) participated in the survey. Out of them, 261 students were Academic secondary schools students and 180 were Vocational secondary schools students. A two way multivariate analysis of variance (MANOVA) was conducted to examine the relationship of gender and types of education on three different learning styles (Auditory, Visual and Kinesthetic). (1) No statistical differences were found among the Auditory, Visual and Kinesthetic learning modalities. (2) Kinesthetic preference was higher among males in academic programs of study than for females in the same program. (3) Within the vocational settings females had higher

kinesthetic preference than the males. (4) No gender-based differences were found.

Jafre M. AbidiZ. (2011) Learning Styles and Overall Academic Achievement in a Specific Educational System
Rezaee A.

The present study is an investigation of the relationship between learning styles and overall academic achievement. The Learning Styles Survey (LSS), employed in this study, appears to be a viable tool to determine student's learning style. In order to investigate this relationship a total of 317 students participated in this survey study. The Learning Styles Survey (LSS) instrument which is based on Joy Reid's Perceptual Learning-Style Preference Questionnaire (1987) was used. The statistical procedures employed in this study were one-way ANOVA, and multiple regression analysis. (1) The analyses of the data indicated a significant relationship between overall academic achievement and learning styles. (2) It was also found that the high, moderate and low achievers have a similar preference pattern of learning in all learning styles.

Eyyam Ramadan (2011) An investigation of the Learning Styles of Prospective educators
Nazan Dogruer

The aim of this study was to investigate the learning styles of prospective teachers in different Departments in the Faculty of Education such as Turkish Language Teaching, Guidance and Psychological Counseling, Pre-school Teacher Education, and Computer and Instructional Technology Teacher Education at Eastern Mediterranean University during the Academic Year 2009-2010 Spring Semester. Prospective teachers have been asked to complete a Learning Styles Inventory. The data was analyzed by using SPSS Statistical Program. It is found that there were differences in the learning styles of prospective teachers according to their departmental choices and students from departments with similar subjects have similar dominant styles.

Sharma Parveen (2011) A Study of Learning Thinking Style of Secondary School students in relation to their Academic Achievement

The styles depend upon cerebral dominance of an individual in retaining and processing different modes of information in his own style of learning and thinking. This study attempted to find out the relationship and significance of difference between academic achievement and learning-thinking style of secondary school students. The study was delimited to class 10th students only. The purpose of present study was to see whether there is a relationship between academic achievement and learning-thinking style of secondary school students or not. Normative Survey method was applied for conduction of the study. The population for the research includes students of secondary class of different areas. Mean and Pearson's Product Moment Correlation ('r') are the statistical technique which helped in the analysis and interpretation of the result. The collected data was analyzed and interpreted on the basis of hypothesis. It has been found that learning-thinking style and academic achievement of secondary school students are positively and significantly related to each other. However significance of mean difference favors male adolescents. Students having high academic achievement are better for teaching.

Shahid M. F. (2011) Role of Learning Styles in the quality of learning at different level

The aim of this descriptive co-relational investigation was to identify the preferred learning styles of their role in quality of performance at secondary intermediary and University level for language students from six different fields. The association and differences in students learning styles related to their demographics were also related to their demographics were also explored. Majority of the student from all the fields in sample showed the diverging style and the accommodating style as their most preferred learning

styles. The learner's gender and nature of house affected the preference for Learning styles other variables showed no association with learning styles. The learning styles of language students have no relationship with the grades obtained in their previous exams.

Bostrom Lena (2011) Students' Learning Styles Compared with their Teacher's Learning Styles in Secondary Schools

This article compares teachers' and students' learning styles profiles at the two major orientations (vocational and academic programs) in upper secondary school, to explore differences and similarities. The study involved 53 secondary school teachers and 101 high school students randomly selected. The learning styles assessment PEPS was used to identify 20 different traits. Three groups were compared and analyzed by using F-test and analysis of variance, ANOVA. The research questions were as follows: to what extent are differences in learning styles between teachers and students and between the two study areas? It was found that teachers have a greater need for light and temperature, are more motivated, more adaptable, have less need for structure and authority and are more alert in the morning and less in the afternoon compared with the students. The two student groups showed no statistically significant differences between them. The vocational students differed more from teachers than their academic peers.

Clarke T. Lesh, T. (2010) Thinking Styles: Teaching and learning styles in graduate education students
Trocchio, J.

This study investigated the relationship between two intellectual styles approaches: Sternberg's Thinking Styles of teachers and Felder and Silverman's Learning Styles were used as tools. Ninety five graduate students majority in special education, reading, educational leadership and curriculum and elementary education completed the thinking styles in teaching inventory (TSTI) and the Index of learning styles questionnaire (ILS). Several thinking styles from Sternberg's theory of self government were highly to moderately

correlated with Felder's Learning Styles. TSTI did not differentiate between master's and doctoral students, but index of learning styles did so. Participants differed in their learning styles in teaching and learning styles, based on their educational measure.

**Cook J. Matthew, (2010) Learning Style Predicting College
B.A. Fairfield Adjustment An exploratory study of
learning styles as a predictor of college
academic adjustment**

The present study examines learning styles of first year students entering college and first semester academic achievement to help incoming students negotiate the high school-to-college transition. Learning styles were determined using the Learning Styles Inventory II a (Kolb, 1993) and grade point average and academic standing were used as measures of academic achievement. Seven hundred and thirty-nine first year students (395 women and 344 men; mean age = 17.7 years) from a Northeastern Jesuit University with approximately 3,000 undergraduate students volunteered to participate as part of their orientation program. This sample represented 82.9% of the incoming freshmen body ($N=891$). It was found that there was no significant difference between the concrete learners and the abstract learners in terms of GPA. A significant difference existed between the active and reflective learners in terms learning style. Active learners had a significantly higher GPA than reflective learners. There was a significant main effect for both learning style type and gender. Female students performed better academically than males. The "doing/thinking" convergers and "feeling/doing" accommodators are doing better academically. "watching/feeling" divergers and "thinking/watching" assimilators are having the most academic difficulty during their first semester of college. There was no significant interaction between learning style type and gender.

**Halim Abdul (2010) Choice of Learning Style of University
B. Raof Abdul Technology Malaysia Senior TESL
Students and Perceptions towards Effective
Teaching**

This study was an attempt to investigate the association between students' learning style and academic performance University Technology Malaysia TESL senior undergraduates. It also investigated the most popular language learning style of UTM TESL students. Another purpose was to investigate the most preferred teaching preferences of UTM TESL students. The descriptive study was carried out in form of questionnaires as the tool of assessment. Interviews were also conducted to validate the findings from the questionnaires. The study focused on the third and fourth year students of TESL Bachelor Program in UTM. Data was analyzed using SPSS version 11.5. The findings reveal visual learning style is the most popular among UTM TESL students. (2) This study also shows that different types of learners had different teaching preferences. (3) There was no significant relationship between students' learning styles. (4) There was no significant relationship between students their academic performances.

**Naik, Bijay (2010) A comparative study of Learning Styles of
Business Students**

This research is investigated on learning styles of business students. A sample of 156 undergraduate business students enrolled in two levels of business statistics courses was used. The ILS instrument based on Felder-Silverman model was selected. The survey was made anonymous and voluntary. The ILS was administered to the students in the form of a printed questionnaire. It was found that there was no significant difference in the learning styles between male and female students. There was significant difference in the learning styles between male and female students in the visual-verbal dimension.

**Yildizlar (2010) Thinking Styles of Candidate teachers
Mehmet who come from different cultures**

The study was to find the relationship between culture variable and thinking styles of candidate teachers who study at TRNC Ataturk Teachers Academy and who study at Cyprus International University, Education Faculty, Turkish Language Teaching Department is analyzed in this research. The research held on the data that were collected from 102 female and 44 male students who study at the Academy and 41 female and 74 male students who study in Turkish Language Teaching. “Thinking Styles Inventory developed by Sternberg Wagner (1992)” was used in the research. It was determined that candidate teachers who study in Turkish Language Teaching show meaningful differentiation in favor of males in the “introvert” sub-dimension according to gender variable. It was also determined that candidate teachers who study in the Academy show meaningful differentiation in favor of males in the “conservative” sub-dimension according to gender variable. It was found that the teacher candidates who come from different cultures have different thinking styles.

**Sunbul Ali Murat (2010) An Analysis of high school students
Sari Hakan Learning Strategies and Styles in
Turkey**

The primary purpose of this survey study was to compare the learning style preferences and learning strategies of Turkish high school. Comparisons included the factors including types of school, branches, grades and gender. This research further investigated the learning strategies and style characteristics of 505 students from 16 high school. It analyzed their similarities and differences by levels of classroom, gender, school tips, branches and grades and it also explored the interactive relationships among these four factors and students’ learning-style and strategies. The Turkish versions of the Learning Style and Learning Strategies Inventory for Grades

9-10 were used. For descriptive statistics, means, means-weight and standard deviations were calculated. For inferential statistics, One-way analyses of variance (ANOVA), t tests, and Tukey post-hoc tests were applied. **Findings:** (1) It was seen that the students' learning strategies and styles differentiated in school, branches, grades and gender variables mentioned above. High school students use attention and metacognitive strategies as well they prefer visual learning styles. (2) It has been discovered that the individuals' school and class environment and their preferences of branch are highly effective in students' learning strategies and styles, and the main reason of the difference of strategy and style can be that various education programmes are used in students' school and branches.

Glines, Cevriye (2004) Learning Style Preferences of preparatory school Students at Gazi University

The aim of this study was to determine the learning style of preparatory school students from Gazi University and examine their relationship between students learning style preferences and faculty students will study gender proficiency level of English and achievement scores on listening, reading, Grammar and writing in English course. The instrument, index of learning style was administered to 367 randomly selected students. As for the data analysis, descriptive statistics, frequencies, percentages, means and standard deviation, the 't'-test was used to see whether students achievement scores differ according to their LSP's and the cross tabs procedure was conducted to investigate whether the LSP's of the student at Gazi University differ according to faculty they will study in gender and level of proficiency. (1) There was no significant difference between students LSP's and faculty, gender, level and achievement scores.

Delialioglu, Fatma (2003) A study to investigate the role of gender and Learning Styles of 10th grade students, kinematics grouping skills

The main study was conducted on 989, 10th grade students. The data obtained was analyzed by using both descriptive and inferential statistics. Finding of the kinematics graphing skills indicated that general performances of the students were very low and many students have difficulties in interpreting kinematic graphs. When the data were analyzed using ANOVA while controlling the effects of student's age. (1) There was no significant difference among the kinematics graphing skills test score of the students having different learning styles. (2) There was no significant difference between the kinematics graphing skills test scores of female and male students. (3) On the other hand a significant difference was observed between the gender and learning styles on student's kinematics graphing skills test score. Male students scored higher in kinematics skills than female students.

Cassidy Simon and (2000) Learning Styles, Academic Belief systems, Self-Report; students proficiency and achievement in higher Education

This paper evaluates the efficiency of teaching and learning in higher education by investigating the relationship between students assessment of their own academic proficiency 'in their case research method proficiency' (RMP) Learning styles, Academic locus of control, academic self-efficacy and academic achievement. First and second year, under graduate students (RMP) was measured before and after completing modules in research methods. Students also completed measures of approaches to learning, academic self-efficacy and academic locus of control academic achievement (module mark) was also recorded. Results showed that perceived proficiency increased after completing the-taught modules and that perceived proficiency was positively correlated with academic performance level, students taught

under the recently modified program, reported significantly higher perceived proficiency than level. Students taught under the previous program perceived proficiency was positively correlated with a strategic learning approach and negatively correlated with surface learning approach and external locus of control beliefs. Academic Achievement was also positively correlated with a strategic learning approach and negatively correlated approach. A deep learning approach failed to be associated with either RMP are academic achievement.

Cano Garcia, F. (2000) Learning and thinking styles; an analysis of their Interrelationship influence on academic Achievement
Hughes E. H

The aim of the study was to examine whether college students learning styles and thinking styles were interrelated, And if these could predict academic achievement? A total of 210 college students completed two inventories, the tools used for the study included learning style Questionnaire (LSQ, Kolb), and Thinking Styles (MSG Sternberg). **Findings:** (1) The results of regression analysis indicated that student's academic achievement was related to students thinking styles. (2) Students that prefer to work individually (internal), that do not enjoy creating formulating and planning for problem solution (legislative in a negative sense) and those that have adherences to existing rules and procedures (Executive) were those which obtained higher age achievement.

Dangwal, Ritu, (1999) Construction of children's Learning Styles

The present study was carried on Construction of children's Learning Styles. Learning Style Inventory consisted of 52 items developed for measuring Adult Learning Styles. It was used to identify 24 items that could be represented by pictures supported by simple text to evolve a Learning Style Inventory for children. (1) It was observed that students of 3rd grade needed more attention than 4th and 5th graders. (2) The concurrent validity between

LSI and CPQ were significantly high and test was considered to be highly valid. Reliability of the test was observed to be high and consistent. The children enjoyed giving LSI test rather than the conventional paper-pencil test. (3) The LSI was also found helpful for the teachers not only to understand their class better but also to apply strategy to teach slow learners children get distracted easily etc.

Verma, Jagdish (1992) A study of learning style, achievement motivation, Anxiety and other ecological correlates of school students of Agra region

The present study is primarily conducted with learning style related to anxiety, achievement-motivation of region and find out the correlation psychological factors. Using the purposive sampling method, 2000 students were considered for the sample. This includes boys and girls, covering the rural and urban locales of Agra city. The tools used in the present study included, Learning Style Inventory by Rita Dunn and Kenneth-Dunn, adopted by Vahistha, achievement-motivation Test by Prayang Mehta, General Anxiety Scale for children (GASC), Hindi Version adopted by Nijhawan, Socio-economic Status Scale by Kuppuswamy, General Information questionnaire (GIQ) by Vashistha and Jagdish Verma. It was found that (1) Sex did not make a difference in the Learning Styles of students, but it had a direct bearing upon achievement-motivation and anxiety. (2) Age levels had a little impact on learning styles, achievement-motivation and anxiety. (3) There were rural-urban differences in learning style of students; urban students had better learning styles than the rural students. (4) Parent's education had influenced in shaping the achievement-motivation of high school students, but it had no impact on learning style and anxiety.

3. STUDIES ON ACADEMIC ACHIEVEMENT

Baljinder S. and Kuldip S. (2009) The Influence of Emotional Intelligence and Learning Style on Student's Academic Achievement.

In this study, the researcher chose to use the self-reported measure as the data collection method as opposed to direct interview. An adapted questionnaire, with some adaptations to suit the context of the study, was used. The total population sample is 1,600 students. A sample of 500 students was chosen using random sampling. A list of students enrolled at University Technology MARA Sarawak was obtained from the Department of Academic Affairs and based on this list, 500 students were selected randomly using the stratified random sampling technique. The average age of the respondents is 21 years. Self-Report Emotional Intelligence Test (SREIT) developed by Schutte et.al (1998) questionnaire aims to assess the student's Emotional Intelligence. The items for the learning styles were mainly adapted from the 'VARK Learning Styles Inventory' developed by Neil Fleming (1987). (1) A significant relationship between emotional intelligence and academic achievement was established. (2) Co-relational analysis showed a significant relationship between GPA and regulation, understanding, facilitation and expression. The results suggest that students with high levels of regulation, understanding, facilitation and expression, tend to be more successful in their academic achievement. (3) A positive relationship was also found between learning styles and academic achievement. The results of the co-relational analysis also show a significant relationship between GPA and visual, auditory, and kinesthetic at the 0.5 level of significance. In general, the results suggest that students with high levels of visual, auditory and kinesthetic tend to be more successful in their academic achievement. (4) A significant relationship was found between GPA and regulation, understanding, facilitation and expression among the female students. In general, the results suggest that female students

with high levels of regulation, thought and expression tend to be more successful in their academic achievement.

Ismail Hakki Erten (2009) Differences in academic achievement among Turkish respective teachers of English as a foreign language

This study seeks to explain prevalent gender differences in academic achievement of 84 third-year students enrolled in a pre-service ELT (English Language Teaching) teacher training department. The study collected both qualitative and quantitative data through semi-structured interviews from a sample of 38 students and content analysis of the data indicated that male and female teacher trainee teacher's has differentiated perceptions of social roles and as an artifact of these roles, they differed in the quality and quantity of time and effort allocated for their academic studies. Girls reported both long periods of time and more efficient Meta cognitive disposition than their male peers. Another important factor for the observed differences appeared to be the perception of teaching as a profession. (1) Female trainee teachers reported more intrinsic orientation towards the profession whereas male trainee teachers mentioned more extrinsic orientation which seemed to directly influence the participant's engagement with their academic endeavor.

Sharmistha Roy (2008) A comparative study of factors affecting Academic Achievement of school going adolescent boys and girls

The aim of the study was to determine some of the selected influencing factors like daily routine of the student's, tuitions, content viewed on television, etc. affecting the academic achievement of school going adolescent boys and girls. The factor group of the study consisted of top ten rankers, both boys and girls from class 7th, 8th, 9th and 11th selected from two English medium schools located at Anand and Vallabh Vidyanagar, Gujarat. Data was collected by the questionnaire method. Each respondent was made to fill the

questionnaire respectively. Analysis was done by calculating frequency and percentages. (1) Results showed that there is not much difference in the importance of money of the selected factors exhibited by boys and girls, which play an important role in their Academic Achievement.

Hau Jen -Tsung (2008) Influences of the Academic Self-concept on Academic Achievement: From a Perspective of Learning Motivation

Based on the released data of 5,690 Taiwanese 8th graders participating in TIMSS 1999, an elaborated motivation-resource competition model has been examined through the structural equation modeling technique. According to the model, a student's self-concept in one learning subject exerts a positive effect on his/her achievement in the same subject, but a negative effect on the achievement in another learning subject. The model demonstrates that students with higher academic self-concept tend to invest more time to engage in learning activities in correspondent learning subject; on the other hand, the time spending on study for other learning subjects will decrease relatively. A secondary analysis approach and structural equation modeling technique were utilized to examine the model mentioned above. Data screening and statistical assumptions testing were processed before model testing. Six latent variables are involved in the proposed model: "Science Self-Concept" (SSC) and "Math Self-Concept" (MSC) are independent latent variables, "Science Achievement" (SA) and "Math Achievement" (MA) are dependent variables, and "Investment in Science Learning" (SI) and "Investment in Math Learning" (MI) are intermediates. Among these variables, SA and MA are estimated through the plausible values of difference subareas, SSC and MSC are estimated by students' responses on, respectively, four and five related items of the student background questionnaire (SBQ). (1) The path coefficients of elaborated MR Model estimated through the five sets of plausible values did not show the expected negative effect but a positive correlation between MI and SI. (2) The results indicate that the goodness-of-

fit indices met the required criteria in substance and the estimated path coefficients confirm the revised model except for the path from SI to SA. (3) For both math and science learning areas, students' academic self-concept exerts a positive direct effect on their academic achievement. But the indirect effects between academic self-concept and academic achievement via passive investment demonstrate a positive effect for math learning but no significant effect for science learning. (4) There is a negative effect from the academic self-concept to passive investment in another learning area. Although the self-concept on one learning area shows a negative effect on the passive investment in another learning area, the indirect negative effects from MS/SS, via SI/MI, to SA/MA are not significant. (5) The direct effect from the self-concept in one learning area still exerts a significant negative effect on another one.

Nuthana P. G. Yenagi (2007) Gender Analysis of Academic Achievement among high school students

The study was carried out to make gender analysis of academic achievement among high school students on a sample of 600 students studying in 8th, 9th and 10th standards of which 325 boys and 275 girls. The sample was selected randomly from two schools of rural and two of Dharwad city, Karnataka state. To measure study habits and self-concept of students, Patel's (1976) study habit inventory and self-concept scale of Singh and Singh (1988) were used. To collect the general information of students' socio-economic status scale developed by AICRP-CD (2002) was used and average of grades of two previous years was taken from school records as a measure of academic achievement. The data thus collected was subjected to mean, SD, t-test, and correlation. (1) The students had good study habits and possessed high self-concept. Academic achievement was excellent among students. (2) Class-wise comparison of study habits and self-concept revealed that 8th standard students were better than 9th and 10th standards. (3) There was significant association between study habits, self-concept, socio-economic status and

academic achievement among boys and girls. (4) Study habits, self-concept and socio economic status were significantly related to academic achievement. (5) Rural students had better study habits and self-concept than urban students. (6) Urban students had higher academic achievement than rural students.

Chowdhury, Aparajita; Kumari (2007) **Role of Parental support in satisfying children's Needs and Academic Achievement**

To explore the role of parental support in satisfying children's needs and academic achievement. The sample consisted of 50 children of boys and girls studying in 7th, 8th and 9th grades in school, of which an equal number of boys and girls were included in the sample. The school was in a predominantly middle class community area. The mean age of the students was 13.5 years, children's need satisfaction, family effectiveness and social support, Inventory and academic marks were used as measures in the study. (1) Girls required more support from their parents and at the same time their needs were also found to be more than those of the boys. (2) With regard to the academic achievements, parental supports were found to have a positive effect on their children's academic performance.

Kikas, Eve, Mottus, Evi (2006) **Ability grouping in schools, A study, of Academic Achievement in five schools in Estoni**

The paper deals with the questions of the quality of schooling and the effect of ability grouping on students Achievement. One hundred and forty seven students from five schools participated in the study. Two schools were usual mainstream town schools, one a usual rural school, one step-by-step school and one elite private school. All children were studied twice, at the beginning of the first (Age=7) and third grade. First, children's cognitive abilities were assessed, second their academic achievement in Estonian language and

Mathematics were assessed. Both the battery of cognitive tests and tasks in academic achievement test were developed specifically for this study. (1) It was shown that attending an elite private school was related to abilities and higher academic achievement attending elite school had negative impact on achievement.

Nirmala, P., and (2006) A study on optimization of Academic Merlyn Sanders Achievement in Mathematics: A Linear Programme Approach

The study examined on optimization of Academic Achievement in Mathematics: A Linear Programme Approach. For the purpose of the present study, 36 schools have been selected from in and around Chennai district by giving due representation to the management (11 Government schools, 2 Corporation schools, 12 private aided schools and 11 private unaided schools), type (10 boys, 17 Girls and 9 Co-educational schools) and board affiliation of the schools (28 schools belonged to state board and 8 to matriculation). In this study 900 students from Higher Secondary classes were selected randomly by giving due representation to the student related variables such as subject groups, sex, community parental education, etc. Different scales were used to collect data regarding Mathematics Information Processing Skills (MAPS) by Kenneth C. Bessant; Decision Making Skills (DMS) by Scott and Bruce; Attitude towards Mathematics (ATM) by Fennema Sherman; Academic Achievement Test in Mathematics (AATM) by the researcher. (1) It is observed that mathematics information skills, decision making skills and attitude towards mathematics have made a significant contribution towards the academic achievement. All the four factors of attitude to mathematics (Confidence, Usefulness, Success and Teacher) have made a significant contribution towards the maximization of the aggregate performance in mathematics.

**Kassahun, T. and (2006) Girls Performance in Mathematics in
Kedir, B. Upper Primary Schools of Addis Ababa**

The study comparisons of girl's achievement with that of boys in mathematics in the upper primary education in Addis Ababa; also to examine the extent of relationship between students performance in mathematics and school ownerships; and to examine the attitudes of both genders towards mathematics and pinpoint some of attitudinal stereotypic barriers to girls achievement in mathematics. The research followed a multi-stage sampling procedure to select the main sources of data. On the basis of school ownership a list of all school operating in Addis Ababa with Class VI was prepared. The list was limited to co-educational schools and was used to selected sample schools in the third stage of sampling process. All in all, 10 schools (five each from the government and non-government sectors) were selected based on a stratified sampling procedure. Finally, one section of Class VI from each school selected in stage three was chosen, and all its students participated in the study. Out of the total samples of 611 students from 10 schools, 302 were girls and 309 were boys. In terms of age, about 51.3 percent of the respondents were under 13 years, 43.9 percent of them were in the range of 13 and 15 years, and remaining 4.8 percent were above 15 years. The researchers employed both objective and subjective instruments of data collection, and to maintain objectivity in data collection used a standardized mathematics test and documentary analysis. The statistical tools were used for study mean, standard deviation, Chi-square, and t-test. (1) The girl's performance in mathematics in government schools may not be significantly different from that of non-government schools in the upper primary schools of Addis Ababa. (2) Majority of boys and girls agreed that parents did not favor sons against daughters or vice versa when it came to their schooling. More specifically, about 84.5 percent of boys and 82.2 percent of girls said their fathers had encouraged all children, irrespective of gender, to pursue their studies and

perform well in school. Similarly, about 85.6 percent of boys and 84.6 per cent of girls felt that their mothers had shown equal interest in their sons and daughters education. (3) Some of boys and girls believed that most mathematics teachers were biased against girls in their classroom activities. (4) A sizeable number of boys (41.5 per cent) and girls (43.1 per cent) reported that their mathematics teachers were gender-neutral in classrooms. When the aggregate data were closely scrutinized, an overwhelming majority (57.8 per cent) of student believe that their mathematics teachers were gender sensitive in classroom activities.

S. O. Salami and E. A. (2004) Influence of single parenting on the Academic Achievement of adolescents in Secondary schools in Alawode

The purpose of the study was to investigate the effects of single parenting on the Academic Achievement of adolescents in secondary schools in Ejigbo local government area of Osun state. Descriptive survey research design was employed. A total of 100 senior secondary students randomly selected from five secondary schools in the local government were involved in the study. The Academic records of the students were obtained from their principal's. Personal data, forms were also used to collect information as regards their age, gender, religion and type of home they come from. Students t-test statistics was used to analyze the data collected. (1) Students from intact home had significantly better academic achievement than those from single parenting homes. (2) Significant difference was found between the Academic Achievement of Christian and Muslims students from intact homes were as none was found between the Christians and Muslims from single parenting home. (3) Also significant difference was found, between the academic achievement of students however, urban students scored higher in academic achievement than rural students.

Krishnendu Bagghi (2004) A study on scholastic achievement in Life Science in Relation to Cognitive Style Social Disadvantages and Interest of Secondary Students in Tripura

The study is to find out gender differences, if any on all the variables under consideration; determination of relationship between the scores of the boys and girls on cognitive style, social disadvantages, interest and scholastic achievement in life science and prediction of scholastic achievement of boys and girls students in the subject of life science. Sample: 689 students (comprise of boys N=358 and girls N=331) of class 10th reading under the syllabus of Tripura Board of Secondary Education were selected randomly from different schools of four districts in Tripura. For the purpose of the study the following instruments were used. (1) Assessment of Cognitive Style; Kit of References test for cognitive factors by John. W. French, Ruth. B. Ekstrom, Leighton. A price was used to assess cognitive style. (2) S. Chatterjee's Non-Languages Preference Record for assessing interest of the sample students was used in this study. (3) A Scale for assessing social Disadvantages of class 10th student of different schools in Tripura was developed by researchers as no such test was readily available to meet the purpose. (4) Scholastic achievement test of life science: Marks obtained in the year 2002 by the students at the Madhyamik Examination under Tripura Board of Secondary Education which were collected from the respective schools of four districts in Tripura. (1) There was no significant difference between boys and girls in the area of cognitive style, social disadvantages, and different measures of interest on Fine arts, Literary, Scientific Agriculture, Outdoor, sports, household activities. Boys are more proficient in the subject of life science. (2) It is found that very low positive relationship exists in boys and girls between cognitive style, scientific Medical, Agriculture, Technical, Crafts, Outdoor, Sports, Household and Scholastic Achievement in the subject of Life Science. (3) Very low negative relationship exists between Fine Arts,

Literary and Life Science. Moderate positive relationship exists between Social Disadvantages and Life Science. (4) Interest on household of boy's is significant. All variables are not significant. Some are partially significant. (5) It is found that very low positive relationship exist in between scholastic achievement of Life Science and Cognitive Style, Interest on Fine Arts, Scientific, Medical, Agriculture, Technical Crafts, Outdoor, Sports, Household, Moderate positive relationship exists between Scholastic Achievement of Life Science and Social Disadvantages, Interest on Fine Arts, Interest on Literacy, Interest on Scientific, Interest on Medical, Interest on Agriculture, Interest on Household of girl students is significant. All variables are not significant, some are partly significant (6) Cognitive Style, Social Disadvantages, Measures of Interest of the students combined together is a good predictor of their Scholastic achievement in life science. (7) Girls showed significant weakness in life science in comparison to the boys. Intellectual abilities were not responsible for their low achievement.

Chang, Linchiat (2004) Chinese college students in Hong Kong and Singapore to their Caucasian American Counterpart

The purpose of the study was to assess the Chinese college students in Hong Kong and Singapore to their Caucasian American counterpart in an attempt to examine the similarities and differences in subjective overachievement across cultures. (1) The relevance of the subjective achievement experience in different cultures but also revealed important differences. Compared to American participants, Chinese participant showed more ambivalence about the benefits of failure, and they manifested higher levels of self-doubt as well as the tendency to discount ability under conditions of effort exertion. These cross-cultural differences persisted after controlling for individual differences in self-construal.

Gakher S. (2003) Emotional Maturity of students at Secondary Stage-Self- Academic Achievement

The purpose of the study was to find the relationship between Emotional Maturity and Intelligence, Self-Concept and Academic Achievement and to find the difference in the Emotional Maturity of boys and girls. The study was conducted on a sample of 200 students of secondary schools from two Districts i.e. Punjab, Patiala and Ferozpur. The sample comprised of 105 boys and 95 girls. Emotional Maturity Scale (Singh and Bhargava, 1990), Group Test of General Mental Ability (Tandon, 1971), Self-Concept Scale (Ahluwalia, 1986) and Academic Achievement of class 8th students were used. Product moment, co-efficient of correlation and t-test was used as statistical techniques. (1) It was found that there was a significant negative correlation between independent variables of intelligence and emotional maturity i.e. more the students are intelligent, more they will be emotionally mature. (2) Further, there is a significant negative correlation between Self-Concept and Emotional Maturity and therefore as per the manual students who are higher in their Self-Concept are also Emotionally Mature. (3) High Achievers are also high in their emotional maturity. (4) It was also found that boys are more emotionally mature as compared to girls.

Agarwal A. (2002) A Study of relationship of Academic Achievement of boys and girls with Intelligence, Socio- Economic Status, Size of the Family and birth order of the child

In the present study a sample of 300 secondary school students of class 9th was selected from 6 institutions of Lucknow city. Institutions were divided into three categories, i.e., poor, average and good. Two institution from each category were selected, one for boys and one for girls. Academic Achievement (total marks obtained in final exam of class 8th), Prayag Mehta Intelligence Test, Socio-economic status scale by Kuppuswamy and a

questionnaire for family size and birth order were administered for data collection. Pearson Product Moment correlation and Critical Ratio (CR) were used for data analysis. (1) It was found that significant positive relationship existed between academic achievement and intelligence for both the groups. (2) Academic achievement of students was found positively related with their socio-economic status. (3) It was found that there was significant negative relationship between academic achievement and family size of students. (4) Significant negative relationship was also found between academic achievement and birth order of students.

Arya, K & Kistwaria, (2002) Factors affecting the academic performance of adolescent girls; and to find out the association socio- between Personal characteristics and academic Performance

The sample consisted of 60 women (30 working and 30 non-working) having adolescent daughters from palampur town of District Kangra, Interview schedule and Questionnaire were used for the data collection. Chi-square, Percentage was also used for the data analysis. (1) It was found that the involvement of adolescent daughters in household activities of employed home-makers was more than corresponding non-employed home-makers.

Sharma, S.N. (2002) Association of Parental Involvement, Parental Aspirations (Educational and Occupational) with students Achievement and Students Aspirations

The sample of the study consisted of 310 students of Classes XI and X and their parents chosen from four schools of Chandigarh and Panchkula through stratified random sampling techniques. The responses on Parental Involvement and Parental Aspirations were collected. Profiles of Parental Behavior of high and low achieving students were prepared Descriptive

statistics. ANOVA, Chi-square test were applied to analyze the data.

Findings: (1) Parents of high and low achieving students exhibited differentiated behavioral profiles with regard to some dimensions of Parental Involvement. Parents of high achieving students often provide academic guidance to their children and also planned various cultural activities such as arranging picnic dance shows and other festivals. (2) Achievement scores of children belonging to high average and low groups of parental Educational Aspirations were not equal. (3) The Academic Achievement Scores were different for children belonging to different Parental Involvement groups. (4) High parental Involvement group scored higher on Educational Aspirations as compared to their counterparts in the Low Parental Involvement group. (5) Higher Parental Involvement resulted into higher Occupational Aspirations of students

Kobal, Darja and Musek, (2001) Self-Concept and academic Janek achievement

The investigators tested the hypothesis that academic achievement affects different components of Self-Concept. The sample comprised of 230 students in the age range of 16-17 years. Further, the authors investigated the possible influence of nationality (Slovenia, France) further in modifying the relationship between academic achievement and Self-Concept. (1) The results of two-factor (academic achievement nationality) analysis of variance and discriminant analysis showed significant correlations between academic achievement and various indices of self-concept, which varied in a nationality dependent fashion. (2) The French subjects exceeded Slovenians in some domains of Self-Concept (i.e. verbal academic relations with same sex, peers, relations with parents, religion and spirituality, and general Self-Concept), while Slovenian subjects exceeded French subjects in the domain of problem solving and creativity. (3) There was no significant difference between both national samples in self-esteem also the French subjects between exceeded Slovenian in general academic achievements.

Pada, M. (2000) Analysis of Relationship between Academic Achievement and School Interventions of Class IX students

This study find out the effect of school interventions on academic achievement in different categories of schools; also to assess interrelationship between academic achievement and interpretations provided in different categories of schools. Descriptive survey method as well as qualitative and quantitative approaches was adopted for the study. The sample was taken as 55 Headmasters and 550 students of Class IX from different categories of schools in the district of Phenkani, Orissa, using probability sampling method for the study. The tools were used such as achievement test of annual examination. (1) All categories of school differed significantly from one another as regards the academic achievement of the learners. (2) There is no significant difference in school intervention score between government and non-government schools. (3) There is no significant relationship between academic achievement and school intervention in government and non-government schools. (4) There is marked relationship between academic achievement and school intervention in the schools managed by ST and SC Development Department.

Singh (1984) examined the gender analysis of academic achievement among high school students and made a survey of the study habits of high, middle and low achieving adolescents in relation to their sex, intelligence and socio economic status and found that study habits of boys and girls differed significantly at different levels of academic achievement.

OVERVIEW

Karim and Weisz (2011) found that emotional intelligence was positively related to deep acting and satisfaction with life and negatively to psychological distress. Petrides et al. (2010) found that the cross-cultural validity of the TEIQue-SF, and its suitability for the rapid assessment of global trait EI and its four constituent factors. Nasir and Masrur (2010) found that no difference in the mean EQi scores of male and female students except on stress management scale where male students scored higher than female students. Deniz et al. (2010) Stress management and general mood sub-dimensions were found to have significant positive correlations with life satisfaction, whereas intrapersonal skills, interpersonal skills and adaptability sub-dimensions had no significant correlations with life satisfaction. Singh and Sharma (2009) in their study, the better mental health of high EI group may be attributed to emotional self awareness, self regard, self actualization, stress tolerance, impulse control, problem solving, reality testing, happiness and optimism dimensions of emotional intelligence. Carmeli et al. (2009) The results of four hierarchical regression models provide, in general, support for the positive association between emotional intelligence and psychological wellbeing components – self-esteem, life satisfaction, and self-acceptance. Proctor et al. (2009) Findings suggest that very unhappy youths would benefit most from focused interventions aimed at boosting those variables having the most influence on their level of life satisfaction. Gallagher and Vella-Brodrick (2008) This study elucidates the predictive value of SS, EI and their interaction on SWB, and provides a possible conditional relationship between SS and SWB with regard to EI, suggesting that SS may not always be necessary for SWB. Chamorro-Premuzic et al. (2007) A significant amount of shared variance between happiness and the Big Five was explained by trait EI, which partly mediated the paths from stability and conscientiousness to happiness, and fully mediated the link between agreeableness and happiness. Reinsch (2007) Lifelong learning perspective had a significant bivariate

relationship with life satisfaction, and was also significantly related to life satisfaction, but not as significantly as emotional intelligence. Kulshrestha and Sen (2006) The results of the study reveal that emotional intelligence and locus of control have significant correlation with subjective well being. Subjects with high emotional intelligence and internal locus of control scored significantly high on positive affect and scored significantly low on negative effect. Landa et al. (2006) These results support the incremental validity of self-report measures, as the TMMS, and the capacity of constructs related to emotional intelligence to explain the differences on life satisfaction independently from personality traits and mood states constructs. Wong et al. (2005) argued that life satisfaction was one important outcome of people with high EI. The reason is that a person with high EI is able to understand his/her own and others' emotions and to draw upon this understanding to improve behaviours and attitudes for positive results. Austin et al. (2005) found that emotional intelligence is more strongly associated with social network size when compared with the Big-Five personality traits. In turn Big-Five traits appeared to be more strongly related to life satisfaction and health status. Day, Therrian and Carroll (2005) found high emotional intelligence individuals tended to be considerably more extraverted and conscientiousness than low scores on emotional intelligence. Lounsbury et al. (2005) found that Emotional Stability was positively, significantly related to career decidedness for the 12th-grade sample. There were no significant differences in correlational results for males versus females. Bastian et al. (2005) Correlations between EI and academic achievement were small and not statistically significant, although higher EI was correlated with higher life satisfaction, better perceived problem-solving and coping ability and lower anxiety. Vakola, Tsaousis and Nikolaou (2004) found that there is a relationship between personality traits and employees attitudes toward change. Similarly, the contribution of emotional intelligence to the attitudes to change was found to be significant, indicating the added value of using an emotional intelligence measure above and beyond the effect of personality.

Brackett and Mayer (2004) in their study found that emotional intelligence is highly significantly correlated with Neuroticism, Extraversion, Agreeableness and Conscientiousness, but moderately related to Openness to experience. Furnham and Petrides (2003) found that trait EI explained over 50% of the total variance in happiness. The positive relationship between trait EI and happiness persisted in the presence of the Big Five. Lopes, Salovey and Straus (2002) found that Global satisfaction with one's relationships was associated with extraversion, neuroticism (negatively), and the ability to manage one's emotions, as assessed by the MSCEIT. Palmer et al. (2002) found to significant correlate with life satisfaction. Subsequent analyses revealed that only the Clarity sub-scale accounted for further variance in life satisfaction not accounted for by positive and negative effect.

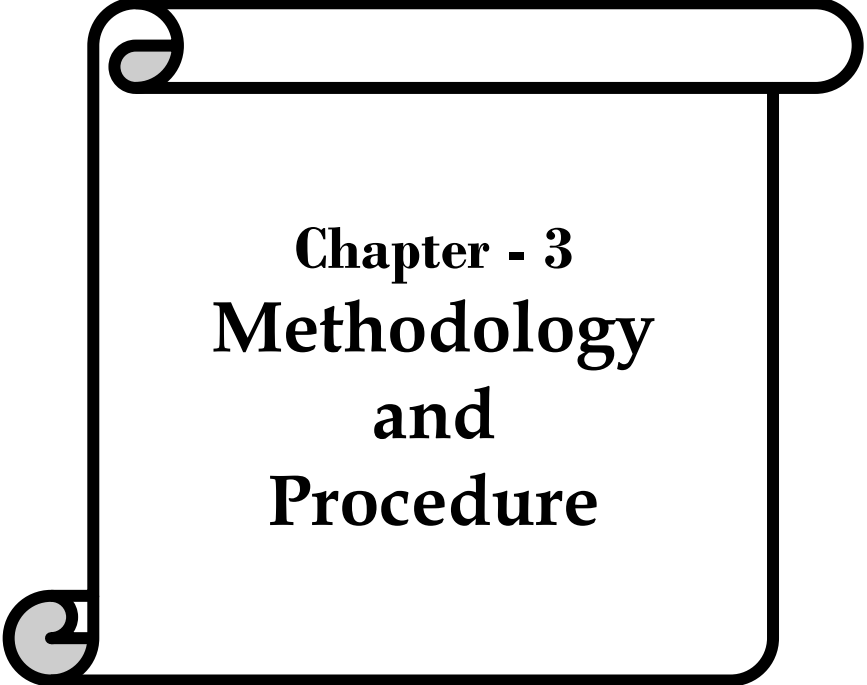
Sywelem Mohamed (2012) found no significant differences in the auditory learning ability and no statistically significant differences in Kinesthetic learning ability between the Egyptian and Saudi students. Asmaa M. Sayed Makhoulf (2012) found kinesthetic preference was higher among males in academic programs of study than for females. Jafre M. Abidin Z. Rezaee A. (2011) noticed high, moderate and low achievers have a similar preference pattern of learning in all learning styles. Eyyam Ramadan Nazan Dogruer (2011) noticed differences in the learning styles of students. Sharma Parveen (2011) observed male and female secondary school students are different in respect to their learning-thinking style. Shahid M. F. (2011) observed majority of the student from all the fields in sample showed the diverging style and the accommodating style as their most preferred learning styles. Bostrom Lena (2011) observed no statistically significant differences between two student groups. Clarke T. Lesh, T. Trocchio, J (2010) observed that participants differed in their learning styles in teaching and learning styles, based on their educational measure. Cook J. Matthew, B.A. Fairfield (2010) found no significant difference between the concrete learners and the abstract learners in terms of GPA. Female students performed better academically than males and no significant interaction existed between

learning style type and gender. Halim Abdul B. Raof Abdul (2010) revealed no significant relationship between students learning styles and their academic performance. Naik, Bijay (2010) observed no significant difference in the learning styles between male and female students however significant difference in the learning styles existed between male and female students in the visual- verbal dimension. Yildizlar Mehmet (2010) found teacher candidates who come from different cultures have different thinking styles. Sunbul Ali Murat Sari Hakan (2010) found students' learning strategies and styles differentiated in school, branches, grades and gender variables. Glines, Cevriye (2004) found no significant difference between students LSP's and faculty, gender, level and achievement scores. Delialioglu, Fatma (2003) revealed no significant difference between the kinematics graphing skills test scores of female and male students. A significant interaction was observed between the gender and learning styles on students kinematics graphing skills test scored. Cassidy Simon and Eachus Peter (2000) showed that perceived proficiency increased after completing the-taught modules and that perceived proficiency was positively correlated with academic performance level, students taught under the recently modified program, reported significantly higher perceived proficiency than level 2 students taught under the previous program perceived proficiency was positively correlated with a strategic learning approach and negatively correlated with surface learning approach and external locus of control beliefs. Cano Garcia- F. Hughes E. H. (2000) revealed students that prefer to work individually (internal) that do not enjoy creating formulating and planning for problem solution (legislative in a negative sense) and those that have adherences to existing rules and procedures (Executive) were those which obtained higher age achievement. Dangwal, Ritu (1999) observed students of 3rd grade needed more attention than 4th and 5th graders. The concurrent validity between LSI and CPQ were significantly high and test was considered to be highly valid.

Baljinder S. and Kuldip S. (2009) noticed that students with high levels of regulation, understanding, facilitation and expression, tend to be more

successful in their academic achievement and positive relationship existed between learning styles and academic achievement. Ismail Hakki Erten (2009) revealed female trainee teachers reported more intrinsic orientation towards the profession whereas male trainee teachers mentioned more extrinsic orientation. Sharmistha Roy (2008) found much difference in the importance of money of the selected factors exhibited by boys and girls, which play an important role in their Academic Achievement. Hau Jen – Tsung (2008) found that for both math and science learning areas, students' academic self-concept exerts a positive direct effect on their academic achievement. Nuthana P. G. Yenagi Ganga (2007) revealed that Academic achievement was excellent among boys and girls. Rural students had better study habits and self-concept than urban students. Urban students had higher academic achievement than rural students. Chowdhury, Aparajita; Kumari Anita (2007) found girls required more support from their parents and at the same time their needs were also found to be more than those of the boys. With regard to the academic achievements, parental supports were found to have a positive effect on their children's academic performance. Kikas Eve, Mottus, Evi (2006) observed that attending an elite private school was related to abilities and higher academic achievement attending elite school had negative impact on achievement. Nirmala, P., and Merlyn Sanders (2006) observed that mathematics information skills, decision making skills and attitude towards mathematics have made a significant contribution towards the academic achievement. Kassahun, T. and Kedir B. (2006) observed girl's performance in mathematics in government schools may not be significantly different from that of non-government schools in the upper primary schools of Addis Ababa. S. O. Salami and E.A. Alawode (2004) revealed significant difference between the Academic Achievement of Christian and Muslims students from intact homes were as none was found between the Christians and Muslims from single parenting home. Krishnendu Bagghi (2004) found that very low positive relationship exist in between scholastic achievement of Life Science and Cognitive Style, Interest on Fine Arts, Scientific, Medical,

Agriculture, Technical Crafts, Outdoor, Sports, Household. Chang, Linchiat (2004) revealed that Chinese participant showed more ambivalence about the benefits of failure, and they manifested higher levels of self-doubt as well as the tendency to discount ability under conditions of effort exertion. Gakher S.C. (2003) found a significant negative correlation between independent variables of intelligence and emotional maturity. Agarwal, A. (2002) found significant negative relationship between academic achievement and family size of students. Arya, K and Kistwaria, J. (2002) found that majority of the adolescent daughters of non employed mother devote more time in their studies in comparison to the corresponding group. Sharma, S.N. (2002) observed achievement scores of children belonging to high average and low groups of parental educational aspirations were not equal. The Academic Achievement Scores were different for children belonging to different Parental Involvement groups. Kobal, Darja and Musek, Janek (2001) showed no significant difference between both national samples in general academic achievements. Pada, M. (2000) found no significant difference in school intervention score between government and non-government schools and marked relationship between academic achievement and school intervention in the schools.



Chapter - 3
Methodology
and
Procedure

Research methodology is a way to systematically investigate the research problem. It gives various steps in conducting the research in a systematic and a logical way. It is essential to define the problem, state objectives and hypothesis clearly. The research design provides the details regarding what, where, when, how much and by what means enquiry is initiated. Every piece of research must be planned and designed carefully so that the researcher precedes a head without getting confused at the subsequent steps of research. The researcher must have an objective understanding of what is to be done, what data is needed, what data collecting tools are to be employed and how the data is to be statistically analyzed and interpreted. There are a number of approaches to the design of studies and research projects all of which may be equally valid.

Research is a systematic attempt to obtain answers to meaningful questions about phenomenon or events through the application of scientific procedures. It an objective, impartial, empirical and logical analysis and recording of controlled observation that may led to the development of generalizations, principles or theories, resulting to some extent in prediction and control of events that may be consequences or causes of specific phenomenon.

Research is a systematic and refined technique of thinking, employing specialized tools, instruments and procedures in order to obtain a more adequate solution of a problem than would be possible under ordinary mean. Thus research always starts from question. There are three objectives of

research factual, practical and theoretical, which gives rise to three types of research: historical, experimental and descriptive.

Research designs have been defined by different social scientists in different ways. All these definitions emphasize systematic methodology in collecting accurate information for interpretation. Selltize *et al.*, (1959) indicates that, “research designs are closely linked to investigators objectives, accordingly they specify that research designs are exploratory descriptive and/or experimental in nature”. According to Ackoff Russel (1961) research design is, “planning various phases and procedures relating to the formulation of research effort”.

Kerlinger (1983) has rightly remarked; “Research designs set up the frame work for adequate tests of the relations among variables. Design tells us in a sense, what observation to make, how to make them and how to analyze the quantitative representation of the observations. A design tells us what type of statistical analysis to use. Finally, an adequate design outlines possible conclusions to be drawn from the statistical analysis”. William Zikmund (1988) has described research design as, “master plan specifying the methods and procedures for collecting and analyzing the needed information”.

The present study has been completed through the descriptive method of research. This method has been the most popular and widely used method of research in social science and education. The descriptive method is designed to obtain pertinent and precise information concerning the current status of phenomena and also draw valid conclusions from the facts discovered. They are restricted not only to fact finding but may often result in the formulation of important principles of knowledge and solution significant problems concerning local, state, national and international issues. Descriptive studies investigate phenomena in their natural setting. Their purpose is both immediate and long range. Descriptive research helps to explain educational phenomena in terms of the condition are relationships that exist, opinions that are held by the students, teachers, parents and experts processes that are going on. The details about the sample, the tools and their

description, the statistical method used for data analysis for the present study are given as under:

Design of the Study

Sample

The sample for the present study consisted of 200 adolescent students of 10th grade (100 boys and 100 girls) were selected randomly from the eight Govt. Schools of district Srinagar.

The breakup of the sample are as under:

Boys	Girls	Total
100	100	200

List of the sample schools

S.No	Name of the School	Respondents
1.	Govt. Girls High School, Batmaloo	25
2.	Govt. Girls High School, Baghwanpora	25
3.	Govt. Girls High School, Chatterhama	25
4.	Govt. Girls High School, Gooripora	25
5.	Govt. Boys High School, Amda Kadal	25
6.	Govt. Boys High School, Batapora	25
7.	Govt. Boys High School, Barthana	25
8.	Govt. Boys High School, Chandihar	25
Total		200

TOOLS USED

The following tools are used in the present study:

4. Emotional Intelligence Scale prepared by Anokool Hyde, Sanjyot Pethe and Upinder Dhar were used to measure Emotional Intelligence of adolescent students.

5. Learning Styles Inventory prepared by Rita Dunn, Keneth Dunn and Gary E. Price were used to measure Learning Styles of the adolescent students.
6. Academic Achievement of the students was collected by giving them self-constructed information blank in which they had to give the aggregate percentage of marks of 8th and 9th class for each student were noted from the office records of the sample schools.

DESCRIPTION OF TOOLS

1. EMOTIONAL INTELLIGENCE SCALE

It is unrealistic to set aside our emotions and feelings in workplace. Organizational life requires that we work together side by side for eight to twelve hours a day. We spend more time with our coworkers than we do with our friends, spouse or children. Feelings and opinions just do not go away because we walk into workplace. At work, we can put on work clothes, but we cannot take off our emotions, so what happens to our emotions at work? They go underground and become a powerful invisible force. The term Emotional Intelligence encompasses the following five characteristics and abilities as discussed by Goleman (1995).

(1) Self-awareness- Knowing your emotions, recognizing feelings as they occur and discriminating between them is being emotionally literate. Being able to identify and label specific feelings in yourself and others ; being able to discuss emotions and communicate clearly and directly. The ability to empathize with, feel compassion for, validate, motivate, inspire, encourage and soothe others. The ability to make intelligent decisions using a healthy balance of emotions and reason. Being neither too emotional nor too rational. The ability to manage and take responsibility for one's own emotions, especially the responsibility for self-motivation and personal happiness. Recognizing and naming one's own emotions, knowledge of the causes of emotions, recognizing the difference-between feelings and actions.

(2) **Mood Management**- Handling feelings so that they are relevant to the current situation and you react appropriately. Frustration tolerance and anger management, eliminating verbal pull-downs, fights and group disruptions, better able to express anger appropriately without resorting to violence, fewer suspensions or expulsions, less aggressive or self-destructive behaviour, more positive feelings about self, school and family, better at handling stress.

(3) **Self-motivation** — "Gathering up" your feelings and directing yourself towards a goal, despite self-doubt, inertia, and impulsiveness. More responsible, better able to focus on task at hand and pay attention, less impulsive ; more self-controlled and improved scores on achievement tests.

(4) **Empathy** - Recognizing feelings in others and tuning into their verbal and non-verbal cues. Better able to take another person's perspective, improved empathy and sensitive to others' feelings, better at listening to others. Affiliative persons are 'friendly, sociable, helpful and skilful in dealing with people, and open about their feelings. They make good companions because they are pleasant and agreeable. Others feel comfortable with them and like them. In other words, affiliative persons have superior emotional and social skills in dealing with others, derive gratification and reward from their interpersonal contacts, and tend to be source of happiness to others.

(5) **Managing Relationships**- Handling interpersonal interaction, conflict resolution, and negotiations. Increased ability to analyze and understand relationships., better at resolving conflicts and negotiating disagreements, better at solving problems in relationships, more assertive and skilled at communication. More popular and outgoing; friendly and involved with peers, more sought out by peers, more concerned and considerate, more "prosocial" and harmonious in groups, more sharing, cooperation, and helpfulness, more democratic in dealing with others.

Reliability

The reliability of the scale was determined by calculating reliability coefficient on a sample of 200 subjects. The split-half reliability coefficient was found to be 0.88,

Validity

Besides face validity, as all items were related to the variable under focus, the scale has high content validity. It is evident from the assessment of judges / experts that items of the scale are directly related to the concept of Emotional Intelligence. In order to find out the validity from the coefficient of reliability (Garrett, 1981), the reliability index was calculated, which indicated high validity on account of being 0.93.

Factors of Emotional Intelligence

The scale was administered on 200 executives and the scores obtained were subjected to factor analysis and ten-factors were identified (Table 3). These are self awareness, empathy, self motivation, emotional stability, managing relations, integrity, self development, value orientation, commitment and altruistic behaviour.

(A) *Self-awareness* is being aware of oneself and is measured by items 6, 12, 18, 29. These items are "I can continue to do what believe in even under severe criticism", "I have my priorities clear", "I believe in myself1 and "I have built rapport and made and maintained personal friendships with work associates." This factor is the strongest and explains 26.8 percent variance and has a total factor load of 2.77. The correlation of this factor with total score is 0.66.

(B) *Empathy* is feeling and understanding the other person and is measured by items 9: 10, 15, 20 and 25. These are "I pay attention to the worries and concerns of others", "I can listen to someone without the urge to say something", "I try to see the other person's point of view", "I can stay focused under pressure, and "I am able to handle multiple demands." This factor explains 7.3 percent variance with a total factor load of 3.11. The correlation of the factor with total score is 0.70.

(C) **Self motivation** is being motivated internally and is measured by 2, 4, 7, 8, 31 and 34. These items are "People tell me that I am an inspiration for them", "I am able to make intelligent decisions using a healthy balance of emotions and reason", "I am able to assess the situation and then behave", "I can concentrate on the task at hand inspite of disturbances", "I think feelings should be managed", and "I believe that happiness is an attitude". This factor accounts for 6.3 percent variance and a total factor load of is 3.28. Its correlation with total score is 0.77.

(D) **Emotional stability** is measured by times 14, 19, 26 and 28. These are "I do not mix unnecessary emotions with issues at hand", "I am able to stay composed in both good and bad situations", I am comfortable and open to novel ideas and new information, and "I am persistent in pursuing goals despite obstacles and setbacks". This factor explains 6.0 percent variance with a total factor load of 2.51. The correlation of this factor with total score is 0.75.

(E) **Managing relations** is measured by 1, 5, 11 and 17. The statements that measure this factor are "I can encourage others to work even when things are not favourable", "I do not depend on others' encouragement to do my work well", "I am perceived as friendly and outgoing", and "can see the brighter side of any situation". This factor explains 5.3 percent variance with a total factor load of 2.38. The correlation of this factor with total score is 0.67.

(F) **Integrity** is measured by items 16, 27 and 32. "I can stand up for my beliefs", "I pursue goals beyond what is required of me", and "I am aware of my weaknesses" are the statements that measure this factor. This factor explains 4.6 percent variance with a total factor-load of 1.88.

(G) **Self-development** is measured by items 30 and 33 which are "I am able to identify and separate my emotions" and "I feel that I must develop myself even when my job does not demand it" and explains 4.1 percent variance with a total load of 1.37.

(H) **Value orientation** is measured by items 21, 22. The statements are "I am able to maintain the standards of honesty and integrity", and "I am able to

confront unethical actions in others¹¹ and explains 4.1 percent variance with a total factor load of 1.29,

(I) *Commitment* is measured by the items 23 and 24. "I am able to meet commitments and keep promises", and "I am organized and careful in my work" measure this factor. This factor accounts for 3.6 percent variance with a total factor load of 1.39.

(J) *Altruistic behaviour* is measured by the items 3 and 13. The items are "I am able to encourage people to take initiative", and "I can handle conflicts around me". It explains 3.0 percent variance with a total factor load of 1.3.

Factor-wise Items Serial Number

Sr. No,	Factor	Item Serial Number	Total
A	Self-awareness	6, 12, 18,29	4
B	Empathy	9, 10, 15,20,25	5
C	Self-motivation	2,4,7,8,31,34	6
D	Emotional stability	14, 19,26,28	4
E	Managing relations	1,5, 11, 17	4
F	Integrity	16,27,32	3
G	Self-development	30,33	2
H	Value orientation	21,22	2
I	Commitment	23,24	2
J	Altruistic behaviour	3, 13	2
Total Stems			34

Norms for interpretation of Raw Score

N	200
Mean (M)	68
Standard Deviation	16
High	85 and above
Normal	52-84
Low	51 and below

Use of the Scale

The scale can be used for research and survey purpose. It can also be used for individual assessment. It is self-administering and does not require the service of highly trained tester. It is eminently suitable for group as well as individual testing.

Norms of the Scale

Norms of the scale are available on a sample subjects. These norms can be regarded as references points for interpreting the Emotional Intelligence scores. The users of this scale are advised to develop their own norms based on their own samples. Individuals with the high score can be considered to have high level of emotional intelligence and are likely to be high performers.

2. LEARNING STYLES INVENTORY

The learning style Inventory (LSI) developed by Rita Dunn, Keneth Dunn and Gary E. Prince is a multidimensional instrument that identifies the conditions under which individual are more likely to learn. This is a self-reporting tool that assess an individual's preference for conditions of learning,. According to the authors, the preferences for different conditions comprise the learning styles. This inventory consists of 100 statements that are categorized as aspects and elements.

Aspects and Elements of learning Style Questionnaire (LSQ)

22 elements are classified under four aspects i.e.

- (I) Environmental (II) Emotional
- (III) Sociological (IV) Physical

(I) Environmental Stimuli: Various levels of sound, light, temperature and seating design are the four elements that constitute physical conditions in the learning environment.

- a) **Sound:** Noise level is the environmental stimuli that affects individuals differently. Some learners need pin drop silence while other's can work easily even if there is noise in the environment. Some learners can ignore the sound while some may require complete silence to concentrate on learning. Nearby or distant sounds may also effect individuals differently. It implies coping with noise levels in the environment varies from individual to individual.
- b) **Light:** Light is another element that affects learning. Some are sensitive to learn in bright light while others are not. Some prefer to learn in bright light while others in dim light. Still light variable do not affect others implying light is not an important factor for them to learn.
- c) **Temperature:** Temperature tolerance varies from the learner to learner. Some can focus attention better when they feel warm and environment other when it is cool.
- d) **Seating Design:** Some learners like casualness in the learning and fee! comfortable when they sit in a chair with a soft seat or on a bed. Some may like to sit on the floor covered or uncovered while concentrating. Infect, these learners like informal seating design. But some others may prefer formal seating arrangement like that of traditional classroom i.e. sitting on a hard seat using chair, table and desk.

(II) Emotional Stimuli: Motivation, persistence, responsibility and need for structure have been treated as the elements of one's emotional nature.

- a) **Motivation:** Some learners are always enthusiastic, interested and motivated to learn and do not need somebody to encourage them but others need to be motivated by parents or teacher. It implies self-motivated learners prefer to learn on their own while others need some adult motivation.
- b) **Persistence:** Some learners pursue the given tasks till completion, have the ability to sustain their attention for long time and indicate their high level of persistence. Some others are less persistent; find it difficult to continue the task till completion since they do not have the ability to sustain their attention for a longer period of time.
- c) **Responsibility:** Responsible learners complete the assigned task to the best of their abilities without guidance while others are unable to assume the responsibility to complete the assignment given to them.
- d) **Weed for Structure:** Teachers and parents expect students to learn independently. But some need frequent supervision and guidance in the process of learning. For them the term structure implies tight and inflexible time schedule and instruction to complete a task. Motivation, persistence and responsible learners need little supervision rather they need freedom; flexibility and option:

(III) Sociological Stimuli: Self-peer or adult-orientation are elements of sociological stimuli. Some learners prefer to learn on their own while others need either peer or the presence of some adult. Sociological elements indicate preferences to work alone or with peer in a pair or small group of 2-4 peers or team of more than 4 peers. Some learners are able to concentrate in the presence of an adult still others prefer to learn in varied ways i.e. some like to learn alone or with peers or in the presence of an adult.

(IV) Physical Stimuli: The responses to physical elements include perceptual and time preferences besides the need for intake and mobility.

- a) **Perceptual preferences:** different terms have been used to refer perceptual needs of learner's as-perceptual modalities / preferences / styles or strength. The following perceptual preferences have been assessed by the inventory:
- i) **Auditory:** Some learners prefer to hear, talk, listen, tell and so on, indicating their preferences for sense of hearing but some others may not have the ability to use auditory sense effectively.
 - ii) **Visual:** Some learners like to read, see, observe the things and watch television. Infact, visual modalities help them to learn and understand better while others may not have preferences for visual mode of learning to concentrate on.
 - iii) **Tactile:** Some learners prefer to feel, write draw, trace, mould and build things with their own hands indicating their preferences for tactile mode of learning using the sense of touch.
 - iv) **Kinesthetic:** Learning is preferred by some learners by doing through physical activities while others do not like to learn through bodily movements.
- b) **Intake:** some learners like to chew or eat something while trying to learn others cannot concentrate if they eat while learning but prefer to eat only after finishing studying.
- c) **Time of the Day:** Every individual finds his/her energy level maximum at a particular time of the day. Some learners may prefer to learn early in the morning while others late morning or afternoon, or late evening or night hours depending upon their preferences and high energy level at that time of the day.
- d) **Mobility:** Learners are usually expected to sit still and work continuously but some learners need to move around regimentation act as impediment left to themselves. They like to change their posture and location frequently indicating their need for mobility and others like passivity while learning.

The Statement: The Learning Style Inventory is responded as true or false as applicable to each learner. Several items describe, each element to understand learner's preferences better. The items pertaining to an element have been distributed randomly in the inventory. Use of verb, such as think, learn, read, write, concentrate, check consistency in preferences for learning to illustrate item, eliciting responses on the element of 'light' are:

1. I like studying with lot of light.
2. I study when lights are dim.
3. A house I usually study under a shaded lamp while the rest of the room is dim.
4. When I study I put on my lights.

Scoring: Scoring has been done as per the scoring given in the Learning Style Inventory. A score of one mark was awarded to answer Inventory along with scoring key was given in the Appendix The individual raw score for each element of LSQ on conversion into T score with mean of 50 and S.D of 10 indicate one of 5 levels of learning style preferences, A preference summary of an individual can be prepared using interpretation key which each level used a spread area of 10 scores,

Interpretation of Scores

To interpret an individual's profile, authors of LSQ have suggested following guidelines:

- i. T score ranging between 70-80 and beyond refer to strong preferences elements falling with this range are extremely important to the learners. The learners would always learn new or difficult concept more easily and retain them better if that element is ensured.
- ii. T score ranging between 60-69 preferences. Preference is as important as strong preference but the individual has some limited option and would usually or often learn new or difficult concepts more easily and retain better when that particular element is provided. Such learners however, can occasionally learn well despite the failure to address that element.

- iii. T score ranging between 30-39 imply opposite preferences. An opposite response after preferences is just as important as a preference. The learners occasionally can overcome an opposite preference but not too often.
- iv. T score range below 20 or 30 -29 are interpreted as (opposite strong preferences) which reflect an opposite response that I just as important as strong preferences. Such learners always learn new or difficult concept more easily if that element is taken care of. The learning style inventory provides an individual's profile for each learner representing how he or she responds to the element.

Reliability and Validity

Extensive use of this standardized inventory has confined its practicability and validity in American schools. In India, Mathur (1985) used a Hindi version of this inventory. Bhat (1985) used it to compare learning styles of learning disabled and normal children.

Using test-retest method on 42 students (the Dunn and Dunn) ascertained reliability of the tool. The coefficient of correlation ranged between 0.60-0.80 for lighter elements. These are noise- level, light seating design, self motivation, parent's motivation, responsibility, need for structure, presence of authority figure, alone vs. peer orientation, learning in varied ways, visual and kinesthetic mode of learning, morning's, evening time, morning and afternoon time, need for mobility, intake of food. For 3 elements-persistence, auditory and tactile mode of learning the co-efficient of correlation ranged between 0.80-1.00, only one element i.e. temperature, the value fell between 0.40-0.60.

PROCEDURE

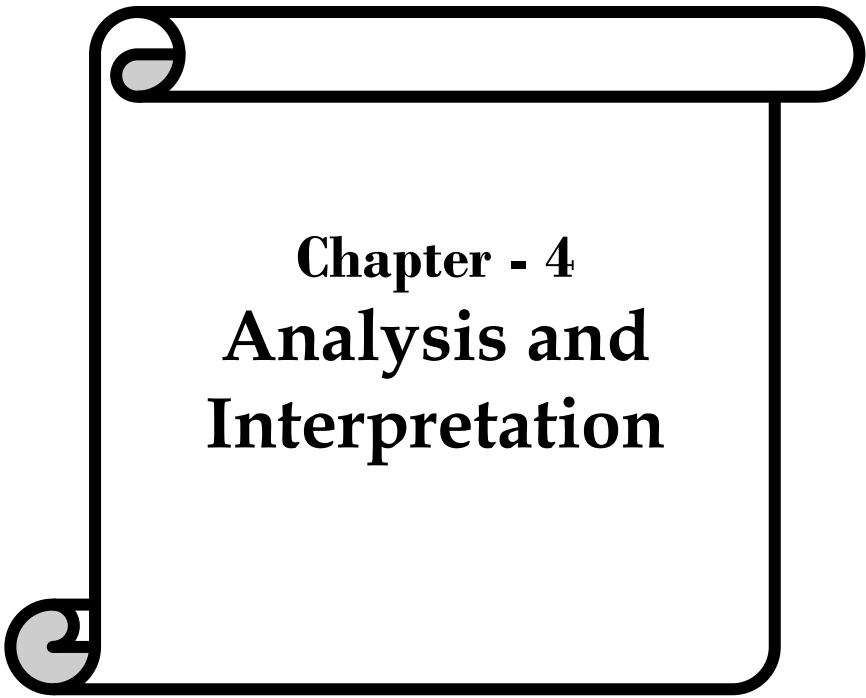
The list of all the Government Schools was obtained from the office of the Chief Education Officer District Srinagar in order to collect the sample the investigator visited various Govt. Schools of District Srinagar. The Emotional Intelligence Scale and Learning Styles were administered to the sample subjects of 10th Grade students. These tests were

administered on the students in their respective institutions and the scoring was strictly done as per the manuals of the tests. The academic achievement of previous two years i.e. 8th and 9th classes of the sample subject was collected from the official records of the Govt. Schools.

STATISTICAL TREATMENT

To achieve the objectives of the study, the data collected was statistically analyzed using the following technique;

- Mean
- S.D
- t-test
- Correlation



Chapter - 4
Analysis and
Interpretation

The analysis and interpretation of the data is of great significance. The data as such has no meaning, if it is not analyzed and interpreted properly. It may be fair to say that research consists in general of two large steps, the collection of data and the analysis of that data. Interpretation calls for a critical examination of the results of analysis in the light of all the limitations of that gathered data. However valid, reliable and adequate data may be, it does not serve any worthwhile purpose unless it is carefully edited systematically classified, tabulated scientifically, analyzed intelligently and rationally concluded.

Analysis of data means to make the raw data meaningful or to draw some results from the data after the proper treatment. However, valid, reliable and adequate the data may be, it does not serve any worthwhile purpose unless it is carefully edited, systematically classified and tabulated, scientifically analyzed, intelligently interpreted and rationally concluded. Analysis of data means studying the tabulated data in order to determine inherent facts. It involves breaking up of complex factors into simplest parts and putting them in new arrangement for the purpose of interpretation.

No precision in the collection of data or selection of tools can guarantee the outcome of objectives unless the pooled information is adequately subjected to statistical inference. It is unfortunate that inadequate knowledge in the application of the statistical analysis leads to blind alleys or

unwarranted inferences. These limitations are due to inadequate techniques which are being used sometimes not for any justification, but for boosting the theoretical framework of a research design.

Notwithstanding the precision of data computation, an investigator needs to be equally critical and selective in choosing an appropriate statistical method for the analysis of data. Because an inadequate statistical analysis will make the whole process a meaningless collection of tables and figures. It is pertinent to understand the objectives under investigation and then employ a suitable statistical device so as to differentiate between the known variables and factors which interfere with their performance.

The analysis and interpretation has been undertaken in a systematic way as under:

- A:** Descriptive analysis of the sample subjects.
- B:**
 1. Comparison of boys and girls on emotional intelligence
 2. Comparison of boys and girls on learning styles
 3. Comparison of boys and girls on academic achievement.
- C:** Correlational analysis

Section – A

Table 4.1: Showing the levels of Emotional Intelligence (Factor wise) of adolescent boys and girls of 10th grade.

Factors	Score		Boys	Girls	Total
(A) Self-awareness	High	11 and above	25	35	60
	Normal	4-10	53	59	112
	Low	3 and below	14	6	20
	Total		100	100	200
(B) Empathy	High	15 and above	11	9	20
	Normal	7-14	56	70	126
	Low	6 and below	33	21	54
	Total		100	100	200
(C) Self- motivation	High	18 and above	15	4	19
	Normal	9-17	33	57	90
	Low	8 and below	52	39	91
	Total		100	100	200
(D) Emotional stability	High	11 and above	15	16	31
	Normal	4-10	79	77	156
	Low	3 and below	6	7	13
	Total		100	100	200
(E) Managing relations	High	12 and above	7	15	22
	Normal	5-11	70	72	142
	Low	4 and below	23	13	36
	Total		100	100	200
(F) Integrity	High	8 and above	58	62	120
	Normal	4-7	37	28	65
	Low	3 and below	5	10	15
	Total		100	100	200
(G) Self- development	High	6 and above	65	79	144
	Normal	2-5	35	19	54
	Low	1 and below	0	2	2
	Total		100	100	200
(H) Value Orientation	High	6 and above	73	72	145
	Normal	2-5	24	26	50
	Low	1 and below	3	2	5
	Total		100	100	200
(I) Commitment	High	6 and above	51	69	120
	Normal	2-5	44	28	72
	Low	1 and below	5	3	8
	Total		100	100	200
(J) Altruistic behaviour	High	6 and above	57	67	124
	Normal	2-5	40	31	71
	Low	1 and below	3	2	5
	Total		100	100	200

Table 4.2: Showing the levels of Emotional Intelligence of adolescent boys and girls of 10th grade.

		Boys	%age (Boys)	Girls	%age (Girls)	Total	%age (Total)
85 and above	High	39	39%	47	47%	86	43
52-84	Normal	34	34%	33	33%	67	33.5
51 and below	Low	27	27%	20	20%	47	23.5
Total		100		100		200	100%

A perusal of the above table shows the levels of Emotional Intelligence of adolescent boys and girls of 10th grade. The data reveals that 43% of adolescent students of 10th grade fall in the high category of Emotional Intelligence, 33.5% of adolescent students of 10th grade fall in the average normal category. The data further reveals that 23.5% of adolescent students of 10th grade fall in the low category so far as their emotional intelligence is concerned.

On the basis of above results, the 1st objective (chapter I) which reads as “To study the emotional intelligence of adolescent students of 10th grade” has been accomplished.

Table 4.3: Showing the levels of Learning Styles of adolescent boys and girls of 10th grade.

Levels of Learning style		Boys	%age (Boys)	Girls	%age (Girls)	Total	%age (Total)
70-80	Strong Preferences	33	33%	38	38%	71	35.5
60-69	Preferences	27	27%	24	24%	51	25.5
30-39	Opposite Preferences	22	22%	20	20%	42	21
Below 20 or 20-29	Opposite Strong Preferences	18	18%	18	18%	36	18
Total		100		100		200	100%

A perusal of the above table shows the levels of Learning Styles of adolescent boys and girls of 10th grade. The data reveals that 35.5% of adolescent students of 10th grade fall in the strong preferences category of Learning Style, 25.5% of adolescent students of 10th grade fall in the preferences category, 21% of adolescent students of 10th grade have opposite preferences of learning style. The data further reveals that 18% of adolescent students of 10th grade have opposite strong preference category so far as their learning style is concerned.

On the basis of above results, the 2nd objective (chapter I) which reads as “To study the learning styles of adolescent students of 10th grade” has been accomplished.

Table 4.4: Showing the levels of Academic Achievements of adolescent boys and girls of 10th grade.

	Boys	%age (Boys)	Girls	%age (Girls)	Total	%age (Total)
Distinction	13	13%	18	18%	31	15.5%
I Division	27	27%	37	37%	64	32%
II Division	36	36%	24	24%	60	30%
III Division	24	24%	21	21%	45	22.5%
Total	100		100		200	100%

A perusal of the above table shows the levels of Academic Achievements of adolescent boys and girls of 10th grade. The data reveals that 15.5% of adolescent students of 10th grade got distinction, 32% of adolescent students of 10th grade got I division, while 30% of adolescents students of 10th grade got II division category of academic achievement. The data further reveals that 22.5% of adolescent students of 10th grade got III division category of academic achievements so far as their academic achievement is concerned.

On the basis of above results, the 3rd objective (chapter I) which reads as “To study the academic achievement of adolescent students of 10th grade” has been accomplished.

Section –B 1
EMOTIONAL INTELLIGENCE

Table 4.5: Showing the mean comparison of adolescent boys and girls of 10th grade (n = 100) on Factor ‘A’ self awareness of emotional intelligence.

Groups	Mean	SD	t- value	Significance
Boys	9.1	3.51	5.62	Sig. at 0.01 level
Girls	7.58	3.84		

The table shows the mean comparison of adolescent boys and girls on factor ‘A’ (Self Awareness) dimension of Emotional Intelligence. The calculated t-value 5.62 exceeds the tabulated t-value (2.58) at 0.01 level of significance which depicts that there is a significant difference between boys and girls adolescents on Self Awareness dimension of Emotional Intelligence. However, the table further indicates that mean score favours adolescent boys (9.1) which shows that adolescent boys have knowing their emotions, recognizing feelings as they occur, being ability to manage and take responsibility for self-motivation and personal happiness as compared to adolescents girls.

Table 4.6: Showing the mean comparison of adolescent boys and girls of 10th grade (n = 100) on Factor ‘B’ Empathy of Emotional Intelligence.

Groups	Mean	SD	t- value	Significance
Boys	8.09	3.24	1.15	Insignificant
Girls	8.35	3.50		

The above table shows the mean comparison of adolescent boys and girls on Factor ‘B’ (Empathy) dimension of Emotional Intelligence. The calculated t-value 1.15 is less than the tabulated t-value (1.96), which depicts that there is no significant difference between boys and girls adolescents on Empathy of Emotional Intelligence. As, the table further indicates that mean score favours

adolescent girls (8.35) which reveals that adolescent girl have better able to take another person`s perspective, sociable, helpful and skilful as compared to adolescent boys.

Table 4.7: Showing the mean comparison of adolescent boys and girls of 10th grade (n = 100) on Factor ‘C’ Self motivation of emotional intelligence.

Groups	Mean	SD	t- value	Significance
Boys	8.63	3.74	1.89	Insignificant
Girls	7.61	3.87		

The above table shows the mean comparison of adolescent boys and girls on factor ‘C’ (Self motivation) dimension of Emotional Intelligence. The calculated t-value 1.89 is less than the tabulated t-value (1.96), which depicts that there is no significant difference between boys and girls adolescents on self motivation of Emotional Intelligence. As, the mean score favours adolescent boys (8.63) which reveals that adolescent boys have more responsible, better able to focus on task at hand and pay attention as compared to adolescents girls.

Table 4.8: Showing the mean comparison of adolescent boys and girls of 10th grade (n=100) on Factor ‘D’ Emotional stability of emotional intelligence.

Groups	Mean	SD	t- value	Significance
Boys	7.74	2.73	0.50	Insignificant
Girls	8.17	3.45		

The above table shows the mean comparison of adolescent boys and girls on factor ‘D’ (Emotional stability) dimension of Emotional Intelligence. The calculated t-value 0.50 is less than the tabulated t-value (1.96), which depicts that there is no significant difference between boys and girls adolescents on Emotional stability of Emotional Intelligence.

Table 4.9: Showing the mean comparison of adolescent boys and girls of 10th grade (n=100) on Factor ‘E’ Managing relations of emotional intelligence.

Groups	Mean	SD	t- value	Significance
Boys	8.04	3.29	4.69	Sig. at 0.01 level
Girls	7.13	2.94		

The table shows the mean comparison of adolescent boys and girls on factor ‘E’ (Managing relations) dimension of Emotional Intelligence. The calculated t-value 4.69 exceeds the tabulated t-value (2.58) at 0.01 level of significance which depicts that there is a significant difference between adolescent boys and girls on managing relations dimension of Emotional Intelligence. As, the mean score favours adolescent boys (8.04) which indicates that adolescent boys have higher managing relations than adolescent girls.

Table 4.10: Showing the mean comparison of adolescent boys and girls of 10th grade (n = 100) on Factor ‘F’ Integrity of emotional intelligence.

Groups	Mean	SD	t- value	Significance
Boys	8.08	3.46	0.83	Insignificant
Girls	7.9	3.12		

The above table shows the mean comparison of adolescent boys and girls on Factor ‘F’ (Integrity) of Emotional Intelligence. The calculated t-value 0.83 is less than the tabulated t-value (1.96), which depicts that there is no significant difference between boys and girls adolescents on integrity of Emotional Intelligence. As mean score favours adolescent boys (8.08) which indicates that adolescent boys have higher integrity than adolescent girls.

Table 4.11: Showing the mean comparison of adolescent boys and girls of 10th grade (n=100) on Factor ‘G’ Self development of emotional intelligence.

Groups	Mean	SD	t- value	Significance
Boys	7.23	1.99	11.44	Sig. at 0.01 level
Girls	6.44	1.74		

The table shows the mean comparison of adolescent boys and girls on factor ‘G’ (Self development) dimension of Emotional Intelligence. The calculated t-value 11.44 exceeds the tabulated t-value (2.58) at 0.01 level of significance which depicts that there is a significant difference between adolescent boys and girls on self development dimension of Emotional Intelligence. As mean score favours adolescent boys (7.23) which indicate that adolescent boys have higher self development than adolescent girls.

Table 4.12: Showing the mean comparison of adolescent boys and girls of 10th grade (n=100) on Factor ‘H’ Value orientation of emotional intelligence.

Groups	Mean	SD	t- value	Significance
Boys	7.47	1.72	6.34	Sig. at 0.01 level
Girls	7.14	1.51		

The table shows the mean comparison of adolescent boys and girls on factor ‘H’ (Value orientation) dimension of Emotional Intelligence. The calculated t-value 6.34 exceeds the tabulated t-value (2.58) at 0.01 level of significance which depicts that there is a significant difference between adolescent boys and girls on value orientation dimension of Emotional Intelligence. As mean score favours adolescent boys (7.47) which indicates that boy adolescents have higher value orientation than girl adolescents.

Table 4.13: Showing the mean comparison of adolescent boys and girls of 10th grade (n= 100) on Factor ‘I’ Commitment of emotional intelligence.

Groups	Mean	SD	t- value	Significance
Boys	5.62	2.65	8.69	Sig. at 0.01 level
Girls	6.62	2.13		

The table shows the mean comparison of adolescent boys and girls on factor ‘I’ (Commitment) dimension of Emotional Intelligence. The calculated t-value 8.69 exceeds the tabulated t-value (1.96) at 0.01 level of significance which depicts that there is a significant difference between adolescent boys and girls on commitment dimension of Emotional Intelligence. As the mean score favours adolescent girls (6.62) which indicate that adolescent girls have higher commitment as compared to adolescent boys.

Table 4.14: Showing the mean comparison of adolescent boys and girls of 10th grade (n=100) on Factor ‘J’ Altruistic behaviour of emotional intelligence.

Groups	Mean	SD	t- value	Significance
Boys	6.52	2.55	0.36	Insignificant
Girls	6.9	5.52		

The above table shows the mean comparison of adolescent boys and girls on Factor ‘J’ (Altruistic behaviour) of Emotional Intelligence. The calculated t-value 0.36 is less than the tabulated t-value (1.96), which depicts that there is no significant difference between boys and girls adolescents on altruistic behaviour of Emotional Intelligence. As mean score favours adolescent girls (6.9) which indicate that adolescent girls have higher altruistic than adolescent boys.

Table 4.15: Showing the mean comparison of adolescent boys and girls of 10th grade (n = 200) on composite score of emotional intelligence.

Groups	Mean	SD	t- value	Significance
Boys	82.05	12.60	4.77	Sig. at 0.01 level
Girls	72.12	16.59		

The above table shows the mean comparison of adolescent boys and girls on composite score of Emotional Intelligence. The calculated t-value 4.77 is significant at 0.01 level. Further, it reveals that there is a remarkable difference between adolescent boys and girls on composite score of emotional intelligence. The mean score favours adolescent boys (82.05) which adolescent boys have high emotional intelligence as comparison to adolescent girls.

Thus from the confirmation of the results from the above table the hypotheses No. 1 (Chapter 1) which reads as, “Boys and Girls do not differ significance in their emotional intelligence” stands rejected.

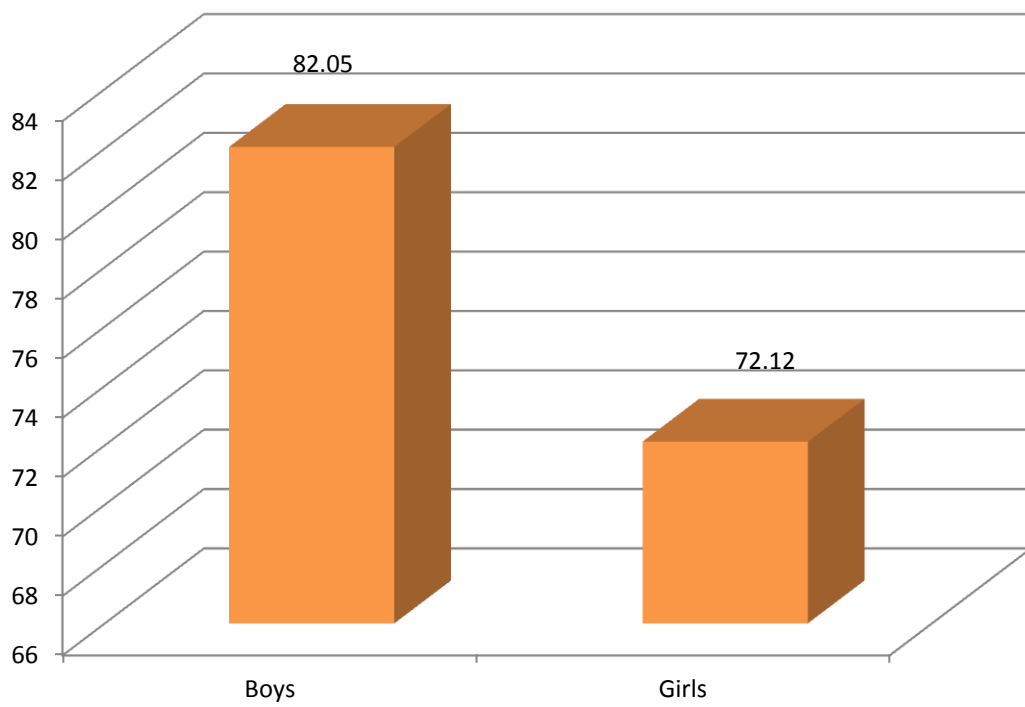


Figure 4.1: Showing the mean comparison of adolescent boys and girls of 10th grade (n = 200) on composite score of emotional intelligence.

Section – B 2
LEARNING STYLES

Table 4.16: Showing the mean comparison of adolescent boys and girls of 10th grade (n = 100) on Environmental stimulus of learning styles.

Groups	Mean	SD	t- value	Significance
Boys	24.21	4.62	1.46	Insignificant
Girls	25.19	4.97		

The above table shows the mean comparison of adolescent boys and girls on environmental stimulus dimension of learning style. The calculated t-value 1.46 is less than the tabulated t-value (1.96), which depicts that there is no significant difference between adolescent boys and girls on environmental stimulus of learning style. The table further reveals that adolescent girls achieved higher mean score (25.19) as compared to adolescent boys on environmental stimulus of learning styles.

Table 4.17: Showing the mean comparison of adolescent boys and girls of 10th grade (n = 100) on Emotional stimulus of learning styles.

Groups	Mean	SD	t- value	Significance
Boys	28.12	4.98	7.68	Sig. at 0.01 level
Girls	23.28	4.10		

The above table shows the mean comparison of adolescent boys and girls on emotional stimulus of learning style. The calculated t-value 7.68 exceeds the tabulated t-value (2.58) at 0.01 level of significance which depicts that there is a significant difference between adolescent boys and girls on emotional stimulus dimension of learning styles. The table further reveals that adolescent boys achieved higher mean score (28.12) as compared to adolescent girls on emotional stimulus of learning styles.

Table 4.18: Showing the mean comparison of adolescent boys and girls of 10th grade (n = 100) on Sociological stimulus of learning styles.

Groups	Mean	SD	t- value	Significance
Boys	24.4	4.66	1.66	Insignificant
Girls	23.7	4.28		

The above table shows the mean comparison of adolescent boys and girls on sociological stimulus of learning style. The calculated t-value 1.66 is less than the tabulated t-value (1.96), which depicts that there is no significant difference between adolescent boys and girls on sociological stimulus of learning style. The table further reveals that adolescent boys achieved higher mean score (24.4) as compared to adolescent girls on sociological stimulus of learning styles.

Table 4.19: Showing the mean comparison of adolescent boys and girls of 10th grade on Physical stimulus of learning styles.

Group	Mean	S.D.	t- value	Level of significance
Boys	26.21	5.51	4.6	Sig. at 0.01 level
Girls	25.98	5.15		

The table shows the mean comparison of adolescent boys and girls on physical stimulus of leaning styles. The calculated t-value 4.6 exceeds the tabulated t-value (2.58) at 0.01 level of significance which depicts that there is a significant difference between adolescent boys and girls on physical stimulus of learning styles. The table further reveals that adolescent boys achieved higher mean score (26.21) as compared to adolescent girls on physical stimulus of learning styles.

Table 4.20: Showing the mean comparison of adolescent boys and girls of 10th grade on composite scores of learning styles (N=200).

Groups	Mean	SD	t- value	Significance
Boys	42.91	7.21	9.73	Sig. at 0.01 level
Girls	33.66	6.48		

The above table shows the mean comparison of adolescent boys and girls on composite score of learning styles. The calculated t-value 9.73 exceeds the tabulated t-value (2.58) at 0.01 level of significance which depicts that there is a significant difference between adolescent boys and girls of learning styles. The table further reveals that adolescent boys achieved higher mean score (42.91) as compared to adolescent girls on physical stimulus of learning styles.

Therefore, the elements of learning style – Environmental stimulus, Emotional stimulus, Sociological stimulus and Physical stimulus have significant impact on the learning abilities of adolescents boys and girls of 10th grade.

Thus from the confirmation of the results from the above table the hypotheses No. 2 (Chapter 1) which reads as, “Boys and Girls do not differ significance in their learning styles” stands rejected.

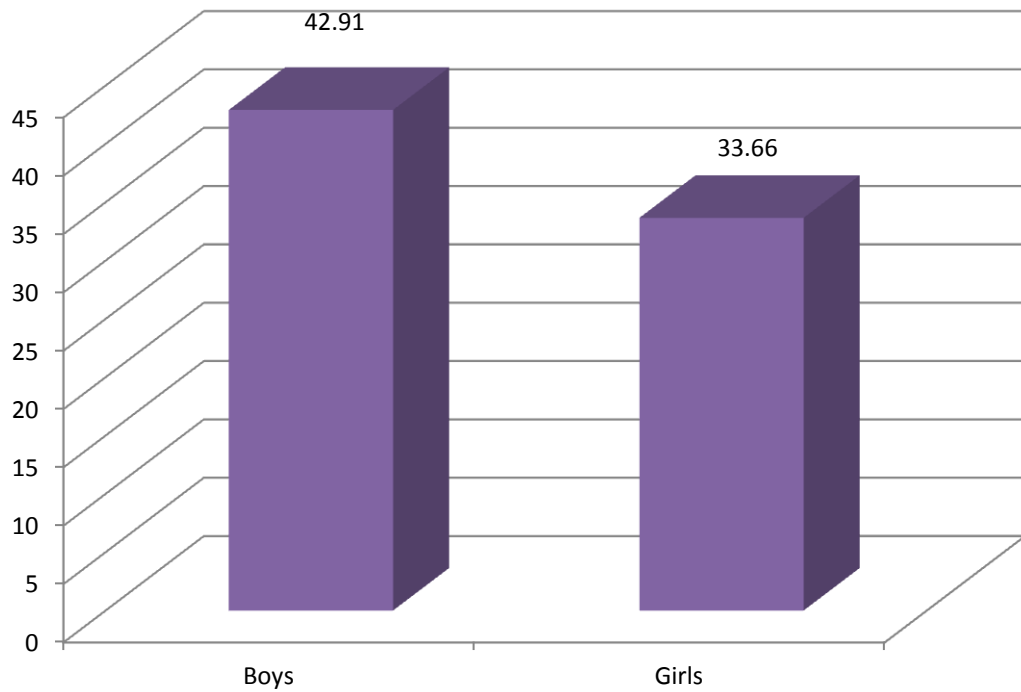


Figure 20: Showing the mean comparison of adolescent boys and girls of 10th grade on composite scores of learning styles (N=200).

Section – B 3
ACADEMIC ACHIEVEMENT

Table 4.21: Showing the mean comparison of adolescent boys and girls of 10th grade on Academic achievement (N =200).

Group	Mean	S.D.	t- value	Level of significance
Boys	53.50	6.40	7.73	Sig. at 0.01 level
Girls	62.16	9.36		

The above table shows significance of mean difference between adolescent boys and adolescent girls on Academic Achievement. The calculated t-value 7.73 exceeds the tabulated t-value (2.58) at 0.01 level of significance which depicts that there is a significant difference between adolescent boys and girls on Academic achievements. As mean score favours adolescent girls (62.16) which indicate that adolescent girls have better academic achievement as compared to adolescent boys.

Thus from the confirmation of the results from the above table the hypotheses No. 3 (Chapter 1) which reads as, “Boys and Girls do not differ significantly on Academic Achievement” stands rejected.

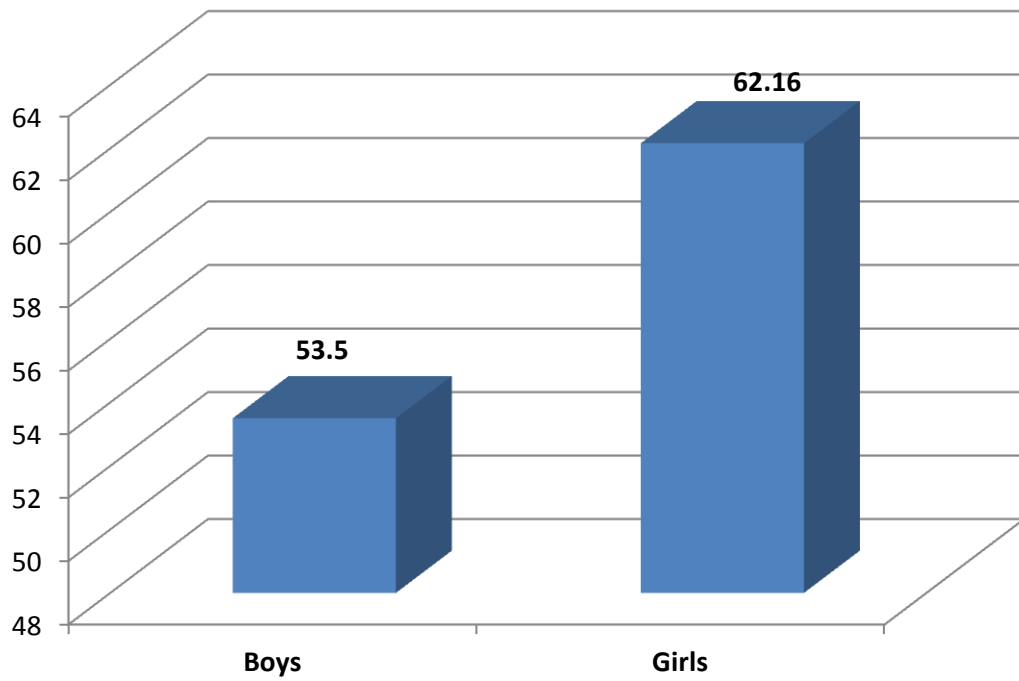


Fig. 4.3: Showing the mean comparison of adolescent boys and girls of 10th grade on Academic achievement (N =200).

Section – C (Correlational Analysis)

Table 4.22: Correlations between Emotional Intelligence, Learning Style and Academic Achievement of adolescent boys and girls of 10th grade.

	Emotional Intelligence	Learning Style	Academic Achievement
Emotional Intelligence	*	0.54*	0.31*
Learning Style		*	0.48*
Academic Achievement			*

* Significant at .01 level

The perusal of the above table reveals that there is significant relationship between emotional intelligence and learning style.

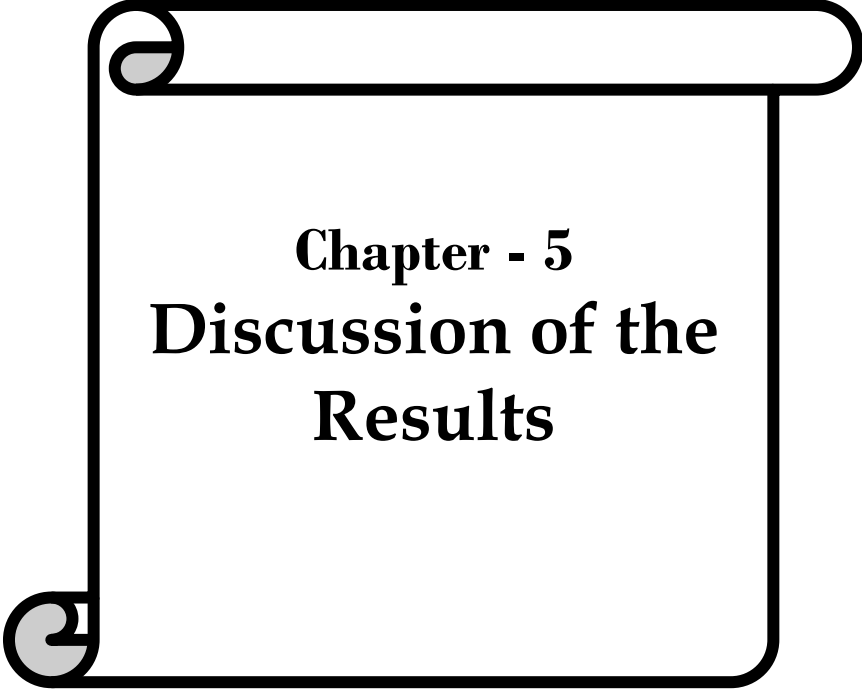
Thus from the confirmation of the results from the above table the hypotheses No. 4 (Chapter 1) which reads as, “There is a positive relationship between emotional intelligence and learning style of adolescent students of 10th grade”, stands accepted.

The above table further reveals that there is significant relationship between emotional intelligence and academic achievement. Thus, it confirms that emotional intelligence has effect on academic achievement.

Thus from the confirmation of the results from the above table the hypotheses No. 5 (Chapter 1) which reads as, “There is a positive relationship between emotional intelligence and academic achievement of adolescent students of 10th grade”, stands accepted.

Further, the above table reveals that there is significant relationship between learning style and academic achievement. The learning styles have impact on academic achievement.

In the light of the above table the hypotheses No. 6 (Chapter 1) which reads as, “There is a positive relationship between learning styles and academic achievement of adolescent students of 10th grade”, stands accepted.



Chapter - 5
Discussion of the
Results

Parents play a major role in developing emotional skills in children. Parents communicate information to their children at birth. They signal messages to children by touching, feeling, and speaking. They provide a support system during emotional times in their children's lives. Parents also help build self-esteem, self-control, self-awareness, and confidence. As parents and children work together to develop emotional intelligence skills, the child's ability to make good sound healthy decisions improves, communication skills are also enhanced, and children feel empowered to lead productive lives (Kolb & Hanley-Maxwell, 2003). Everyone needs emotional intelligence to make it through the emotional challenges we face in life. The ability to manage emotional intelligence effectively is important for success in school, home, the workplace, and most importantly in life.

In the learning environment, many educators are becoming aware that students emotional intelligence should be incorporated and embraced in the classroom. When a student's emotional and social skills are addressed, academic achievement of the student increases and interpersonal relationships improve (Goleman, 1995). In the workplace, there is a great demand for individuals to perform effectively emotionally and cognitively (Goleman, 1998). Based on Goleman's (1995) emotional intelligence concept, an individual must be able to work effectively in a team environment. An

individual must also be able to manage emotions at work and interact successfully with the public to produce positive outcomes on the job.

The data collected after the administration of the relevant tools was statistically analyzed. The same has been presented in the foregoing pages. A discussion based on this analysis is presented as under:

1. Emotional Intelligence of Adolescent boys and girls
2. Learning Styles of Adolescents boys and girls
3. Academic Achievement of Adolescents boys and girls.
4. Correlation between emotional intelligence, learning styles and academic achievement of adolescent boys and girls.

1. Emotional Intelligence of Adolescent Boys and Girls

While analyzing the emotional intelligence of adolescent boys and girls of 10th grade students it was found that 43% of adolescent boys and girls students of 10th grade fall in the high score of Emotional Intelligence and likely to be high performers, 33.5% of adolescent boys and girls students of 10th grade fall in the average normal score and likely to be average performance and only 23.5% of adolescent boys and girls students of 10th grade fall in the low score of emotional intelligence and likely to be low performance. Therefore, the highest percentage of adolescent boys and girls of Emotional Intelligence are likely to be high performance.

Furthermore, it was analyzed that there is insignificant difference between adolescent boys and girls of 10th grade students on 'B' Empathy ($t=1.15$), 'C' (Self motivation) ($t = 1.89$), 'D' (Emotional stability) ($t=0.50$), 'F' (Integrity) ($t = 0.83$), 'J' (Altruistic behaviour) ($t= 0.36$) factors of Emotional intelligence, therefore, no decisive decision can be taken about these factors.

The analyses makes it clear that the mean score of adolescent boys (9.1) on factor 'A' (Self Awareness) higher as compared to adolescent girls (7.58) and obtained 't' value (5.62) which is significant at 0.01 level. Therefore, the adolescent boys and girls differ significantly on factor – A

(Self Awareness). It was found that adolescent boys are better knowing their emotions, recognizing feelings as they occur and having knowledge of the causes of emotions as compared to adolescent girls of 10th grade students.

While analyzing adolescent boys and girls of 10th grade students on factor 'E' (Managing relations) of Emotional Intelligence. It was found that there is significant difference between adolescent boys and girls students as 't' value (4.69) which is significant at 0.01 level. The mean score of adolescent boys (8.04) and adolescent girls (7.13) which reveals that adolescent boys better handling interpersonal interaction, conflict resolution, more sharing, cooperation and helpfulness and more democratic in dealing with others as compared with adolescent girls of 10th grade students.

Similarly, analyze adolescent boys and girls of 10th grade students on factor 'G' (Self development) of Emotional Intelligence. It was found that there is significant difference between adolescent boys and girls on factor 'G' (Self development) of Emotional Intelligence as 't' value (11.44) which is significant at 0.01 level. The mean score of adolescent boys (7.23) and adolescent girls (6.44) which reveals that adolescent boys are more popular and better linked by their peers. They are found to be able to handle a number of tasks than girls. They are having more ability to identify and separate their emotions and developing themselves even when the job does not demand it as compared with adolescent girls.

When we analyze adolescent boys and girls of 10th grade adolescent students on factor 'H' (Value orientation) of Emotional Intelligence it was found there is significant difference between adolescent boys and girls on factor 'H' (Value orientation) of Emotional Intelligence as 't' value (6.34) which is significant at 0.01 level. However, the mean score of adolescent boys (7.47) and adolescent girls (7.14) which shows that adolescent boys are more responsible and they have more control over their feelings, are more aware of their weakness and are stronger in their beliefs, better linked with their peers and better in maintaining the standards of integrity as compared to adolescent girls.

Further, analyze adolescent boys and girls of 10th grade students on factor 'I' (Commitment) of Emotional intelligence. It was found that there is significant difference between adolescent boys and girls on this factor as 't' value (8.69) which is significant at 0.01 level. However, the mean score of adolescent boys (5.52) and adolescents girls (6.62) shows that adolescent girls are careful to their work, able to meet commitments and keeps promises as compared to adolescent boys.

On the basis of analyses and interpretation it was found that there is significant difference between adolescent boys and girls of 10th grade students on composite score of Emotional intelligence as 't' value (4.77) which is significant at 0.01 level. However, mean score of adolescent boys (82.05) and adolescents girls (72.12) which shows adolescent boys have high emotional intelligence in comparison to adolescent girls. The obtained results of the study are in line with the findings of the study reported by **Hunt and Evans (2004)** reported in their study on individuals having traumatic experiences and simultaneously studied on their emotional intelligence level, and the results showed that adolescent boys have higher Emotional Intelligence than girls. **Mishra and Ranjan (2008)** have also been studied whether the gender difference affects emotional intelligence of adolescents. The results showed that adolescent boys and girls differ significantly on emotional intelligence and boys were found to be significantly higher on emotional intelligence than the girls. The higher scores of adolescent boys indicate that they are better on interpersonal, intrapersonal, adaptability and stress management skills and their overall general mood (happiness and optimism) are of higher order than the adolescent girls. **Carr (2009)** have studied sex differences in emotional intelligence among a student sample of medical schools. Results indicated that male candidates had higher emotional intelligence scores than females.

2. Learning Style of Adolescent Boys and Girls

On the basis of analysis and interpretation it was found that highest percentage (35.5%) of adolescent boys and girls of 10th grade students are

those learners who fall in the strong preferences category i.e. highest percentage of adolescent students would always learn new or difficult concept more easily and retain them better if that element is ensured. While 25.5% are those learners who have limited option and usually or often learn new or difficult concept more easily and retain better when that particular element is provided. 21% of adolescent boys and girls are those learners who have opposite preferences and only 18% are those learners who have opposite strong preferences.

While analyzed the adolescent boys and girls of 10th grade students on Learning style inventory. It was found that there is insignificant difference between adolescent boys and girls on Environmental stimulus and Sociological stimulus factors of Learning styles. Therefore, no decisive decision can be taken about these factors.

When analyze adolescent boys and girls of 10th grade students on Emotional stimulus of Learning style it was found that there is significantly differ between adolescent boys and girls as 't' value (7.68) which is significant at 0.01 level. Mean score of adolescent boys (28.12) and adolescent girls (23.28) which shows that adolescent boys are well responsible, motivation, persistency and well structured material as compared to adolescent girls.

Further, analyzed adolescent boys and girls on Physical stimulus of learning style. It was found that there is significant difference between adolescent boys and girls on Physical stimulus factor of Learning style as 't' value 4.6 which is significant at 0.01 level. Mean score of adolescent boys (26.21) and adolescent girls (25.98) which shows that adolescent boys are perception, intake, time and mobility as compared to adolescent girls.

On the basis of analysis and interpretation of adolescent boys and girls on composite score of Learning style. It was found that there is significant difference between adolescent boys and girls on Learning style as 't' value (9.73) which is significant at 0.01 level. Mean score of adolescent boys (72.91) and adolescent girls (33.66) which shows that adolescent boys have

high verbal, content preference, class preference, learning preferences and interests than their counterparts, which is quite in line with the findings of **Sharma Parveen (2011)** who found that male and female secondary school students were different in their learning-styles. However significance of mean difference favoured male adolescents. **Delialiogu, Fatma (2003)** noticed that male students scored higher in kinematic skill than female students. **Verma, Jagdish (1992)** observed that male adolescents have higher Learning Styles than female adolescents. It also indicates that male adolescents have higher verbal, content preference, class preference, learning preferences and interests than female adolescents.

3. Academic Achievement of Adolescent Boys and Girls

While analyzed the adolescent boys and girls of 10th grade students it was found that 15.5% of adolescent students of 10th grade got distinction, 32% of adolescent students of 10th grade got 1st division, while 30% of adolescents students of 10th grade got 2nd division category of academic achievement. The data further reveals that 22.5% of adolescent students of 10th grade got 3rd division category of academic achievements.

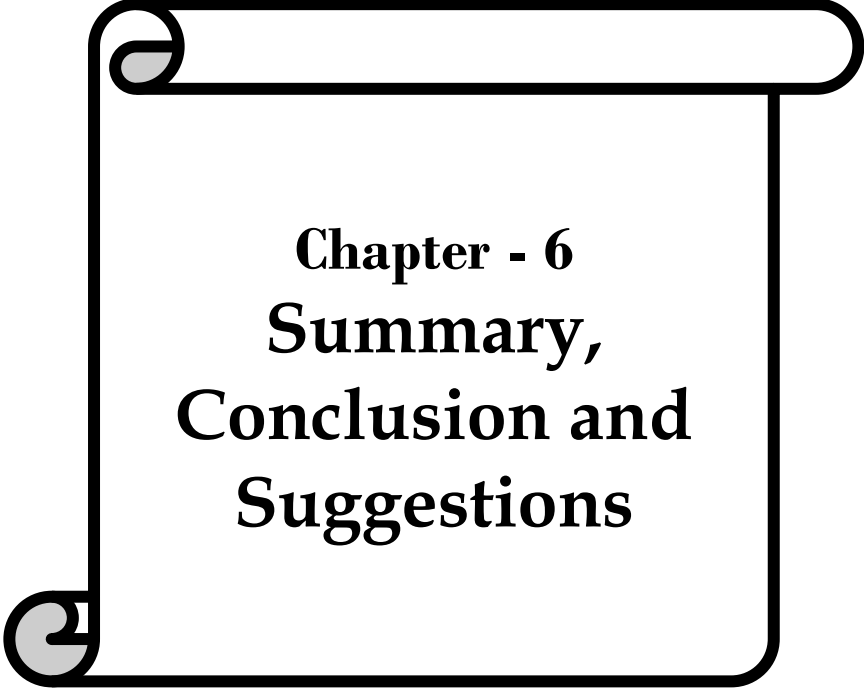
On the basis of analyses and interpretation of adolescent boys and girls of 10th grade students it was found that there is significant difference between adolescent boys and girls on Academic achievement as 't' value (7.73) which is significant at 0.01 level. However, mean score of adolescent boys (53.50) and adolescent girls (62.61) which shows that adolescent girls have better academic achievement as compared to their counterparts, which is quite in line with the findings of Singh (1984) found that study habits of boys and girls differed significantly at different levels of academic achievement. **S. O. Salami and E. A. Alawode (2004)**, who found that rural male and rural female adolescents differed significantly on academic achievement.

4. Correlation between Emotional Intelligence, Learning Styles and Academic Achievement of adolescent boys and girls

On the basis of analysis and interpretation it was found that there is significant and positive relationship between emotional intelligence and learning styles.

Also it was found that there is significant and positive relationship between emotional intelligence and academic achievement. Thus, it confirms that emotional intelligence has strong effect on academic achievement.

Further, it was found that there is significant relationship between learning style and academic achievement. The learning styles have significant impact on academic achievement.



Chapter - 6
Summary,
Conclusion and
Suggestions

SUMMARY

The purpose of this study was to examine the Emotional Intelligence, Learning Style and Academic Achievements of Adolescent Students of 10th Grade. A sample of 200 adolescent students of 10th grade (100 boys and 100 girls) participated in this study and these were selected randomly from the various Govt. Schools of district Srinagar. The following tools were employed for the purpose of collecting relevant data from the selected subjects:

7. Emotional Intelligence Scale prepared by Anokool Hyde, Sanjyot Pethe and Upinder Dhar were used to measure Emotional Intelligence of adolescent students.
8. Learning Styles Inventory prepared by Rita Dunn, Keneth Dunn and Gary E. Prince were used to measure Learning Styles of the adolescent students.
9. Academic Achievement of the students was collected by giving them self-constructed information blank in which they had to give the aggregate percentage of marks of 8th and 9th class for each student were noted from the office records of the sample schools.

Objectives

The following objectives were formulated for the present study:

11. To study the emotional intelligence of adolescent students of 10th grade.
12. To study the learning styles of adolescent students of 10th grade.
13. To study the academic achievement of adolescent students of 10th grade.
14. To compare adolescent boys and girl students on emotional intelligence, learning styles and academic achievement.
15. To find the relationship between emotional intelligence on one hand and learning styles and academic achievement of adolescent students of 10th grade.

Hypotheses

The following hypotheses have been formulated for the present research work:

13. Boys and girls do not differ significantly in their emotional intelligence.
14. Boys and girls do not differ significantly in their learning style.
15. Boys and girls do not differ significantly in their academic achievement.
16. There is a positive relationship between emotional intelligence and learning styles of adolescent students of 10th grade.
17. There is a positive relationship between emotional intelligence and academic achievement of adolescent students of 10th grade.
18. There is a positive relationship between learning styles and academic achievement of adolescent students of 10th grade.

Statistical Analysis

To achieve the objectives of the study, the data collected was statistically analyzed using the following technique;

1. Mean
2. S.D
3. t-test
4. Correlation

CONCLUSIONS

On the basis of analysis, interpretation and discussion of the results presented in the foregoing chapters, certain meaningful conclusions have been drawn which are reported as under:

22. It was found that 43% of adolescent students of 10th grade fall in the high category of Emotional Intelligence, 33.5% of adolescent students of 10th grade fall in the average normal category. The data further reveals that 23.5% of adolescent students of 10th grade fall in the low category so far as their emotional intelligence is concerned.

23. It was found that 35.5% of adolescent students of 10th grade fall in the strong preferences category of Learning Style, 25.5% of adolescent students of 10th grade fall in the preferences category, 21% of adolescent students of 10th grade have opposite preferences of learning styles. The data further reveals that 18% of adolescent students of 10th grade have opposite strong preference category so far as their learning style are concerned.
24. It was found that 15.5% of adolescent students of 10th grade got distinction, 32% of adolescent students of 10th grade got 1st division, while 30% of adolescents students of 10th grade got 2nd division category of academic achievement. The data further reveals that 22.5% of adolescent students of 10th grade got 3rd division category of academic achievement so far as their academic achievement is concerned.
25. It was found that adolescent boys are better in handling interpersonal interaction, conflict resolution, more sharing, cooperation and helpfulness and are more democratic in dealing with others as compared to adolescent girls.
26. It was found that adolescent boys are more popular and better linked by their peers, they are found to be able to handle a number of tasks than the adolescent girls.
27. It was found that adolescent boys are more responsible and they have more control over their feelings and are more aware of their weakness and are also stronger in their beliefs, better linked with their peers and better in maintaining the standards of integrity as compared to adolescent girls.
28. It was found that adolescent girls are careful to their work, able to meet commitments and keep promises as compared to adolescent boys.
29. It was found that adolescent boys have high emotional intelligence in comparison to adolescent girls.

30. It was found that there is significant difference between adolescent boy and girl students on factor 'E' (Managing relations) of Emotional Intelligence.
31. It was found that there is significant difference between adolescent boys and girls on factor 'G' (Self development) of Emotional Intelligence.
32. It was found there is significant difference between adolescent boys and girls on factor 'H' (Value orientation) of Emotional Intelligence.
33. It was found that there is significant difference between adolescent boys and girls on factor 'I' (Commitment) of Emotional intelligence.
34. It was found that there is significant difference between adolescent boys and girls on Emotional intelligence.
35. It was found that adolescent boys have more perception power, intake, time and mobility as compared to adolescent girls.
36. It was found that adolescent boys have high verbal preference, content preference, class preference, learning preferences and interests than adolescent girls.
37. It was found that there is significant difference between adolescent boys and girls on Physical stimulus factor of Learning style.
38. It was found that there is significant difference between adolescent boys and girls on Learning style.
39. It was found that there is significant difference between adolescent boys and girls on Academic achievement. Adolescent girls were found to have better academic achievement as compared to adolescent boys.
40. There is a significant relationship between emotional intelligence and learning style.
41. There is a significant relationship between emotional intelligence and academic achievement.
42. There is a significant relationship between learning style and academic achievement.

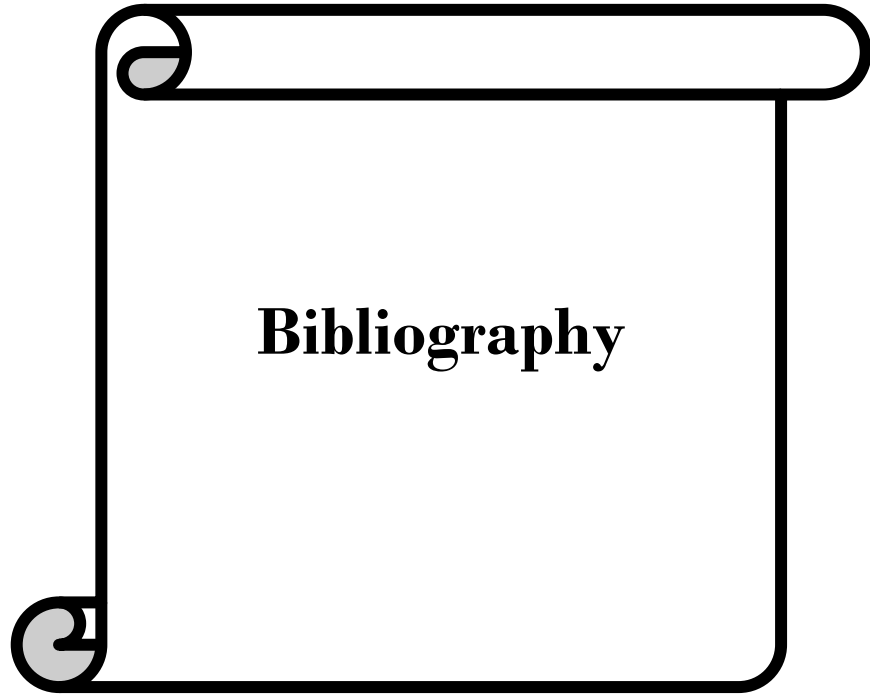
SUGGESTIONS

1. As the variables undertaken in the present study play an important role in an adolescent's studies, therefore, the future researchers should take a large sample in order to increase the generalization of the results.
2. Other variables should also be taken into consideration e.g the factors which influence the academic achievement and learning styles of the adolescents.
3. A-cross cultural study may should be conducted on Emotional intelligence, learning styles and academic achievements of college level students in the Kashmir.
4. The present investigation studied the adolescent groups only similar study may be conducted on different age groups.

EDUCATIONAL IMPLICATIONS

1. The present study gives us an idea about the presence of emotional intelligence among the adolescent boys and girls which will be helpful to both the teachers and the parents.
2. Information about the learning style of the adolescents will help the teachers in understanding the weaknesses and strengths of the adolescents that hamper their progress in their studies.
3. This study gives us information about the academic achievement of adolescent boys and girls and states that emotional intelligence and learning styles can influence a person's academic achievement.
4. The student's future can be moulded by developing better learning style which could consequently lead to better academic achievement. All the students should be aware of their learning styles preferences in order to understand their program, lesson, material and subject matter more comprehensively.
5. It is also important for the teacher and parents to remember the effect that emotions have on learning. Emotional intelligence affects each student's ability to learn.
6. Based on the findings of this study, a teacher should review his/her teaching styles to reach the variety of learning styles in the classroom, while understanding, the effect of emotional intelligence on the student learning.
7. Educators that are aware of the different learning styles will be able to narrow the existing gaps between how subject-matter and material is presented and how learners receive information and gain knowledge. Encouragement should be given to the students by the parents and teachers this can help them in creating a friendly atmosphere by encouraging students to work harder, so that they feel self-confident to take risks in their learning.

8. The teachers should also conduct weekly, monthly reading tests, oral tests and written tests by making a fair assessment of the students that could be of great value in the evaluation of learning styles and academic achievement.
9. By gaining a better understanding of adolescents learning styles, it is possible that teaching strategies, methods, and techniques that can be used to assist in the development of critical thinking and other important skills can be identified and improved.



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