

**IMPACT OF EMOTIONAL INTELLIGENCE ON COGNITIVE DIFFICULTY AND  
ACADEMIC ACHIEVEMENT OF HIGHER SECONDARY STUDENTS**

**DISSERTATION**

**Submitted to the Central University of Haryana for the Fulfillment of the  
Degree of**

**MASTER OF PHILOSOPHY IN EDUCATION**

**Under the School of Arts, Humanities and Social Sciences**

**In the Department of Education**



**Supervisor:**

Professor Sarika Sharma  
HOD, Department of Education

**Researcher:**

Muhammad Aarif Malik  
M.Phil. Scholar (Roll No. 10082)

**Co-Supervisor:**

Dr. Dinesh Chahal  
Assistant Professor  
Department of Education

**Central University of Haryana**

**2018**

## **Declaration**

This is to certify that the material embodied in the present work entitled “**Impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students**” is based on my original research work. It has not been submitted in part or full for any other diploma or degree of any University/ Institution deemed to be University and College/ Institution of National Importance. References from other works have been duly cited at the relevant places.

Date: .06.2018

**Muhammad Aarif Malik**

M. Phil. Scholar

Roll No. 10082

**Counter Signed by Supervisor**

**Professor Sarika Sharma**

HOD, Department of Education

Central University of Haryana

**Counter Signed by Co- supervisor**

**Dr. Dinesh Chahal**

Assistant Professor

Department of Education

Central University of Haryana

**Forwarded By Head of the Department**

**Professor Sarika Sharma**

Department of Education

Central University of Haryana

## Acknowledgement

I am exceedingly appreciative of my supervisor **Professor Sarika Sharma, Head of Department, Department of Education, Central University of Haryana, Mahendergarh and my co-supervisor Dr. Dinesh** for their scrupulous supervision, stimulus and inspiration and for offering me liberal upbringing to deal with the topic of research in my own style. I am also extremely appreciative for their assistance, professionalism, and valuable guidance and for their patience, motivation, enthusiasm, and immense knowledge. They always blessed me with their creative ideas without which it would have been impossible for me to complete this work. I document my sincere appreciation for their regular encouragement and creative initiatives in the process of my improvement. The more I appreciate them the less it is for them.

I express my sincere thanks to **Dr. Renu Yadav** for her continuous support and guidance in accomplishing my research work. I also extend my thanks to **Mrs. Aarti Yadav** who were involved with me and suggested me for the latest updating in research and its changing scenario. I also regards them for their encouragement, insightful comments, and motivation. In particular, I am grateful to my teachers for enlightening me the first glance of research.

I am also very grateful to **Dr. Rubul Kalita, Dr. Naveed Khan, and Dr. Pooja Walia** faculties in the School of Education, Central University of Haryana for their valuable inputs, guidance, encouragement and cooperation in completing my research work.

I am grateful to all faculty members and non-teaching staff of Central University of Haryana for their kindness, love, affection and co-operation during my research. Thank also goes to the support staff especially e-lab and Library of the university, where they helped me out in my basic needs regarding this study.

I also thanks to the various Principals and Teachers of the schools, where I visited and who supported and helped me out in collection of data and through this I would be able to

complete my research work. I place my heartfelt gratitude to students who has participated in the study. I thank profusely for their cooperation and support.

It gives me immense pleasure to express my regards for my loving brother **Dr. Kaiser** without whose support I could not have been able to realize my dream of conducting research.

I would also like to acknowledge my fellow friends (**Altaf Rasool, Sheetal Devi, Irfan Yousuf, Showkat Ahmad, Parveez**) research scholars of Central University of Haryana, who helped me out in various problems which came in front of me in research, and continues their support in terms of knowledge, during the course and this research program as well.

I am thankful to my dear friend **Sajad Ahmad Mir** and **Basit Rashid** (MCA Students) who helped me in typing and editing of my Dissertation. My sincere thanks to **Ajaz, Kaleem, Kelash, sorav, Jyoti**, students of Department of Education.

At lastly, I bear my sincere thanks to all who contributed and helped me while carrying out the research work.

**Muhammad Aarif Malik**

## Index

List of Tables.....

List of Figures.....

| <b>Chapter</b>          | <b>Description</b>   | <b>Page No</b> |
|-------------------------|--|----------------|
| <b><i>Chapter 1</i></b> | <b><i>Introduction</i></b>   | <b>1-25</b>    |
| 1.1                     | Emotional Intelligence   |                |
| 1.2                     | Cognitive Difficulty   |                |
| 1.3                     | Academic Achievement   |                |
| 1.4                     | Significance of the Study  |                |
| 1.5                     | Statement of the Problem   |                |
| 1.6                     | Definition of the key terms  |                |
| 1.7                     | Objectives of the Study  |                |
| 1.8                     | Hypothesis of the Study  |                |
| 1.9                     | Delimitation of the Study  |                |
| <b><i>Chapter 2</i></b> | <b><i>Review of Related Literature</i></b>   | <b>27-54</b>   |
| 2.1                     | Classification of Sources of Literature Review Materials<br>From Summaries to Early Stage Material |                |
| 2.2                     | Studies Related to Emotional Intelligence  |                |
| 2.3                     | Studies Related to Cognitive Difficulty  |                |
| 2.4                     | Studies Related to Academic Achievement  |                |
| 2.5                     | Research Gap   |                |
| <b><i>Chapter 3</i></b> | <b><i>Methodology and Procedure</i></b>  | <b>55-61</b>   |
| 3.1                     | Population for the Study   |                |
| 3.2                     | Selection of the Sample  |                |
| 3.3                     | Variables Studied  |                |

|                          |   |                |
|--------------------------|---|----------------|
| 3.4                      | Selection of the Tools: Emotional Intelligence Test- Dr. Ekta Sharma<br>And Cognitive Difficulty Scale by Dr. V.N. Yadav, Suraj Mal,<br>Indu and Diksha |                |
| 3.5                      | Reliability and Validity of first Emotional Intelligence Test   |                |
| 3.6                      | Reliability and Validity of Cognitive Difficulty Scale  |                |
| 3.7                      | Other Sources of Data   |                |
| 3.8                      | Administration of the Tools   |                |
| 3.9                      | Scoring Procedure   |                |
| 3.10                     | Statistical Techniques Employed   |                |
| <b>Chapter 4</b>         | <b><i>Analysis and Interpretation of Data</i></b>   | <b>63-90</b>   |
| 4.1                      | Regression  |                |
| <b>Chapter 5</b>         | <b><i>Main Findings, Educational Implications and Suggestions<br/>For Further Research</i></b>  | <b>91-94</b>   |
| <b>Summary</b>           |   | <b>95-113</b>  |
| <b>Abstract in Hindi</b> |   | <b>114-115</b> |
| <b>References</b>        |   | <b>117-122</b> |
| <b>Appendix</b>          |   | <b>123-143</b> |

## **List of Tables**

|               |  |
|---------------|--|
| Table No. 3.1 | Showing the details of sample selected from different higher secondary schools of Jammu city.  |
| Table No. 4.1 | Descriptive Statistics of hypothesis there is no significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students.   |
| Table No. 4.2 | Multivariate tests of hypothesis there is no significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students.   |
| Table No. 4.3 | Tests of between-subjects effects of hypothesis there is no significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students.  |
| Table No. 4.4 | Descriptive Statistics of hypothesis there will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to Gender (Boys/ girls).       |
| Table No. 4.5 | Multivariate tests of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to Gender (Boys/ girls).                |
| Table No. 4.6 | Tests of between-subjects effects of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic achievement of Higher Secondary Students with reference to Gender (Boys/ girls). |
| Table No. 4.7 | Descriptive Statistics of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to locality (Rural / Urban).        |

- Table No. 4.8            Multivariate tests of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to locality (Rural / Urban).
- Table No. 4.9            Tests of between-subjects effects of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to locality (Rural / Urban).
- Table No.4.10            Descriptive Statistics of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to type of schools (Government/ Private).
- Table No. 4.11            Multivariate tests of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Secondary Students with reference to type of schools (Government/ Private).
- Table No. 4.12            Tests of between-subjects effects of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to type of schools (Government/Private).

## List of Figures

| <b>Figure No.</b> | <b>Name of the Figure</b>  |
|-------------------|--|
| <b>A</b>          | Bar diagram of descriptive statistics of hypothesis there is no significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students.  |
| <b>B</b>          | Bar diagram of multivariate tests of hypothesis there is no significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students.  |
| <b>C</b>          | Bar diagram of between subjects effects of hypothesis there is no significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students.  |
| <b>D</b>          | Bar diagram of descriptive statistics of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to Gender (Boys/ girls).   |
| <b>E</b>          | Bar diagram of multivariate tests of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to Gender (Boys/ girls).       |
| <b>F</b>          | Bar diagram of between subjects effects of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to Gender (Boys/ girls). |
| <b>G</b>          | Bar diagram of descriptive statistics of hypothesis there will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to                    |

---

locality (Rural / Urban).

- H** Bar diagram of multivariate tests of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to locality (Rural / Urban).
- I** Bar diagram of between subjects effects of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to locality (Rural / Urban).
- J** Bar diagram of descriptive statistics of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to type of school (Government/ Private).
- K** Bar diagram of multivariate tests of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to type of school (Government/ Private).
- L** Bar diagram of between subjects effects of hypothesis there is no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement Higher Secondary Students with reference to type of school (Government/ Private).
-

# INTRODUCTION

## 1.1 Emotional Intelligence

It is evident from the literature, and is proven by the researches that emotional intelligence (also known as Emotional Quotient) has a pre-requisite role in everything, every action, every decision, and in every judgement of an individual. It is expected that emotions not only drive us to act but it also provides its help and guidance in determining the aims, objectives and goals of life as well, and it also attempts for pleasant ends and avoiding unpleasant one. In the current situations it is well known that the number of difficulties faced by children and youth may give rise to many psychosomatic problems which lead to anxiety, tensions, and frustrations and emotional upsets in everyday life. From the last twenty years, it has been analyzed that emotional intelligence has manifested as a novel theoretical approach for the exploration of individual differences, which has not been clearly elucidated by customary methods of cognitive abilities or personality traits. In spite of increasing curiosity among investigators and specialists, it leftovers uncertain and undecided that in what way the paradigm should be best addressed (**Roberts, Zeidner, & Matthews, 2001**). The people who often looks emotionally intelligent can best use their thinking to bring about their emotions instead of being copped by them. The concept of emotional intelligence has now emerged as a significant gauge to measure one's knowledge, skills, abilities, capabilities in out-field, school and in personal affairs of life. The results revealed from the research works recommended that emotional intelligence plays a gigantic role in one's job performance, decision making, judgement, motivation and leadership etc.. According to the Oxford English Dictionary emotion as "Any agitation or disturbance of mind, feeling, and passion, any vehement or excited mental state". Emotions of an individual differ in agreement with amalgams, disparities and alterations of mental state. To some extent within its range, every individual's emotion plays an exclusive role as provoked by one's biological tendencies. The emotional incentives might be categorized into different kind of feelings like anger, fear, cheerfulness, affection, amazement, revulsion, grief, etc. These various biological

propensities are shaped further by our experience in life and culture. In tiny words, it can be said that emotions are all prevalent in our daily life. Emotional intelligence not only satisfies our longings but it also makes us competent in our own field. It is frequently seen that each and every individual get some experiences and relays their spirits and emotions in every day of life. Good emotions of a person can create for him a congenial environment in order to get cherished information about relations, associations, interactions behavior and about every aspect of life. The number of researches conducted in recent times in the said field proposes that emotions are constructive and productive and it could be beneficial at each stage of education for students, if it play its significant role in order to improve and boost their performance or achievement in their personal life.

The term emotional intelligence (EI) was first introduced in scientific literature by psychologists **John Mayer and Peter Salovey in 1990**. By getting the attributes of emotional intelligence in life, one becomes the competent to perceive, process, regulate and manage the emotions which further lead him to good personality development. Emotional intelligence is defined as “The ability to perceive emotion, integrate emotion to facilitate thought, understand emotions, and to regulate emotions to promote personal growth” (**Mayer & Salovey 1997**). It often appears that the individuals having good emotional intelligence are able to generate better skills and expertise in them in order to bring out the information processing about emotions compared to others. Emotional intelligence also plays a gigantic role in order to diminish the cognitive difficulties of students. Those who have high emotional intelligence can understand concepts, terms, phrases etc. In a short span of time. the students like gifted and creative understand difficult tasks within no time and collect more and more knowledge and information without any hindrances. These categories of students having high emotional intelligence lead them to gain more and more which could be beneficial for themselves and for society in general. According to **Reuven Bar-On (1996)** emotional intelligence as “An array of non-cognitive (emotional and social) capabilities, competencies and skills that influence one’s ability to succeed in coping with environmental demands and pressures.” The individuals can best use their emotions for guiding behavior and for thinking in beneficial ways and they are

open-minded, flexible and are good listeners forever. It has been explained that emotional intelligence is the aptitude to recognize emotions, to access and create emotions, to succor thought, to comprehend emotions and emotive knowledge and normalize emotions to endorse emotional and intellectual growth (**Mayer and Salovy, 1997**). EI is basically an important factor for effective control and in screening good academic performance of students. The success of the student mostly depends upon their intelligence which enlightens his path of way towards progress and prosperity and makes him optimist to achieve the personal goals of life. When the student does not clearly grip the concepts in the class room, perhaps it indicates the sign of low emotional intelligence. While penetrating the term emotional intelligence it is found that the term emotional intelligence (EI) is correlated with academic performance, job performance, and creative thinking etc.

Daniel Goleman, who is considered as the father of emotional intelligence, believes that emotional intelligence is conquering the skills of self-awareness, self-management, social awareness and relationship management. Emotional Intelligence is the capacity to diagnose, comprehend, understand, and cope one's emotions and that of others. Those with high emotional intelligence will be able to make the emotions work for their own benefit. Self-esteem and optimism are found in elevation in those individuals who are best in emotional intelligence. These individuals can easily apprehend emotional information and are capable to smear that understanding for effective decision making and problem solving cases in life. They will also be competent to bring out pure reasoning about emotions and practice the emotional knowledge to develop their thinking. Emotional Intelligence refers to "the capacity to understand emotional information and to reason with emotions" **John D. Mayer & Peter Salovey (1990)**.

Here we briefly discuss about the various models of emotional intelligence such as; ability model, mixed model and trait model.

## **Ability Model:**

According to this model emotional intelligence is a pure form of mental ability and hence also as a pure intelligence. This model of emotional intelligence is given by **John Mayer and Peter Salovey**. They also asserted that models of emotional intelligence are the basis of emotional intelligence. This model suggests that emotional intelligence is an integration of two extents one is experiential ((capability of perceiving, reacting, and operate emotional information without certainly comprehending it) and another one is strategic (aptitude to apprehend and manage emotions without essentially recognizing and perceiving feelings well or completely experiencing them). (Mayer & Salovey, 1997) had developed four branches of this ability of emotional intelligence. The branch first shifts toward ‘emotional perception’ which implies to be self-aware of emotions and it also provides the ability to differentiate between right and wrong, honest and dishonest expressions of emotions. The second branch refers to ‘emotional assimilation’ which affords the ability of distinguishing various emotions for instance feelings which recognize those that are effecting their thought processes. The third one is ‘emotional understanding’ which refers to comprehend emotions such as; feel more than one emotion at a time and also provides the capability of recognizing transitions from one to another. And the fourth and last one which is ‘emotional management’ provides the ability to deal with the valuable emotions which may be suitable at the situation.

## **Bar-On: A Mixed Model of Emotional Intelligence**

The director of the Institute of Applied Intelligences in Denmark and consultant for a variety of institutions and organizations in Israel, Reuven Bar-On developed one of the first measures of emotional intelligence that used the term "Emotion Quotient". This model of emotional intelligence always narrates to the ability and capability for performance and success instead of performance and success itself, and it is also well-thought-out process oriented rather than outcome oriented (Bar-On, 2002). Bar-On in this mentioned 5 constituents or components such as: intrapersonal, interpersonal, adaptability, stress management, and general mood

## **The Trait EI model**

Trait model of emotional intelligence talk about an individual's self-perceptions of his emotional abilities. According to this definition it is implied that emotional intelligence EI contains behavioral tendency and self-perceived tendency and it is also measured by self-report. Trait EI should be investigated within a personality framework and another name of this paradigm is trait emotional self-efficacy.

According to the **Goleman's** model of intelligence which is known as a assorted model and it is branded by the five wide-ranging zones. They are: 1) knowing one's emotions (Self-awareness), 2) managing emotions (Self-management), 3) motivating oneself, 4) recognizing emotions in others (Empathy), and 5) handling relationships (Relationship management). These skills have significant role in the academic performance of students. In order to know the consequence of the manifestation of these components in the development of one's life are briefly being discussed as below:

### **1.1.1 Self-Awareness (Knowing one's Emotions)**

The self-awareness dimension of emotional intelligence refers to be empowered to realize own spirits, sentiments, thoughts and personal strengths and weaknesses as well. Goleman (1998) says that self-awareness component is grave in comprehending others and unveiling empathy. It is very established fact that the capability to "recognize a feeling as it happens and put it off if inconvenient" is the bedrock to emotional intelligence. Self-awareness or knowing one's emotions always compel us to know what one feels, senses, thinks, and why so. This component of emotional intelligence instructs that you must be aware of your own self and others sentiments and emotions so that, they would be able to get precise and perfect records and information about the world around them. Goleman (2002) describes that, emotional self-awareness is the capability to realize one's emotions and their special effects on self and others. It is very difficult job for an individual if he/she displays sentiments and feelings from one jiffy to another for his/her psychological insight and self-understanding, so one must be aware and conscious about the emotions of others in

order to construct a fruitful and purposive workstation environment and worthy interpersonal relations. If an individual is eager to respond properly to an existing condition then he should read his emotions in that condition. So those who are found to be impotent to recognize their spirits are at a marvelous disadvantage, and in the sense they are considered as emotionally illiterates.

### **1.1.2 Self-Control (Managing or Controlling one's Emotions)**

From this component of emotional intelligence it is revealed that one should be able to control and normalize moods and emotions in one's own self and as well as in others. It is well known from the literature and research works that those who are emotionally intelligent must be competent in order to screen, differentiate and tag their sentiments precisely and it is whispered that they are capable to enhance and adapt these feelings, utilize strategies that would change their feelings, and judge the usefulness of these strategies. As far as this component of emotional intelligence is concerned it makes an individual liable to grip scratchy emotions unless they may agree that they are feeling them. Good emotional intelligence may lead you to be flexible, and can remain open to his feelings, learn from them and can utilize them to take apposite deed.

### **1.1.3 Motivating Oneself**

Constructive inspiration – the rationalizing of moods and spirits of eagerness, fanaticism and assurance – is central for success. To encourage one-self for any accomplishment needs perfect ends and a positive 'can-do' attitude. Emotions provoke us but these also can disable us if they are moreover robust and if we permit them to devastate us. It entails adjourning fulfillment or roasting impetuosity. Those who have this skill inclined to be extremely prolific and operative in of any kind of task they commence.

### **1.1.4 Empathy (Recognizing Emotions of Others)**

It is very amazing to discuss that an individual should possess those feelings and sentiments which would grab his attention towards the feelings and sentiments of

others. The empathetic attitude of an individual plays a very momentous role in comprehending the emotions, advancement and conversion of spirits to one another and the capability to forecast by what means people will feel and retort in different situations. It implies the meaning that a person can feel about another rather than feel about himself. It is often seen that the more empathetic are being found more agreed with the intelligent social gestures that others need or want. Empathetic skills may encourage you to expand the boundaries of interpersonal relationships and, can make a bond of communication with others which results in comprehending the viewpoints of others very well. Goleman has explained empathy as ‘social radar’. He enlightens empathy as being able to pick up another’s sensation deprived of having a word expressed by them. So if you want to be empathetic it means you want to emotionally red other people.

### **1.1.5 Social Skills (Handling Relationships)**

The talent of making relationships with others and managing the emotions of others provides you the aptitude of motivating and encouraging them. If an individual has the capability to understand the others emotions, sentiments and feelings then you are capable to establish and create new associations to work in prosperous crews among and can have a good leadership quality. Those who generate the attributes of this component of emotional intelligence are always surpass in different kinds of skills such as; motivating others, understanding others emotions, be effective leader, creating interpersonal relations and networking very slickly with others. Emotional intelligence (EI) stretches the ability to have ‘grace under fire’ and to act with truthfulness and pluck. So in a basic and pure sense, the efficacy of one’s association skills pivots on one’s capability to accommodate to or influence the emotions of another person.

### **1.2 Cognitive Difficulty**

The concept of cognitive difficulties is exceedingly comprehensive and not well-defined. In floppy terms cognitive difficulty refers to the problems and issues related with general awareness, concentration attention, perception, and reading difficulty, learning, memory and problem solving. In spite if an individual is having trivial

cognitive difficulty then he may be able to function and work adequately. The individuals having the deep cognitive difficulty impedes their day to day functioning (**Broadbent, Cooper, Fitzgerald and Parkes, 1982; Lasson, Alderton, Meideffer and Underhill, 1997**). The term Cognition was first proposed by **T. G. Bever and Jaques Mehler** and the term was born in France when the **Jaques Mehler** moved from the United States of France. The term cognitive refers to the general perspective which involves attention, perception, learning, memory, reasoning, decision making and problem solving etc. It is usually seen that every individual can learn, remember, reason and solve problems with prodigious accuracy. When we go and think through the general perspective the term cognition is often influenced by peripheral forces that may lead an individual to amiss. The identified and systematic errors are occurred by inclined processes of memory and reasoning. It has been analyzed and observed that individuals are likely to misunderstand the information that is frequently accessible to them. Many times the situations occur when this accessible information is not found optimally associated and related to the problem at the finale. Generally at the very occasions it is seen that individuals in the course of cognitive processing left behind the important information. According to the viewpoint of cognitive psychologists they often attempt to study and separate the function of specific cognitive processes as according to them cognitive processes function together. At many stages the communication between cognition and other processes occur which works in making interaction with other such systems.so it should be kept in mind that there are massive factors which always regulate the direction and intensity of behavior. The cognitive difficulty of an individual may always result in deterioration in the psychological health of an individual. If an individual has cognitive difficulty, then it is assumed that he is unable to to concentrate over the work he is doing and he always face difficulties in learning, remembering, taking judgements in different situations, giving late respond to what the people say to him, doing mistakes in counting the amount while purchasing anything etc. It is found by the psychologists that there is no one right direction to study cognition. All the processes of cognition should be studied through a variety of covering operations. In the discipline of cognition the number of methods of investigation pursues the general comprehension that the number of diverse techniques

that lead to the same conclusion, in fact all the methods and techniques should be scientific in nature because non-scientific methods of study can not reveal right conclusions and it may lead to commit errors. There are several motives and concerns regarding the cognitive difficulty which becomes hurdle in analyzing and identifying it. On the other hand there are various available measuring tests all over the world, but there is a practical dearth of indigenous tests. Meanwhile the cognitive difficulty phenomenon could span over a variety of constituents for example, attention, perception, learning, recent memory, remote memory, spatial memory, forgetting, judgement, intuition, reasoning, decision making and problem solving etc.

Cognitive psychology takes us in the direction of studying all its related aspects of mental processes and their vital role in thinking, feeling, and behaving. The other major broad categories of this study are memory, perception, acquisition of knowledge and expertise, comprehension, understanding and production of language, problem solving, creativity, decision making and reasoning etc. The huge amount of experiments in this field is at the peak, but mathematical models and computer simulations also play a gigantic role in this field. The behavior by cognitive psychologists is also measured in laboratory in order to arrive at the conclusion about covert mental processes. According to this discipline human mind is well-thought-out first as processor of information; it has been found that it has an ability to compute answers to problems in an analogous manner as the software of a computer. The information processing approach is nothing but the relationship of mental processes and computation which has proved productive and prolific. The human mind is dynamic and respire through meaning. We often use symbols and signs in order to refer to objects, things, events and other experiences of life. There is always an endeavor by us to know and realize why experience arise as they do and naturally our own survival all reproduce the human need for meaning which is the ultimate purpose of our optimistic attitude. According to the cognitive psychology both the mind and brain systems developed through evolution. It is seen from the evolutionary perspective of the cognitive psychology that there is a comparison of memory functioning among different species. The mind and brain both have some general and specific functions that assist us in reproducing as organisms successfully. The process of perceiving, remembering and thinking have grown in such

a manner that permits us to implement to our environment. If we try to apprehend these systems in the milieu of neurophysiology and evolutionary biology affords additional driving force in the discipline. The individuals having more cognitive difficulty are unable to understand the signboards on the road; they forget the directions of the roads that they know very well, they forget where they had kept the things like, pen, newspaper, spectacles or books etc. The several other fundamental concepts of cognitive psychology are that processes modify mental representations in a series of stages (Massaro & Cowan, 1993). According to this psychology the hierarchical system of mind is a complex of so many other functions. The diverse branches of mind are; perception, memory and motor output. The term memory has two separate systems named as which are known as working or short-term memory and a long term memory. According to Atkinson and Shiffrin (1971) they designated that a short term store retains any kind of information just for several seconds. Long term stores according to them keeps information over intervals of several minutes, hours, days, weeks, months or years. In the hierarchical arrangement of functional constituents of mind can best be analyzed and studied in isolation. ( Simon, 1969). The individuals living in this world have meaning when there is memory in him. Memory is that capacity in an individual which remembers and preserves the learnt material and life experiences for a longer period of time and reproduces it through recall or recognition when he feels required. The recent and distant past expresses who we are, what we learnt, what we believe, and how we behave and feel. The children's having this type of cognitive difficulty is not capable to learn or remember anything. The children having memory problems are always poor in academic performance also because memory is directly related examination or testing of learning. These kind of children's forget the things very quickly such as; they forget they had gone from one part to another part of their home, they forget the appointments made with the people, sometimes they forget why they are going to the market, sometimes they unknowingly do the other tasks at home even though they have not started them and even forget the names of the people. According to **Hitch** (2006) ,the most striking aspect of the development of working memory in childhood is the steady improvement in performance in all the complex span tasks. Complex span tasks refer to combining storage and processing requirements, such as

maintaining words while reading sentences (**Daneman & Carpenter , 1980**) or solving equations ( **Turner and Engle, 1989**), or maintaining numbers while counting arrays of dots (**Case, 1985**). Track Packiam, Alloway and Lisa Archibald characterize the short-term and working memory impairments related with various developmental disorders that have a great impact on learning such as Specific Language Impairment, Developmental Coordination Disorder, Attention Deficit and Hyperactive Disorder, and Austin Spectrum Disorder. Each of these disorders is related with a selective profile of strengths and weaknesses across the diverse roles of working memory as described in Baddeley's multi-component model and as measured by the Automated Working Memory Assessment (AWMA, Alloway, 2007) , a cognitive test that consents to govern the profile of a student's verbal and visuo-spatial working memory skills. **Alloway and Archibald** recall that about 10% of children in a typical classroom have working memory difficulties that can impact their learning. Consciousness is among the basic and principal concepts of cognition but to investigate it is a very subtle task as of several causes and its advancement seems very slow in future. The one of the basic problem in studying consciousness is that the concept is not well-defined. The scientists tried to study consciousness and other people mean diverse things whenever they talk about it. **Pikner** (1999) explicated that at certain occasions scientists talk about as consciousness as self-knowledge. The intelligent persons hold knowledge about various objects, events, and ideas. The knowledge of these various kinds is knowledge about the self. The informational access is the second meaning of consciousness which is the ability to become conscious and aware and able to testimony on mental representations and the practice that function on them. Several times cognitive difficulty of an individual refers to his/her unconsciousness and mental unawareness because of that he/she feel themselves in day dreaming and are not supposed to listen the things carefully an these kind if individuals are likely to commit mistakes because of carelessness.

From birth to the end of adolescence the corollary increase in knowledge, skills, and abilities are perhaps among the most conspicuous phenomenon that can be studied in natural sciences. From the beginning till become the mature organism the physical growth is by itself amazing, and even the cognitive development is likely more

inspiring as distinctive and exclusive to our species and looks like as the chief element of the prolonged developmental period that exemplifies and characterizes Homo sapiens. Jean Piaget described cognitive development as an advancement concerning rationality by the creation of sound configurations underlying behavior, however his account of the egocentric and intuitive thinking of young children's inability to synchronize different points of view and dimensions booms Baldwin's conception of a restricted span of attention in children. So from the above little discussion about cognitive development it is revealed that developmental psychologists deduced most of the developmental differences between children and adults would come from the inadequate capacity of the situations they are met with and attempt to comprehend. The main idea of the doctrines of the neo-Piagetian theories is that cognitive exercises execute a load to the processing system (**Morra, Gobbo, Marini, & Sheese, 2008**). With the consequent clue, whose derivation goes back to the date as we have seen to **J. M. Baldwin**, that there is some processing or cognitive capacity, often measured as attentional, which is restricted but increase with age and allows to endure with higher information load. According to the contemporary experimental cognitive psychology the general processing capacity is defined as the capacity of working memory to sustain information as provisionally dynamic and ready for treatment in face of any disrupting events, working memory is considered as to be the "workbench of cognition" (**Jarrold & Towes, 2006**). From the seminal work of **Baddeley and Hitch (1974)**, several theories are suggested to account for the functioning and limited capacity of this system (**Baddeley & Logie, 1999; Barrouillet, Bernardin, and Camos, 2004; Cowan, 2005; Engle and Kane, 2004; Ericsson & Kintsch, 1995**). According to the Piaget's theory of cognitive development there is a systematic classification of stages in cognitive development and the advancement from one stage to another stage is permanently fixed. The child can not embrace the policies and approaches of a later stage at an early stage of development, so he must have to attain and use the strategies and schemas of early stages.

We come to know and understand the world by perceiving and sensing the environment. Perception is the result of those processes that may construct mental representations of the information available in the environment. The stored information

in memory as well as present in environment draws by such mental representation. It is elusive to understand that a process as speedy and uncomplicated as perception involves multiple stages and transformations of mental representations. Our sensory systems are continuously assaulted and shelled by sights, sounds, smells and other signals from the external environment. Attention brings up to selecting certain stimuli from among many and emphasizing cognitive resources on those selected. **William James (1890)** described attention as “the taking possession by the mind, in clear and vivid form, of one out of what seem several simultaneously possible trains of thought.... Focalization, concentration, of consciousness is of its essence” Attention is one of the important aspects of cognition which allows us to emphasize on what is important at the occasion and avoid the rest one. The persons having more cognitive difficulty are not capable to keep their attention toward the matter which leads them that external world would overwhelm them with sensory information and their internal world would overwhelm them with memories or fantasies. When attention fails, they are left careless and incompetent to operate. The biggest hurdle in the way of teaching learning process could be the limited attention span of learner which hinders their learning performance. Whenever there is malfunctioning in the attention, its significance to normal cognition and behavior is superficial. Attention deficit/hyperactivity disorder (ADHD) is a general diagnosed psychiatric disorder that generally takes place before 7 years of age. Children having ADHD are simply confused and extremely restive and imprudent. Although because of this malfunctioning in the attention span of children, he interrupts his ability to acceptable into social and academic environments and also latter in occupational settings. ADHD is diagnosed inattention, hyperactivity, and impulsivity is common and severe, beyond the range of normal behavior in young children (**Shaywitz, Fletcher, & Shaywitz, 1995**). Mental attention surges with age and assisting in the alteration from one developmental stage to the next. So one of the basic things about cognitive development is the nature of the incredible increase in the intellectual capabilities of a human being during maturation from infancy to early adulthood. Piaget was incredulous by the growth of the child and extremely explored the basis of that growth, influencing developmental psychology intensely. Among various cognitive strategies,

cognitive dissonance is the perception of inharmoniousness between two cognitions, which can be well-defined as any component of knowledge, comprising of attitude, emotion, belief, or behavior (Pintrich et al., 1993). The cognitive dissonance strategy embraces that contradicting cognitions serve as a driving force that coerces the mind to acquire or discover novel thoughts or beliefs, or to modify existing beliefs, in order to diminish the extent of dissonance between cognitions (Aïmer, 1998; Lee et al., 2003). According to Piaget's theory (1967; 1980), when a child realizes cognitive conflict (disequilibrium), this recognition inspires him or her to endeavor to resolve the conflict and thus alter his/her cognition, attitude, or behavior. Piaget called the process of resolving conflict "equilibration." According to him, equilibration brings up to the process of self-regulation that preserves a balance between "assimilation" and "accommodation." Several educational intrusions have been planned to nurture dissonance in students by accruing their cognizance of conflicts between prior beliefs and novel information (Guzzetti et al., 1993).

The different cognitive disabilities are briefly discussed below:

### **Functional vs. Clinical Cognitive Disabilities**

Generally there are two types of cognitive disabilities which are clinical and functional disability. Clinical disability includes autism, Down syndrome, traumatic brain injury (TBI), and even dementia. In this regard least severe cognitive disabilities include generally attention deficit disorder (ADD), dyslexia (difficulty reading), dyscalculia (difficulty with math), and learning disabilities. These disabilities are treated through medical perspective but for web accessibility realizing cognitive disabilities by functional disability is of much utility. There are some important reasons because of that functional disability is considered more useful from the perspective of web accessibility. For example If we tell a developer that people having autism is not of any worth unless or until the developer is acquainted with that what kinds of hurdles a person is facing on his/her website by autism. On the other hand clinical diagnoses are not mutually elite in conditions of what difficulties people face. The various types of difficulties emerged from functional cognitive disability are one by one given below:

## **Memory**

Memory which plays a significant role in all the operations of life and simply it is the ability to recall whatever is seen, heard, read and learnt etc.. Generally there are three types of memory such as, working-memory, short-term memory and long-term memory. Many individuals may have difficulties with one, two or all the three types of memory. Memory difficulties may impair the ability of remembering the things, where I am going, how I go to content etc. Sometimes it becomes very subtle for an individual to remember many errors and at occasions even forget the error information while before was able to address that error.

## **Problem Solving**

The problem solving aptitude is considered as the highest type of learning according to the Gagne's hierarchy of learning. Individuals having cognitive disabilities cannot easily accomplish any problem solving task and as a result they leave the site and do not persevere and continue to solve the raised problem. So the people having cognitive difficulty are not expected to solve the problems very efficiently.

## **Attention**



In every day classroom operation it is evident that some individuals are not responding or giving their attention to the task taught by the teacher which demonstrates that they have difficulty in focusing on attention. Disruptions for instance scrolling text, blinking

of the icons and pop-up windows also results in creating web environment challenging or difficult and even impossible.

The people having Attention Deficit Hyperactivity Disorder (ADHD) think learning process a burden and difficult for them but otherwise this is due to their distractibility not by any kind of inability. These types of people (with ADHD) have impetuosity, impulsiveness, easily disturbed, careless, absent minded and are living in fantasy.

### **Reading, Linguistic, and Verbal Comprehension**

From the observations and experimentations it is illuminated that the number of individuals has difficulty with reading, learning languages and in apprehending the text.

These kinds of difficulties may be mild or severe, and having the range from minor challenges to a thorough inability to read any text. Emergence of these difficulties may create frustration, in the minds of individuals and discourage them.

### **1.3 Academic Achievement**

The term academic achievement always refers its glance towards the success and pleasure of an individual. This term is constantly considered as nebulous because it does not embrace so much that it could be defined in definite terms. Nevertheless, the academic achievement of an individual comprises of his/her abilities, capabilities, skills to do hard work, aptitude etc. According to Rao (1980) achievement is concerned to a great extent with the development of knowledge, understanding and acquisition of skills. It has extensively been observed that it is among the important goals and objectives of life which after getting, provide lots of pleasure for one in his/her life. According to the conducted researches in the said field it has been analyzed that, several factors play its gigantic role in the academic achievement of an individual which are functioning and operating within the individual and in his external environment. The intellectual, emotional and environmental are the fundamental factors which greatly influences the academic achievement variable of students. Out of these factors it has been honestly recognized that the factors pertaining emotions

mainly an anxiety and social factors like self-concept and intensities of ambition mostly dogged one's academic achievement. Although from various surveillances and investigations it is found that, learners sited in an identical set of academic settings differ in their educational achievement. This variable constantly illumines the performance of a person which further led to the degree to which he achieved precise and particular goals in the teaching learning environment of school, college and university. It has also been revealed from the researches that the students having high IQ and are highly creative students can bestow their best to various kinds of achievements in every competitive field. Moreover the school systems typically express or embrace the acquisition of knowledge and comprehension in an unambiguous intellectual province of e.g., numeracy, literacy, science, history etc.. Good academic achievement reveals the aptitude of students which implies the prediction of their future life and it indicates both the EQ and IQ level of students. The better achievement at different competitive stages of life also indicates the student's adjustment, good mental health, psychologically well-being, convergent thinking, emotional maturity, motivational state etc. It is recognized that from birth to death a person always endeavors to achieve more and more by getting education because education has the quality to infuse in a child a sense of ripeness and accountability by fetching in him anticipated modifications according to his requirements and demands of eternally changing society. It is education that always struggles to make a person civilized, optimistic, creative person, bold, brave, and powerful and makes him morally characterized.

The field of academic achievement having inclusive scope concealments the extensive collection of aims and objectives of education. The various standardized assessments such as; grade point average (GPA) and scholastic assessment tests (SAT) were prepared in order to measure the academic achievement of students, which also function as the indicators of predicting whether a students have ability to continue their education or not. Hence it is demonstrated from these standardized assessments that whether the students get opportunity to go for university education such as for the courses of MA, M.Phil., Ph.D. as well as for other technical courses. Moreover the academic achievement not only indicates the future expectations from the students but

it also play its massive role in the progress and prosperity of a nation. It is realized that in advanced societies, academic success plays a significant role in every person's life. In this current era competition became a primary part in every one's life. The students having more intelligence always achieve more rather than those who have not, and it bears its impact on their comprehension, abilities, skills, aptitudes, reasoning, problem solving etc. Academic achievement is considered as one of the fundamental goals by every school such as from pre-nursery to university education. It is endeavored in every day school activity of curriculum that the students should be given opportunities to get more and more in order to enhance their personal progress and the nation as whole. It has been analyzed that there are number of factors such as; family background, illiteracy of the parents, family economic conditions, cultural factors, interest, motivation etc. which influence the academic achievement of students in harsh manner. Achievement at all times needs to make hard labor and it has been realized that to accomplish anything requires competence, ability, aptitude and effort. Education which is known as sub system of society always remains in accruing its role in improving, renovating and overhauling the academic achievement variable. The modification of behavior, good personal characteristics, morally well-being, patience, humbleness, punctuality, and respect from others are all the indicators of achievement. The current achievement of students is well-thought-out as the predictor of success in later stages of life. In the words of **Verma and Upadhyay (1981)** 'achievement is the attainment or accomplishment of an individual in some or particular branch of knowledge after a certain period of training. The achievement score of a student indicates towards the future success of the individual'. Academic achievement is associated with the attainment of principles, generalizations and the ability to execute effectively aims, signs, symbols and thoughts.

The term academic achievement shifts one's notion to execute on the course materials and it also states the differentiation between the types and quantity of tasks that the students participate and that they execute at the initial or at the culmination of the course. It has been found a wrong decision for evaluators to result the students' performance in terms of high and low achievement which is identical with over and under achievement. It is recognized in the current era of education that the academic

achievement is well-thought-out as the chief concern of the students, teachers and parents. Students achievement or the achievement of the school as a whole is regarded as the out-put of all educational strives. It is analyzed that the students differ in their achievement, as no one individual is alike in the world in any manner. Naturally they differ in color, form, size and shape but there are several other factors which are accountable in their achievement at every aspect and in every stage of life, among which the main credit goes for intelligence (IQ). As you know that a single teacher teaches a whole class but there are some students in the class who surpass others in every examination, grasp the things, thoughts, concepts, phrases, ideas, symbols, signs, different formulas in different subjects etc. very easily and rapidly where as others who do not possess these kinds of attributes persists in the backward. So it may be said that the students or individuals belonging to the same group, caste, class, community, grade, and of similar abilities are generally found in different ranks in their academic achievement. In educational institutions, for many decades it has been observed that one's academic achievement is perceived as one of the fundamental function of the aptitude, ability, and intelligence quotient of student. For this purpose several tests have been prepared by psychologists to measure the aptitude of students. The term intelligence is renowned as an electric force of the brain and it is well-thought-out as the dynamic element which plays an immense role in the academic achievement. The diverse number of abilities in an individual such as, ability to think, ability to reason, ability to solve problems, ability to comprehend, ability to ponder in an abstract way, ability to make plan and management, ability to compare things of different nature and ability to learn and seek etc. So it is revealed that intelligence is a composite of dozens of qualities rather than any single quality. We cannot call any person an intelligent unless or until we will not measure his intelligence on standardized tests, because intelligence is not directly visible and observable. So we cannot call a person an intelligent or a boob unless his intelligence is measured. In the present world it is on the fire that academic achievement is the basic input for the growth of education and of life as well. Those who get high percentage of marks in the examination always felt themselves in higher order, respectful citizen, loved by others, feeling of independence,

and by self-confidence and these autonomous feelings create in them a sense of adjustment of life in society which further leads them to a dynamic personality.

The concept of achievement automatically shifts one's cognizance towards something that is to be obtained by the knowledge, capabilities, hard work, aptitudes and skills etc. developed in different subjects among the students within the four walls of school. According to Crow and Crow (1969) achievement refers to the extent to which a learner gets profit from instructions in a given area of learning i.e. achievement is reflected by the extent to which knowledge or skill has been acquired by a person from the training imparted to him. It is the quality of academic achievement of students by which their competence, proficiency, efficiency, productivity and deficiency, ineffectiveness, hopelessness etc. are identified. Now a days it is evident that in this world of competition the worth and value of the students' performance became a fundamental element for taking admission in schools, colleges, universities and also in other various technical and personal programs. The involvement of family members in the academic achievement of their children particularly their parents are always very eager for the better performance of their children and they hope every success for their children. By this enthusiastic attitude of parents shapes the whole educational process all over the world. In the current trends of education the concept of only, academic achievement is enough for student which makes him satisfactory altered into the concept of harmonious and all round development of child. Because of the emergence of this trend in education, it shifts the attention of parents towards those types of schools where all the technologies are utilized in teaching learning process, such as smart classrooms, smart boards, computer based learning or e-learning and hi-tech language laboratories. By these inventions the students not only raised their academic performance but also developed the quality of education, personality and standards of teaching- learning process as well. The several other factors influencing the academic achievement of students are briefly discussed here; i) Home which is considered as the first school and the mother who is considered as the first and best teacher of child. If both these factors play a positive attitude with a child, it may enlighten his future. ii) Institutions like schools, colleges and universities should be well and gorgeous for

students. iii) Teacher student interaction should be at liberty. iv) Peer group also play a gigantic role in academic achievement. v) Curriculum should be flexible etc.

So in brief we can say that academic achievement is considered as the milestone in the evolution and progress of educational system. It is among the fundamental goals of education and it is the result of instructions given to the students by the teacher at the end of every course whether it is technical or professional. Academic achievement which is determined in marks or grades displaying the learning out-comes of pupils by the end. In each and every society of the world academic achievement is well thought out as the basic and permanent accountability of any educational institution in order to endorse dynamic personality type among children. The academic achievement variable has a big hand in obtaining the all-round development of personality of the child or student. It is estimated that the academic achievement has expected massive significance for its real interpretation. For us academic achievement is determined as a main condition to magistrate one's total abilities, potentialities and capacities. The promotion from one class to another class is not possible unless you have not achieved good marks or satisfactory grade in previous class and the selection for any course or job is also based on this academic achievement. According to **Clifford et al. (1986)**, achievement is the task oriented behavior that allows the individual's performance to be evaluated according to some internally and externally imposed criterion. It always persists in the minds of an individual to get high academic achievement so that he may go not only for a university education but also can apply and get an appreciated and treasured job in the society. In this modern world of science various technologies were invented in the field of education because of that, parents now a day determine the sky touching goals for their children. So in the educational globe the inclusive struggle of education is to enhance the academic performance of students.

#### **1.4 Significance of the Study**

In 21<sup>st</sup> century, the world of scientific technologies the life of an individual moves from simple to very complex. In order to be settled in life one has to face very tremendous challenges in the prevailing situations of the society. In order to face these challenges one must have the ability to fight against this, so that he can make his life

flexible, adjusted in the society, get renowned and achieve every success. Every individual in the society wants to be respected by others, loved by others and have self-esteem. Emotions are the basis of everything what people do, feel, act, decision, making judgement and the basis of characteristics of personality. Academic achievement is regarded as one of the fundamental aims within the realm of education that can be a measure of the achievement of the end goals of an individual's and an educational system's success in the future. Emotional intelligence plays a gigantic role in predicting the academic performance of students. Good academic achievement is the key to success in personal and professional life and it also fetch economic security and social respect. Academic achievement largely depends on the students cognitive and non- cognitive factors like, aptitude, achievement motivation, socio-economic conditions, attendance, personality traits and teaching learning methods. Good academic achievement of students displays their punctuality, sensitivity, gregariousness, intelligence and emotional maturity.

Cognitive difficulty of students refers to their problems having in general awareness, concentration attention, perception, and reading difficulty, learning, memory and problem solving. Forgetting is another main factor of cognitive psychology which has an immense role in determining the cognitive difficulty of students at different levels. In the classroom, it is an established fact that the teacher must be acquainted with the interest, readiness and motivation of students in the classroom. Yet it is recognized that initially, the teacher should also know the ability, aptitude, intelligence, comprehension, cognitive abilities and emotional maturity of students. In order to make teaching learning process interactive and effective the teacher must have the knowledge about all the above mentioned cognitive and non-cognitive factors. Now a day's education has a very wide scope in the global world and competition is at its peak among students to top. It is difficult for students to manage their emotions so that they can face different situations in the school life. It is not an easy task to cope with emotions in order to best performance. The prediction for achieving success is mostly indicated by the emotional measures and the guardian and teachers are always found eager, to develop the intelligence of students and they are putting laid emphasis on their emotions for better academic performance. It has been analyzed that a student is

affected by emotions in several ways. According to **Mayer et al. (2000)** suggested that emotions signal relationships between a person and a friend, a family, the situation, a society, and internally between a person and his or her memory. Good emotional intelligence of students may diminish their cognitive difficulties and accrue their academic achievement. These individuals can easily apprehend emotional information and are capable to smear that understanding for effective decision making and problem solving cases in life. They will also be competent to bring out pure reasoning about emotions and practice the emotional knowledge to develop their thinking.

The number of studies conducted on student's emotional intelligence and other variables. It is apparent from the facts that the research has been done in this field on the relationship between emotional intelligence and academic achievement but little research has been done on emotional intelligence, cognitive difficulty and academic achievement of higher secondary students of Jammu district of j&k state. Hence, the present study has been undertaken to unveil how emotional intelligence puts its effect on cognitive difficulty and academic achievement of higher secondary students. The researcher signifies a study in the sense that how and why emotional intelligence bears its impact on the cognitive difficulties and Academic achievement of higher secondary students.

## **1.5 Statement of the Problem**

On the basis of the above discussion the problem can be stated as under:

**“Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students.”**

## **1.6 Definitions of the Key Terms**

### **1.6.1 Emotional Intelligence**

Emotional intelligence in this study brings up to the five different abilities such as, self-awareness, managing emotions, motivating one-self, empathy and handling relations with others. The five mentioned abilities have been reflected as the indication

of emotionally well-being. Henceforth the related abilities in this investigation refer to the measurement of 'Emotional Intelligence' by using the Emotional Intelligence Test.

### **1.6.2 Cognitive Difficulty:**

According to the investigation cognitive difficulty states the problems and issues related with general awareness, concentration, attention, reading, writing, learning, memory, comprehension, understanding, forgetting and problem solving.

### **1.6.3 Academic Achievement:**

The term may be well-defined as an execution or improvement in a performance conceded successfully by an individual or a group of individuals at the end of an academic task. In the present study it was stated that the percentage of aggregate marks obtained by a certain student of 12<sup>th</sup> class student in his/her 11<sup>th</sup> class in the end term examination was considered their academic achievement.

### **1.6.4 Higher Secondary School:**

A higher secondary school is that type of school where students are given secondary education. The students admitted in these schools typically fall between the age group of 17-19, after secondary education and before higher education.

## **1.7 Objectives of the Study:**

**Present study is designed to achieve the following objectives:**

- 1) To study the impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students.
- 2) To study the impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of class higher secondary students with reference to Gender (Boys/girls).
- 3) To study the impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of higher secondary Students with reference to locality (Rural / Urban)

- 4) To study the impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of higher secondary students with reference to type of school (Government/Private).

## **1.8 Hypotheses of the Study**

**In the light of the above objectives the hypotheses of the study can be formulated as under:**

- 1) There will be no significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students
- 2) There will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to Gender (Boys/ girls).
- 3) There will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to locality (Rural / Urban).
- 4) There will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to type (Government/ Private).

## **1.9 Delimitation of Study**

1. The present study is delimited to only district Jammu.
2. The study is delimited to only 12<sup>th</sup> class students.
3. The study is delimited to government and private higher secondary schools of Jammu district.
4. The sample of the present study consists of 240 students only.
5. The investigation has been confined to 8 higher secondary schools of Jammu district.



# REVIEW OF RELATED LITERATURE

## 2.1 Conceptual Framework

Review of related literature plays a gigantic role in the planning and then execution of any research work. Review of related literature is a written summary of articles, books, journals and other documents which acts a torch bearer for the present and the past and gives the deep insight regarding the topic. Review of related literature document the need for proposed study. According to **Best (1963)** literature of the problem having the familiarity helps the students to discover what is known already, and what others have attempted to find out.

The review of literature may be well-thought-out as an explanation of the literature pertinent to a specific field or identified topic of research. One major definition of a literature review is that "... A literature review uses as its database, reports of primary or original scholarship, and does not report new primary scholarship itself. The primary reports used in the literature may be verbal, but in the vast majority of cases reports are written documents. The types of scholarship may be empirical, theoretical, critical/analytic, or methodological in nature. Second a literature review seeks to describe summaries, evaluate, clarify and/or integrate the content of primary reports." (**Cooper,1988**). The 2<sup>nd</sup> chapter of the dissertation or theses consists of review of related literature and it may be a contextual where the researcher is delineating a part of research, or helps in setting, the hypothesis. In the words of **Busha & Harter, (1980)** 'Literature review is a critical summary of different facets of research problem as reported in existing sources'. The literature review is a frame of writing that has the purpose to analyze the existing knowledge by practical as well as theoretical findings and its contribution to an identified problem. Usually it is seen that the literature associated with academics for instance a theses, review of related literature of a topic heads a proposal for research and fallouts section. Literally the term 'review' or 'look again' implies the meaning of what has previously been written about the topic. According to **Lawerence & McEvoy (2008)**, literature means "it is an evidence based review of relevant reference material."

## 2.2 Reviews

**Miglani, D. (2001)** there is highly a significant relationship between Emotional intelligence and Academic achievement. In this study he also found that Emotional Intelligence and academic achievement are correlated with each other. We cannot say that only good IQ level is not the sign of the lofty academic achievement of students. There may also be other factors which play the accountable role in high academic achievement of students.

**Kaur, M. (2001)** this study was done in order to know the relation of Emotional Maturity of adolescents to intelligence, academic achievement and environment catalysts. In this study the sample size of 356 students of XI class. According to this stud it was established that there is highly positive significant correlation between general intelligence and emotional maturity. From the investigation of the study it was known that the high IQ level students have high emotional maturity and the vice versa. In this study it was also established that the students with good academic achievement have high IQ level. The emotional maturity plays a very gigantic role in the academic achievement of students. A study also found that there is a significant relationship of emotional maturity with intelligence, academic achievement and environmental catalysts.

**Martha & George (2001)** in this investigation a study was conducted on 319 students and among them 162 were males and 157 were females. In this study they were interesting to know the effects of emotional intelligence on gender wise (male and female). According to this study the emotional intelligence of males and emotional intelligence of females indicates a significant difference in self-control and academic achievement.

**Maree and Ebersohn (2002)** conducted a study to determine the probable connotation of the construct emotional intelligence. In this favor two case studies of adolescent males were conducted by them to know that major impact emotional intelligence puts not only on the qualitative level of intelligence actualization but also it influences the quantitative level of intelligence measurement and scholastic achievement.

**O’connor and Little (2003)** in this investigation they asserted that the capability to measure the emotional intelligence based on a cognitive framework may be the forecast of better academic achievement than the self- report of emotional intelligence measures

**Nelson & Low (2003)** In this study they established a viewpoint that emotional intelligence is the only sole variable which is greatly influencing he personal achievement, carrier success, leadership and life satisfaction. They observed that the persons who are emotionally mature and fit should be capable to identify, understand experience and express human emotions in a vigorous, creative and dynamic ways.

**Mathur, Dube and Mallhotra (2003)** this study was conducted to know the relationship of emotional intelligence and academic achievement of students. In this study the investigators collected the data from the sample of 83 adolescent boys and girls from a local public school. The study bares the results that emotional intelligence corroborates and compliments academic achievement of students. From the collected data of the study it was found that adolescents with higher level of responsibility perform better on scholastic performance, in adjustment and are more positive and certain

**Petrides et.al. (2004)** “the study was conducted by the investigators to know the relationship between the emotional intelligence, cognitive ability and academic performance of students”. In this study the investigators were interest to know whether there is any significant relationship of emotional intelligence with cognitive ability and academic achievement or not, for this purpose they collected a data from the sample of 659 students. From the collected the data they found that emotional intelligence of 160 students is moderately related to the performance and cognitive ability where the students having higher IQ and higher emotional intelligence EQ are leading toward a greater academic performance. In this study it was also established that cognitive relations between emotional intelligence and deviant school behavior, such as unlawful, absence and expulsion.

**Manhas (2004)** conducted a study to know the correlation between emotional intelligence and academic achievement of students. For this investigation he collected a data from a sample of 400 students of 11<sup>th</sup> class from both boys and girls. After the data

collected from the sample, results were revealed that there was a highly positive correlation between emotional intelligence and academic achievement of students.

**Lekhi, V. (2005)** in this study the investigator was interested to know the relationship of emotional maturity of adolescent students with the cognitive and non-cognitive variables. To accomplish a study the investigator took a sample of 939 adolescents of XI class students in sr. secondary schools of Punjab state and saw that intelligence and emotional maturity have significant correlation with each other. This study indicates that the students who have good IQ level they display high class of emotional maturity and which reflects their good behavior and a dynamic personality.

**Betty, A. R. (2005)** in the current research the investigator compared the subsamples of university students to investigate the concurrent criterion validity of a mixed model conceptualization of emotional intelligence with self-reported exercise attitudes. The findings of study exposed that in overall there is 1.6% variance accredited to the model effect of self-reported activity stage or level and exercise attitude with emotional intelligence. In this investigation the scale used for female sub samples was not significantly correlated while there was a major correlation of in the sub sample of male.

**Bruni et al. (2006)** in the current investigation he collected a data from the sample of 380 school students of Italy in order to explore the relationship of academic achievement, demographic and psychological factors. In this study the researcher employed a school achievement index as a tool to determine their academic achievement. The study found out a major difference between academic achievement of male and female students. It was found in the study that female students have higher academic achievement as compared to male students.

**Gakhar, S.C. & Manhas, K.D. (2006)** "There is a significant correlation between Emotional Intelligence, Intelligence, Creativity and academic achievement". Department of Education, Punjab University, Chandigarh. In this study it would be revealed that there are significant and challenges to face in life during the school going period. In the current study the investigators took a sample of 400 11<sup>th</sup> class male and female adolescents from both the government and private schools located in rural and

urban areas of Jammu and Kashmir. In this investigation 165 were found that there is positive general intelligence and emotional intelligence ( $r = .208$ ). In the study it was also revealed from the results that there is a positively significant correlation of adolescents creativity and their emotional intelligence ( $r = .610$ ). According to the investigation it could be said that significant positive correlation between academic achievement and emotional intelligence is obtained ( $r = 0.128$ )

**Altun, A., & Cakan, M. (2006)** in this paper cognitive styles, achievement scores and attitudes toward computers among university students was studying during the investigation. There are two elements of cognitive styles (namely Field dependence/Field independence) that have been investigated with different groups of students as well as with their attitudes. However, in the field of research there is a scarcity of research publications pertinent to teacher trainees in an international setting. The standardized group embedded Figures test was used to evaluate the field dependency among (30 teacher trainees in this work. On the whole it was seen that cognitive styles and academic achievement were not found significantly related with each other ( $r = .14$ ,  $p = .15$ ); Cognitive styles and attitudes toward computers ( $r = .01$ ,  $p = .84$ ); and cognitive styles and attitudes toward computers when their academic scores were covariate  $F(2, 126) = .40$ ,  $p > .05$ ). According to the findings of the study it is revealed that students attitudes in the direction of computers are not related with field dependency still when their achievement levels were controlled. Keeping in view the above research it could be said that attitude of students toward computers is found to be making function independently from cognitive styles

**S. Waks & M. Barak (2006)** as you that science and technology subjects need high level thinking. In the majority of the cases the material matched at the planning phase of a curriculum refers mainly to the universal criteria of thinking and learning theories for instance the capability to carry out 'formal operations' according to Piaget. The related question can occur when dealing with a precise subject matter, in this milieu. In order to checking the students material match during an achievement post-test enables us to pass on to the related contents.

In this investigation they projected a method to illustrate a test item through a content item (number of schemes required for solution) and the mandatory resources of learners (represented by the problem solving taxonomy PST level) the cognitive difficulty level CDL is then defined as  $CDL = NS * CDL$ .

In the current study the researchers analyzed that the validity of CDL as an indication of difficulty of a test item that has been conformed in order to teach the essentials of electronics at the high school level (tenth and eleventh grades): it was found in the study that as soon as the students achievement scores decreased (when value of CDL is increased) The investigators had taken two types of student population in the study who are high and low achievers. The results of the study specify that at the beginning phase of learning a novel subject, chiefly the content factor (NS) would be effective for the difficulty level of a mental task. After the 'transient time' has elapsed both the factors NS and PST (i.e. CDL) affect the student's level of cognitive difficulty. It has been analyzed that in the latter stages the effect of PST becomes most prevailing as the complication of the material increases.

**Joan Hill (2006)** in the present study the researcher investigated development of children who are experienced emotional and behavioral difficulties ( E.B.D) by employing the piagetian approach. In order to enlighten the children's difficulties the researcher adopted a method of significant exploration. By using this method the nature of the children's reasoning and cognitive process were clarified particularly the thinking system of children was characterized by a high degree of ambiguity. The method employed for this is displayed to be particularly productive for providing insight into the cognitive difficulties experienced by this group of children. The results of the study therefore to donate to our understanding of the special educational needs of many children and have chief implications for methods and approaches employed in teaching.

**Neil Humphrey, Andrew Curran , Elisabeth Morris , Peter Farrell & Kevin Woods (2007)** in the field of research it has been seen for the last few years the emotional intelligence has a very significant and very interesting in both the areas of academic success and emotional adjustment of students. On the other hand it is seen

that emotional intelligence among students in the four walls of school demonstrated a divisive pursuit, challenging as it does traditional according to the educational viewpoints of rationalists. Moreover, it has been found in this area of research that research findings are incoherent at the best. The several key questions associated to this important discussion has been converted in this research article. What do we mean by emotional intelligence? Is emotional intelligence bearing its impact on learner's emotional health and well-being, academic performance and other adaptive outcomes? Can we teach emotional intelligence? According to the findings of this research article there are some key issues to contemplate in order to develop policy, practice and much more additional research.

**Darsana M. (2007)** in Kollam Kerala of India research has been done on the identified problem for research entitled as "Relationship between emotional intelligence and certain achievement facilitating variables of higher secondary school students" In this identified problem the researcher was interested to know the relationship between emotional intelligence and other those variables which facilitate their achievement and compared the emotional intelligence of different groups of students in context of sex, locale of the school, nature of school management and SES. The aims and objectives of the study were to know the correlation between emotional intelligence and those variables which facilitate the achievement of students from the whole sample or relevant sub-sample and contrast their emotional intelligence by dividing them into groups in pairs and classified them in context of sex, locale of the school, nature of the school management and socio-economic status( high SES, low SES). In this research work the investigator found that emotional intelligence and academic motivation are highly correlated with each other and it is also found that there is a significant difference between boys and girls in terms of emotional intelligence and emotional understanding and it has also been searched that boys performed better in emotional intelligence and emotional understanding than girls. In the current study the difference in terms of gender was significant and whosoever make research in this area must keep that difference in mind. The results revealed from the study reports that a difference of gender and suggested that boys have higher social skills than girls. In this study there

has been shown no significant difference between boys and girls in terms of emotional perception, emotional facilitation of thought and emotional management.

**Srivastava (2007)** in the present study the investigator was interested to see the relationship between emotional intelligence and achievement in environmental studies. According to the findings of the study the investigator revealed the results that emotional intelligence and achievement in environmental studies have positively significant correlation with each other. The investigator from the study also revealed that the students who were emotionally intelligent are emotionally more stable and responsive to their environmental issues than the students who were emotionally less intelligent.

**Jaeger and Eager (2007)** in this research article they make endeavor to explore the worth of emotional intelligence as a means to enhance academic performance. In this investigation they affirmed that the function of non-cognitive variables, together with emotional intelligence has been often denied in the academic model of success in higher education. The worth of emotional intelligence in forecasting the academic performance of students is addressed and calculated by applying cumulative grade point average. In the current study the investigators arrived at the point to conclude that in the non-cognitive development of students especially emotional intelligence, might enhance performance of students inside and outside the classroom students affairs professionals play a significant role.

**Eniola and Adebisi (2007)** this work has been done in order to explore the value of emotional intelligence and setting up the goals of life in boosting the power of enthusiasm in order to work among the student who are visually impaired. In this study the investigators made experiment of pre and post-test experimental group design(N=32) in which the work value inventory has been accomplished by the participants. This research work was passed over a period of six weeks. The indication of a results revealed from the study was toward that the students who had experienced emotional intelligence and goal setting intervention had a significant difference in the level of motivation.

**Pamela Qualter, Kathryn J. Gardner & Helen E. Whiteley (2008)** in this study the investigators depicted the utility and efficacy of the term emotional intelligence in the field of research by making a critical analysis, and they also examined in their study the convenience of the construct of emotional intelligence in the debate on educational policy and practice. According to this study the investigators examined two major approaches of emotional intelligence to the theory and measurement and a bridge the proof and conformation of linking the term emotional intelligence to the life success and academic achievement. The researchers also well thought out that can emotional intelligence be altered and changed or not and they were also interested to that how emotional intelligence might be facilitated in educational practice. They arrived to conclude that whereas the different constructs of emotional intelligence relics under discussion, among them some of the attributes encompassed by the term emotional intelligence can forecast that success of life and socio emotional programs of learning in schools can beneficially devote to the development of the different attributes.

**Berenson, Boyles, and Weaver (2008)** in the current research the investigators established a viewpoint that the intrinsic factors of emotional intelligence and personality traits were to resolve the extent or degree which predict Grade Point Average and measure academic success among students. According to the study it has been confirmed that emotional intelligence plays a vital role in forecasting the GPA; which display the grade points of students. The associated soft skills of academic success can appear a productive abstract of the online successful students that might be useful for promotion , advertisement, quality assessment and custody efforts.

**Leeson et al. (2008)** in the current study the investigators conducted a study on a sample of 639 high school students New South Wales, Australia in order to examine their cognitive ability , personality and academic performance. From the responds of the respondents it has been revealed that there is a significant difference between boys and girls in their academic achievement. The results also displayed that the girls perform better than boys. According to the results of the current study it can be said that gender plays a pivotal act in forecasting academic achievement.

**Cukowicz et al. (2008)** in this study it was examined that taking suicide risk in a sample of depressed individuals may be the result of their coping style and thought suppression. According to the results of the study it has been indicated that eminent emotional coping and thought suppression were related with intensified suicide risk, whereas the lower avoidance coping was also related with higher suicide risk. So we can say that negative thinking patterns are insisted by negative emotions.

**Mahajan Neeta & Sharma Shweta (2008)** they conducted a study on 'stress and storm in adolescence' Agra. The investigators conducted a study in order to explore the anxiety among adolescent boys and girls in conditions of four selected areas viz; physical, emotional, social and educational. To arrive this study at certain conclusion 40 boys and 40 girls (15-17 years) of age were selected for a study as a sample through a multistage stratified random sampling technique. They prepared a self-made standardized questionnaire to obtain relevant information from the selected sample. It was found that education is a major anxiety prone area among girls and they were found more worried and fearful for their marks and percentage as compared to boys. Nervous and anxiety level was found dominant in boys than girls because of certain physical reasons. It was also established that there is a significant difference between emotional anxiety among boys and girls in general. Study also reveals that boys are more stable than girls at least emotionally, while in boys anxiety and tension was found more because of identified reasons. According to the study adolescents are extremely concerned as how others observe them and they are opposite and pertinent to show self-consciousness, and they are notified on being criticized by others.

**Deniz, Tras, and Aydosan (2009)** in this paper the investigators analyzed that emotional intelligence bare its effect on the academic personification and locus of control tendencies of a group of students. It has been concluded from this research that the sub scales of emotional intelligence scale, flexibility and coping with stress have significantly high correlation with the academic adjournment leaning scores. It was also revealed from the study that the two subscales of emotional intelligence scale , adaptability and universal attitude could significantly forecast the students locus of control scores.

**Sabine Schaefer, Martin Lövdén, Birgit Wieckhorst & Ulman Lindenberger (2009)** in the current study the investigators investigated that how 9 years old and young adults performed a working memory task under different difficulty conditions while making on a tread mill. They found that stride-length and stride-time variability had been showed when cognitive load was very elevated. The participants under study in both the age groups enhanced their cognitive performance while walking at their preferred speed as against to sitting or walking at a fixed non- preferred speed. In this study after research it is found that the communication of walking and cognitive performance is influenced by allocating resources between two tasks, and also it is established that performance enhancement in cognition can be triggered by an exercise prompted inauguration of resources.

**AbdullahI, O. E. (2009)** in this study he took a matter of emotional intelligence as a matter of an enhancement to intellectual education. In this work in order to get the Nigerian vision 202020, the Nigerian policy makers of education give their consideration to Nigerian students, emotional intelligence specifically at the tertiary level of education, in the faculties of education and colleges of education that taught and skilled would be teachers.

**Chopra Vanita (2009).** in this study the investigator were interested to the ‘educational implications of emotional intelligence for better teacher and student performance’ New Delhi: .According to the study emotional intelligence pays an important role in achieving the performance of teachers and students and it is always integrated with the classroom. The study helps to analyses these kind of skills which would latter contribute in the success of life and it also assist in order to know others better than himself is discussed here. It could be said that emotional intelligence is that skill which has a significant role in assisting the learners or students in determining and displaying the way of success in school and in other grounds. From the above discussion it has been revealed that by the emotional intelligence the students feel themselves high revered and they are courageous to face the situation which would discourage them and my setback. For the learners in order to recognize their strengths and abilities they need necessary to develop a confidence and a burly sense of self-

worth. The learners with emotional intelligence must learn to take accountability for their better learning and performance and reveal diligence and elasticity in the face of obstacles and impediments. In the end of the study it is concluded that emotional intelligence is a beneficial and fruitful for both the teachers and students, which also manage their emotions and it not only contributes to their development but also for teaching-learning procedure and functioning it for an additional operative.

**Lather Manisha (2009)** the current research work conducted in Kurukshetra University Kurukshetra, to study the emotional intelligence as a measure for success in life'. The investigator asserts that emotional intelligence has very just rose grand concern in the fields of researchers and mental health specialists. According to the author in the study that emotional intelligence is a dynamic vigor that might affect personal success and relations with others. The accountability of fortification and stillness of mind is presumed and grown among all the young people. The learning and pro-active ,parents, teachers and helping adults is of essential requisite to be conscious and sensitive of the signs, symbols and patterns that indicate peril for the years. The consciousness about the storm and stress of adolescents and depression unlock the entrance gate for adults to commence constructive and productive efforts.

**Lather Manisha (2009)** he identified a problem for investigation reads as under 'effect of emotional intelligence on psychological distress of high school students' Kurukshetra University Kurukshetra. The study examined hypothesis that the emotional intelligence may diminish the distress of high school students when it is applied in classrooms for them. In the study the investigator collected a data from the 1000 high school students among them 500 were male students and 500 were female students. The researcher in this investigation employed Hindi adaptation of cornell medical index health questionnaire (Broadman et.al.1949) by Wig et.al.(1983) to measure the psychological distress of high school students. In this study the emotional intelligence scale developed by (Sharma R 2007) was employed to measure their emotional intelligence. After the investigation it was formed that 562 students were having psychological distress out of 1000 high school students taken as a sample for study. The findings of the study revealed that there is a negative correlation between

emotional intelligence and its dimensions with psychological distress. So it was established that emotional intelligence has a pre-requisite role in diminishing the psychological distress of students.

**Ton de Jon (2009)** in the literature of educational research the cognitive load is a theoretical concept which plays a progressively vital role in it. The fundamental thought of cognitive load theory is that cognitive capability of functioning in memory is restricted with the attention that if a learning task needs too much ability, learning will be hindered. It is recommended that instructional system should be designed so much that optimize the utilization of working memory ability and evade cognitive surplus. The educational research significantly has been sophisticated by cognitive load theory and it has been used to explain and clarify a big and bulky set of experimental findings. In this research article the open questions were explored to set out and the demarcations of cognitive load theory by verifying a number of problematic conceptual methodological and application related issues. In this study it is concluded by presenting research plan for further studies of cognitive load.

**Umadevi M.R. (2009)** he conducted a study on relationship between emotional intelligence , achievement motivation and academic achievement' at Devan Gere in Karnataka. The current study was revolving around the object that to know the correlation between emotional intelligence, achievement motivation and academic achievement of primary school student teachers. In the study the investigator employed Emotional Intelligence Scale and achievement motivation test on 200 D.ED students and the data collected was subjected to descriptive, correlational and differential analysis. The objectives prepared by investigator in order to achieve were to find out the relationship between emotional intelligence and academic achievement of student teachers, and to know the relationship between achievement motivation and academic achievement of student teachers and the study was also aimed to compare the emotional intelligence and achievement motivation of student teachers with respect to gender and streams of arts and science groups. At last in the study the findings were revealed that there is positive significant relationship between emotional intelligence and academic achievement of primary school student teachers and it was also

established that achievement motivation and academic achievement of primary school student teachers positively correlated. There was no significant difference in emotional intelligence of primary school student teachers and art and science student teachers. There was also no significant difference in achievement motivation of male and female student teachers, and arts and science student teachers.

**Usha P. & Rekha (2009)** they identified a problem for their research work as under “Emotional competence and mental health as predictors of academic achievement” IN Kerala and Thrissur. They conducted a study on secondary school students of Kerala to investigate their incompetence and mental health as forecasters of academic achievement. To accomplish the study they selected a sample of 530 students of Thrissur and Ernakulum districts of Kerala on the basis of sex , type of management of school and locality. For achieving the objectives of study they administered scale of emotional competence, Mental Health States Scale and achievement test in physics subject. The hypothesis of the study prepared by the investigators were; There will be significant difference in the mean scores of emotional competence , mental health and achievement in physics for the groups twisted on the basis of gender, locality and type of management schools, the another was there will be significant relationship between emotional intelligence and achievement in physics for total sample and sub-samples, the next hypothesis were that there will be significant relationship between mental health and achievement in physics for total sample and sub-samples, and in this study the effect of two independent variables emotional competence and mental health was seen on dependent variable achievement in physics. The results of the study entail that emotional competence plays a great role in predicting achievement in physics. Hence according to the study emotional skills should be developed among adolescent students and more emphasis should be laid on infusing emotional literacy to the standard curriculum and congeal atmosphere should be created in schools to develop these kind of skills among students. The children having good mental health recognize their accountability take decision by own self, plan for future, set realistic goals for themselves, and in solving the concrete or abstract problems , do the best they can in the problem situation, stumble upon or generate. They are well known how to solve the problem of life and they are very proudful for improving their intellectual efficiency.

So in order to enhance and improve the development of mental health of pupil's proper environment should be emphasized.

**Mavroveli et al. (2009)** in this study the investigators made effort to examine the construct validity of the trait emotional intelligence in middle and late childhood and established a view point to know its relationship with cognitive ability, emotional perception and social behavior. In the current research work the investigators collected the data from the sample of 140 children who belong to the age group of 8 to 12 years from identified primary schools. The investigators gathered relevant information from the selected sample by employing psychological tool of Trait Emotional Intelligence Questionnaire-Child Form (TEIQue-CF; Mavroveli et al. 2008) to measure their trait emotional intelligence, and also used Standard Progressive Matrices (Raven and Court, 2000) to evaluate children's reasoning ability. To measure and assess the children's emotion attribution accuracy and emotion biases, Assessment of Children's Emotion Skills (ACES; Schultz, Izard & Bear 2004) were employed. Social Skill Training (SST; Spence 1995) was used to know children's social skills and children's academic achievement were achieved from the school records. According to the investigation of the study it was found out that there is a positive relation of trait emotional intelligence with both peer rated pro-social behavior and general peer competence. Since it is hypothesized in trait emotional intelligence theory there is no relation of the construct with IQ (Raven Matrices) and academic achievement.

**Dianna L. Newman, Deborah K. Kundert, David S. Lane Jr. & Kay Sather Bull (2009)** they conducted a research to know the conflicting facts regarding to make use of statistical item difficulty as a way of ordering difficulty present by the multiple choice tests. Some other texts employed other alternative method for cognitive difficulty. In the current study the investigators analyzed the effect of both statistical and cognitive difficulty in shaping item order. The study revealed the finding that the students who get items in growing cognitive order, there is no issue of the order or sort of statistical difficulty scored higher on hard items. The students opposed to statistical and cognitive difficulty orders achieved the highest on medium-level items by getting the forms. The researchers at the end concluded that the effects of cognitive difficulty should be

explored by one or another way and proposed that further studies in future examine and analyze sub-scores as well as total test result performance.

**Sony et.al. (2010)** in the current study the investigator believed that emotional intelligence and general mental abilities are different approaches in demonstrating the students' academic performance and the potential of building social interaction with others. According to the results and findings of the study it was revealed that emotional intelligence and general mental ability plays an imitable and distinctive role in forecasting the academic achievement of students. Although by making meta-analysis it had also been found that emotional intelligence is highly correlated to the quality of social interaction with process than general mental ability.

**James N. Thompson, Russell Sheldrick & Elisabeth Berry (2010)** this study was conducted on Subarachnoid hemorrhage which often results in disabling psychological trauma, meta health difficulties and cognitive impairments that can preserve beyond the first year of discharge. The NHS foundation trust a long term follow-up program were using by neuropsychology and specialist nurses to identify patients in requirement of neuropsychological intervention for ongoing problems that thwart and prevent a return to work and normal life. In 2008 results of an audit of patients reveals that one in three patients need referral. The referred patients who finished both the initial and final outcome measures, there were seen significant improvement clinically and statistically. According to the study the findings revealed specify that the effectiveness of joint neuropsychology and specialist nurse follow-up for Subarachnoid hemorrhage patients.

**Augustin de Coulon, Elena Meschi & Anna Vignoles (2011)** this study mentions that there is a positively significant relationship between a parents childhood cognitive skills level and their own children's skill levels. So far it has also been known that individuals skill level change in childhood period and into adulthood, very significantly as a result of their education , training and work experience. So the skill level of parents is potentially as necessary in forecasting the cognitive and non-cognitive skills of their children. In this study the investigators framed the aims and objectives, The first one is that to assess the power and potential of the intergenerational correlation between parental skill in adulthood, specifically literacy

and numeracy skills. In the study the next and second aim is to appraise whether from a policy perspective, identifying adults with poor basic skills in literacy and numeracy is supportive and obliging in formulating policies to get children having poor cognitive and non-cognitive skills at risk. The researchers collected the data from British Cohort Study(BCS). They found burly proof and conformation that children who are performing better in cognitive and non-cognitive tests are of the parents with better memory and literacy in adulthood. It is not only that parents early cognitive skills and their adult cognitive skills are positively correlated, but also their parents early stage skills provide productive information to assist in explaining their children's early skills in regression that also control for parents their own personal cognitive skills as measured at age five. This paper gives evidence that the parents with poor literacy and numeracy skills may assist us to forecast that which children having poor skills themselves are mainly and mostly at risk.

**Singh Amit and Kumar Dinesh (2011)** in the present research work the investigators were eager to study the 'emotional intelligence and academic achievement of college students' Jind, Haryana. In this investigation they were interested to know the emotional intelligence and academic achievement of college students of Rotini in Delhi. To accomplish the research work they collected a sample of 100 college going students among which 50 were boys and 50 were girls from Rotini. The findings of the study revealed that the emotional intelligence of (science, arts and commerce streams) college going boys and girls were alike and similar. Whereas the academic achievement of science boys and girls were significantly different. This work also established a viewpoint that emotional intelligence and academic achievement were positively correlated with each other.

**Brandenburg et al. (2011)** they conducted a study to know the relation of emotional intelligence with academic performance and analyze the probable difference in emotional intelligence of students with regard to demographic and experiential characteristics. They collected from 140 civil engineering and construction management students from Clemson University and according to the view point of citadel it is recommended that emotional intelligence boost along with increase in GPR.

The emotional intelligence of students crests or reaches the zenith at the group of 2.51 to 3.0 GPR. In the study it was also found that emotional intelligence decreases as GPR increases, they also verified and recognized a positive association between work experience and emotional intelligence. According to the findings and results of the study it is suggested that augmented importance on co-op extra-curricular programs are devised to help students to improve and develop their emotional intelligence skill.

**Richard Menary (2012)** this paper asserts that cognitive that cognitive abilities and cognitive character and its expansion in integration terms should be kept in consideration. The obtained and acquired practice and experience of generating information that is gathered and saved in an openly assessable environment may play a positive role in the expansion of cognitive abilities. The investigator identifies these cognitive abilities (2007). He said that such process is incorporated with our cognitive character as compared to artefacts; for instance notebooks. In the current research paper the investigator were very interested about the two paths to cognitive expansion that he compared in the paper. The first one he calls artefact extension which is in the current classic and standard position of the pivotal connection of a representative with an artefact. This approach requires to trounce the opposition from cognitive outsourcing that can easily be obtained as artefact or tool to do cognitive processing for us without extending our cognitive abilities. As compared to this enculturated cognition, does not grievance that artefacts themselves expanded our cognitive abilities, but to a certain extent the obtained and acquired practices for controlling and operating artefacts and the information saved in them expand our cognitive abilities. According to the investigation the investigator present a sequence of arguments and cases which reveal that an enculturated approach plays a better role for the both epistemic and cognitive cases of the diffusion of ability and character.

**H. Brissart , M. Leroy, E. Morele, C. Baumann, E. Spitz & M. Debouverie (2012)** in multiple sclerosis (MS) in cognitive impairments are often found. In terms of methods and designs the efficiency and usefulness of cognitive treatment and remedial interventions and interference have been discharge in the majority of the study. The investigators prepared and framed the objective to judge the effectiveness of cognitive

remediation and therapy in MS patients with a cognitive intervention (ProCogSEP program), against to a control intervention . According to the study 20 MS patients have accomplished this easy and very simple blind task; and 10 patients pursued 13 sessions (2 hours) of the ProCog-SEP1 program. The next t10 patients pursued 13 sessions of a debate program (control group). In the study all patients suffered neuropsychological assessment, prior and after their program in charge to judge and evaluate cognitive functions. There were two neuropsychologists correspondingly who appraised the patients and conducted the group discussions. As against to its own baseline ProCog-SEP Group displayed development in verbal memory [free recall ( $p = .02$ ), learning ( $p = .002$ )], in visual memory [free ( $p = .05$ ) and delayed recall ( $p = .007$ )], in working-memory ( $p = .03$ ), in verbal fluency ( $p = .05$ ) and in language ( $p = .01$ ). Primarily in verbal and visual memory and in verbal fluencies intergroup analysis displays advantage of cognitive program.

**Phioanh Nghiemphu Albert Lai David Wellisch Pia Banerjee Timothy Cloughesy Jennifer Pham Sandra Cervantes (2014)** according to this study it has been investigated the neurocognitive functioning and other phases of quality of life became gradually more important in the clinical care of patients having glioma. This is almost always unfeasible and impractical due to time, cost and resource considerations when continuous monitoring of neurocognitive functioning with methodical and comprehensive evaluations would be ideal for patients. In spite of that a cognitive symptoms can be administered to identify the patients who recognize themselves to be experiencing cognitive difficulties, permitting for fast recognition and detection of patients in need should be measured by self-report. Just a self-report measure of neurocognitive functioning was prepared with the intention of the cognitive domains affected by treatment of cancer. Though according to the investigators knowledge, the questionnaire as a tool employed in the study for adults have merely included adult supervisors of childhood cancers. The 299 patients accomplished and done the childhood cancer supervisor study neuro-cognitive questionnaire with adult one-set WHO Grade II-IV glioma in the current research work. There were 25 items in the questionnaire with four sub-scales representing diverse cognitive functions. These four different sub-scales are; Task Efficiency, Emotional Tolerance, organization and

memory. It has been revealed from the results of the study that general and overall sources, primary areas of concern and relationships with medical characteristics were known and recognized. According to the investigation the subtest scores were ; Task Efficiency T score ( $M = 42.8, SD = 15.9$ ), Emotional Tolerance T score ( $M = 51.6, SD = 11.7$ ), Organization T score ( $M = 48.6, SD = 11.7$ ), and Memory T score ( $M = 44.0, SD = 15.3$ ), indicating that task efficiency plays a great role and great concern in the cognitive functioning. The responses of the subject were received and then analyzed of 188 patients (61.6%) approved the highest ranked item. I have difficulty recalling things I had previously learned' ( $M = 0.81, SD = 0.74$ ). The statistical techniques of Chi-Square , t-tests and regression were also applied and they analyzed and identified major effects of tumor laterality , radio-chemotherapy, repetition and KPS score ( $p < .05$ ), excluding tumor grade on each of the four subscales scores. According to the results of this study it is seen that adult –onset glioma patients having difficulties if memory and task efficiency are regularly certified and a number of medical characteristics play a pivotal role in the altitude and level of cognitive dysfunction that patient's experience.

**Helena M. K. Tam, Charlene L. M. Lam, Haixia Huang, Baolan Wang & Tatia M. C. Lee (2014)** according to them general cognitive status (GCS) is a complex and multiple of cognitive abilities which are reflecting full function. According to the research works and other related literatures it has been found that there is a significant relationship between cognitive processing speed and GCS as well as age related alterations of processing speed on cognitive performance. This study was conducted on 34 younger and 39 older adults to identify differences in relationships between cognitive processing speed and GCS in relation to age. The investigators measured the cognitive processing speed bu employing the processing speed index of the Wechsler Adult Intelligence Scale. According to the results of the study it is looked for that cognitive processing speed forecasted GCS in older rather than younger adults. According to this to identify the training effect of cognitive processing speed on GCS should be investigated and known in further researches in future. It also mentions cognitive factors associated with processing speed and the relation between GCS, verbal fluency, cognitive inhibition and divided attention. A regression analysis were

used and specify that there is a great contribution of verbal fluency in cognitive processing speed in older adults , accounting for 21% of the deviation. All these observations and interpretations propose that age-associated alterations of prefrontal regions cannot fully enlighten age associated decline in cognitive speed.

**Houman Alipour & Mohamad Goldust (2015)** in the current study it is an objective to judge and evaluate the relationship between blood pressure components and cognitive functions and cognitive reserve. It is seen that hypertension makes use of a slight and delicate impact on the brain that is demonstrated by reduced cognitive function. The investigators conducted a cross-sectional study on 500 subjects who were assessed and estimated from general population. The neurological tests which were employed showed a negative relationship with age, memory and there were positive relation of executive function and education. According to the outcome and findings of the investigation it has been seen that hypertensives (HT) were less effective and useful than the normotensives (NT) in the test of memory with interference at10 s (MI-10) (-32%,  $p = 0.043$ ), clock drawing test (CLOX) (-26%,  $p < 0.001$ ), and mini-mental state examination (MMSE) (-7.4%,  $p = 0.02$ ). Lower MMSE, MI-10, and CLOX were predicted by higher systolic (OR, 0.94,  $p = 0.032$ ; OR 0.96,  $p < 0.001$ ; OR 0.94,  $p < 0.001$ ) and higher pulse pressure (BP) (OR 0.95,  $p = 0.04$ ; OR 0.97,  $p < 0.001$ ; and OR 0.92,  $p < 0.001$ ). The cognitive reserve index (CRI) was 8% lower in the HT ( $p = 0.04$ ) and was predicted by higher pulse BP (OR 0.86,  $p < 0.001$ ). The BP vectors of lower MMSE, MI-10, and CLOX were associated with higher values of systolic and diastolic BP, whereas CRI was low towards higher systolic and lower diastolic. It is concluded from the current study that it makes a belief and trust that there is an association and relation of BP and cognition, higher values of systolic BP with impaired cognitive function.

**Anggi Tias Pratama and Aloysius Duran Corebima (2016)** the present study was conducted to mention the emotional intelligence and its pivotal role in the academic success of students' and their learning results. The students who found emotionally mature and having better emotional intelligence are capable to confront the problematic and difficult situation very easily in school and society. The current study is

enthusiastic to know the correlation of emotional intelligence and students cognitive learning results of biology and each indicator of EQ on the biology cognitive learning results. In this study the investigators selected a sample of 232 students of class X by applying random sampling method from 7 schools. According to the outcome of the study it has been revealed that there is a positive and significant correlation of EQ with biology cognitive learning results. There is a 5.2% donation of EQ in the students learning results. The indicators of EQ for example pinpointing self-emotion was 0.01% managing emotions was 0.05% motivating own selves was 0.60% identifying and recognizing emotions in others was 0.33% keeping relationship was 4.25%. The relevant information which may indicate the association of EQ and biology learning results and the donation of each indicator associated can be beneficial information for teachers to develop the students EQ through the execution of suitable information learning strategies.

**Jonas Everaert, Ivan Grahek, Wouter Duyck, Jana Buelens, Nathan Van den Bergh & Ernst H. W. Koster (2016)** from the perspective of this study both the cognitive biases and emotion regulation(ER) difficulties are influential and helpful in comprehending characteristic features of depression. Though about interplay, it is known that it plays an important role as risk factor to depression. The investigators conducted a cross-sectional study in order to investigate and find how the consequent use of ER process are adopted and changed by multiple cognitive biases, and it is also seen that how depressive symptoms are normalized. Controlled and adjusted by ER habits consequently. In the study all the participants first completed a computerized version of the scrambled sentences test, when their movements of eye were registered and then they also accomplished questionnaires judging and assessing positive reappraisal, brooding and depressive symptoms. There is a direct effect of both path and bootstrapping for cognitive biases on depressive symptoms and indirect effects through the use of reappraisal that was in turn associated to the use of brooding. According to these results and findings a superior and enhanced thought of how cognitive biases and ER habits interact to maintain depressive symptoms.

**Jonas Everaert, Ivan Grahek & Ernst H.W. Koster (2016)** conferring to this study the scarcity of cognitive control over the emotional and cognitive biases are essential apparatus underlying depression, however the interaction of these emotionally distorted cognitive processes associated with depressive symptoms is soundly comprehended. In the study the investigator examined the relationship among cognitive control of emotional information, cognitive biases and depressive symptoms. According to the above theory the effect models were created, conjecture that the poor cognitive control over emotional material forecasts depressive symptoms throughout negative attention and interpretation biases. It has been revealed that poor inhibitory control over negative material was associated with negative attention bias which resulted in forecasting a harmonizing bias in the process of interpretation and consequently in depressive symptoms. There had an indirect effect on depression severity of both the shifting and updating impairments in response to negative material through negative interpretation bias, In the whole study there was no direct effect of deficient cognitive control over emotional material on depressive symptoms. The results and findings of the study display that it assists to prepare an incorporated comprehension of the cognitive fundamentals of depressive symptoms.

**Sajjad Ullah, Mumtaz Ali Anwar & Nosheen Fatima Warraich (2017)** current study exploring the role and importance of emotional intelligence and its value and acceptance in every academic discipline. Emotional intelligence is that variable which seems as putting its impact on the various academic activities of students in one or another way. This research article had done meta-analysis of various literatures to know the relationship of emotional intelligence with the academic and non-academic characteristics of students and laid the emphasis on the significance of this relationship. This study also demonstrated that students' emotional intelligence is a significant element for them when they are managing a taxing situation. This study also exemplify that emotional intelligence can be helpful and caring managing library anxiety among students which may lead them toward better academic performance. This research work is very helpful for academic librarians in order to identify and realize the role and function of emotional intelligence in the activities of the patrons related to library. The

conclusion of the paper suggested that further research in the same area should be given more concentration and interest.

## **2.3 Research Gap**

The researcher had reviewed many researches and found that the researches were conducted on various related areas. The one study found that Emotional Intelligence and academic achievement are correlated with each other. The good IQ level is not the sign of the lofty academic achievement of students. There may also be other factors which play the accountable role in high academic achievement of students. The another study is on Emotional Maturity of adolescents to intelligence, academic achievement and environment catalysts. As per this study it was established that there is highly positive significant correlation between general intelligence and emotional maturity. From the investigation of the study it was known that the high IQ level students have high emotional maturity and the vice versa. In this study it was also established that the students with good academic achievement have high IQ level. The emotional maturity plays a very gigantic role in the academic achievement of students. A study also found that there is a significant relationship of emotional maturity with intelligence, academic achievement and environmental catalysts. One study was conducted on to know the effects of emotional intelligence on gender wise (male and female) where the emotional intelligence of males and emotional intelligence of females indicates a significant difference in self-control and academic achievement. In the year 2002 the Maree and Ebersohn was conducted a study to determine the probable connotation of the construct emotional intelligence where the major impact on emotional intelligence puts not only on the qualitative level of intelligence actualization but also it influences the quantitative level of intelligence measurement and scholastic achievement. Few studies shows that that the capability to measure the emotional intelligence based on a cognitive framework may be the forecast of better academic achievement than the self-report of emotional intelligence measures. The persons who are emotionally mature and fit should be capable to identify, understand experience and express human emotions in a vigorous, creative and dynamic ways. Few studies were based on emotional intelligence corroborates and compliments academic achievement of students. It was

found that adolescents with higher level of responsibility perform better on scholastic performance, in adjustment and are more positive. In the year 2004 Petrides et.al. was conducted a research to know the relationship between the emotional intelligence, cognitive ability and academic performance of students. In this study the investigators were interest to know whether there is any significant relationship of emotional intelligence with cognitive ability and academic achievement or not. It was also established that cognitive relations between emotional intelligence and deviant school behavior, such as unlawful, absence and expulsion. The result of one study was revealed that there was a highly positive correlation between emotional intelligence and academic achievement of students and another study shows the relationship of emotional maturity of adolescent students with the cognitive and non-cognitive variables where the students who have good IQ level they display high class of emotional maturity and which reflects their good behavior and a dynamic personality. In the year 2006 Gakhar, S.C. E' Manhas, K.D. had conducted a study where significant correlation between Emotional Intelligence, Intelligence, Creativity and academic achievement were discussed. Many studies were conducted on emotional intelligence and a very few studies were conducted on cognitive difficulty. Pamela Qualter, Kathryn J. Gardner & Helen E. Whiteley in his study depicted the utility and efficacy of the term emotional intelligence in the field of research by making a critical analysis, and they also examined in their study the convenience of the construct of emotional intelligence in the debate on educational policy and practice. The investigators examined two major approaches of emotional intelligence to the theory and measurement and a bridge the proof and conformation of linking the term emotional intelligence to the life success and academic achievement. The researcher conclude that whereas the different constructs of emotional intelligence relics under discussion, among them some of the attributes encompassed by the term emotional intelligence can forecast that success of life and socio emotional programs of learning in schools can beneficially devote to the development of the different attributes. Ton de Jon in the year 2009 had written in the literature of educational research the cognitive load is a theoretical concept which plays a progressively vital role in it. The fundamental thought of cognitive load theory is that cognitive capability of functioning

in memory is restricted with the attention that if a learning task needs too much ability, learning will be hindered. It is recommended that instructional system should be designed so much that optimize the utilization of working memory ability and evade cognitive surplus. The educational research significantly has been sophisticated by cognitive load theory and it has been used to explain and clarify a big and bulky set of experimental findings. In this research article the open questions were explored to set out and the demarcations of cognitive load theory by verifying a number of problematic conceptual methodological and application related issues. In this study it is concluded by pre-scenting research plan for further studies of cognitive load. There was one paper written by Richard Menary which asserts that cognitive abilities and cognitive character and its expansion in integration terms should be kept in consideration. The obtained and acquired practice and experience of generating information that is gathered and saved in an openly assessable environment may play a positive role in the expansion of cognitive abilities. The investigator identifies these cognitive abilities (2007). He said that such process is incorporated with our cognitive character as compared to artifacts; for instance notebooks. In the current research paper the investigator were very interested about the two paths to cognitive expansion that he compared in the paper. The first one he calls artifact extension which is in the current classic and standard position of the pivotal connection of a representative with an artifact. As compared to this acculturated cognition, does not grievance that artifacts themselves expanded our cognitive abilities, but to a certain extent the obtained and acquired practices for controlling and operating artifacts and the information saved in them expand our cognitive abilities. According to the investigation the investigator present a sequence of arguments and cases which reveal that an acculturated approach plays a better role for the both epistemic and cognitive cases of the diffusion of ability and character. H. Brissart , M. Leroy, E. Morele, C. Baumann, E. Spitz & M. Debouverie said that in multiple sclerosis (MS) in cognitive impairments are often found. In terms of methods and designs the efficiency and usefulness of cognitive treatment and remedial interventions and interference have been discharge in the majority of the study. The investigators prepared and framed the objective to judge the effectiveness of cognitive remediation and therapy in MS patients with a cognitive

intervention (ProCogSEP program), against to a control intervention . There were two neuropsychologists correspondingly who appraised the patients and conducted the group discussions. As against to its own baseline ProCog-SEP Group displayed development in verbal memory [free recall ( $p = .02$ ), learning ( $p = .002$ )], in visual memory [free ( $p = .05$ ) and delayed recall ( $p = .007$ )], in working-memory ( $p = .03$ ), in verbal fluency ( $p = .05$ ) and in language ( $p = .01$ ). Primarily in verbal and visual memory and in verbal fluencies intergroup analysis displays advantage of cognitive program. Some studies shows the cognitive status (GCS) a complex and multiple of cognitive abilities which are reflecting full function. According to the research works and other related literatures it has been found that there is a significant relationship between cognitive processing speed and GCS as well as age related alterations of processing speed on cognitive performance. Houman Alipour & Mohamad Goldust in the year 2015 studied to judge and evaluate the relationship between blood pressure components and cognitive functions and cognitive reserve. It is seen that hypertension makes use of a slight and delicate impact on the brain that is demonstrated by reduced cognitive function. The investigators conducted a cross-sectional study on 500 subjects who were assessed and estimated from general population. The neurological tests which were employed showed a negative relationship with age, memory and there were positive relation of executive function and education. According to the outcome and findings of the investigation it has been seen that hypertensives (HT) were less effective and useful than the normotensives (NT) in the test of memory with interference at10 s (MI-10) ( $-32\%$ ,  $p = 0.043$ ), clock drawing test (CLOX) ( $-26\%$ ,  $p < 0.001$ ), and mini-mental state examination (MMSE) ( $-7.4\%$ ,  $p = 0.02$ ). Lower MMSE, MI-10, and CLOX were predicted by higher systolic (OR, 0.94,  $p = 0.032$ ; OR 0.96,  $p < 0.001$ ; OR 0.94,  $p < 0.001$ ) and higher pulse pressure (BP) (OR 0.95,  $p = 0.04$ ; OR 0.97,  $p < 0.001$ ; and OR 0.92,  $p < 0.001$ ). The cognitive reserve index (CRI) was 8% lower in the HT ( $p = 0.04$ ) and was predicted by higher pulse BP (OR 0.86,  $p < 0.001$ ). The BP vectors of lower MMSE, MI-10, and CLOX were associated with higher values of systolic and diastolic BP, whereas CRI was low towards higher systolic and lower diastolic. One study shows both the cognitive biases and emotion regulation(ER) difficulties are influential and helpful in comprehending characteristic

features of depression. Though about interplay, it is known that it plays an important role as risk factor to depression. The investigators conducted a cross-sectional study in order to investigate and find how the consequent use of ER process are adopted and changed by multiple cognitive biases, and it is also seen that how depressive symptoms are normalized. Controlled and adjusted by ER habits consequently. In the study all the participants first completed a computerized version of the scrambled sentences test, when their movements of eye were registered and then they also accomplished questionnaires judging and assessing positive reappraisal, brooding and depressive symptoms. There is a direct effect of both path and bootstrapping for cognitive biases on depressive symptoms and indirect effects through the use of reappraisal that was in turn associated to the use of brooding. According to these results and findings a superior and enhanced thought of how cognitive biases and ER habits interact to maintain depressive symptoms.

In the current research study the topic chosen by the investigator has not been investigated earlier. By making a review of earlier researches, articles, journals, conference papers and working- papers associated with my topic, it is now clear that the investigator by his sincere efforts did not find any study which has been done either in the country or abroad earlier on the present topic. The topic selected for investigation is new and yet have not been investigated, that is why the researcher has got the attention for this topic. Hence the novelty of the topic is also one of the reasons which motivated the researcher to select the said topic for the present study. The above review reveals that many scholars have studied the different factors which affect the academic achievement of the students. However this comprehensive and concise research work laid emphasis on studying the correlated variables of emotional intelligence, cognitive difficulty and academic achievement.

## **RESEARCH METHODOLOGY**

The research methodology part of my current research work is discussed here. In this chapter the researcher comes to elucidate research objectives, hypotheses and different dimensions by applying an appropriate methodology to accomplish these objectives. In this chapter the researcher also gives a comprehensive view of the sample size, techniques for sampling, tools used for data collection and data analysis and its educational implications to complete the study. The data collection which is an essential part of the whole research process is the basis for entire data. Different techniques were employed for data gathering process. This part of research also demonstrates the sample which is observed as the center of research. In the present study the researcher adopted a sandwich of descriptive research design. Research methodology plays a very gigantic role in any research that becomes the reason that it is known as blue print of research. In this part, the researcher makes a comprehensive planning to bring out present research work methodically. In everyday life it is evident that research became a foundation stone for judgement and decision making in different situations.

**The steps followed in this chapter are discussed below:**

1. Population
2. Sample
3. Variables under study
4. Selection of the tools
5. Administration of the tools
6. Scoring procedure
7. Statistical techniques employed

### **3.1 Population**

The concept of population in research refers to the group of individuals having some characteristics in common. The greatest amount of researches comprises in the depiction of inferences about a population and that whatsoever is known from the sample under study is taken to represent the population as a whole. Since the present

study includes 40 higher secondary schools of district Jammu as the population of the study.

### 3.2 Sample

Sampling is among the fundamentals of different aspects of research and sample is the subset and the representative of the whole population. It is necessary for all statistical studies. The researcher always demands for a sample which would be reflective for the whole population. In every research the sample should be good and moral so that it would be able to generalize the results efficiently. The term sample by the name refers to, that it is a smaller representative of the whole population. Sampling is that process in the research which holds all the characteristics of the population and generalizing the results to the total population.

Generally there are two sampling methods such as probability and Non-probability sampling method. In the current study the researcher applied simple random sampling method for data collection. The investigator prepared a list of all higher secondary schools of Jammu district, from which the investigator selected 8 schools randomly. In the present study a sample of 240, XIIth class students were selected from different higher secondary schools of district Jammu.

**TABLE 3.1: Showing the details of sample selected from different higher secondary schools of Jammu city**

| <b>S no.</b> | <b>Name of the Schools</b>  | <b>Boys</b> | <b>Girls</b> | <b>Total</b> |
|--------------|---|-------------|--------------|--------------|
| <b>01</b>    | <b>Central Basic Higher Secondary. School</b>                     | <b>15</b>   | <b>15</b>    | <b>30</b>    |
| <b>02</b>    | <b>Government Boys Higher Secondary School<br/>Gandhi Nagar</b>   | <b>15</b>   | <b>15</b>    | <b>30</b>    |
| <b>03</b>    | <b>Government Girls Higher Secondary School<br/>Bazar Qasaban</b> | <b>15</b>   | <b>15</b>    | <b>30</b>    |
| <b>04</b>    | <b>Government Girls Higher Secondary School<br/>Shastri Nagar</b> | <b>15</b>   | <b>15</b>    | <b>30</b>    |
| <b>05</b>    | <b>Dewan Dewi Public School Rajpura<br/>Magotrian</b>             | <b>15</b>   | <b>15</b>    | <b>30</b>    |

|              |  |            |            |            |
|--------------|--|------------|------------|------------|
| <b>06</b>    | <b>BSF Senior Secondary School Paloura Camp</b>    | <b>15</b>  | <b>15</b>  | <b>30</b>  |
| <b>07</b>    | <b>Dogra Higher Secondary School Shastri Nagsr</b> | <b>15</b>  | <b>15</b>  | <b>30</b>  |
| <b>08</b>    | <b>Heritage School Panjthirthi</b>                 | <b>15</b>  | <b>15</b>  | <b>30</b>  |
| <b>TOTAL</b> |  | <b>120</b> | <b>120</b> | <b>240</b> |

### **3.3 Variables Studied**

The variables that have been studied in the present study are as under

1. Emotional Intelligence
2. Cognitive Difficulty
3. Academic Achievement

### **3.4 Selection of the Tools**

It is seen in every type of research that the investigator needs such kind of instruments to collect certain evidences and explore them in new arenas. The instruments which are used are called tools. In the current research study the researcher employed the following standardized tools to collect data on the selected psychological variables:

1. **Emotional Intelligence Test of Dr. Ekta Sharma by Prasad Psycho Corporation  
New Delhi**

### **Introduction**

“Emotional intelligence refers to the capacity of recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in us and in our relationships” (Goleman, 1998). It describes abilities distinct from, but complimentary to, academic intelligence, the purely cognitive capacities measured by Intelligence Quotient (IQ). Many people who look smart but lack emotional intelligence end up working for people who have lower IQ than those but who excel in emotional intelligence skills. Howard Gardner gave one of the most influential theories of intelligence in 1983. He pointed out the distinction between intellectual and emotional capacities. His list of seven kinds of intelligence includes not just the familiar verbal and mathematical abilities but also two personal varieties: knowing

one's inner world and social adeptness. Mayor and Salovey (1993) gave a comprehensive theory of Emotional Intelligence describing it as, "A type of social intelligence that involves the ability to monitor one's own and others' emotions and to discriminate among them and to use this intelligence to guide one's thinking and actions."

Latest psychological research shows that an individual's emotional quotient contributes much more vibrantly to one's productivity and success in life than much researched IQ. Daniel Goleman (1995) says that as much as 80% of adult success in life than much comes from Emotional Quotient (EQ). In the present study, taking a wider view of intelligence, Emotional Intelligence has been categorized into five domains as has been explained by Daniel Goleman.

1. *Self-Awareness (SA)*: Knowing what we are feeling at the moment, and using those preferences to guide our decision making; having a realistic assessment of our own abilities and a well-grounded sense of self confidence.
2. *Managing Emotions (ME)*: Handling our emotions so that they facilitate rather than interfere with the task at hand; being conscientious and delaying gratification to pursue goals; recovering well from emotional distress.
3. *Self-Motivation (SM)*: Using our deepest preferences to move and guide us towards our goals, to help us take initiative and strive to improve, and to preserve in the face of setbacks and frustrations.
4. *Empathy (E)*: Sensing what people are feeling, being able to take their perspective, and cultivating rapport and atonement with a broad diversity of people.
5. *Handling Relationships (HR)*: Handling emotions in relationship[ps well and accurately reading social situations and networks; interacting smoothly; using these skills to persuade and lead, negotiate and settle disputes, for cooperation and teamwork.

For the current research study the investigator employed Emotional Intelligence Test developed by Dr. Ekta Sharma. This test constitutes of 60 items from five domains of Emotional Intelligence i.e., Self Awareness, Managing Emotions, Motivating Oneself, Empathy, and Handling Relationships. The response pattern in the scale is of

Likert type i.e., on a five-point continuum from always, most often, occasionally, rarely to never. As all the items are socially acceptable, though positively and negatively stated, the scoring for each statement in the scale is done in descending/ascending order for determining the emotional intelligence by giving a score of 5 for always, 4 for most often, 3 for occasional, 2 for rarely, 1 for never and reverse for negative items.

### **3.5 Reliability and Validity**

The five dimensions of emotional intelligence having the values of alpha reliability, the value of self-awareness is 0.667, for managing emotions the value is 0.604, for motivating one-self the value is 0.839, for empathy the value is 0.645 and for handling relationships the values is 0.837. Thus, it could be inferred that all the items are highly correlated and test developed is highly valid.

## **2. Cognitive Difficulty Scale by Dr. V. N. Yadav, Dr. Suraj Mal, Indu and Diksha by Prasad Psycho Corporation New Delhi 2016.**

Cognition is a general term which involves attention, perception, learning, memory, reasoning, decision making, problem solving etc. In general an individual can perceive, learn, remember, reason and solve problems with great accuracy. It is generally assumed that cognition is influenced by external forces and it can lead to an individual astray. Memories and reasoning processes, for example are susceptible to certain well identified, systematic errors. In general term it is observed that individuals tend to over value information that is easily available to them. It is done even when this information is not optimally relevant to the problem at end. Sometimes important information is left behind in the course of cognitive processing. Cognitive psychologists try to study and often isolate the function of specific cognitive processes because they consider that cognitive processes work together. Sometimes the interaction between cognition and other processes occur at many levels it works in interaction with other systems. Therefore, it is thought to be important that numerous factors which may determine the intensity and direction of the behaviour. If an individual has difficulty in cognitive processing it may result in deterioration in the psychological health of an individual. The cognitive difficulty may also be an indicator of prolonged heightened stress. There is no one right way to study cognition.

Naïve researchers sometimes seek the best method by which they study cognition. Their search inevitably will be in vain. All cognitive processes need to be studied through a variety of covering operations. The varied methods of study seek a common understanding of cognition that may lead to the same concrete conclusions. For example, suppose studies of reaction times, error rates and patterns of individual differences all lead to the same conclusion. All these methods must be scientific. Non-scientific methods of study can commit errors and lead to wrong conclusions. To assess and identify cognitive difficulty in the individual has remained a problem due to various reasons and issues. However, there are host of measuring tests of cognition available all over the world, but there is a virtual scarcity of indigenous test. Hence, a need to develop a cognitive difficulty measure was perceived by the investigators and the present test was prepared for the purpose.

In the current study the researcher also employed Cognitive Difficulty Scale developed by Dr. V. N. Yadav, Suraj Mal, Indu and Diksha. This scale consists of 40 items which are having five five-point continuums from always, often, uncertain, sometimes to never. According to this scale a score of 5 for always, 4 for often, 3 for uncertain, 2 for some times, 1 for never and reverse for negative items.

### **3.6 Reliability and Validity**

As far as reliability of the construct is concerned, it was determined by test re-test method on a sample of 120 subjects and it was 0.82. The internal consistency reliability was determined by adopting odd even procedure. Using Spearman Brown formula, the reliability coefficient correlation of the test was found to be 0.89.

The validity of the test was determined by correlating the scores on the present measure with the scores of Broadbent et.al. (1982) cognitive failure measure. The coefficient of correlation was .66, which was significant beyond .001 level of confidence.

### **3.7 Other Sources of Data**

In this study the researcher collected the academic achievement of higher secondary students from the records of the concerned schools. The total marks and the marks

obtained by the students in their last examination were considered as their academic achievement by the investigator.

### **3.8 Administration of the Tools**

In the present study the investigator visited both the government and private higher secondary schools of Jammu district by applying simple random sampling method. The investigator with all the concerned Principals discussed a lot about the need of his study for granting permission for the data collection. After getting permission from the principal the investigator established a moral and virtuous rapport with the sample and provides them directions for giving their responses very prudently.

### **3.9 Scoring Procedure**

The scoring procedure of both the questionnaires was done as per the guidelines and procedures given in the manuals.

### **3.6 Statistical Techniques Employed**

In the present study the investigator used MANOVA to analyze the data.



## **ANALYSIS AND INTERPRETATION OF DATA**

It is obvious that the investigator in the third chapter of his study mentioned the research design and methodology, basis of the research, variables under study, population, sample, instruments used and procedure for data collection and statistical techniques used for data analysis. In the research data analysis is well-thought-out as the heart of the research work. The scores which are gathered from the collected data have no worth unless and until it is analyzed and interpreted by employing suitable scientific techniques. By the help of analysis all the complex factors involved are breaking down into small and simple parts and also keeps them in new arrangements for the purpose of interpretation.

In research study the researcher should not only be acquainted with the precision of the data collection and the reliability and validity of the tools to achieve the targeted objectives and to accomplish the study but also the researcher should be acquainted with the different application of statistical analysis. The data analysis also aims to take out relevant information and can also facilitate conclusion of the study. Data analysis is that systematic process by which the researcher applies different statistical and or logical techniques to designate, explain, summarize, recapitulate and assess the data. In this study the analysis of data was done with IBM SPSS 29.

In the current study the researcher has made an effort in order to analyze and interpret the data of the present study by employing MANOVA as statistical technique.

### **4.1 MANOVA or Multiple Regressions**

Multivariate analysis of variance (MANOVA) is basically an ANOVA with several dependent variables. Generally regression analysis means the estimation and prediction of the unknown value of one variable from the known value of the other value. Regression analysis is a mathematical measure of the average relationship between two or more variables in terms of the original units of the data. Regression analysis is simply the statistical relationship of dependent and independent variables. In regression analysis we have only two variables, one variable which is known as independent variable is the cause of the behavior of another one which is known as dependent

variable. In regression analysis independent variable is also known as regressor or predictor or explanatory whereas the dependent variable is also known as regressed or explained variable. The regression analysis when confined to study only two variables at a time it is known as simple regression but when it is used for studying more than two variables at a time is known as multiple regression.

**Objective No.1: To study the Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students.**

**Hypothesis: There will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students.**

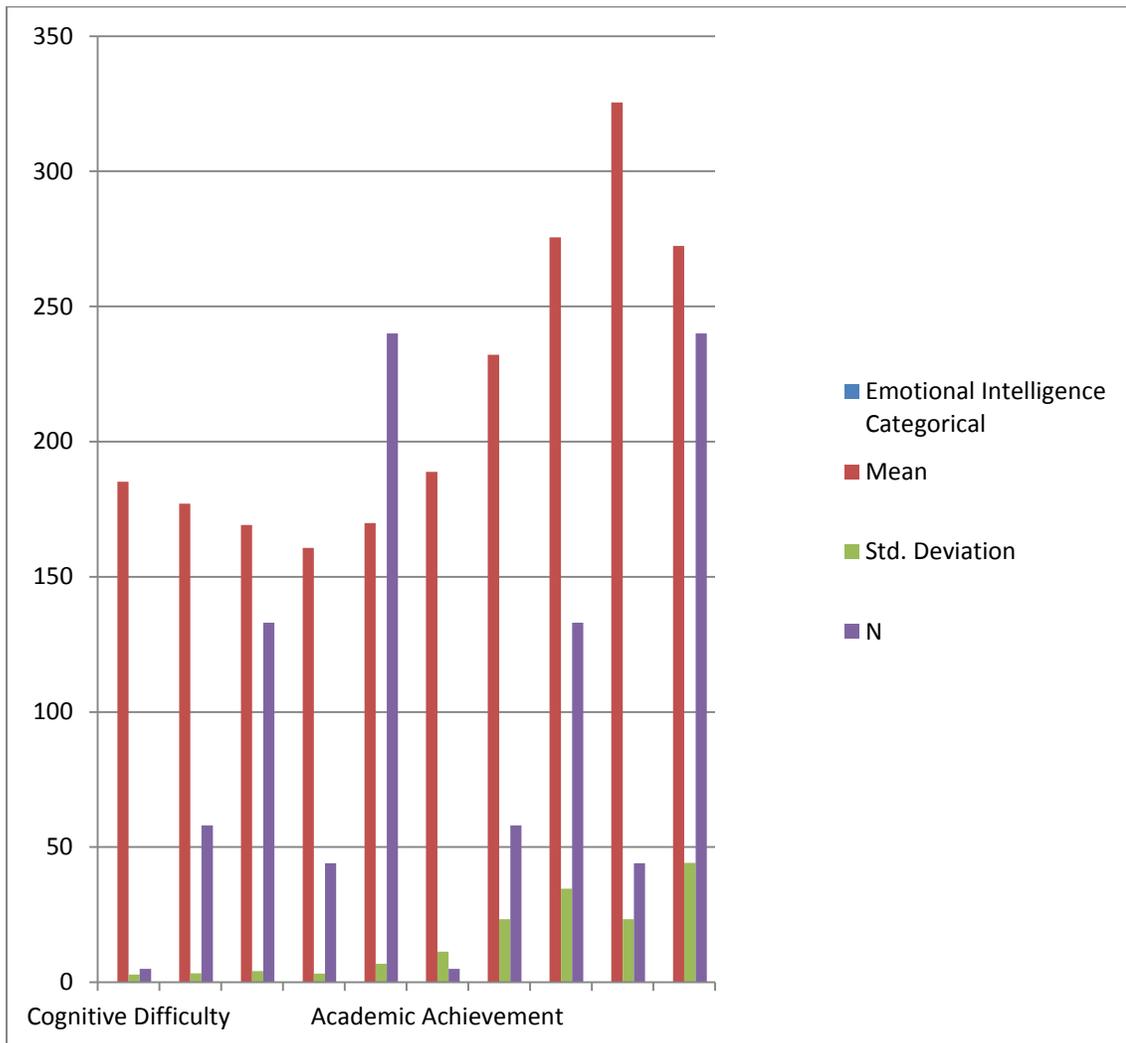
**Table No. 4.1: Descriptive Statistics of hypothesis there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students.**

**Table No.4.1: Descriptive Statistics**

|                         | Emotional Intelligence<br>Categorical | Mean     | Standard<br>Deviation | N   |
|-------------------------|---------------------------------------|----------|-----------------------|-----|
| Cognitive<br>Difficulty | 100-109                               | 185.2000 | 2.86356               | 5   |
|                         | 110-119                               | 177.0862 | 3.31548               | 58  |
|                         | 120-129                               | 169.1429 | 4.09757               | 133 |
|                         | 130-140                               | 160.7273 | 3.18692               | 44  |
|                         | Total                                 | 169.8542 | 6.86264               | 240 |
| Academic<br>Achievement | 100-109                               | 188.8000 | 11.27830              | 5   |
|                         | 110-119                               | 232.1207 | 23.31634              | 58  |
|                         | 120-129                               | 275.5714 | 34.58680              | 133 |
|                         | 130-140                               | 325.4773 | 23.30135              | 44  |
|                         | Total                                 | 272.4125 | 44.20796              | 240 |

Table No.4.1 reveals that the descriptive statistics of the dependent variables of higher secondary students and levels of Emotional Intelligence. The above table shows the mean score of cognitive difficulty and academic achievement of higher secondary students in different levels of Emotional Intelligence. It is also represented by the above analysis that the students having different scores of emotional intelligence in all the categories have different mean scores and the number of students were displayed in each category

(A)



**Table No. 4.2: Multivariate Tests of hypothesis there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students.**

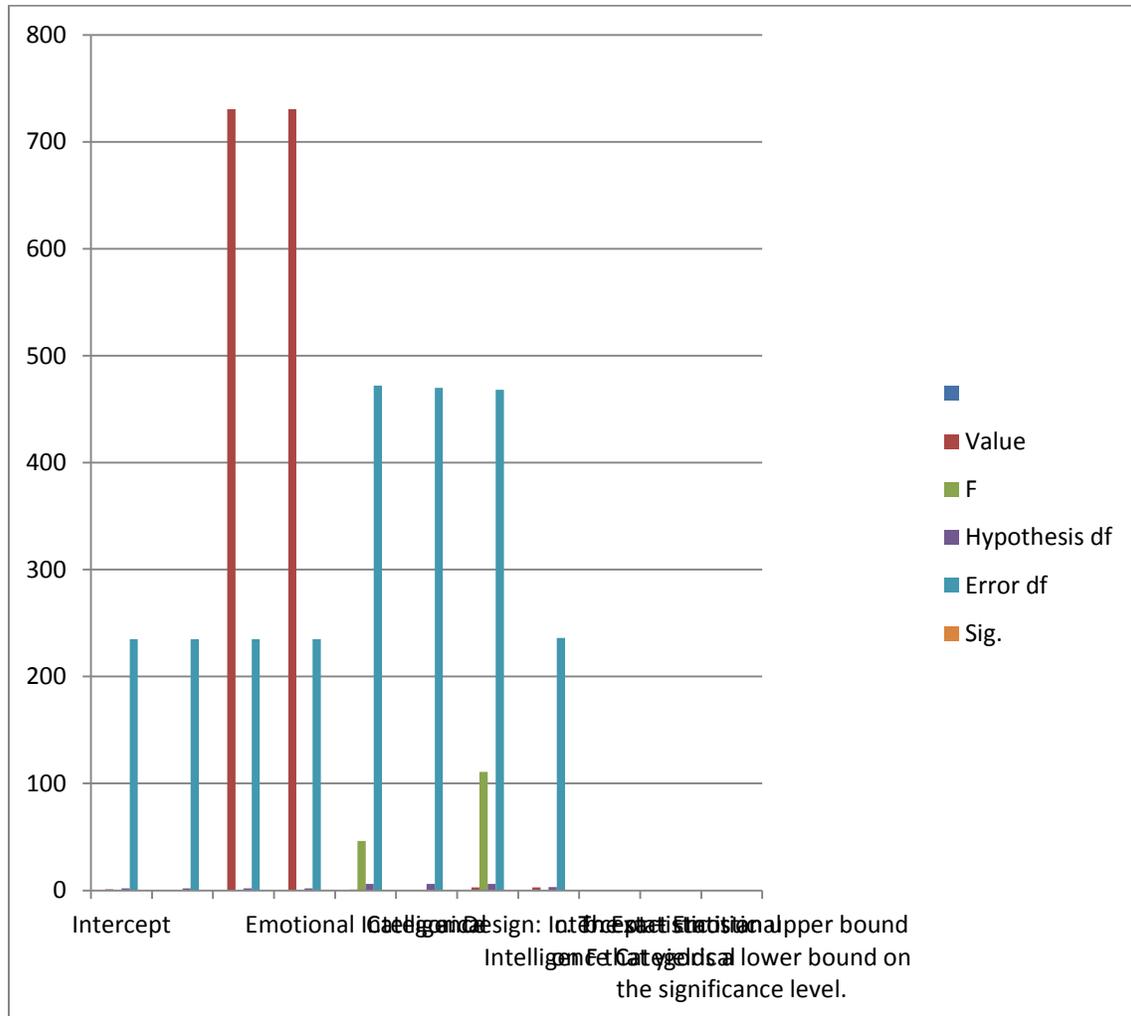
**Table No.2: Multivariate Tests**

| Effect   |                    | Value   | F                      | Hypothesis df | Error df | Sig. |
|--|--------------------|---------|------------------------|---------------|----------|------|
| Intercept  | Pillai's Trace     | .999    | 85827.049 <sup>b</sup> | 2.000         | 235.000  | .000 |
|  | Wilks' Lambda      | .001    | 85827.049 <sup>b</sup> | 2.000         | 235.000  | .000 |
|  | Hotelling's Trace  | 730.443 | 85827.049 <sup>b</sup> | 2.000         | 235.000  | .000 |
|  | Roy's Largest Root | 730.443 | 85827.049 <sup>b</sup> | 2.000         | 235.000  | .000 |
| Emotional Intelligence Categorical   | Pillai's Trace     | .741    | 46.300                 | 6.000         | 472.000  | .000 |
|  | Wilks' Lambda      | .260    | 75.335 <sup>b</sup>    | 6.000         | 470.000  | .000 |
|  | Hotelling's Trace  | 2.845   | 110.959                | 6.000         | 468.000  | .000 |
|  | Roy's Largest Root | 2.844   | 223.725 <sup>c</sup>   | 3.000         | 236.000  | .000 |
| a. Design: Intercept + Emotional Intelligence Categorical                                    |                    |         |                        |               |          |      |
| b. Exact statistic   |                    |         |                        |               |          |      |
| c. The statistic is an upper bound on F that yields a lower bound on the significance level. |                    |         |                        |               |          |      |

We have Wilks' Lambda test p-value statistically significant ( $<0.05$ ), hence we conclude that linear combination of Cognitive Difficulty and Academic Achievement differs between different levels of Emotional Intelligence in higher secondary students. The p-values, statistic values for Wilks' Lambda are given in above table no.3. Hence the hypothesis stated that there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students is rejected. So emotional intelligence has a significant effect on the student's cognitive difficulty and academic achievement of students. The p value is less than alpha 0.05 level of significance which shows that emotional intelligence determines

the cognitive difficulty and academic achievement of students. So emotional intelligence has a significant role in effecting the cognitive difficulty and academic achievement of students. So it is stated that the earlier framed hypothesis was rejected which signifies that emotional intelligence has a positive effect on cognitive difficulty and academic achievement of students.

(B)



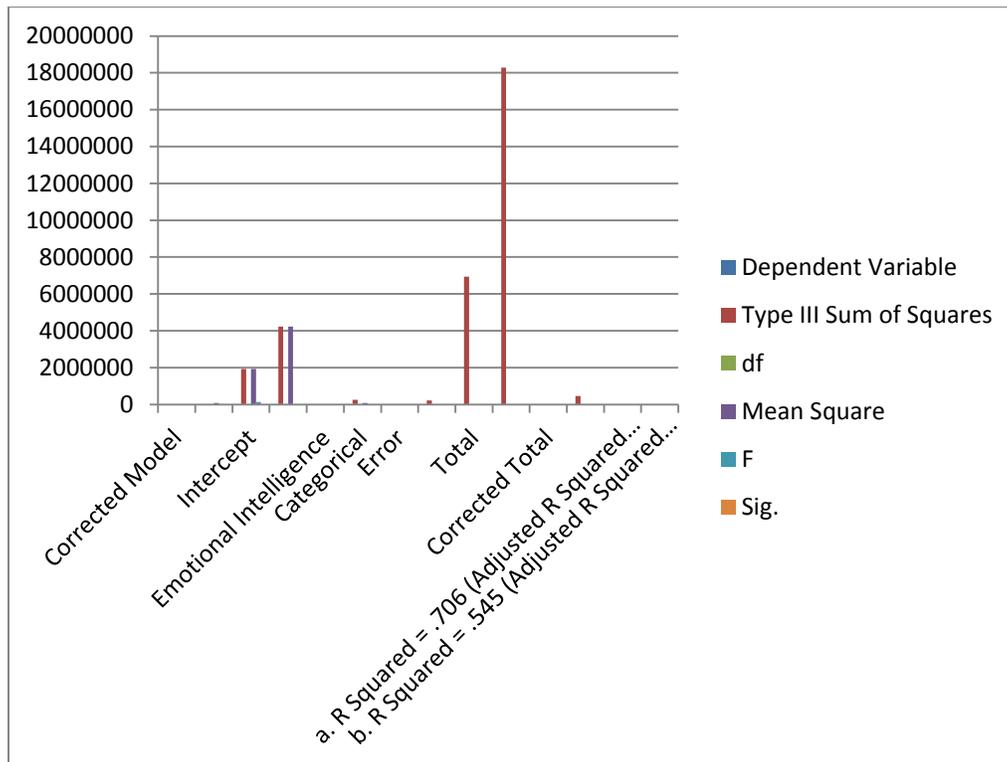
**Table No.4.3: Tests of Between-Subjects Effects of hypothesis there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty an Academic Achievement of Higher Secondary Students.**

**Table No.3: Tests of Between-Subjects Effects**

| Source  | Dependent Variable   | Type III Sum of Squares | df  | Mean Square | F          | Sig. |
|---|----------------------|-------------------------|-----|-------------|------------|------|
| Corrected Model                                 | Cognitive Difficulty | 7943.514 <sup>a</sup>   | 3   | 2647.838    | 188.653    | .000 |
|   | Academic Achievement | 254339.659 <sup>b</sup> | 3   | 84779.886   | 94.046     | .000 |
| Intercept                                       | Cognitive Difficulty | 1935776.527             | 1   | 1935776.527 | 137919.862 | .000 |
|   | Academic Achievement | 4220098.595             | 1   | 4220098.595 | 4681.317   | .000 |
| Emotional Intelligence Categorical              | Cognitive Difficulty | 7943.514                | 3   | 2647.838    | 188.653    | .000 |
|   | Academic Achievement | 254339.659              | 3   | 84779.886   | 94.046     | .000 |
| Error   | Cognitive Difficulty | 3312.382                | 236 | 14.036      |            |      |
|   | Academic Achievement | 212748.504              | 236 | 901.477     |            |      |
| Total   | Cognitive Difficulty | 6935361.000             | 240 |             |            |      |
|   | Academic Achievement | 18277145.000            | 240 |             |            |      |
| Corrected Total                                 | Cognitive Difficulty | 11255.896               | 239 |             |            |      |
|   | Academic Achievement | 467088.162              | 239 |             |            |      |
| a. R Squared = .706 (Adjusted R Squared = .702) |                      |                         |     |             |            |      |
| b. R Squared = .545 (Adjusted R Squared = .539) |                      |                         |     |             |            |      |

From the above table it is clear that difference in cognitive scores between different levels of Emotional Intelligence as well as marks obtained scores between different levels of Emotional Intelligence differ statistically in all the higher secondary students (p-values for Cognitive Difficulty and Academic Achievement are less than 0.05 level of significance). So the hypothesis stated that there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students is rejected.

(C)



**Objective No.2:** To study the impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of class higher secondary students with reference to Gender (Boys/girls).

**Hypothesis:** There will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to Gender (Boys/ girls).

**Table No. 4.4:** Descriptive Statistics of hypothesis there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to gender (boys/girls)

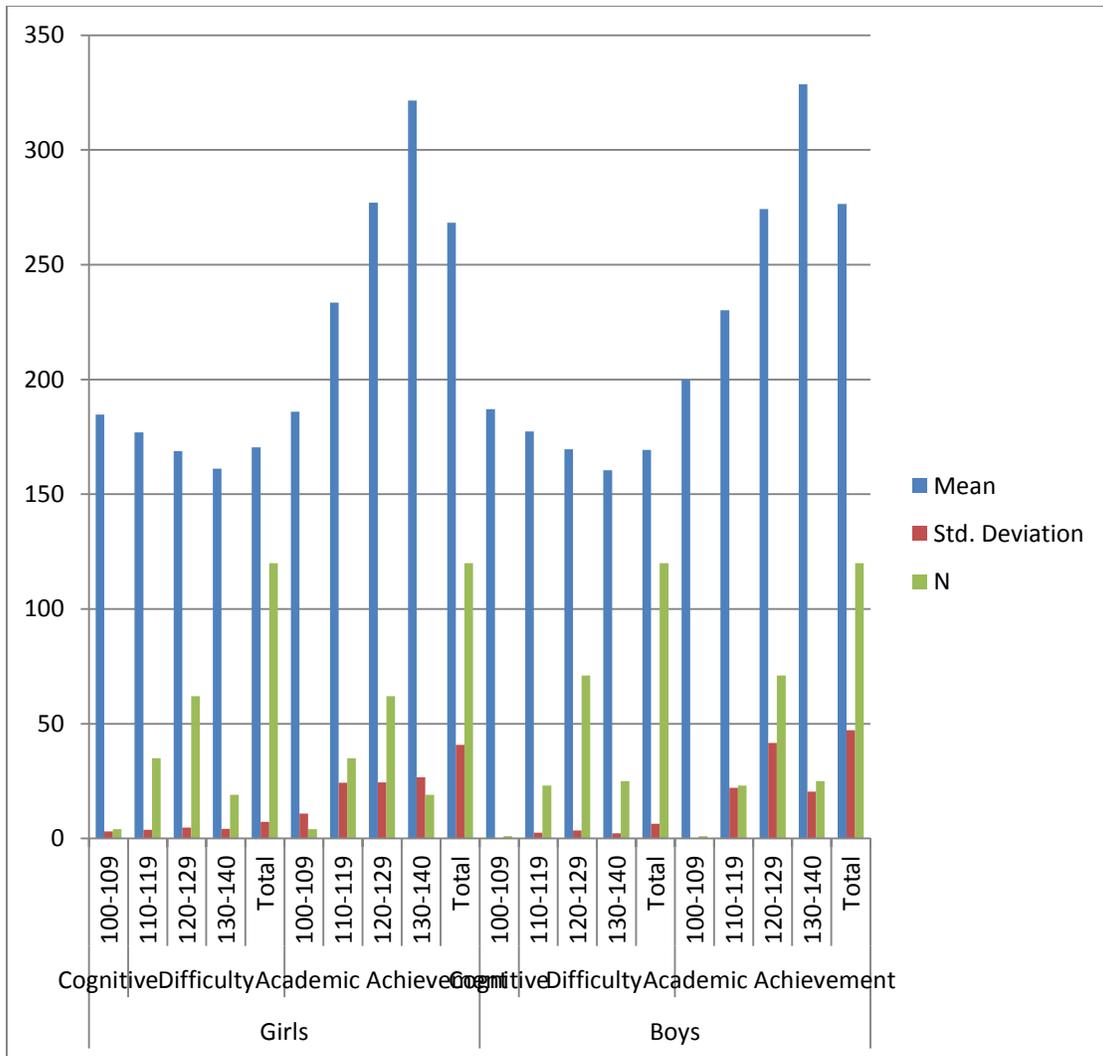
**Table No. 4.4: Descriptive Statistics**

| Gender |                      | EI_Categorical | Mean     | Standard. Deviation | N   |
|--------|----------------------|----------------|----------|---------------------|-----|
| Girls  | Cognitive Difficulty | 100-109        | 184.7500 | 3.09570             | 4   |
|        |                      | 110-119        | 176.8857 | 3.78675             | 35  |
|        |                      | 120-129        | 168.7097 | 4.69177             | 62  |
|        |                      | 130-140        | 161.1579 | 4.14009             | 19  |
|        |                      | Total          | 170.4333 | 7.25494             | 120 |
|        | Academic Achievement | 100-109        | 186.0000 | 10.83205            | 4   |
|        |                      | 110-119        | 233.4286 | 24.34469            | 35  |
|        |                      | 120-129        | 277.0645 | 24.41571            | 62  |
|        |                      | 130-140        | 321.4737 | 26.70907            | 19  |
|        |                      | Total          | 268.3333 | 40.77450            | 120 |
| Boys   | Cognitive Difficulty | 100-109        | 187.0000 | .                   | 1   |
|        |                      | 110-119        | 177.3913 | 2.48155             | 23  |
|        |                      | 120-129        | 169.5211 | 3.48818             | 71  |
|        |                      | 130-140        | 160.4000 | 2.25462             | 25  |
|        |                      | Total          | 169.2750 | 6.42469             | 120 |
|        | Academic Achievement | 100-109        | 200.0000 | .                   | 1   |
|        |                      | 110-119        | 230.1304 | 22.03985            | 23  |
|        |                      | 120-129        | 274.2676 | 41.62450            | 71  |
|        |                      | 130-140        | 328.5200 | 20.38202            | 25  |
|        |                      | Total          | 276.4917 | 47.21220            | 120 |

Table no.4.4 presents the descriptive statistics of the dependent variables with respect to gender and levels of Emotional Intelligence. The above table shows the mean score of cognitive difficulty and academic achievement of gender (boys/girls) in different levels of Emotional

Intelligence. The number of students given in table fall in different categories of emotional intelligence with diverse mean scores at each level. It also shows the mean score of students gender wise in all the categories of emotional intelligence which shows the mean score of both boys and girls separately.

(D)



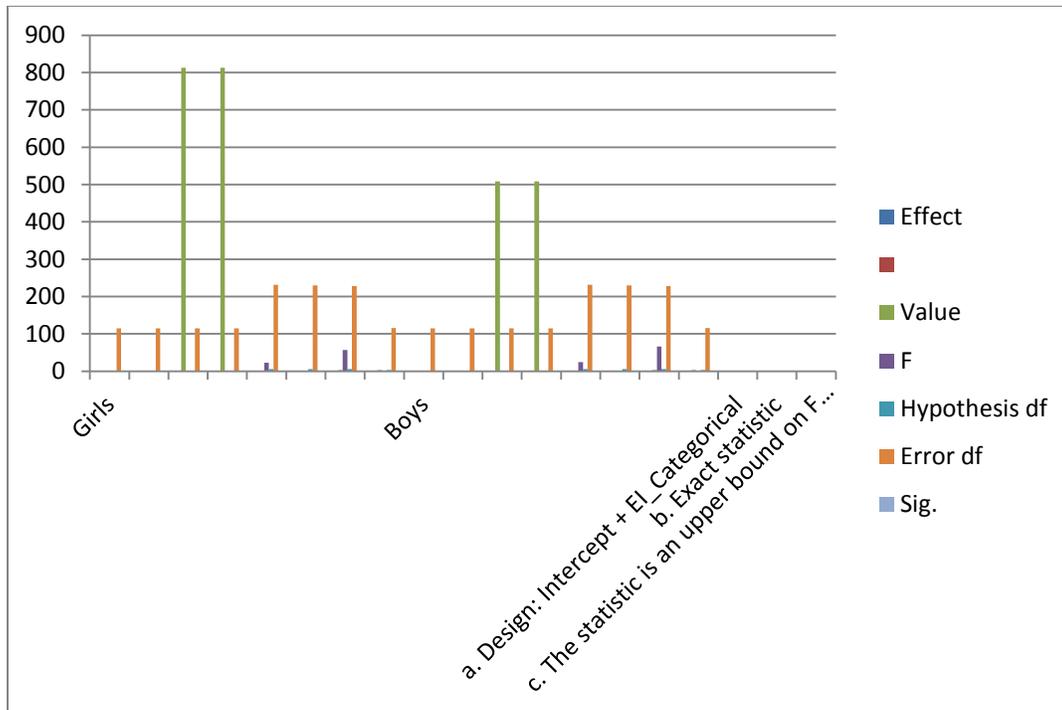
**Table No. 4.5: Multivariate Tests of hypothesis there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to gender (boys/girls).**

**Table No. 4.5: Multivariate Tests**

| Gender   | Effect                             | Value              | F       | Hypothesis df          | Error df | Sig.    |      |
|--|------------------------------------|--------------------|---------|------------------------|----------|---------|------|
| Girls  | Intercept                          | Pillai's Trace     | .999    | 46707.956 <sub>b</sub> | 2.000    | 115.000 | .000 |
|  |                                    | Wilks' Lambda      | .001    | 46707.956 <sub>b</sub> | 2.000    | 115.000 | .000 |
|  |                                    | Hotelling's Trace  | 812.312 | 46707.956 <sub>b</sub> | 2.000    | 115.000 | .000 |
|  |                                    | Roy's Largest Root | 812.312 | 46707.956 <sub>b</sub> | 2.000    | 115.000 | .000 |
|  | Emotional Intelligence Categorical | Pillai's Trace     | .750    | 23.203                 | 6.000    | 232.000 | .000 |
|  |                                    | Wilks' Lambda      | .251    | 38.175 <sup>b</sup>    | 6.000    | 230.000 | .000 |
|  |                                    | Hotelling's Trace  | 2.979   | 56.604                 | 6.000    | 228.000 | .000 |
|  |                                    | Roy's Largest Root | 2.978   | 115.138 <sup>c</sup>   | 3.000    | 116.000 | .000 |
| Boys   | Intercept                          | Pillai's Trace     | .998    | 29223.142 <sub>b</sub> | 2.000    | 115.000 | .000 |
|  |                                    | Wilks' Lambda      | .002    | 29223.142 <sub>b</sub> | 2.000    | 115.000 | .000 |
|  |                                    | Hotelling's Trace  | 508.229 | 29223.142 <sub>b</sub> | 2.000    | 115.000 | .000 |
|  |                                    | Roy's Largest Root | 508.229 | 29223.142 <sub>b</sub> | 2.000    | 115.000 | .000 |
|  | Emotional Intelligence Categorical | Pillai's Trace     | .783    | 24.903                 | 6.000    | 232.000 | .000 |
|  |                                    | Wilks' Lambda      | .221    | 43.241 <sup>b</sup>    | 6.000    | 230.000 | .000 |
|  |                                    | Hotelling's Trace  | 3.509   | 66.670                 | 6.000    | 228.000 | .000 |
|  |                                    | Roy's Largest Root | 3.503   | 135.464 <sup>c</sup>   | 3.000    | 116.000 | .000 |
| a. Design: Intercept + Emotional Intelligence Categorical                                    |                                    |                    |         |                        |          |         |      |
| b. Exact statistic   |                                    |                    |         |                        |          |         |      |
| c. The statistic is an upper bound on F that yields a lower bound on the significance level. |                                    |                    |         |                        |          |         |      |

We have Wilks' Lambda test p-value statistically significant ( $<0.05$ ), hence we conclude that linear combination of Cognitive and Marks Obtained differs between different levels of Emotional Intelligence in both boys and girls students. The p-values, statistic values for Wilks' Lambda are given in above table no.4.5. Hence the hypothesis stated that there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to their gender ((boys/girls) is rejected. So emotional intelligence has a significant effect on the student's cognitive difficulty and academic achievement of students. The p value is less than alpha 0.05 level of significance which shows that emotional intelligence determines the cognitive difficulty and academic achievement of students. So it is stated that the earlier framed hypothesis was rejected which signifies that emotional intelligence has a positive effect on cognitive difficulty and academic achievement of students.

(E)



**Table No.4.6: Tests of Between-Subjects Effects of hypothesis there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to gender (boys/girls).**

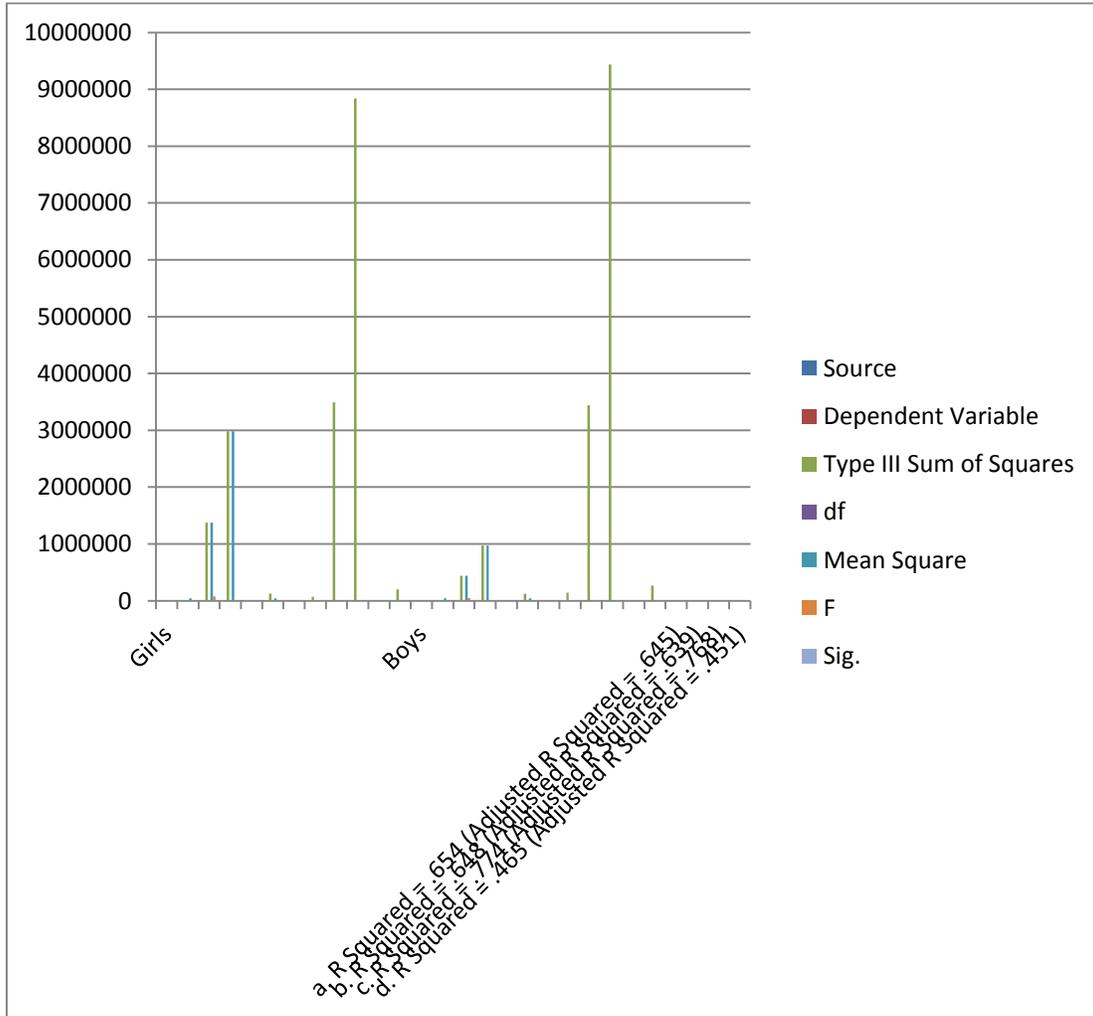
**Table No. 4.6: Tests of Between-Subjects Effects**

| Gender    | Source                 | Dependent Variable   | Type III Sum of Squares | df                      | Mean Square | F         | Sig.    |      |
|-----------|------------------------|----------------------|-------------------------|-------------------------|-------------|-----------|---------|------|
| Girls     | Corrected Model        | Cognitive Difficulty | 4095.873 <sup>a</sup>   | 3                       | 1365.291    | 73.064    | .000    |      |
|           |                        | Academic Achievement | 128137.616 <sup>b</sup> | 3                       | 42712.539   | 71.078    | .000    |      |
|           | Intercept              | Cognitive Difficulty | 1376713.751             | 1                       | 1376713.751 | 73675.625 | .000    |      |
|           |                        | Academic Achievement | 2983474.686             | 1                       | 2983474.686 | 4964.822  | .000    |      |
|           | Emotional Intelligence | Cognitive Difficulty | 4095.873                | 3                       | 1365.291    | 73.064    | .000    |      |
|           |                        | Academic Achievement | 128137.616              | 3                       | 42712.539   | 71.078    | .000    |      |
|           | Error                  | Cognitive Difficulty | 2167.593                | 116                     | 18.686      |           |         |      |
|           |                        | Academic Achievement | 69707.050               | 116                     | 600.923     |           |         |      |
|           | Total                  | Cognitive Difficulty | 3491966.000             | 120                     |             |           |         |      |
|           |                        | Academic Achievement | 8838178.000             | 120                     |             |           |         |      |
|           | Corrected Total        | Cognitive Difficulty | 6263.467                | 119                     |             |           |         |      |
|           |                        | Academic Achievement | 197844.667              | 119                     |             |           |         |      |
|           | Boys                   | Corrected Model      | Cognitive               | 3802.728 <sup>c</sup>   | 3           | 1267.576  | 132.563 | .000 |
|           |                        |                      | Academic Achievement    | 123311.227 <sup>d</sup> | 3           | 41103.742 | 33.592  | .000 |
| Intercept |                        | Cognitive Difficulty | 439218.390              | 1                       | 439218.390  | 45933.547 | .000    |      |
|           |                        | Academic Achievement | 972080.786              | 1                       | 972080.786  | 794.437   | .000    |      |

|  |   |                      |             |     |           |         |      |  |
|--|---|----------------------|-------------|-----|-----------|---------|------|--|
|  | Emotional Intelligence Categorical              | Cognitive Difficulty | 3802.728    | 3   | 1267.576  | 132.563 | .000 |  |
|  |   | Academic Achievement | 123311.227  | 3   | 41103.742 | 33.592  | .000 |  |
|  | Error   | Cognitive Difficulty | 1109.197    | 116 | 9.562     |         |      |  |
|  |   | Academic Achievement | 141938.764  | 116 | 1223.610  |         |      |  |
|  | Total   | Cognitive Difficulty | 3443395.000 | 120 |           |         |      |  |
|  |   | Academic Achievement | 9438967.000 | 120 |           |         |      |  |
|  | Corrected Total                                 | Cognitive Difficulty | 4911.925    | 119 |           |         |      |  |
|  |   | Academic Achievement | 265249.992  | 119 |           |         |      |  |
|  | a. R Squared = .654 (Adjusted R Squared = .645) |                      |             |     |           |         |      |  |
|  | b. R Squared = .648 (Adjusted R Squared = .639) |                      |             |     |           |         |      |  |
|  | c. R Squared = .774 (Adjusted R Squared = .768) |                      |             |     |           |         |      |  |
|  | d. R Squared = .465 (Adjusted R Squared = .451) |                      |             |     |           |         |      |  |

From the above table, it is clear that the difference in cognitive scores between different levels of Emotional Intelligence as well as marks obtained scores between different levels of Emotional Intelligence differ statistically in both boys and girls (p-values for Cognitive Difficulty and Academic Achievement are less than 0.05 level of significance). So the hypothesis stated that there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to their gender ((boys/girls) is rejected. Hence it is implied that emotional intelligence has a significant role in determining the cognitive difficulty and academic achievement of students. The r square also shows that there is a very significant effect of emotional intelligence on cognitive difficulty and academic achievement of students.

(F)



**Objective No.3:** To study the impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of class higher secondary students with reference to locality (rural/urban).

**Hypothesis:** There will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to locality (rural/urban).

**Table No. 4.7:** Descriptive Statistics of hypothesis there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to locality (rural/urban).

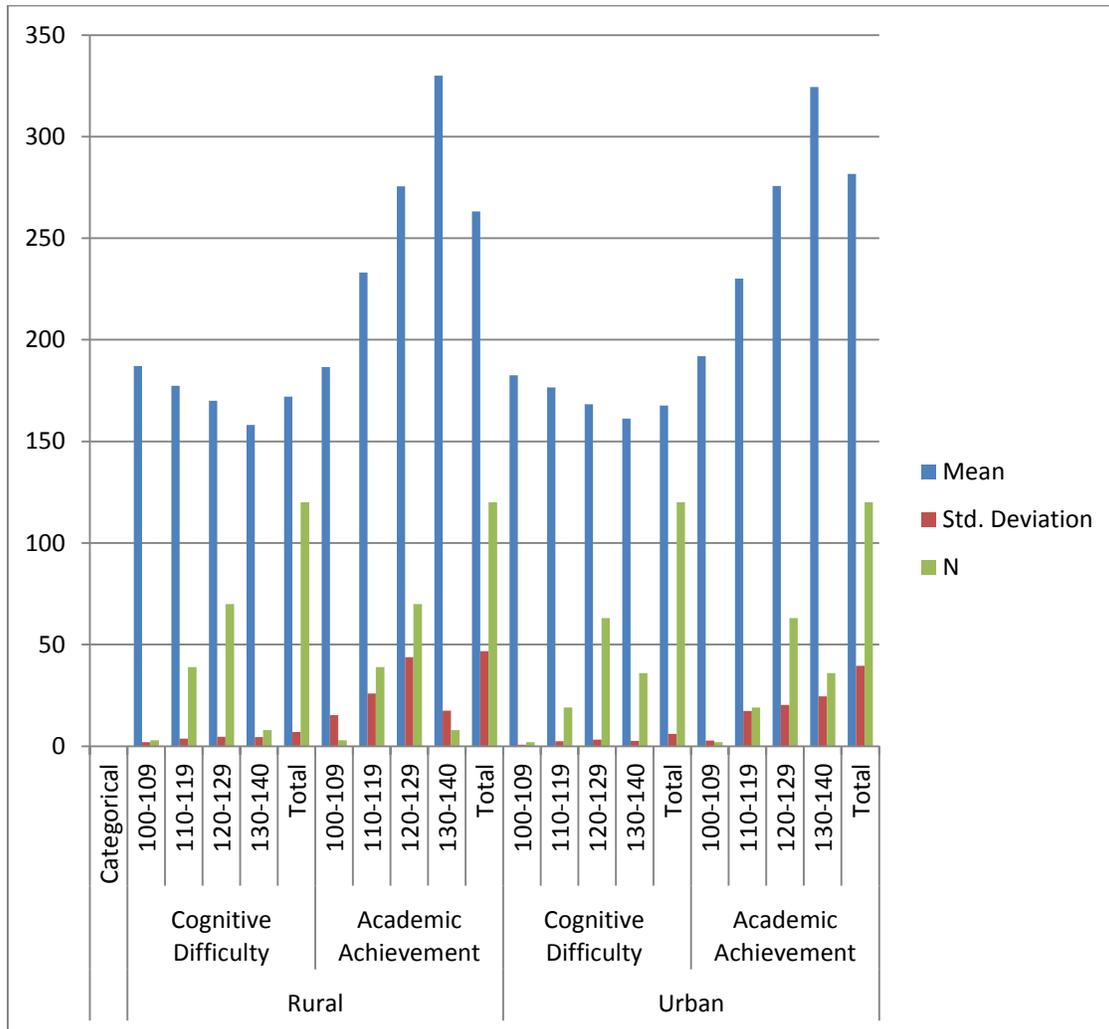
**Table No. 4.7: Descriptive Statistics**

| Locality |                         | Emotional Intelligence<br>Categorical | Mean     | Standard<br>Deviation | N   |
|----------|-------------------------|---------------------------------------|----------|-----------------------|-----|
| Rural    | Cognitive<br>Difficulty | 100-109                               | 187.0000 | 2.00000               | 3   |
|          |                         | 110-119                               | 177.3077 | 3.67891               | 39  |
|          |                         | 120-129                               | 169.9571 | 4.58237               | 70  |
|          |                         | 130-140                               | 158.1250 | 4.48609               | 8   |
|          |                         | Total                                 | 171.9833 | 6.93182               | 120 |
|          | Academic<br>Achievement | 100-109                               | 186.6667 | 15.27525              | 3   |
|          |                         | 110-119                               | 233.0769 | 25.91015              | 39  |
|          |                         | 120-129                               | 275.4714 | 43.82135              | 70  |
|          |                         | 130-140                               | 330.0000 | 17.52549              | 8   |
|          |                         | Total                                 | 263.1083 | 46.72713              | 120 |
| Urban    | Cognitive<br>Difficulty | 100-109                               | 182.5000 | .70711                | 2   |
|          |                         | 110-119                               | 176.6316 | 2.43152               | 19  |
|          |                         | 120-129                               | 168.2381 | 3.28591               | 63  |
|          |                         | 130-140                               | 161.3056 | 2.56147               | 36  |
|          |                         | Total                                 | 167.7250 | 6.11509               | 120 |
|          | Academic<br>Achievement | 100-109                               | 192.0000 | 2.82843               | 2   |
|          |                         | 110-119                               | 230.1579 | 17.26996              | 19  |
|          |                         | 120-129                               | 275.6825 | 20.24115              | 63  |
|          |                         | 130-140                               | 324.4722 | 24.49313              | 36  |
|          |                         | Total                                 | 281.7167 | 39.58656              | 120 |

From the table no. 4.7 it is depicted that the descriptive statistics of the dependent variables with respect to locality and levels of Emotional Intelligence. The above table shows the mean score of cognitive difficulty and academic achievement of locality (rural/urban) in different levels of

Emotional Intelligence. The r square also shows that there is a very significant effect of emotional intelligence on cognitive difficulty and academic achievement of students. So the students having high emotional intelligence have least cognitive difficulty which results in their academic improvement and vice versa.

(G)



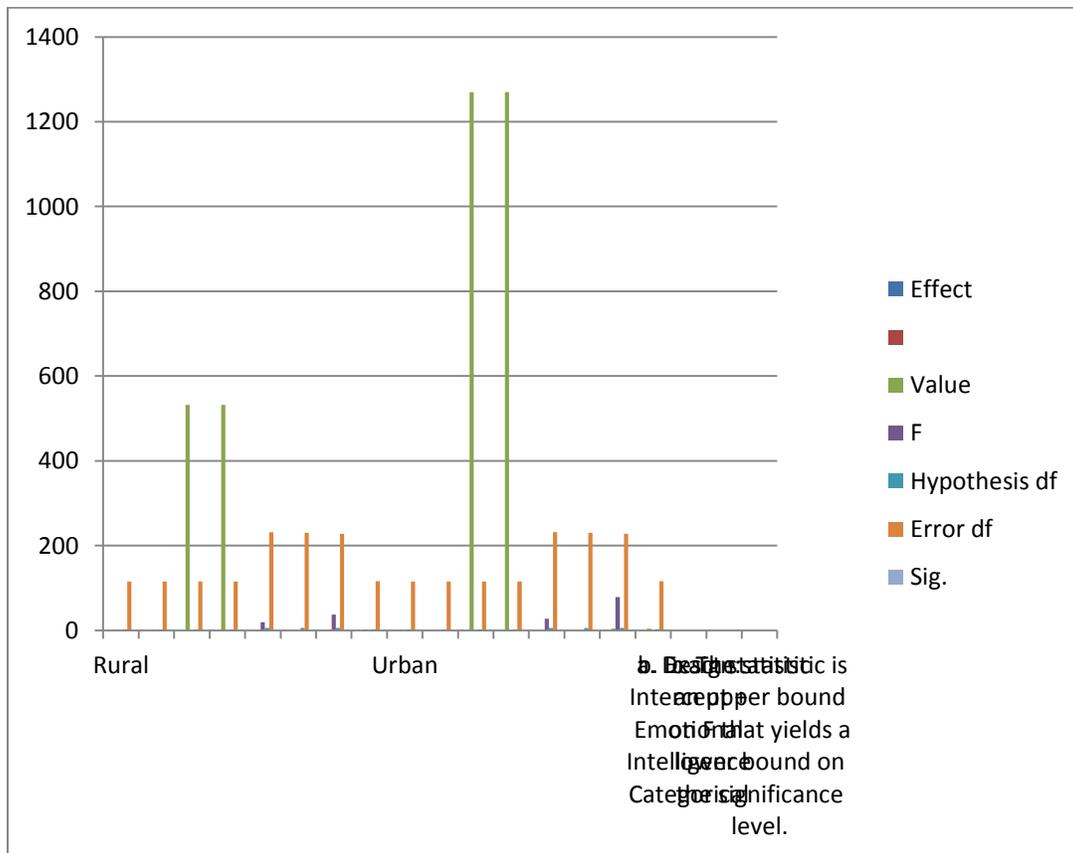
**Table No. 4.8: Multivariate Tests of hypothesis there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to locality (rural/urban).**

**Table No. 4.8: Multivariate Tests**

| Locality   | Effect                             | Value              | F        | Hypothesis df          | Error df | Sig.    |      |
|--|------------------------------------|--------------------|----------|------------------------|----------|---------|------|
| Rural  | Intercept                          | Pillai's Trace     | .998     | 30594.026 <sup>b</sup> | 2.000    | 115.000 | .000 |
|  |                                    | Wilks' Lambda      | .002     | 30594.026 <sup>b</sup> | 2.000    | 115.000 | .000 |
|  |                                    | Hotelling's Trace  | 532.070  | 30594.026 <sup>b</sup> | 2.000    | 115.000 | .000 |
|  |                                    | Roy's Largest Root | 532.070  | 30594.026 <sup>b</sup> | 2.000    | 115.000 | .000 |
|  | Emotional Intelligence Categorical | Pillai's Trace     | .665     | 19.278                 | 6.000    | 232.000 | .000 |
|  |                                    | Wilks' Lambda      | .337     | 27.687 <sup>b</sup>    | 6.000    | 230.000 | .000 |
|  |                                    | Hotelling's Trace  | 1.959    | 37.216                 | 6.000    | 228.000 | .000 |
|  |                                    | Roy's Largest Root | 1.955    | 75.589 <sup>c</sup>    | 3.000    | 116.000 | .000 |
| Urban  | Intercept                          | Pillai's Trace     | .999     | 73003.716 <sup>b</sup> | 2.000    | 115.000 | .000 |
|  |                                    | Wilks' Lambda      | .001     | 73003.716 <sup>b</sup> | 2.000    | 115.000 | .000 |
|  |                                    | Hotelling's Trace  | 1269.630 | 73003.716 <sup>b</sup> | 2.000    | 115.000 | .000 |
|  |                                    | Roy's Largest Root | 1269.630 | 73003.716 <sup>b</sup> | 2.000    | 115.000 | .000 |
|  | Emotional Intelligence Categorical | Pillai's Trace     | .826     | 27.222                 | 6.000    | 232.000 | .000 |
|  |                                    | Wilks' Lambda      | .192     | 49.262 <sup>b</sup>    | 6.000    | 230.000 | .000 |
|  |                                    | Hotelling's Trace  | 4.129    | 78.446                 | 6.000    | 228.000 | .000 |
|  |                                    | Roy's Largest Root | 4.106    | 158.769 <sup>c</sup>   | 3.000    | 116.000 | .000 |
| a. Design: Intercept + Emotional Intelligence Categorical                                    |                                    |                    |          |                        |          |         |      |
| b. Exact statistic   |                                    |                    |          |                        |          |         |      |
| c. The statistic is an upper bound on F that yields a lower bound on the significance level. |                                    |                    |          |                        |          |         |      |

We have Wilks' Lambda test p-value statistically significant ( $<0.05$ ), hence we conclude that linear combination of Cognitive and Marks Obtained differs between different levels of Emotional Intelligence in both rural and urban students. The p-values, statistic values for Wilks' Lambda are given in above table no.4.8. Hence the hypothesis stated that there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to their locality((rural/urban) is rejected. So it displays that emotional intelligence has a positive significant effect on cognitive difficulty and academic achievement of both rural and urban students.

(H)



**Table No.4.9: Tests of Between-Subjects Effects of hypothesis there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to locality (rural/urban).**

**Table No. 4.9: Tests of Between-Subjects Effects**

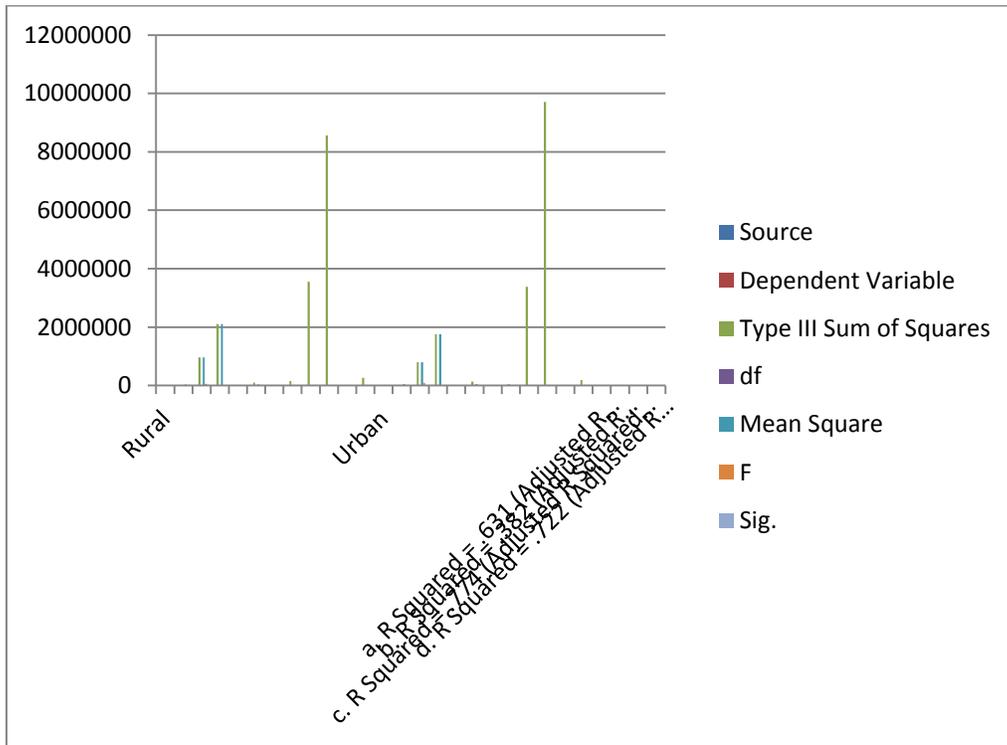
| Locality | Source                             | Dependent Variable   | Type III Sum of Squares | df  | Mean Square | F         | Sig. |
|----------|------------------------------------|----------------------|-------------------------|-----|-------------|-----------|------|
| Rural    | Corrected Model                    | Cognitive Difficulty | 3605.913 <sup>a</sup>   | 3   | 1201.971    | 66.016    | .000 |
|          |                                    | Academic Achievement | 99198.713 <sup>b</sup>  | 3   | 33066.238   | 23.879    | .000 |
|          | Intercept                          | Cognitive Difficulty | 962155.528              | 1   | 962155.528  | 52844.309 | .000 |
|          |                                    | Academic Achievement | 2109472.322             | 1   | 2109472.322 | 1523.380  | .000 |
|          | Emotional Intelligence Categorical | Cognitive Difficulty | 3605.913                | 3   | 1201.971    | 66.016    | .000 |
|          |                                    | Academic Achievement | 99198.713               | 3   | 33066.238   | 23.879    | .000 |
|          | Error                              | Cognitive Difficulty | 2112.054                | 116 | 18.207      |           |      |
|          |                                    | Academic Achievement | 160628.879              | 116 | 1384.732    |           |      |
|          | Total                              | Cognitive Difficulty | 3555110.000             | 120 |             |           |      |
|          |                                    | Academic Achievement | 8566947.000             | 120 |             |           |      |
|          | Corrected Total                    | Cognitive Difficulty | 5717.967                | 119 |             |           |      |
|          |                                    | Academic Achievement | 259827.592              | 119 |             |           |      |
| Urban    | Corrected Model                    | Cognitive Difficulty | 3443.936 <sup>c</sup>   | 3   | 1147.979    | 132.373   | .000 |
|          |                                    | Academic Achievement | 134709.217 <sup>d</sup> | 3   | 44903.072   | 100.603   | .000 |

|   |                                    |                      |             |     |             |           |      |
|---|------------------------------------|----------------------|-------------|-----|-------------|-----------|------|
|   | Intercept                          | Cognitive Difficulty | 795384.190  | 1   | 795384.190  | 91715.328 | .000 |
|   |                                    | Marks Obtained       | 1752731.954 | 1   | 1752731.954 | 3926.921  | .000 |
|   | Emotional Intelligence Categorical | Cognitive Difficulty | 3443.936    | 3   | 1147.979    | 132.373   | .000 |
|   |                                    | Academic Achievement | 134709.217  | 3   | 44903.072   | 100.603   | .000 |
|   | Error                              | Cognitive Difficulty | 1005.989    | 116 | 8.672       |           |      |
|   |                                    | Academic Achievement | 51775.149   | 116 | 446.337     |           |      |
|   | Total                              | Cognitive Difficulty | 3380251.000 | 120 |             |           |      |
|   |                                    | Academic Achievement | 9710198.000 | 120 |             |           |      |
|   | Corrected Total                    | Cognitive Difficulty | 4449.925    | 119 |             |           |      |
|   |                                    | Academic Achievement | 186484.367  | 119 |             |           |      |
| a. R Squared = .631 (Adjusted R Squared = .621) |                                    |                      |             |     |             |           |      |
| b. R Squared = .382 (Adjusted R Squared = .366) |                                    |                      |             |     |             |           |      |
| c. R Squared = .774 (Adjusted R Squared = .768) |                                    |                      |             |     |             |           |      |
| d. R Squared = .722 (Adjusted R Squared = .715) |                                    |                      |             |     |             |           |      |

From the above table, it is demonstrated that the difference in cognitive scores between different levels of Emotional Intelligence as well as marks obtained scores between different levels of Emotional Intelligence differ statistically in both rural and urbans (p-values for Cognitive Difficulty and Academic Achievement are less than 0.05 level of significance). So the hypothesis stated that there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty

and Academic Achievement of Higher Secondary Students with reference to their locality ((rural/urban) is rejected. The r square also shows a significant effect of emotional intelligence on cognitive difficulty and academic achievement of students.

(I)



**Objective No.4:** To study the impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of class higher secondary students with reference to type of school (Government/Private).

**Hypothesis:** There will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to type of School (Government/Private).

**Table No. 4.10:** Descriptive Statistics of hypothesis there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to type of School (Government/Private).

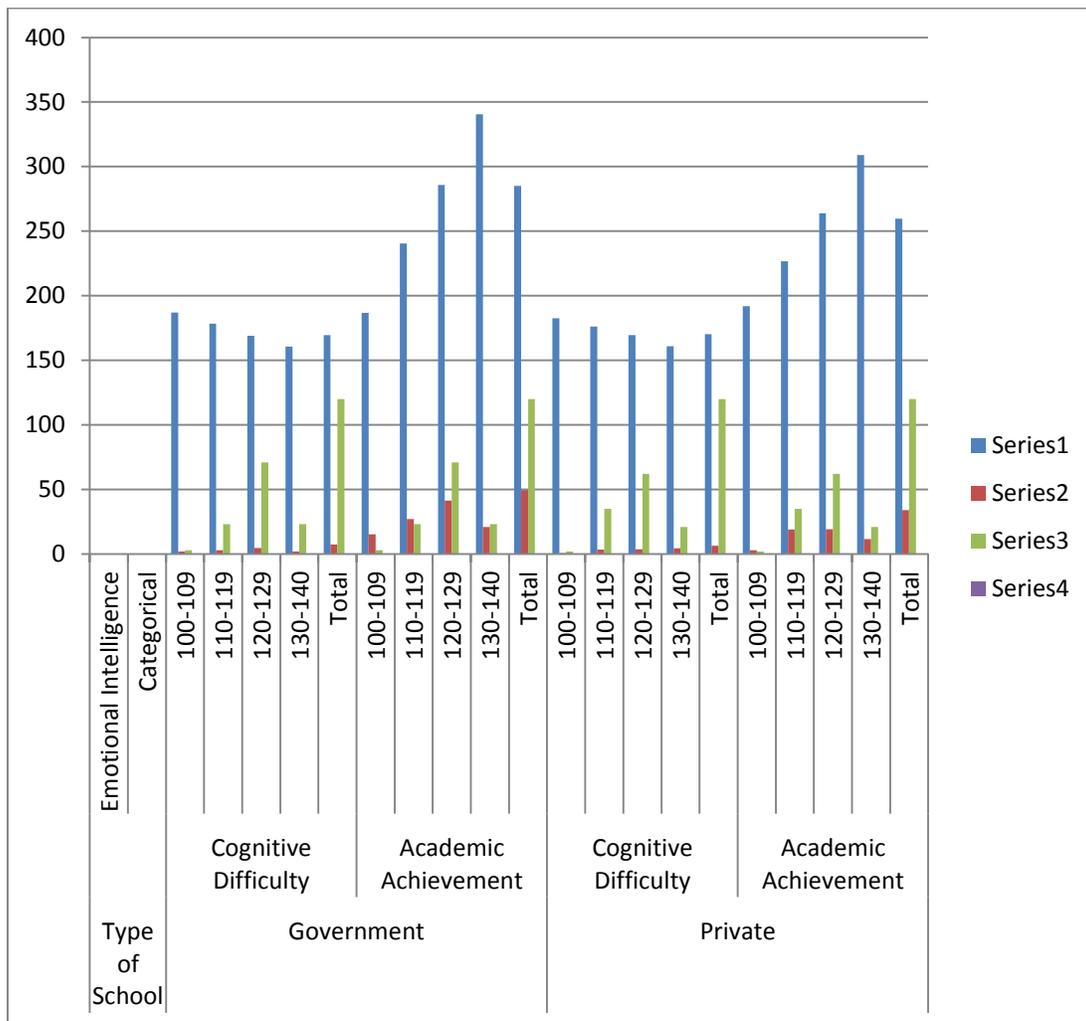
**Table No. 4.10: Descriptive Statistics**

| Type of School |                      | Emotional Intelligence | Mean     | Standard. Deviation | N   |
|----------------|----------------------|------------------------|----------|---------------------|-----|
|                |                      | Categorical            |          |                     |     |
| Government     | Cognitive Difficulty | 100-109                | 187.0000 | 2.00000             | 3   |
|                |                      | 110-119                | 178.3913 | 2.82423             | 23  |
|                |                      | 120-129                | 168.8873 | 4.54988             | 71  |
|                |                      | 130-140                | 160.6087 | 1.82755             | 23  |
|                |                      | Total                  | 169.5750 | 7.26875             | 120 |
|                | Academic Achievement | 100-109                | 186.6667 | 15.27525            | 3   |
|                |                      | 110-119                | 240.3913 | 27.10374            | 23  |
|                |                      | 120-129                | 285.8310 | 41.31931            | 71  |
|                |                      | 130-140                | 340.6087 | 21.00376            | 23  |
|                |                      | Total                  | 285.1417 | 49.51789            | 120 |
| Private        | Cognitive Difficulty | 100-109                | 182.5000 | .70711              | 2   |
|                |                      | 110-119                | 176.2286 | 3.37016             | 35  |
|                |                      | 120-129                | 169.4355 | 3.52332             | 62  |
|                |                      | 130-140                | 160.8571 | 4.25777             | 21  |
|                |                      | Total                  | 170.1333 | 6.44946             | 120 |
|                | Academic Achievement | 100-109                | 192.0000 | 2.82843             | 2   |
|                |                      | 110-119                | 226.6857 | 18.95780            | 35  |
|                |                      | 120-129                | 263.8226 | 19.14699            | 62  |
|                |                      | 130-140                | 308.9048 | 11.41886            | 21  |
|                |                      | Total                  | 259.6833 | 33.85709            | 120 |

From the table no. 4.10 it is illustrated that the descriptive statistics of the dependent variables with respect to types of school and levels of Emotional Intelligence. The above table shows the

mean score of cognitive difficulty and academic achievement of types of school (government/private) in different levels of Emotional Intelligence. It also shows the mean score of students in different levels of emotional intelligence. The above analysis also demonstrates the emotional intelligence of students in different categories with reference to type of school government and private.

(J)



**Table No. 4.11: Multivariate Tests of hypothesis there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to locality (rural/urban).**

**Table No. 4.11: Multivariate Tests**

| Types of School | Effect                             |                    | Value   | F                      | Hypothesis df | Error df | Sig. |
|-----------------|------------------------------------|--------------------|---------|------------------------|---------------|----------|------|
| Government      | Intercept                          | Pillai's Trace     | .999    | 44488.564 <sup>b</sup> | 2.000         | 115.000  | .000 |
|                 |                                    | Wilks' Lambda      | .001    | 44488.564 <sup>b</sup> | 2.000         | 115.000  | .000 |
|                 |                                    | Hotelling's Trace  | 773.714 | 44488.564 <sup>b</sup> | 2.000         | 115.000  | .000 |
|                 |                                    | Roy's Largest Root | 773.714 | 44488.564 <sup>b</sup> | 2.000         | 115.000  | .000 |
|                 | Emotional Intelligence Categorical | Pillai's Trace     | .764    | 23.920                 | 6.000         | 232.000  | .000 |
|                 |                                    | Wilks' Lambda      | .244    | 39.197 <sup>b</sup>    | 6.000         | 230.000  | .000 |
|                 |                                    | Hotelling's Trace  | 3.054   | 58.034                 | 6.000         | 228.000  | .000 |
|                 |                                    | Roy's Largest Root | 3.043   | 117.644 <sup>c</sup>   | 3.000         | 116.000  | .000 |
| Private         | Intercept                          | Pillai's Trace     | .999    | 55132.288 <sup>b</sup> | 2.000         | 115.000  | .000 |
|                 |                                    | Wilks' Lambda      | .001    | 55132.288 <sup>b</sup> | 2.000         | 115.000  | .000 |
|                 |                                    | Hotelling's Trace  | 958.822 | 55132.288 <sup>b</sup> | 2.000         | 115.000  | .000 |
|                 |                                    | Roy's Largest Root | 958.822 | 55132.288 <sup>b</sup> | 2.000         | 115.000  | .000 |
|                 | Emotional Intelligence Categorical | Pillai's Trace     | .770    | 24.190                 | 6.000         | 232.000  | .000 |
|                 |                                    | Wilks' Lambda      | .231    | 41.470 <sup>b</sup>    | 6.000         | 230.000  | .000 |
|                 |                                    | Hotelling's Trace  | 3.332   | 63.311                 | 6.000         | 228.000  | .000 |
|                 |                                    | Roy's Largest Root | 3.332   | 128.822 <sup>c</sup>   | 3.000         | 116.000  | .000 |

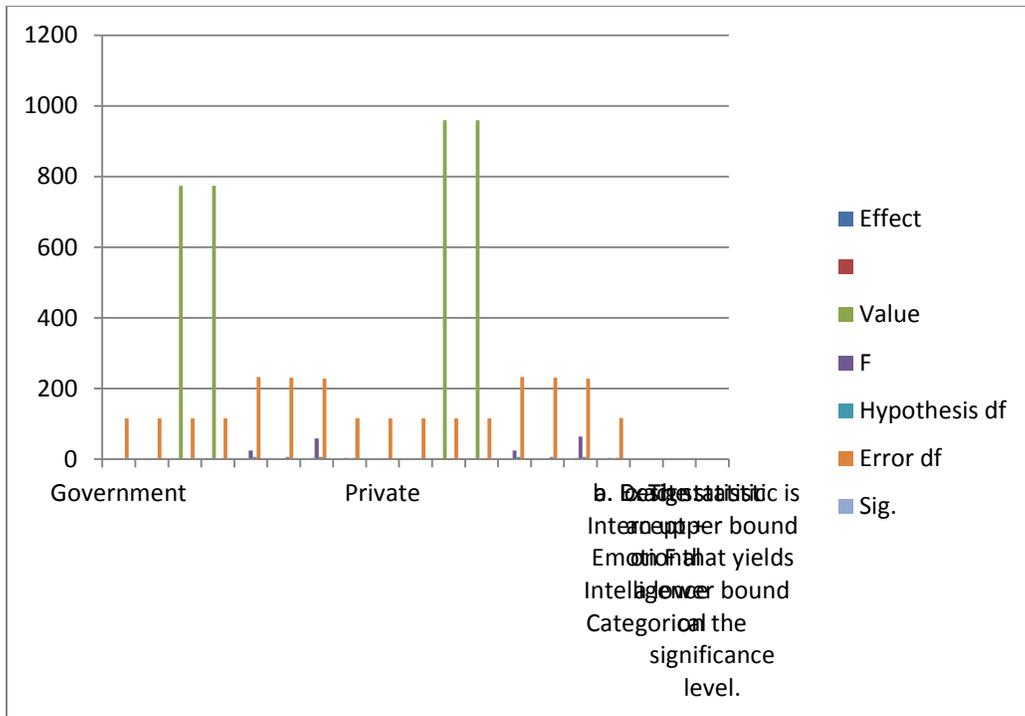
a. Design: Intercept + Emotional Intelligence Categorical

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

We have Wilks' Lambda test p-value statistically significant ( $<0.05$ ), hence we conclude that linear combination of Cognitive and Marks Obtained differs between different levels of Emotional Intelligence of both government and private school students. The p-values, statistic values for Wilks' Lambda are given in above table no.4.11. Hence the hypothesis stated that there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to their types of school (Government/Private) is rejected. So emotional intelligence has a significant effect on the student's cognitive difficulty and academic achievement of students. The p value is less than alpha 0.05 level of significance which shows that emotional intelligence determines the cognitive difficulty and academic achievement of students. So it displays that emotional intelligence has a positive significant effect on cognitive difficulty and academic achievement of both government and private school students.

(K)



**Table No.4.12: Tests of Between-Subjects Effects of hypothesis there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to types of school (government/private).**

**Table No. 4.12: Tests of Between-Subjects Effects**

| Types of School | Source                             | Dependent Variable   | Type III Sum of Squares | df  | Mean Square | F         | Sig. |
|-----------------|------------------------------------|----------------------|-------------------------|-----|-------------|-----------|------|
| Government      | Corrected Model                    | Cognitive Difficulty | 4581.270 <sup>a</sup>   | 3   | 1527.090    | 103.832   | .000 |
|                 |                                    | Academic Achievement | 145946.997 <sup>b</sup> | 3   | 48648.999   | 38.694    | .000 |
|                 | Intercept                          | Cognitive Difficulty | 1111641.098             | 1   | 1111641.098 | 75583.940 | .000 |
|                 |                                    | Academic Achievement | 2555070.927             | 1   | 2555070.927 | 2032.233  | .000 |
|                 | Emotional Intelligence Categorical | Cognitive Difficulty | 4581.270                | 3   | 1527.090    | 103.832   | .000 |
|                 |                                    | Academic Achievement | 145946.997              | 3   | 48648.999   | 38.694    | .000 |
|                 | Error                              | Cognitive Difficulty | 1706.055                | 116 | 14.707      |           |      |
|                 |                                    | Academic Achievement | 145843.595              | 116 | 1257.272    |           |      |
|                 | Total                              | Cognitive Difficulty | 3456969.000             | 120 |             |           |      |
|                 |                                    | Academic Achievement | 10048483.000            | 120 |             |           |      |
|                 | Corrected Total                    | Cognitive Difficulty | 6287.325                | 119 |             |           |      |
|                 |                                    | Academic Achievement | 291790.592              | 119 |             |           |      |

|         |                                    |                        |                        |     |             |           |      |
|---------|------------------------------------|------------------------|------------------------|-----|-------------|-----------|------|
| Private | Corrected Model                    | Cognitive Difficulty e | 3443.382 <sup>c</sup>  | 3   | 1147.794    | 88.381    | .000 |
|         |                                    | Academic Achievement   | 99211.566 <sup>d</sup> | 3   | 33070.522   | 103.128   | .000 |
|         | Intercept                          | Cognitive Difficulty   | 801510.342             | 1   | 801510.342  | 61716.653 | .000 |
|         |                                    | Academic Achievement   | 1659408.200            | 1   | 1659408.200 | 5174.721  | .000 |
|         | Emotional Intelligence Categorical | Cognitive Difficulty   | 3443.382               | 3   | 1147.794    | 88.381    | .000 |
|         |                                    | Academic Achievement d | 99211.566              | 3   | 33070.522   | 103.128   | .000 |
|         | Error                              | Cognitive Difficulty   | 1506.485               | 116 | 12.987      |           |      |
|         |                                    | Marks Obtained         | 37198.401              | 116 | 320.676     |           |      |
|         | Total                              | Cognitive Difficulty   | 3478392.000            | 120 |             |           |      |
|         |                                    | Academic Achievement   | 8228662.000            | 120 |             |           |      |
|         | Corrected Total                    | Cognitive Difficulty   | 4949.867               | 119 |             |           |      |
|         |                                    | Academic Achievement   | 136409.967             | 119 |             |           |      |

a. R Squared = .729 (Adjusted R Squared = .722)

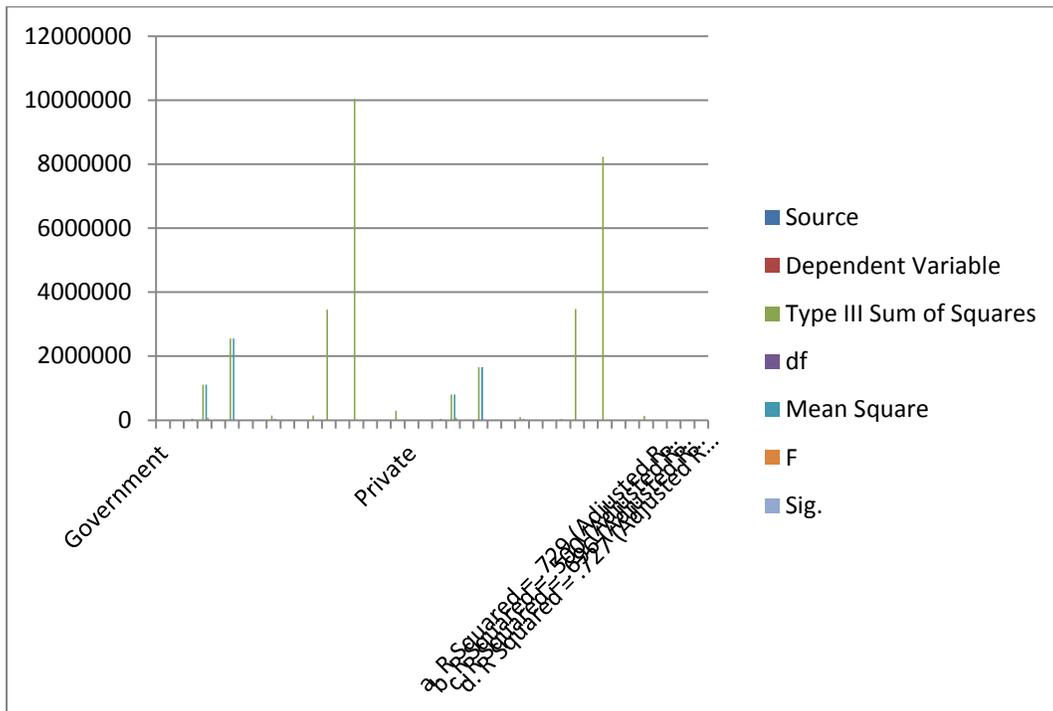
b. R Squared = .500 (Adjusted R Squared = .487)

c. R Squared = .696 (Adjusted R Squared = .688)

d. R Squared = .727 (Adjusted R Squared = .720)

From the above table, it is demonstrated that the difference in cognitive scores between different levels of Emotional Intelligence as well as marks obtained scores between different levels of Emotional Intelligence differ statistically in both government and private school students (p-values for Cognitive Difficulty and Academic Achievement are less than 0.05 level of significance). So the hypothesis stated that there will be no significant Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to their types of school ((government/private) is rejected.

(L)



## **Main Findings, Educational Implications and Suggestions**

### **A. Main Findings:**

The main findings of the current study are as given below

1. There is a significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students.
2. There is a significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students with reference to gender(boys/girls)
3. There is a significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students with reference to locality(rural/urban)
4. There is a significant impact of emotional intelligence on cognitive difficulty and academic achievement higher secondary students with reference to type of school (government/private)

### **Educational Implications**

The present study was particularly aimed to study the impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students with reference to gender, locality and recognition of schools. It can be asserted after analysis and interpretation of data that emotional intelligence plays a very massive role in determining the cognitive difficulty and academic achievement of students. These results have very significant importance for the teachers who are the accountable personnel for the student's carrier. The teachers who are called as 'nation builders' must actively engaged in all curricular and co-curricular activities of the school so that students can avail more opportunities and benefits for enlighten their prospective future.

For the classroom implication, it is the supreme duty of the teacher that first of all he/she should analyze and observe the students intelligence, attitudes, aptitudes, and abilities, stage of development, readiness, and motivation etc. before starting the teaching. The teacher should also know about the student's emotions, feelings, sentiments and provide him every kind of opportunity to explore his experience and make an endeavor to give their best in every discipline. The teacher can never be an effective

unless or until he keeps in consideration the needs and aspirations of the students. The teacher should organize the classroom activities in such a way that the students get equal opportunity for participation. The school should organize those kinds of programmes that not only improve the academic achievement of students but also play a very gigantic role in the all-round development of personality. The teacher should also use various modern teaching strategies and teaching aids in order to facilitate the teaching learning process. Interest oriented activities may also be used by the teacher for improving and enhancing the learning outcomes of the students.

Curriculum which is the corner stone of whole educational process includes all those activities and deeds which are being played inside and outside the four walls of the classroom. The all kinds of experiences provided to learners in and outside the classroom to bring about desirable changes in their behavior is known as curriculum. Curriculum is the basis for achieving the educational aims and objectives and it is also realized that the teacher's attitude towards students are also a part of the curriculum. It should be kept in the minds of the curriculum framers that such kind of activities should be included in the curriculum by which students can reduce their cognitive learning difficulty and can improve their academic performance.

Self-study, parent's liberal attitude and congenial environment may also be big factors in determining the better performance of students. Self-study overhauls all the aspects of the mind which may diminish the cognitive difficulties of students and can play a significant role in the academic achievement of students. The person having good emotional intelligence, low level of cognitive difficulty and good academic achievement always lead himself towards the betterment of himself and for the society as a whole.

### **C. Suggestions for Further Research**

By the limitations suggested for study it is realized that during the course of research work, the suggestions for further research are put forth:

The current study was conducted on 12<sup>th</sup> class higher secondary students of Jammu district of J&K state only. This study can also be conducted in other districts of J&K state and the other states of India. In this present study a sample of 240 students were selected. This

study can also be conducted on a large sample. The present study is restricted to both government and private higher secondary school students of Jammu district. The young researchers can also conduct this study in a comparative manner with Kashmir division and any other state of India. This type of study can also be conducted on emotional intelligence, cognitive difficulty and academic achievement of the college going students also.

### **National Importance of the Study**

In digital modern India the scientific research and technologies changed the life scenario of education and an individual at both national and international levels. Research has influenced the educational process from every angle by its immense scope and implications. The current study demands that emotions are the basis of everything what people do, feel, act, taking decision, making judgement and the basis of characteristics of personality. Academic achievement is regarded as one of the fundamental aims at national level within the realm of education that can be a measure of the achievement of the end goals of an individual's and an educational system's success in the future. Emotional intelligence plays a gigantic role in predicting the academic performance of students. Good academic achievement is the key to success in personal and professional life and it also fetch economic security and social respect. Academic achievement largely depends on the students cognitive and non- cognitive factors like, aptitude, achievement motivation, socio-economic conditions, attendance, personality traits and teaching learning methods. Good academic achievement of students displays their punctuality, sensitivity, gregariousness, intelligence and emotional maturity. Cognitive difficulty of students refers to their problems having in general awareness, concentration attention, perception, and reading difficulty, learning, memory and problem solving. Forgetting is another main factor of cognitive psychology which has an immense role in determining the cognitive difficulty of students at different levels. In the classroom, it is an established fact that the teacher must be acquainted with the interest, readiness and motivation of students in the classroom. Yet it is recognized that initially, the teacher should also know the ability, aptitude, intelligence, comprehension, cognitive abilities and emotional maturity of students. In order to make teaching learning process interactive and effective

the teacher must have the knowledge about all the above mentioned cognitive and non-cognitive factors.

Now a day's education has a very wide scope in the global world and competition is at its peak among students to top. It is difficult for students to manage their emotions so that they can face different situations in the school life. It is not an easy task to cope with emotions in order to best performance. The prediction for achieving success is mostly indicated by the emotional measures and the guardian and teachers are always found eager, to develop the intelligence of students and they are putting laid emphasis on their emotions for better academic performance. It has been analyzed that a student is affected by emotions in several ways. Keeping in view the progress and prosperity of educational system in the current scientific world this study wants the noble attention of educational policy makers, curriculum framers, teachers and parents at both state and national level research conducting agencies, political leaders in order to promote and improve the educational standards at national level. The latest teaching pedagogies and teaching techniques implemented at national levels in every school, college and university play a very gigantic role in improving and enhancing the performance of both teachers and taught at a very rapidity. Hence these modern trends in education has a prerequisite role in knowing the emotional maturity, motivation, readiness, aptitude, level of development, and cognitive abilities of students. The present study illumines the way for educational reformers at both state and national levels to identify the prevailing defects and to reform, renovate and overhaul the whole educational system.

## SUMMARY

### Conceptual Framework

Emotional intelligence has always been considered to be a very important factor in the educational life of an individual, as emotions not only motivate us for some action but also helps in analyzing the goals of life. The concept of emotional intelligence has emerged as a novel concept or idea which accelerates the growth of different disciplines such as, psychology, management and education. This term got existence when it was realized that the individuals having high intelligence quotient (IQ) had not been succeeded in their day to day life rather than those who had average intelligence quotient (IQ). It has been analyzed and investigated by the researches that intelligence quotient has only 20% contribution in the life success of an individual; where as 80% role is being played by several other factors. Thus for the good survival and success of life we have a critical need to be emotionally well-being. Charles Darwin was the first person who throws light on the values of emotions. According to him emotional system plays a significant role in the daily life of an individual. We cannot stop our emotions because they always happen in response to other situations and people. **Charles Darwin** wrote – in ‘The Expression of the Emotions in Man and Animals’ (1872/1998) – about the functional purpose of emotions. **Darwin** believed that emotions ensured survival by energizing required behaviour and also suggested valued information 'Darwin established that emotional expression plays a dynamic role in adaptive behaviour, which remains an important maxim of emotional intelligence to the present day' (**Bar-On 2001, p. 83**). Cognitive psychology takes us in the direction of studying all its related aspects of mental processes and their vital role in thinking, feeling, and behaving. The other major broad categories of this study are memory, perception, acquisition of knowledge and expertise, comprehension, understanding and production of language, problem solving, creativity, decision making and reasoning etc. Emotional intelligence can also reduce your cognitive difficulty or load which may result in good academic achievement of students. By decreasing the level of cognitive difficulty may increase the chance of success in life. Academic achievement has been determined as important goals of life, because it predicts your future success. Education is unique asset and academic achievement is an essential

element of it. The term academic achievement shifts one's notion to execute on the course materials and it also states the differentiation between the types and quantity of tasks that the students participate and that they execute at the initial or at the culmination of the course. It has been found a wrong decision for evaluators to result the students' performance in terms of high and low achievement which is identical with over and under achievement. It is recognized in the current era of education that the academic achievement is well-thought-out as the chief concern of the students, teachers and parents. According to **Clifford et al. (1986)**, achievement is the task oriented behavior that allows the individual's performance to be evaluated according to some internally and externally imposed criterion. It always persists in the minds of an individual to get high academic achievement so that he may go not only for a university education but also can apply and get an appreciated and treasured job in the society. So the educational status of an individual in a society is greatly depicted through the academic achievement.

### **Emotional Intelligence**

It is evident from the literature, and is proven by the researches that emotional intelligence (also known as Emotional Quotient) has a pre-requisite role in everything, every action, every decision, and in every judgement of an individual. It is expected that emotions not only drive us to act but it also provides its help and guidance in determining the aims, objectives and goals of life as well, and it also attempts for pleasant ends and avoiding unpleasant one. In the current situations it is well known that the number of difficulties faced by children and youth may give rise to many psychosomatic problems which lead to anxiety, tensions, and frustrations and emotional upsets in everyday life. Emotional intelligence not only satisfies our longings but it also makes us competent in our own field. It is frequently seen that each and every individual get some experiences and relays their spirits and emotions in every day of life. Good emotions of a person can create for him a congenial environment in order to get cherished information about relations, associations, interactions behavior and about every aspect of life. The number of researches conducted in recent times in the said field proposes that emotions are constructive and productive and it could be beneficial at each stage of education for students, if it play its significant role in order to improve and boost their performance or

achievement in their personal life. Emotional Intelligence refers to “the capacity to understand emotional information and to reason with emotions” **John D. Mayer & Peter Salovey (1990)**. By getting the attributes of emotional intelligence in life, one becomes the competent to perceive, process, regulate and manage the emotions which further lead him to good personality development. Emotional intelligence is defined as “The ability to perceive emotion, integrate emotion to facilitate thought, understand emotions, and to regulate emotions to promote personal growth” (**Mayer & Salovey 1997**).

### **Cognitive Difficulty**

The concept of cognitive difficulties is exceedingly comprehensive and not well-defined. In floppy terms cognitive difficulty refers to the problems and issues related with general awareness, concentration, attention, perception, and reading difficulty, learning, memory and problem solving. In spite if an individual is having trivial cognitive difficulty then he may be able to function and work adequately. The individuals having the deep cognitive difficulty impedes their day to day functioning (**Broadbent, Cooper, Fitzgerald and Parkes, 1982; Lason, Alderton, Meideffer and Underhill, 1997**). The term cognitive refers to the general perspective which involves attention, perception, learning, memory, reasoning, decision making and problem solving etc. It is usually seen that every individual can learn, remember, reason and solve problems with prodigious accuracy. When we go and think through the general perspective the term cognition is often influenced by peripheral forces that may lead an individual to amiss. The identified and systematic errors are occurred by inclined processes of memory and reasoning. It has been analyzed and observed that individuals are likely to misunderstand the information that is frequently accessible to them. Many times the situations occur when this accessible information is not found optimally associated and related to the problem at the finale. Generally at the very occasions it is seen that individuals in the course of cognitive processing left behind the important information. According to the viewpoint of cognitive psychologists they often attempt to study and separate the function of specific cognitive processes as according to them cognitive processes function together. At many stages the communication between cognition and other processes occur which works in making interaction with other such systems.so it should be kept in mind that there are massive

factors which always regulate the direction and intensity of behavior. The cognitive difficulty of an individual may always result in deterioration in the psychological health of an individual. If an individual has cognitive difficulty, then it is assumed that he is unable to concentrate over the work he is doing and he always face difficulties in learning, remembering, taking judgements in different situations, giving late respond to what the people say to him, doing mistakes in counting the amount while purchasing anything etc.. Meanwhile the cognitive difficulty phenomenon could span over a variety of constituents for example, attention, perception, learning, recent memory, remote memory, spatial memory, forgetting, judgement, intuition, reasoning, decision making and problem solving etc.

### **Academic Achievement**

The term academic achievement always refers its glance towards the success and pleasure of an individual. This term is constantly considered as nebulous because it does not embrace so much that it could be defined in definite terms. Nevertheless, the academic achievement of an individual comprises of his/her abilities, capabilities, skills to do hard work, aptitude etc. **According to Rao (1980)** achievement is concerned to a great extent with the development of knowledge, understanding and acquisition of skills. It has extensively been observed that it is among the important goals and objectives of life which after getting, provide lots of pleasure for one in his/her life. According to the conducted researches in the said field it has been analyzed that, several factors play its gigantic role in the academic achievement of an individual which are functioning and operating within the individual and in his external environment. The intellectual, emotional and environmental are the fundamental factors which greatly influences the academic achievement variable of students. It has also been revealed from the researches that the students having high IQ and are highly creative students can bestow their best to various kinds of achievements in every competitive field. Moreover the school systems typically express or embrace the acquisition of knowledge and comprehension in an unambiguous intellectual province of e.g., numeracy, literacy, science, history etc. Good academic achievement reveals the aptitude of students which implies the prediction of their future life and it indicates both the EQ and IQ level of students. The better achievement at

different competitive stages of life also indicates the student's adjustment, good mental health, psychologically well-being, convergent thinking, emotional maturity, motivational state etc. It is recognized that from birth to death a person always endeavors to achieve more and more by getting education because education has the quality to infuse in a child a sense of ripeness and accountability by fetching in him anticipated modifications according to his requirements and demands of eternally changing society.

### **Significance of the Study**

In 21<sup>st</sup> century, the world of scientific technologies the life of an individual moves from simple to very complex. In order to be settled in life one has to face very tremendous challenges in the prevailing situations of the society. In order to face these challenges one must have the ability to fight against this, so that he can make his life flexible, adjusted in the society, get renowned and achieve every success. Every individual in the society wants to be respected by others, loved by others and have self-esteem. Emotions are the basis of everything what people do, feel, act, decision, making judgement and the basis of characteristics of personality. Academic achievement is regarded as one of the fundamental aims within the realm of education that can be a measure of the achievement of the end goals of an individual's and an educational system's success in the future. Emotional intelligence plays a gigantic role in predicting the academic performance of students. Good academic achievement is the key to success in personal and professional life and it also fetch economic security and social respect. Academic achievement largely depends on the students cognitive and non- cognitive factors like, aptitude, achievement motivation, socio-economic conditions, attendance, personality traits and teaching learning methods. Good academic achievement of students displays their punctuality, sensitivity, gregariousness, intelligence and emotional maturity. The researcher signifies a study in the sense that how and why emotional intelligence bears its impact on the cognitive difficulties and Academic achievement of higher secondary students.

### **Statement of the Problem**

**On the basis of the above discussion the problem can be stated as under:**

## **“Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students”**

### **Definitions of the Key Terms**

#### **Emotional Intelligence:**

Emotional intelligence in this study brings up to the five different abilities such as, self-awareness, managing emotions, motivating one-self, empathy and handling relations with others. The five mentioned abilities have been reflected as the indication of emotionally well-being. Henceforth the related abilities in this investigation refer to the measurement of ‘Emotional Intelligence’ by using the Emotional Intelligence Test.

#### **Cognitive Difficulty:**

According to the investigation cognitive difficulty states the problems and difficulties related with general awareness, concentration, attention, reading, learning, memory, comprehension, understanding, forgetting and problem solving etc.

#### **Academic Achievement:**

The term may be well-defined as an execution or improvement in a performance conceded successfully by an individual or a group of individuals at the end of an academic task. In the present study it was stated that the percentage of aggregate marks obtained by a certain student of 12<sup>th</sup> class student in his/her 11<sup>th</sup> class in the end term examination was considered their academic achievement.

#### **Higher Secondary School:**

A higher secondary school is that type of school where students are given secondary education. The students admitted in these schools typically fall between the age group of 17-19, after secondary education and before higher education.

#### **Objectives of the Study:**

**Present study is designed to achieve the following objectives:**

- 1) To study the impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students.
- 2) To study the impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of class higher secondary students with reference to Gender (Boys/girls)
- 3) To study the impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of higher secondary Students with reference to locality (Rural / Urban)
- 4) To study the impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of higher secondary students with reference to type of school (Government/Private).

**Hypotheses of the Study**

**In the light of the above objectives the hypotheses of the study can be formulated as under:**

- 1) There will be no significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students
- 2) There will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to Gender (Boys/girls).
- 3) There will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to locality (Rural / Urban).
- 4) There will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to type of school (Government/ Private).

**Delimitations of the Study**

1. The present study is delimited to only district Jammu.
2. The study is delimited to only 12<sup>th</sup> class students.

3. The study is delimited to government and private higher secondary schools of Jammu district.
4. The sample of the present study consists of 300 students only.
5. The investigation has been confined to 8 higher secondary schools of Jammu district.

## **Research Gap**

The researcher had reviewed many researches and found that the researches was conducted on various related areas. The one study found that Emotional Intelligence and academic achievement are correlated with each other. The good IQ level is not the sign of the lofty academic achievement of students. There may also be other factors which play the accountable role in high academic achievement of students. The another study is on Emotional Maturity of adolescents to intelligence, academic achievement and environment catalysts. As per this study it was established that there is highly positive significant correlation between general intelligence and emotional maturity. From the investigation of the study it was known that the high IQ level students have high emotional maturity and the vice versa. In this study it was also established that the students with good academic achievement have high IQ level. The emotional maturity plays a very gigantic role in the academic achievement of students. A study also found that there is a significant relationship of emotional maturity with intelligence, academic achievement and environmental catalysts. One study was conducted on to know the effects of emotional intelligence on gender wise (male and female) where the emotional intelligence of males and emotional intelligence of females indicates a significant difference in self-control and academic achievement. In the year 2002 the Maree and Ebersohn was conducted a study to determine the probable connotation of the construct emotional intelligence where the major impact on emotional intelligence puts not only on the qualitative level of intelligence actualization but also it influences the quantitative level of intelligence measurement and scholastic achievement. Few studies shows that that the capability to measure the emotional intelligence based on a cognitive framework may be the forecast of better academic achievement than the self- report of emotional intelligence measures. The persons who are emotionally mature and fit should be capable

to identify, understand experience and express human emotions in a vigorous, creative and dynamic ways. Few studies were based on emotional intelligence corroborates and compliments academic achievement of students. It was found that adolescents with higher level of responsibility perform better on scholastic performance, in adjustment and are more positive. In the year 2004 Petrides et.al. was conducted a research to know the relationship between the emotional intelligence, cognitive ability and academic performance of students. In this study the investigators were interest to know whether there is any significant relationship of emotional intelligence with cognitive ability and academic achievement or not. It was also established that cognitive relations between emotional intelligence and deviant school behavior, such as unlawful, absence and expulsion. The result of one study was revealed that there was a highly positive correlation between emotional intelligence and academic achievement of students and another study shows the relationship of emotional maturity of adolescent students with the cognitive and non-cognitive variables where the students who have good IQ level they display high class of emotional maturity and which reflects their good behavior and a dynamic personality. In the year 2006 Gakhar, S.C. E' Manhas, K.D. had conducted a study where significant correlation between Emotional Intelligence, Intelligence, Creativity and academic achievement were discussed. Many studies were conducted on emotional intelligence and a very few studies were conducted on cognitive difficulty. Pamela Qualter, Kathryn J. Gardner & Helen E. Whiteley in his study depicted the utility and efficacy of the term emotional intelligence in the field of research by making a critical analysis, and they also examined in their study the convenience of the construct of emotional intelligence in the debate on educational policy and practice. The investigators examined two major approaches of emotional intelligence to the theory and measurement and a bridge the proof and conformation of linking the term emotional intelligence to the life success and academic achievement. The researcher conclude that whereas the different constructs of emotional intelligence relics under discussion, among them some of the attributes encompassed by the term emotional intelligence can forecast that success of life and socio emotional programs of learning in schools can beneficially devote to the development of the different attributes. Ton de Jon in the year 2009 had written in the literature of educational research the cognitive load is a theoretical concept which plays a

progressively vital role in it. The fundamental thought of cognitive load theory is that cognitive capability of functioning in memory is restricted with the attention that if a learning task needs too much ability, learning will be hindered. It is recommended that instructional system should be designed so much that optimize the utilization of working memory ability and evade cognitive surplus. The educational research significantly has been sophisticated by cognitive load theory and it has been used to explain and clarify a big and bulky set of experimental findings. In this research article the open questions were explored to set out and the demarcations of cognitive load theory by verifying a number of problematic conceptual methodological and application related issues. In this study it is concluded by pre-scenting research plan for further studies of cognitive load. There was one paper written by Richard Menary which asserts that cognitive abilities and cognitive character and its expansion in integration terms should be kept in consideration. The obtained and acquired practice and experience of generating information that is gathered and saved in an openly assessable environment may play a positive role in the expansion of cognitive abilities. The investigator identifies these cognitive abilities (2007). He said that such process is incorporated with our cognitive character as compared to artifacts; for instance notebooks. In the current research paper the investigator were very interested about the two paths to cognitive expansion that he compared in the paper. The first one he calls artifact extension which is in the current classic and standard position of the pivotal connection of a representative with an artifact. As compared to this acculturated cognition, does not grievance that artifacts themselves expanded our cognitive abilities, but to a certain extent the obtained and acquired practices for controlling and operating artifacts and the information saved in them expand our cognitive abilities. According to the investigation the investigator present a sequence of arguments and cases which reveal that an acculturated approach plays a better role for the both epistemic and cognitive cases of the diffusion of ability and character. H. Brissart , M. Leroy, E. Morele, C. Baumann, E. Spitz & M. Debouverie said that in multiple sclerosis (MS) in cognitive impairments are often found. In terms of methods and designs the efficiency and usefulness of cognitive treatment and remedial interventions and interference have been discharge in the majority of the study. The investigators prepared and framed the objective to judge the effectiveness of cognitive remediation and therapy in MS patients with a cognitive

intervention (ProCogSEP program), against to a control intervention . There were two neuropsychologists correspondingly who appraised the patients and conducted the group discussions. As against to its own baseline ProCog-SEP Group displayed development in verbal memory [free recall ( $p = .02$ ), learning ( $p = .002$ )], in visual memory [free ( $p = .05$ ) and delayed recall ( $p = .007$ )], in working-memory ( $p = .03$ ), in verbal fluency ( $p = .05$ ) and in language ( $p = .01$ ). Primarily in verbal and visual memory and in verbal fluencies intergroup analysis displays advantage of cognitive program. Some studies shows the cognitive status (GCS) a complex and multiple of cognitive abilities which are reflecting full function. According to the research works and other related literatures it has been found that there is a significant relationship between cognitive processing speed and GCS as well as age related alterations of processing speed on cognitive performance. Houman Alipour & Mohamad Goldust in the year 2015 studied to judge and evaluate the relationship between blood pressure components and cognitive functions and cognitive reserve. It is seen that hypertension makes use of a slight and delicate impact on the brain that is demonstrated by reduced cognitive function. The investigators conducted a cross-sectional study on 500 subjects who were assessed and estimated from general population. The neurological tests which were employed showed a negative relationship with age, memory and there were positive relation of executive function and education. According to the outcome and findings of the investigation it has been seen that hypertensives (HT) were less effective and useful than the normotensives (NT) in the test of memory with interference at 10 s (MI-10) ( $-32\%$ ,  $p = 0.043$ ), clock drawing test (CLOX) ( $-26\%$ ,  $p < 0.001$ ), and mini-mental state examination (MMSE) ( $-7.4\%$ ,  $p = 0.02$ ). Lower MMSE, MI-10, and CLOX were predicted by higher systolic (OR, 0.94,  $p = 0.032$ ; OR 0.96,  $p < 0.001$ ; OR 0.94,  $p < 0.001$ ) and higher pulse pressure (BP) (OR 0.95,  $p = 0.04$ ; OR 0.97,  $p < 0.001$ ; and OR 0.92,  $p < 0.001$ ). The cognitive reserve index (CRI) was 8% lower in the HT ( $p = 0.04$ ) and was predicted by higher pulse BP (OR 0.86,  $p < 0.001$ ). The BP vectors of lower MMSE, MI-10, and CLOX were associated with higher values of systolic and diastolic BP, whereas CRI was low towards higher systolic and lower diastolic. One study shows both the cognitive biases and emotion regulation(ER) difficulties are influential and helpful in comprehending characteristic features of depression. Though about interplay, it is known that it plays an important role as risk factor to depression. The

investigators conducted a cross-sectional study in order to investigate and find how the consequent use of ER process are adopted and changed by multiple cognitive biases, and it is also seen that how depressive symptoms are normalized. Controlled and adjusted by ER habits consequently. In the study all the participants first completed a computerized version of the scrambled sentences test, when their movements of eye were registered and then they also accomplished questionnaires judging and assessing positive reappraisal, brooding and depressive symptoms. There is a direct effect of both path and bootstrapping for cognitive biases on depressive symptoms and indirect effects through the use of reappraisal that was in turn associated to the use of brooding. According to these results and findings a superior and enhanced thought of how cognitive biases and ER habits interact to maintain depressive symptoms.

In the current research study the topic chosen by the investigator has not been investigated earlier. By making a review of earlier researches, articles, journals, conference papers and working- papers associated with my topic, it is now clear that the investigator by his sincere efforts did not find any study which has been done either in the country or abroad earlier on the present topic. The topic selected for investigation is new and yet have not been investigated, that is why the researcher has got the attention for this topic. Hence the novelty of the topic is also one of the reasons which motivated the researcher to select the said topic for the present study. The above review reveals that many scholars have studied the different factors which affect the academic achievement of the students. However this comprehensive and concise research work laid emphasis on studying the correlated variables of emotional intelligence, cognitive difficulty and academic achievement.

### **Variables Studied**

The variables that have been studied in the present study are as under

1. Emotional Intelligence
2. Cognitive Difficulty
3. Academic Achievement

### **Selection of the Tools**

It is seen in every type of research that the investigator needs such kind of instruments to collect certain evidences and explore them in new arenas. The instruments which are used are called tools. In the current research study the researcher employed the following standardized tools to collect data on the selected psychological variables:

1. **Emotional Intelligence Test of Dr. Ekta Sharma by Prasad Psycho Corporation New Delhi**

“Emotional intelligence refers to the capacity of recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in us and in our relationships” (Goleman, 1998). It describes abilities distinct from, but complimentary to, academic intelligence, the purely cognitive capacities measured by Intelligence Quotient (IQ). Many people who look smart but lack emotional intelligence end up working for people who have lower IQ than those but who excel in emotional intelligence skills. Howard Gardner gave one of the most influential theories of intelligence in 1983. He pointed out the distinction between intellectual and emotional capacities. His list of seven kinds of intelligence includes not just the familiar verbal and mathematical abilities but also two personal varieties: knowing one’s inner world and social adeptness. Mayor and Salovey (1993) gave a comprehensive theory of Emotional Intelligence describing it as, “A type of social intelligence that involves the ability to monitor one’s own and others’ emotions and to discriminate among them and to use this intelligence to guide one’s thinking and actions.”

Latest psychological research shows that an individual’s emotional quotient contributes much more vibrantly to one’s productivity and success in life than much researched IQ. Daniel Goleman (1995) says that as much as 80% of adult success in life than much comes from Emotional Quotient (EQ). In the present study, taking a wider view of intelligence, Emotional Intelligence has been categorized into five domains as has been explained by Daniel Goleman.

1. *Self-Awareness (SA)*: Knowing what we are feeling at the moment, and using those preferences to guide our decision making; having a realistic assessment of our own abilities and a well-grounded sense of self confidence.
2. *Managing Emotions (ME)*: Handling our emotions so that they facilitate rather than interfere with the task at hand; being conscientious and delaying gratification to pursue goals; recovering well from emotional distress.

3. *Self-Motivation (SM)*: Using our deepest preferences to move and guide us towards our goals, to help us take initiative and strive to improve, and to persevere in the face of setbacks and frustrations.
4. *Empathy (E)*: Sensing what people are feeling, being able to take their perspective, and cultivating rapport and atonement with a broad diversity of people.
5. *Handling Relationships (HR)*: Handling emotions in relationships well and accurately reading social situations and networks; interacting smoothly; using these skills to persuade and lead, negotiate and settle disputes, for cooperation and teamwork.

For the current research study the investigator employed Emotional Intelligence Test developed by Dr. Ekta Sharma. This test constitutes of 60 items from five domains of Emotional Intelligence i.e., Self Awareness, Managing Emotions, Motivating Oneself, Empathy, and Handling Relationships. The response pattern in the scale is of Likert type i.e., on a five-point continuum from always, most often, occasionally, rarely to never. As all the items are socially acceptable, though positively and negatively stated, the scoring for each statement in the scale is done in descending/ascending order for determining the emotional intelligence by giving a score of 5 for always, 4 for most often, 3 for occasional, 2 for rarely, 1 for never and reverse for negative items.

### **Reliability and Validity**

The five dimensions of emotional intelligence having the values of alpha reliability, the value of self-awareness is 0.667, for managing emotions the value is 0.604, for motivating one-self the value is 0.839, for empathy the value is 0.645 and for handling relationships the values is 0.837. Thus, it could be inferred that all the items are highly correlated and test developed is highly valid.

### **2. Cognitive Difficulty Scale by Dr. V. N. Yadav, Dr. Suraj Mal, Indu and Diksha by Prasad Psycho Corporation New Delhi first published in the year 2016.**

Cognition is a general term which involves attention, perception, learning, memory, reasoning, decision making, problem solving etc. In general an individual can perceive, learn, remember, reason and solve problems with great accuracy. It is generally assumed that cognition is influenced by external forces and it can lead to an individual astray.

Memories and reasoning processes, for example are susceptible to certain well identified, systematic errors. In general term it is observed that individuals tend to over value information that is easily available to them. It is done even when this information is not optimally relevant to the problem at end. Sometimes important information is left behind in the course of cognitive processing. Cognitive psychologists try to study and often isolate the function of specific cognitive processes because they consider that cognitive processes work together. Sometimes the interaction between cognition and other processes occur at many levels it works in interaction with other systems. Therefore, it is thought to be important that numerous factors which may determine the intensity and direction of the behaviour. If an individual has difficulty in cognitive processing it may result in deterioration in the psychological health of an individual. The cognitive difficulty may also be an indicator of prolonged heightened stress. There is no one right way to study cognition. Naïve researchers sometimes seek the best method by which they study cognition. Their search inevitability will be in vain. All cognitive processes need to be studied through a variety of covering operations. The varied methods of study seek a common understanding of cognition that may lead to the same concrete conclusions. For example, suppose studies of reaction times, error rates and patterns of individual differences all lead to the same conclusion. All these methods must be scientific. Non-scientific methods of study can commit errors and lead to wrong conclusions. To assess and identify cognitive difficulty in the individual has remained a problem due to various reasons and issues. However, there are host of measuring tests of cognition available all over the world, but there is a virtual scarcity of indigenous test. Hence, a need to develop a cognitive difficulty measure was perceived by the investigators and the present test was prepared for the purpose.

In the current study the researcher also employed Cognitive Difficulty Scale developed by Dr. V. N. Yadav, Dr. Suraj Mal, Indu and Diksha. This scale consists of 40 items which are having five five-point continuums from always, often, uncertain, sometimes to never. According to this scale a score of 5 for always, 4 for often, 3 for uncertain, 2 for some times, 1 for never and reverse for negative items.

### **Reliability and Validity**

As far as reliability of the construct is concerned, it was determined by test re-test method on a sample of 120 subjects and it was 0.82. The internal consistency reliability was determined by adopting odd even procedure. Using Spearman Brown formula, the reliability coefficient correlation of the test was found to be 0.89.

The validity of the test was determined by correlating the scores on the present measure with the scores of Broadbent et.al. (1982) cognitive failure measure. The coefficient of correlation was .66, which was significant beyond .001 level of confidence.

## **Findings**

The main findings of the current study are as given below

1. There is a significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students.
2. There is a significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students with reference to gender(boys/girls)
3. There is a significant impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students with reference to locality(rural/urban)
4. There is a significant impact of emotional intelligence on cognitive difficulty and academic achievement higher secondary students with reference to recognition (govt./private).

## **Educational Implications**

The present study was particularly aimed to study the impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students with reference to whole as well as in context of their gender, locality and type of schools. It can be asserted after analysis and interpretation of data that emotional intelligence plays a very massive role in determining the cognitive difficulty and academic achievement of students. These results have very significant importance for the teachers who are the accountable personnel for the student's carrier. The teachers who are called as

'nation builders' must actively engaged in all curricular and co-curricular activities of the school so that students can avail more opportunities and benefits for enlighten their prospective future.

For the classroom implication, it is the supreme duty of the teacher that first of all he/she should analyze and observe the students intelligence, attitudes, aptitudes, and abilities, stage of development, readiness, and motivation etc. before starting the teaching. The teacher should also know about the student's emotions, feelings, sentiments and provide him every kind of opportunity to explore his experience and make an endeavor to give their best in every discipline. The teacher can never be an effective unless or until he keeps in consideration the needs and aspirations of the students. The teacher should organize the classroom activities in such a way that the students get equal opportunity for participation. The school should organize those kinds of programs that not only improve the academic achievement of students but also play a very gigantic role in the all-round development of personality. The teacher should also use various modern teaching strategies and teaching aids in order to facilitate the teaching learning process. Interest oriented activities may also be used by the teacher for improving and enhancing the learning outcomes of the students.

Curriculum which is the corner stone of whole educational process includes all those activities and deeds which are being played inside and outside the four walls of the classroom. The all kinds of experiences provided to learners in and outside the classroom to bring about desirable changes in their behavior is known as curriculum. Curriculum is the basis for achieving the educational aims and objectives and it is also realized that the teacher's attitude towards students are also a part of the curriculum. It should be kept in the minds of the curriculum framers that such kind of activities should be included in the curriculum by which students can reduce their cognitive difficulty and can improve their academic performance.

Self-study, parent's liberal attitude and congenial environment may also be big factors in determining the better performance of students. Self-study overhauls all the aspects of the mind which may diminish the cognitive difficulties of students and can play a significant role in the academic achievement of students. The person having good

emotional intelligence, low level of cognitive difficulty and good academic achievement always lead himself towards the betterment of himself and for the society as a whole.

### **National Importance of the Study**

In digital modern India the scientific research and technologies changed the life scenario of education and an individual at both national and international levels. Research has influenced the educational process from every angle by its immense scope and implications. The current study demands that emotions are the basis of everything what people do, feel, act, taking decision, making judgement and the basis of characteristics of personality. Academic achievement is regarded as one of the fundamental aims at national level within the realm of education that can be a measure of the achievement of the end goals of an individual's and an educational system's success in the future. Emotional intelligence plays a gigantic role in predicting the academic performance of students. Good academic achievement is the key to success in personal and professional life and it also fetch economic security and social respect. Academic achievement largely depends on the students cognitive and non- cognitive factors like, aptitude, achievement motivation, socio-economic conditions, attendance, personality traits and teaching learning methods. Good academic achievement of students displays their punctuality, sensitivity, gregariousness, intelligence and emotional maturity. Cognitive difficulty of students refers to their problems having in general awareness, concentration attention, perception, and reading difficulty, learning, memory and problem solving. Forgetting is another main factor of cognitive psychology which has an immense role in determining the cognitive difficulty of students at different levels. In the classroom, it is an established fact that the teacher must be acquainted with the interest, readiness and motivation of students in the classroom. Yet it is recognized that initially, the teacher should also know the ability, aptitude, intelligence, comprehension, cognitive abilities and emotional maturity of students. In order to make teaching learning process interactive and effective the teacher must have the knowledge about all the above mentioned cognitive and non-cognitive factors.

Now a day's education has a very wide scope in the global world and competition is at its peak among students to top. It is difficult for students to manage their emotions so that

they can face different situations in the school life. It is not an easy task to cope with emotions in order to best performance. The prediction for achieving success is mostly indicated by the emotional measures and the guardian and teachers are always found eager, to develop the intelligence of students and they are putting laid emphasis on their emotions for better academic performance. It has been analyzed that a student is affected by emotions in several ways. Keeping in view the progress and prosperity of educational system in the current scientific world this study wants the noble attention of educational policy makers, curriculum framers, teachers and parents at both state and national level research conducting agencies, political leaders in order to promote and improve the educational standards at national level. The latest teaching pedagogies and teaching techniques implemented at national levels in every school, college and university play a very gigantic role in improving and enhancing the performance of both teachers and taught at a very rapidity. Hence these modern trends in education has a prerequisite role in knowing the emotional maturity, motivation, readiness, aptitude, level of development, and cognitive abilities of students. The present study illumines the way for educational reformers at both state and national levels to identify the prevailing defects and to reform, renovate and overhaul the whole educational system.

### **Suggestions for Further Research**

By the limitations suggested for study it is realized that during the course of research work, the suggestions for further research are put forth:

The current study was conducted on 12<sup>th</sup> class higher secondary students of Jammu district of J&K state only. This study can also be conducted in other districts of J&K state and the other states of India. In the present study a sample of 240 students were selected. This study can also be conducted on a large sample. The present study is restricted to both government and private higher secondary school students of Jammu district. The young researchers can also conduct this study in a comparative manner with Kashmir division or any other state of India. This type of study can also be conducted on emotional intelligence, cognitive difficulty and academic achievement of the college going students also.

## शोध सार

अध्ययन में परिकल्पित किया गया है जिसमें देखा गया है की किस तरह भावनात्मक बुद्धि का प्रभाव संज्ञानात्मक कठिनाई जम्मू और कश्मीर राज्य के जम्मू जिले के उच्चतर माध्यमिक छात्रों के उच्चतर शैक्षिक उपलब्धि पर पड़ा है। न सिर्फ उप पर ही बल्कि पूरे ही स्कूल पर जिन रिसर्च किया है। इलाके पर लिंग और विभिन्न प्रकार के स्कूल पर भावनात्मक खुफिया बहुत ही महत्वपूर्ण कारक समझा जाता है। जो छात्रों को आगे भविष्य में सहायक साबित होता है प्रभाव नियंत्रण और शैक्षिक प्रदर्शन स्क्रीनिंग पर इ आई एक महत्वपूर्ण कारक है। छात्रों की सफलता उनकी बुद्धि पर निर्भर करता है जो उनको प्रगति और समृद्धि प्रबुद्ध करता है और उनको व्यक्तिगत लक्ष्यों को प्राप्त करने के लिए आशावादी बनता है। संज्ञानात्मक कठिनाई दूसरी और समस्याओं और कठिनाई से संदर्भित करता है। जिनका संबंध सामान्य जागरूकता एकाग्रता ध्यान ध्यान और पढ़ने में कठिनाई सीखने स्मृति और समस्या को सुलझाना। शोधकर्ता द्वारा अध्ययन को पूरा करने के लिए वर्णनात्मक सर्वेक्षण विधि द्वारा नियोजित किया गया है। इस अध्ययन में जम्मू जिले के आठ विभिन्न सरकारी और निजी उच्च माध्यमिक स्कूल के १२ वीं कक्षा के २४० छात्रों के नमूने का चयन किया गया। यह कार्य लगभग एम्फिल शोध प्रबंध पर आधारित है। प्रस्तुत शोध कारक में शोध कर्ता मनोवैज्ञानिक स्तर पर डाटा एकत्र करने के लिए दो मानकी कृत उपकरणों का प्रयोग किया गया जिन में फेला भावनात्मक बुद्धि परीक्षण डाक्टर एकता शर्मा (Dr. Ekta Sharma by Prasad Psycho Corporation New Delhi) और दूसरा संज्ञानात्मक कठिनाई पैमाना (Dr. V.N. Yadav, Dr. Suraj Mal, Indu and Disha by Prasad Psycho Corporation New 2016) इस अध्ययन के परिणामों से यह पता चलता है की यहाँ संज्ञानात्मक कठिनाई और उच्चतर माध्यमिक छात्रों के शैक्षिक

उपलब्धि पर भावनात्मक बुद्धि का बहुत बड़ा प्रभाव पड़ा है इतना ही नहीं इसका प्रभाव लिंग पर इलाके पर और अन्य प्रकार के स्कूलों पर पड़ता है। डाटा का विश्लेषण और व्याख्या करने के बाद यह कहा जा सकता है की भावनात्मक बुद्धिसंज्ञानात्मक कठिनाई और छात्रों के , शैक्षिक उपलब्धि का अंदाजा लगाने में अहम भूमिका निभाई है। अनुसंधान ने प्रत्येक क्षेत्र में शैक्षणिक प्रक्रिया को प्रभावित किया है। वर्तमान अध्ययन की मांग है कि लोग जो कुछ भी करते हैं, महसूस करते हैं, कार्य करते हैं, निर्णय लेते हैं और व्यक्तित्व की विशेषताओं का आधार रखते हैं। अकादमिक उपलब्धि को राष्ट्रीय स्तर पर शिक्षा के दायरे में मौलिक उद्देश्यों में से एक माना जाता है जो कि किसी व्यक्ति के अंतिम लक्ष्यों की उपलब्धि और भविष्य में शैक्षणिक प्रणाली की सफलता का एक उपाय हो सकता है। छात्रों की संज्ञानात्मक कठिनाई सामान्य जागरूकता, एकाग्रता ध्यान, और पढ़ने में कठिनाई, सीखने, स्मृति और समस्या को हल करने में उनकी समस्याओं का संदर्भ देती है। वर्तमान अध्ययन मौजूदा दोषों की पहचान करने और पूरे शैक्षिक तंत्र में सुधार, नवीनीकरण और समस्त जन तक शिक्षा का विस्तार करने के लिए राज्य और राष्ट्रीय दोनों स्तरों पर शैक्षिक सुधारकों के लिए मार्ग प्रशस्त करता है।

## References

- AbdullahI, O. E. (2009). Introducing Emotional intelligence in the Nigeria Higher Education. Department of Arts & Social Sciences Education, Faculty of Education, university of Ilorin, Ilorin, Nigeria.
- Ajay Kumar Bhimrao Patil. (2006). Emotional Intelligence Among Student Teachers in Relation to Sex, Faculty and Academic Achievement. *Edutracks*, Vol.5, Nov., NO.7, Hyderabad : Neel Kamal Publications Pvt.Ltd.
- Altun, A., & Cakan, M. (2006). Undergraduate students' academic achievement, field dependent/independent cognitive styles and attitude toward computers. *Journal of Educational Technology and Society*, 9, 289.
- Arthur S Elstein (2002) Clinical problem solving and diagnostic decision making: selective review of the cognitive literature, *BMJ* 2002;324:729
- Augustin de Coulon & Elena M. & Anna V. (2011). "Parents' skills and children's cognitive and non-cognitive outcomes," *Education Economics*, Taylor & Francis Journals, vol. 19(5), pages 451-474, July.
- Barchard, K.A. (2003). Does Emotional Intelligence Assist in prediction of Academic Success. *Educational and Psychological Measurement*, 63(5), 840-858. Retrieved from [www.epm.sagepub.com/content/63/5/840.short](http://www.epm.sagepub.com/content/63/5/840.short).
- Berenson, Boyles and Weaver (2008). Emotional Intelligence as a Predictor for Success in Online Learning. *The international review of research in open and distributed learning(IRRODL)*.Vol.9.
- Bradberry, T., & Greaves, J. (2005). *The emotional intelligence*. New York: Simon and Schuster.
- Bruni, O. Ferini- Sterambi, L., Russo, P. M., Antignani, M., Innocenzy, M., and Ottaviano (2006) Sleep Disturbances and Teacher Rating of School Achievement and Temperament in Children.*Sleep Medicine*, 7, 1, 43- 48.

- B. Winblad, K. Palmer et.al. (2004). Mild cognitive impairment – beyond controversies, towards a consensus, report of the International Working Group on Mild Cognitive Impairment. Volume 256, Issue 3, Pages: 179-270
- Chanderasekaran, S. (2008). Emotional intelligence of adolescent boys and girls. *Journal of Indian Psychological Research*, 52(2).
- Chouhan, V., & Bhatnagar, T. (2003). Assessing emotional maturity, emotional expression and emotional quotient of adolescent male and female students. *Journal of Community Guidance and Research*, 20(2), 157-167.
- Darsana, M. (2007). Relationship between emotional intelligence and certain achievement Facilitating variables of higher secondary school students. *Edutracks*, 7(4), 25-31.
- Deniz, M. Engin and others (2009) An investigation of academic procrastination, locus of control, and emotional intelligence. *Educational Sciences: theory and Practice*, 9(2) Spr 2009 p 623-632.
- Dianna L. Newman, Deborah K. Kundert, David S. Lane Jr. & Kay Sather Bull (2009). *Applied Measurement in Education*, Volume 1, No 1- Taylor and Francis Online.
- Drago, & Judy, M. (2004). The relationship between emotional intelligence and academic achievement in non-traditional college students. *Walden University*, 213.
- Eniola, M.S. and Adebisi, K. (2007) Emotional intelligence and goal setting-an investigation into interventions to increase motivation to work among visually impaired students in Nigeria, *British Journal of Visual Impairment*, 25 (3): 249- 253.
- John Sweller (1988) *Cognitive Load During Problem Solving: Effects on Learning*. A Multidisciplinary Journal, Online ISSN: 1551-6709.
- Kaur, M. (2001). A Study of Emotional Maturity of Adolescents in relation to Intelligence, Academic Achievement and Environmental Catalysts. Ph.D. (Edu.), Panjab University, Unpublished thesis.

Lather, M. (2009). Emotional intelligence as a measure of success in life. *Edu tracks*, 8(11), 18-19.

Lekhi, V. (2005). "A study of emotional maturity of adolescents in relation to cognitive and Non-Cognitive variables," Ph.D. Thesis, P.U.Chandigarh.

Leeson, Peter, Joseph Ciarrochi and Peatrick C. L. Heaven (2008). Cognitive Ability, Personality and Academic Performance in Adolescence. *Personality and Individual Differences*, 45, 63.

Lisa C. McGuire, Earl S. Ford, Umed A. Ajani (2006). Cognitive Functioning as a Predictor of Functional Disability in Later Life, Volume 14, Issue 1, Pages 36- 42.

Mahajan Neeta & Sharma Shweta. (2008). Stress and storm in adolescence. *Indian Journal of Psychometry and Education*, 39(2): p.204-207, Patna.

Manhas, K.D. (2004). Cognitive and non-cognitive correlates of emotional intelligence of adolescents. Ph.D. thesis in Education, Panjab University, Chandigarh.

Manhas, K. D. & Gakhar, S. C. (2006). Emotional intelligence as correlated of intelligence, creativity and academic achievement. *Praachi Journal of Psycho-cultural Dimension*, Vol. 22(1), pp. 82-84.

Maree, J. G. & Ebersohn, L. (2002). Emotional intelligence and achievement: Redefining giftedness. *Gifted Education International*, 16, 261-273.

Mavroveli et al. (2009). Relating trait emotional intelligence to objective socioemotional outcomes in childhood. *British Journal of Educational Psychology*, 79(Pt 2):259-72 · November 2008 with 972 Reads

Martha, T. & George, M. (2001, November). Emotional intelligence: The effect of gender, GPA, ethnicity. Paper presented at the annual meeting of the Mid-South Educational Research association, Mexico City. .

- Mathurs, M., Dube, S. and Malhotra, B. (2003) Emotional Intelligence: Interrelationships of attribution, taking responsibility and scholastic performance in adolescents. *Indian Psychological Review*, 60,4,175- 180.
- Mayer, J. D., & Salovey, P. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*. 9(3), 185-211.
- Miglani, D. (2001).Emotional intelligence as related to academic achievement of Adolescents. Unpublished M.Ed. dissertation, Panjab University, Chandigarh.
- Neil Humphrey, Andrew Curran, Elisabeth Morris, Peter Farrell & Kevin Woods (2007) Emotional Intelligence and Education: A critical review, *Educational Psychology. An International Journal of Experimental Educational Psychology*, 27(2), 235-254. DOI: 10.1080/01443410601066735
- Nelson, D. & Low, G. (2003) Emotional Intelligence: Achieving Academic and career excellence. Upper Saddle River, NJ: Prentice – Hall.
- O'Connor, R., M. & Little, I. S. (2003). Revisiting the predictive validity of emotional intelligence: Self-report versus ability-based measures.*Personality and Individual Differences*, 35, 1893 – 1902.
- Pamela Qualter, Kathryn J. Gardner & Helen E. Whiteley. (2007). Emotional intelligence: review of research and educational implications, pastoral care in education. *An International Journal of Personal, Social and Emotional Development*, 25(1), 11-20.
- Petrides, K.V., Frederickson, N., and Furnham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behavior at school. *Personality and Individual Differences*, 36, 277-293.
- Priyam Dhani and Tanu Sharma (2016). Emotional Intelligence; History, Models and Measures. Vol. No. 5, Issue No.07, July 2016.

Ross et al. (2007) "Empathy and emotional responsiveness in delinquent and non-delinquent adolescents". *Journal of Negro Education*, 54(2), 134-147.

Rui Nouchi and Ryuta K. (2014). Improving Cognitive Function from Children to Old Age: A Systematic Review of Recent Smart Ageing Intervention Studies, Volume 2014 (2014), Article ID 235479, 15 pages.

Singh Amit and Kumar Dinesh (2011). "Emotional intelligence and academic achievement of college students". Jind, Haryana.

Singh, Y. (2011). Academic Achievement and Study Habits of Higher Secondary Students. *International Refereed Journal*, 3 (27), 19-20.

Srivastava, N. (2007). A study of emotional intelligence in relation to achievement in environmental studies. *Journal of Educational Studies*, 1, 5,7- 9.

Thi Lam, L., & Kirby, S. L. (2002). Is Emotional Intelligence an Advantage? An Exploration of the Impact of Emotional and General Intelligence on Individual Performance. *The Journal of Social Psychology*, 142(1), 133-143.

Ton de Jon (2009). Cognitive load theory, educational research, and instructional design: some food for thought. Published online 27 August 2009, DOI 10.1007/s11251-009-9110-0.

Umadevi, M. R. (2009). The relationship between Emotional Intelligence and Achievement Motivation and Academic Achievement. *EDUTRACKS*, 40(3), 31-35.

Undokun and Adeyerno (2010), Emotional Intelligence and Academic achievement: The moderating influence of age, intrinsic and extrinsic motivation, *An online journal of the African educational research network*, 10(2), 127-141.

Usha, P., & Rekha. (2009). Emotional intelligence and Mental health as predictors of Academic achievement. *Edutracks*, 8(10), 25-29.

Wang Meifang, Sun and Dan Xing (2009) Intelligence, Achievement Goals and Academic Achievement of Rural Adolescents: Cross-Lagged Regression Analysis, Psychological Research. Retrieved from internet, en.enki.com.cn.

## RAW DATA OF THE STUDY

**Gender: Girls**

**Locality: Rural**

**Type of School: Government**

| S. No. | SA | ME | MO | E  | HR | Emotional Intelligence Total | Cognitive Difficulty Total | AA  | MM  |
|--------|----|----|----|----|----|------------------------------|----------------------------|-----|-----|
| 1      | 23 | 24 | 20 | 15 | 25 | 107                          | 189                        | 170 | 500 |
| 2      | 26 | 24 | 25 | 15 | 31 | 121                          | 151                        | 430 | 500 |
| 3      | 23 | 25 | 24 | 18 | 26 | 116                          | 179                        | 285 | 500 |
| 4      | 29 | 25 | 30 | 16 | 28 | 128                          | 165                        | 310 | 500 |
| 5      | 24 | 24 | 22 | 16 | 34 | 120                          | 177                        | 295 | 500 |
| 6      | 29 | 28 | 24 | 20 | 31 | 132                          | 161                        | 330 | 500 |
| 7      | 26 | 27 | 25 | 18 | 32 | 128                          | 166                        | 400 | 500 |
| 8      | 26 | 25 | 28 | 17 | 31 | 127                          | 168                        | 300 | 500 |
| 9      | 24 | 24 | 22 | 17 | 26 | 113                          | 182                        | 265 | 500 |
| 10     | 27 | 25 | 23 | 18 | 30 | 123                          | 173                        | 312 | 500 |
| 11     | 28 | 26 | 22 | 16 | 32 | 124                          | 172                        | 315 | 500 |
| 12     | 29 | 26 | 26 | 20 | 32 | 133                          | 160                        | 360 | 500 |
| 13     | 25 | 25 | 23 | 14 | 31 | 118                          | 177                        | 290 | 500 |
| 14     | 24 | 25 | 22 | 15 | 28 | 114                          | 180                        | 265 | 500 |
| 15     | 27 | 28 | 23 | 15 | 30 | 123                          | 171                        | 299 | 500 |
| 16     | 27 | 24 | 25 | 15 | 30 | 121                          | 175                        | 289 | 500 |
| 17     | 28 | 28 | 21 | 17 | 33 | 127                          | 166                        | 300 | 500 |
| 18     | 24 | 27 | 26 | 15 | 30 | 122                          | 175                        | 275 | 500 |
| 19     | 26 | 31 | 25 | 17 | 31 | 130                          | 161                        | 315 | 500 |
| 20     | 29 | 30 | 24 | 15 | 29 | 127                          | 168                        | 299 | 500 |
| 21     | 24 | 23 | 20 | 14 | 28 | 109                          | 185                        | 190 | 500 |
| 22     | 23 | 29 | 23 | 16 | 33 | 124                          | 178                        | 309 | 500 |
| 23     | 31 | 30 | 25 | 18 | 24 | 128                          | 166                        | 303 | 500 |
| 24     | 30 | 26 | 25 | 19 | 29 | 129                          | 165                        | 315 | 500 |
| 25     | 28 | 29 | 26 | 16 | 31 | 130                          | 164                        | 330 | 500 |
| 26     | 26 | 32 | 24 | 17 | 25 | 124                          | 171                        | 307 | 500 |
| 27     | 25 | 30 | 25 | 15 | 30 | 125                          | 170                        | 410 | 500 |
| 28     | 24 | 29 | 19 | 13 | 25 | 110                          | 184                        | 200 | 500 |
| 29     | 25 | 23 | 31 | 14 | 27 | 120                          | 174                        | 270 | 500 |
| 30     | 24 | 25 | 25 | 14 | 26 | 114                          | 179                        | 250 | 500 |

**Gender: Boys****Locality: Rural****Type of School: Government**

| S. No. | SA | ME | MO | E  | HR | Emotional Intelligence Total | Cognitive Difficulty Total | AA   | MM  |
|--------|----|----|----|----|----|------------------------------|----------------------------|------|-----|
| 31     | 25 | 26 | 20 | 14 | 27 | 112                          | 180                        | 240  | 500 |
| 32     | 26 | 28 | 21 | 15 | 30 | 120                          | 175                        | 272  | 500 |
| 33     | 26 | 26 | 22 | 15 | 28 | 117                          | 179                        | 260  | 500 |
| 34     | 28 | 26 | 23 | 17 | 28 | 122                          | 174                        | 300  | 500 |
| 35     | 25 | 25 | 22 | 15 | 28 | 115                          | 174                        | 290  | 500 |
| 36     | 27 | 29 | 29 | 21 | 28 | 134                          | 159                        | 450  | 500 |
| 37     | 28 | 25 | 22 | 16 | 29 | 120                          | 176                        | 268  | 500 |
| 38     | 25 | 24 | 22 | 17 | 25 | 113                          | 181                        | 205  | 500 |
| 39     | 25 | 29 | 25 | 18 | 29 | 126                          | 166                        | 315  | 500 |
| 40     | 29 | 27 | 27 | 13 | 32 | 128                          | 164                        | 325  | 500 |
| 41     | 27 | 26 | 25 | 16 | 31 | 125                          | 168                        | 312  | 500 |
| 42     | 23 | 25 | 26 | 16 | 27 | 117                          | 177                        | 230  | 500 |
| 43     | 30 | 29 | 22 | 15 | 25 | 121                          | 176                        | 256  | 500 |
| 44     | 28 | 28 | 25 | 18 | 26 | 125                          | 171                        | 307  | 500 |
| 45     | 24 | 25 | 23 | 18 | 30 | 120                          | 174                        | 272  | 500 |
| 46     | 28 | 26 | 24 | 15 | 31 | 124                          | 172                        | 300  | 500 |
| 47     | 27 | 25 | 26 | 14 | 28 | 120                          | 175                        | 279  | 500 |
| 48     | 26 | 29 | 26 | 16 | 29 | 126                          | 169                        | 310  | 500 |
| 49     | 27 | 26 | 27 | 16 | 28 | 124                          | 172                        | 315  | 500 |
| 50     | 27 | 23 | 24 | 17 | 30 | 121                          | 175                        | 278  | 500 |
| 51     | 26 | 24 | 25 | 18 | 35 | 128                          | 165                        | 330  | 500 |
| 52     | 27 | 29 | 25 | 18 | 30 | 129                          | 163                        | 433  | 500 |
| 53     | 30 | 25 | 25 | 16 | 30 | 126                          | 170                        | 317  | 500 |
| 54     | 31 | 24 | 26 | 15 | 28 | 124                          | 173                        | 301` | 500 |
| 55     | 21 | 22 | 20 | 14 | 28 | 105                          | 187                        | 200  | 500 |
| 56     | 26 | 23 | 22 | 15 | 28 | 114                          | 179                        | 245  | 500 |
| 57     | 25 | 22 | 24 | 14 | 25 | 110                          | 183                        | 215  | 500 |
| 58     | 23 | 23 | 24 | 14 | 29 | 113                          | 180                        | 235  | 500 |
| 59     | 27 | 25 | 24 | 18 | 30 | 124                          | 173                        | 299  | 500 |
| 60     | 27 | 24 | 25 | 14 | 27 | 117                          | 178                        | 260  | 500 |

**Gender: Girls****Locality: Urban****Type of School: Government**

| S. No. | SA | ME | MO | E  | HR | Emotional Intelligence Total | Cognitive Difficulty Total | AA  | MM  |
|--------|----|----|----|----|----|------------------------------|----------------------------|-----|-----|
| 61     | 28 | 26 | 22 | 14 | 35 | 125                          | 168                        | 280 | 500 |
| 62     | 24 | 22 | 27 | 14 | 26 | 113                          | 178                        | 200 | 500 |
| 63     | 25 | 28 | 25 | 15 | 28 | 121                          | 164                        | 220 | 500 |
| 64     | 25 | 24 | 25 | 27 | 28 | 129                          | 165                        | 279 | 500 |
| 65     | 24 | 25 | 27 | 16 | 27 | 119                          | 176                        | 245 | 500 |
| 66     | 24 | 26 | 24 | 15 | 25 | 114                          | 177                        | 210 | 500 |
| 67     | 30 | 24 | 24 | 14 | 30 | 122                          | 171                        | 230 | 500 |
| 68     | 31 | 30 | 26 | 15 | 26 | 128                          | 163                        | 318 | 500 |
| 69     | 24 | 25 | 24 | 13 | 31 | 117                          | 174                        | 235 | 500 |
| 70     | 27 | 25 | 24 | 16 | 31 | 123                          | 170                        | 255 | 500 |
| 71     | 28 | 31 | 25 | 15 | 29 | 128                          | 166                        | 300 | 500 |
| 72     | 30 | 28 | 24 | 14 | 30 | 126                          | 168                        | 290 | 500 |
| 73     | 25 | 25 | 22 | 16 | 33 | 121                          | 172                        | 275 | 500 |
| 74     | 27 | 26 | 28 | 20 | 27 | 128                          | 164                        | 412 | 500 |
| 75     | 28 | 25 | 21 | 12 | 33 | 119                          | 172                        | 228 | 500 |
| 76     | 26 | 28 | 24 | 14 | 31 | 123                          | 167                        | 255 | 500 |
| 77     | 30 | 20 | 28 | 17 | 29 | 124                          | 165                        | 270 | 500 |
| 78     | 27 | 29 | 30 | 16 | 28 | 130                          | 165                        | 280 | 500 |
| 79     | 26 | 25 | 23 | 13 | 30 | 117                          | 179                        | 226 | 500 |
| 80     | 32 | 28 | 24 | 14 | 30 | 128                          | 167                        | 290 | 500 |
| 81     | 26 | 24 | 25 | 14 | 28 | 117                          | 178                        | 220 | 500 |
| 82     | 30 | 26 | 24 | 16 | 30 | 126                          | 167                        | 280 | 500 |
| 83     | 25 | 25 | 22 | 15 | 31 | 118                          | 177                        | 230 | 500 |
| 84     | 27 | 30 | 24 | 14 | 32 | 127                          | 169                        | 292 | 500 |
| 85     | 29 | 32 | 25 | 18 | 29 | 133                          | 162                        | 365 | 500 |
| 86     | 26 | 30 | 28 | 15 | 31 | 130                          | 164                        | 330 | 500 |
| 87     | 25 | 23 | 25 | 17 | 35 | 125                          | 168                        | 280 | 500 |
| 88     | 31 | 26 | 25 | 16 | 36 | 134                          | 159                        | 460 | 500 |
| 89     | 32 | 25 | 27 | 13 | 31 | 128                          | 163                        | 294 | 500 |
| 90     | 30 | 25 | 30 | 17 | 32 | 134                          | 160                        | 374 | 500 |

**Gender: Boys****Locality: Urban****Type of School: Government**

| S. No. | SA | ME | MO | E  | HR | Emotional Intelligence Total | Cognitive Difficulty Total | AA  | MM  |
|--------|----|----|----|----|----|------------------------------|----------------------------|-----|-----|
| 91     | 26 | 26 | 24 | 17 | 30 | 123                          | 171                        | 250 | 500 |
| 92     | 27 | 27 | 25 | 18 | 31 | 128                          | 165                        | 292 | 500 |
| 93     | 26 | 23 | 28 | 16 | 31 | 124                          | 169                        | 275 | 500 |
| 94     | 27 | 27 | 26 | 16 | 32 | 128                          | 165                        | 300 | 500 |
| 95     | 25 | 26 | 32 | 16 | 31 | 130                          | 161                        | 330 | 500 |
| 96     | 29 | 28 | 21 | 17 | 33 | 128                          | 164                        | 292 | 500 |
| 97     | 27 | 28 | 28 | 16 | 32 | 131                          | 160                        | 455 | 500 |
| 98     | 29 | 27 | 22 | 17 | 30 | 125                          | 169                        | 272 | 500 |
| 99     | 25 | 26 | 23 | 19 | 32 | 125                          | 168                        | 270 | 500 |
| 100    | 30 | 29 | 25 | 14 | 33 | 131                          | 160                        | 400 | 500 |
| 101    | 31 | 27 | 26 | 16 | 32 | 132                          | 159                        | 335 | 500 |
| 102    | 29 | 30 | 28 | 14 | 31 | 132                          | 158                        | 430 | 500 |
| 103    | 24 | 23 | 26 | 16 | 34 | 123                          | 170                        | 294 | 500 |
| 104    | 24 | 25 | 24 | 16 | 31 | 120                          | 172                        | 275 | 500 |
| 105    | 25 | 26 | 24 | 16 | 30 | 121                          | 171                        | 279 | 500 |
| 106    | 30 | 24 | 26 | 14 | 32 | 126                          | 168                        | 280 | 500 |
| 107    | 24 | 25 | 25 | 22 | 32 | 128                          | 165                        | 290 | 500 |
| 108    | 31 | 26 | 26 | 17 | 29 | 129                          | 164                        | 292 | 500 |
| 109    | 33 | 31 | 29 | 13 | 27 | 133                          | 159                        | 468 | 500 |
| 110    | 32 | 28 | 27 | 16 | 28 | 131                          | 160                        | 360 | 500 |
| 111    | 25 | 27 | 26 | 17 | 32 | 127                          | 167                        | 276 | 500 |
| 112    | 28 | 29 | 28 | 16 | 31 | 132                          | 160                        | 350 | 500 |
| 113    | 25 | 23 | 21 | 15 | 36 | 120                          | 175                        | 230 | 500 |
| 114    | 30 | 27 | 30 | 17 | 29 | 133                          | 160                        | 347 | 500 |
| 115    | 31 | 27 | 27 | 17 | 31 | 133                          | 158                        | 350 | 500 |
| 116    | 28 | 28 | 27 | 17 | 31 | 131                          | 161                        | 320 | 500 |
| 117    | 28 | 26 | 24 | 17 | 32 | 127                          | 165                        | 308 | 500 |
| 118    | 28 | 26 | 26 | 19 | 30 | 129                          | 164                        | 325 | 500 |
| 119    | 29 | 28 | 23 | 16 | 35 | 131                          | 162                        | 330 | 500 |
| 120    | 26 | 31 | 26 | 18 | 31 | 132                          | 161                        | 335 | 500 |

**Gender: Girls****Locality: Rural****Type of School: Private**

| S. No. | SA | ME | MO | E  | HR | Emotional Intelligence Total | Cognitive Difficulty Total | AA  | MM  |
|--------|----|----|----|----|----|------------------------------|----------------------------|-----|-----|
| 121    | 30 | 25 | 16 | 15 | 35 | 121                          | 160                        | 300 | 500 |
| 122    | 30 | 32 | 30 | 19 | 24 | 135                          | 150                        | 430 | 500 |
| 123    | 26 | 30 | 24 | 14 | 36 | 130                          | 155                        | 315 | 500 |
| 124    | 27 | 25 | 22 | 14 | 31 | 119                          | 165                        | 295 | 500 |
| 125    | 25 | 25 | 24 | 26 | 30 | 130                          | 155                        | 310 | 500 |
| 126    | 21 | 22 | 24 | 13 | 30 | 110                          | 180                        | 210 | 500 |
| 127    | 24 | 26 | 24 | 14 | 35 | 123                          | 162                        | 298 | 500 |
| 128    | 23 | 25 | 21 | 14 | 28 | 111                          | 179                        | 225 | 500 |
| 129    | 24 | 25 | 23 | 14 | 32 | 118                          | 175                        | 235 | 500 |
| 130    | 31 | 24 | 23 | 15 | 32 | 125                          | 173                        | 250 | 500 |
| 131    | 30 | 27 | 23 | 13 | 32 | 125                          | 161                        | 253 | 500 |
| 132    | 29 | 25 | 24 | 15 | 30 | 123                          | 163                        | 245 | 500 |
| 133    | 24 | 26 | 22 | 14 | 33 | 119                          | 167                        | 235 | 500 |
| 134    | 25 | 26 | 19 | 13 | 30 | 113                          | 175                        | 230 | 500 |
| 135    | 25 | 24 | 22 | 12 | 28 | 111                          | 180                        | 215 | 500 |
| 136    | 23 | 25 | 21 | 13 | 32 | 114                          | 177                        | 220 | 500 |
| 137    | 23 | 31 | 22 | 13 | 27 | 116                          | 176                        | 222 | 500 |
| 138    | 24 | 21 | 25 | 14 | 26 | 110                          | 181                        | 199 | 500 |
| 139    | 22 | 26 | 24 | 13 | 31 | 116                          | 176                        | 228 | 500 |
| 140    | 24 | 27 | 21 | 13 | 27 | 112                          | 179                        | 205 | 500 |
| 141    | 25 | 27 | 22 | 12 | 34 | 120                          | 175                        | 250 | 500 |
| 142    | 24 | 30 | 26 | 13 | 28 | 121                          | 175                        | 252 | 500 |
| 143    | 25 | 28 | 25 | 15 | 32 | 125                          | 170                        | 275 | 500 |
| 144    | 27 | 25 | 21 | 11 | 28 | 112                          | 178                        | 222 | 500 |
| 145    | 27 | 28 | 23 | 13 | 29 | 120                          | 173                        | 230 | 500 |
| 146    | 25 | 27 | 20 | 14 | 31 | 117                          | 175                        | 223 | 500 |
| 147    | 31 | 28 | 19 | 15 | 29 | 122                          | 173                        | 255 | 500 |
| 148    | 26 | 24 | 23 | 15 | 32 | 120                          | 173                        | 240 | 500 |
| 149    | 26 | 27 | 23 | 16 | 28 | 120                          | 172                        | 240 | 500 |
| 150    | 27 | 30 | 23 | 14 | 31 | 125                          | 169                        | 280 | 500 |

**Gender: Boys****Locality: Rural****Type of School: Private**

| S. No. | SA | ME | MO | E  | HR | Emotional Intelligence Total | Cognitive Difficulty Total | AA  | MM  |
|--------|----|----|----|----|----|------------------------------|----------------------------|-----|-----|
| 151    | 29 | 28 | 24 | 14 | 33 | 128                          | 169                        | 300 | 500 |
| 152    | 26 | 27 | 23 | 13 | 27 | 116                          | 177                        | 212 | 500 |
| 153    | 25 | 27 | 26 | 17 | 31 | 126                          | 170                        | 240 | 500 |
| 154    | 22 | 25 | 26 | 12 | 29 | 114                          | 178                        | 209 | 500 |
| 155    | 32 | 25 | 19 | 13 | 34 | 123                          | 169                        | 233 | 500 |
| 156    | 28 | 23 | 17 | 16 | 31 | 115                          | 178                        | 220 | 500 |
| 157    | 31 | 23 | 19 | 13 | 29 | 115                          | 177                        | 225 | 500 |
| 158    | 34 | 32 | 24 | 14 | 13 | 117                          | 177                        | 235 | 500 |
| 159    | 28 | 31 | 19 | 15 | 28 | 121                          | 174                        | 240 | 500 |
| 160    | 27 | 27 | 22 | 14 | 27 | 117                          | 173                        | 222 | 500 |
| 161    | 29 | 24 | 25 | 13 | 31 | 122                          | 171                        | 250 | 500 |
| 162    | 29 | 24 | 25 | 16 | 32 | 126                          | 169                        | 270 | 500 |
| 163    | 31 | 24 | 26 | 14 | 33 | 128                          | 168                        | 275 | 500 |
| 164    | 26 | 32 | 26 | 13 | 31 | 128                          | 167                        | 405 | 500 |
| 165    | 30 | 24 | 24 | 23 | 28 | 129                          | 169                        | 279 | 500 |
| 166    | 25 | 26 | 24 | 16 | 31 | 122                          | 174                        | 245 | 500 |
| 167    | 32 | 27 | 29 | 13 | 25 | 126                          | 170                        | 250 | 500 |
| 168    | 25 | 25 | 24 | 12 | 29 | 115                          | 176                        | 210 | 500 |
| 169    | 24 | 31 | 26 | 13 | 30 | 124                          | 169                        | 242 | 500 |
| 170    | 27 | 25 | 29 | 15 | 32 | 128                          | 168                        | 350 | 500 |
| 171    | 27 | 25 | 24 | 22 | 29 | 127                          | 168                        | 250 | 500 |
| 172    | 25 | 22 | 25 | 14 | 33 | 119                          | 174                        | 235 | 500 |
| 173    | 31 | 26 | 22 | 15 | 30 | 124                          | 170                        | 240 | 500 |
| 174    | 31 | 27 | 21 | 14 | 31 | 124                          | 169                        | 235 | 500 |
| 175    | 28 | 22 | 24 | 15 | 26 | 115                          | 176                        | 208 | 500 |
| 176    | 32 | 30 | 23 | 14 | 29 | 128                          | 171                        | 255 | 500 |
| 177    | 31 | 29 | 24 | 13 | 32 | 129                          | 170                        | 265 | 500 |
| 178    | 30 | 34 | 22 | 13 | 25 | 124                          | 172                        | 245 | 500 |
| 179    | 35 | 21 | 17 | 12 | 33 | 118                          | 174                        | 215 | 500 |
| 180    | 25 | 25 | 30 | 15 | 34 | 129                          | 169                        | 380 | 500 |

**Gender: Girls****Locality: Urban****Type of School: Private**

| S. No. | SA | ME | MO | E  | HR | Emotional Intelligence Total | Cognitive Difficulty Total | AA  | MM  |
|--------|----|----|----|----|----|------------------------------|----------------------------|-----|-----|
| 181    | 34 | 26 | 23 | 13 | 34 | 130                          | 165                        | 300 | 500 |
| 182    | 38 | 31 | 18 | 14 | 29 | 130                          | 164                        | 434 | 500 |
| 183    | 25 | 24 | 25 | 12 | 33 | 119                          | 175                        | 260 | 500 |
| 184    | 27 | 25 | 23 | 16 | 35 | 126                          | 170                        | 270 | 500 |
| 185    | 26 | 27 | 22 | 14 | 35 | 124                          | 169                        | 265 | 500 |
| 186    | 25 | 24 | 22 | 14 | 32 | 117                          | 173                        | 250 | 500 |
| 187    | 27 | 33 | 24 | 17 | 31 | 132                          | 163                        | 305 | 500 |
| 188    | 25 | 25 | 20 | 13 | 28 | 111                          | 181                        | 220 | 500 |
| 189    | 24 | 25 | 23 | 15 | 31 | 118                          | 174                        | 230 | 500 |
| 190    | 28 | 27 | 28 | 16 | 30 | 129                          | 164                        | 245 | 500 |
| 191    | 29 | 28 | 25 | 18 | 30 | 130                          | 165                        | 299 | 500 |
| 192    | 22 | 24 | 25 | 13 | 27 | 111                          | 180                        | 218 | 500 |
| 193    | 24 | 26 | 24 | 15 | 33 | 122                          | 171                        | 260 | 500 |
| 194    | 29 | 31 | 25 | 14 | 33 | 132                          | 163                        | 400 | 500 |
| 195    | 28 | 25 | 24 | 14 | 31 | 122                          | 170                        | 265 | 50  |
| 196    | 22 | 26 | 25 | 14 | 35 | 122                          | 171                        | 270 | 500 |
| 197    | 29 | 23 | 21 | 19 | 32 | 124                          | 168                        | 280 | 500 |
| 198    | 26 | 25 | 24 | 17 | 27 | 119                          | 176                        | 239 | 500 |
| 199    | 39 | 24 | 24 | 15 | 27 | 129                          | 163                        | 246 | 500 |
| 200    | 29 | 30 | 29 | 15 | 27 | 130                          | 166                        | 300 | 500 |
| 201    | 22 | 25 | 28 | 14 | 33 | 122                          | 171                        | 268 | 500 |
| 202    | 26 | 27 | 28 | 15 | 28 | 124                          | 169                        | 275 | 500 |
| 203    | 24 | 24 | 22 | 13 | 25 | 108                          | 183                        | 190 | 500 |
| 204    | 22 | 24 | 23 | 13 | 27 | 109                          | 182                        | 194 | 500 |
| 205    | 25 | 23 | 24 | 15 | 33 | 120                          | 174                        | 250 | 500 |
| 206    | 27 | 27 | 24 | 17 | 32 | 127                          | 169                        | 265 | 500 |
| 207    | 26 | 27 | 27 | 17 | 36 | 133                          | 160                        | 410 | 500 |
| 208    | 23 | 25 | 28 | 14 | 30 | 120                          | 172                        | 260 | 500 |
| 209    | 25 | 24 | 25 | 15 | 26 | 115                          | 177                        | 240 | 500 |
| 210    | 29 | 21 | 24 | 14 | 33 | 121                          | 172                        | 285 | 500 |

**Gender: Boys****Locality: Urban****Type of School: Private**

| S. No. | SA | ME | MO | E  | HR | Emotional Intelligence Total | Cognitive Difficulty Total | AA  | MM  |
|--------|----|----|----|----|----|------------------------------|----------------------------|-----|-----|
| 211    | 30 | 24 | 26 | 16 | 32 | 128                          | 170                        | 287 | 500 |
| 212    | 32 | 25 | 22 | 14 | 32 | 125                          | 168                        | 270 | 500 |
| 213    | 31 | 25 | 28 | 16 | 31 | 131                          | 164                        | 305 | 500 |
| 214    | 30 | 25 | 29 | 17 | 30 | 131                          | 166                        | 310 | 500 |
| 215    | 26 | 30 | 27 | 13 | 32 | 128                          | 172                        | 295 | 500 |
| 216    | 24 | 24 | 25 | 17 | 34 | 124                          | 167                        | 275 | 500 |
| 217    | 26 | 25 | 25 | 19 | 35 | 130                          | 165                        | 299 | 500 |
| 218    | 28 | 24 | 26 | 16 | 23 | 117                          | 175                        | 250 | 500 |
| 219    | 31 | 27 | 21 | 16 | 36 | 131                          | 164                        | 313 | 500 |
| 220    | 28 | 29 | 23 | 19 | 34 | 133                          | 159                        | 315 | 500 |
| 221    | 32 | 31 | 24 | 17 | 32 | 136                          | 157                        | 340 | 500 |
| 222    | 29 | 30 | 25 | 15 | 30 | 129                          | 163                        | 411 | 500 |
| 223    | 22 | 29 | 27 | 13 | 26 | 117                          | 177                        | 255 | 500 |
| 224    | 24 | 25 | 23 | 16 | 34 | 122                          | 171                        | 269 | 500 |
| 225    | 23 | 27 | 24 | 12 | 26 | 112                          | 180                        | 212 | 500 |
| 226    | 30 | 25 | 26 | 18 | 29 | 128                          | 174                        | 260 | 500 |
| 227    | 29 | 26 | 25 | 15 | 28 | 123                          | 172                        | 250 | 500 |
| 228    | 26 | 28 | 28 | 14 | 36 | 132                          | 160                        | 410 | 500 |
| 229    | 27 | 29 | 21 | 13 | 26 | 116                          | 177                        | 205 | 500 |
| 230    | 28 | 28 | 21 | 17 | 30 | 124                          | 170                        | 248 | 500 |
| 231    | 29 | 29 | 28 | 16 | 29 | 131                          | 160                        | 312 | 500 |
| 232    | 28 | 27 | 29 | 16 | 32 | 132                          | 159                        | 312 | 500 |
| 233    | 29 | 26 | 29 | 16 | 32 | 132                          | 158                        | 317 | 500 |
| 234    | 27 | 25 | 26 | 14 | 31 | 123                          | 173                        | 275 | 500 |
| 235    | 30 | 24 | 25 | 15 | 30 | 124                          | 173                        | 280 | 500 |
| 236    | 31 | 28 | 27 | 13 | 30 | 129                          | 164                        | 295 | 500 |
| 237    | 26 | 28 | 26 | 19 | 32 | 131                          | 160                        | 290 | 500 |
| 238    | 28 | 24 | 25 | 18 | 31 | 126                          | 166                        | 282 | 500 |
| 239    | 27 | 26 | 28 | 17 | 31 | 129                          | 163                        | 407 | 500 |
| 240    | 29 | 23 | 25 | 16 | 32 | 125                          | 171                        | 280 | 500 |

## **Details of Academic activities during M. Phil. Programme**

### **Seminar:**

1. Participation as paper presenter on the topic” **A Concept Note on New Working Models of PPP for Access of Differently Abled Students**” in National Seminar on Inclusive and Qualitative Expansion of Higher Education in Haryana, Jointly organized by School of Education & Department of Education, Central University of Haryana, Under the MHRD Scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.

### **Workshops:**

1. Participated in the course Critical Perspective on “**Inclusive Education**” held at Central University of Haryana Under the **MHRD** scheme of **Global Initiative for Academic Networks** Government of India from October 30, 2017 to November 03, 2017.
2. Participated in Two-Day National Workshop on “**Theatre in Education**” organized by School of Education, Central University of Haryana under the aegis of MHRD Scheme of ‘Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching’((PMMMNMTT) on **3<sup>rd</sup> - 4<sup>th</sup> May, 2018**

### **Research Paper:**

1. Research paper entitled “**Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher secondary Students**”, Published in a peer reviewed journal of Innovation The Research Concept, Vol-3, Issue-3 April-2018, ISSN: 2456–5474.

# EIT

Consumable Booklet (16-0349-CB)

Dr. Ekta Sharma

PH.D., M.A., T.H.D.

## INSTRUCTIONS:

Against each statement in this booklet five options are given. These options represent five response categories, viz., Always, Most Often, Occasionally, Rarely and Never. You are requested to put a tick mark (✓) on any one of the five alternative response categories, which would represent your true feelings.

---

### DETAILS OF THE RESPONDENT

---

Name :  
Age :  
Gender :  
Education :  
Occupation :

---



ISO 9001 : 2008 CERTIFIED ORGANISATION

10 A, Veer Savarkar Block, Shakarpur, New Delhi - 110092, India

[www.prasadpsycho.com](http://www.prasadpsycho.com)

Intellectual Property and Copyright©2011. All rights reserved. May not be reproduced in whole or part in any form or by any means without permission of Prasad Psycho Corporation. This booklet is printed in Orange ink on white paper. Any other version is unauthorised.

REORDER #RO16-0349-CB

Printed in India

| S. No. | Statement  | Always | Most Often | Occasionally | Rarely | Never |
|--------|--|--------|------------|--------------|--------|-------|
| 1.     | I can easily impress others.   |        |            |              |        |       |
| 2.     | I get anxious whenever my exam result is about to be declared.                               |        |            |              |        |       |
| 3.     | I perceive clear goals in my life with a "can do" attitude.                                  |        |            |              |        |       |
| 4.     | I take others view points while looking at or while analyzing a situation.                   |        |            |              |        |       |
| 5.     | I feel confident while talking to a new person.  |        |            |              |        |       |
| 6.     | I can take criticism regarding my physique in a healthy manner.                              |        |            |              |        |       |
| 7.     | Day-dreaming is good for diverting attention.  |        |            |              |        |       |
| 8.     | I mostly set aside some time for relaxation everyday to relive myself from a stressful life. |        |            |              |        |       |
| 9.     | I tend to easily move to tears or laughter.  |        |            |              |        |       |
| 10.    | It is always wise to avoid an argument.  |        |            |              |        |       |
| 11.    | I feel jealous when people give compliments to my friends and not me.                        |        |            |              |        |       |
| 12.    | I easily get aggressive with my friends.   |        |            |              |        |       |
| 13.    | I accept myself as I am; with all my strengths and weaknesses.                               |        |            |              |        |       |
| 14.    | I am temperamentally more prone to be skeptic than a believer in god.                        |        |            |              |        |       |
| 15.    | It is okay if parents satisfy demands of younger siblings prior to my demands.               |        |            |              |        |       |
| 16.    | I am academically brilliant in my class.   |        |            |              |        |       |
| 17.    | I try to divert my attention to something positive while feeling depressed.                  |        |            |              |        |       |
| 18.    | There is always a chance to correct your mistakes.   |        |            |              |        |       |
| 19.    | I would rather listen to a story than tell one.  |        |            |              |        |       |
| 20.    | It is better to talk less than being labeled as a talkative person.                          |        |            |              |        |       |
| 21.    | I am capable of handling every situation in my life.   |        |            |              |        |       |

| S. No. | Statement  | Always | Most Often | Occasionally | Rarely | Never |
|--------|--|--------|------------|--------------|--------|-------|
| 22.    | I find myself tensed up because of petty things in life.                     |        |            |              |        |       |
| 23.    | I believe in the "try, try, try, again, until you succeed" theory.           |        |            |              |        |       |
| 24.    | I easily believe in the excuses that others give for not doing a job.        |        |            |              |        |       |
| 25.    | I feel adults impose things on me.   |        |            |              |        |       |
| 26.    | I get upset upon missing an opportunity in life.                             |        |            |              |        |       |
| 27.    | Hurting someone to make one-self happy is okay.                              |        |            |              |        |       |
| 28.    | Frequent rewards can increase my performance.                                |        |            |              |        |       |
| 29.    | I correct others not because they are wrong but because they irritate me.    |        |            |              |        |       |
| 30.    | I find myself criticizing others too often.                                  |        |            |              |        |       |
| 31.    | I get irritated and depressed when I am unable to solve a given problem.     |        |            |              |        |       |
| 32.    | I think success depends on what we say and how we say it.                    |        |            |              |        |       |
| 33.    | I feel motivated to do a job in the right manner.                            |        |            |              |        |       |
| 34.    | I feel it is alright to help others financially even when I can't afford it. |        |            |              |        |       |
| 35.    | I can learn from the mistakes of others.                                     |        |            |              |        |       |
| 36.    | I feel shy when in a group.  |        |            |              |        |       |
| 37.    | I blame failures on situations.  |        |            |              |        |       |
| 38.    | I believe in forgiving others rather than remembering their misdeeds.        |        |            |              |        |       |
| 39.    | I try to remain calm while discussing sensitive/controversial issues.        |        |            |              |        |       |
| 40.    | I become the center of attraction every where that I go.                     |        |            |              |        |       |
| 41.    | I am capable of doing any work in life if I am interested in doing it.       |        |            |              |        |       |

| S. No. | Statement  | Always | Most Often | Occasionally | Rarely | Never |
|--------|--|--------|------------|--------------|--------|-------|
| 42.    | I feel guilty for not helping others when I could.   |        |            |              |        |       |
| 43.    | I apologise for my behaviour if I feel I am wrong.   |        |            |              |        |       |
| 44.    | I am liked by everyone.  |        |            |              |        |       |
| 45.    | It is better to check oneself rather than being checked by others.   |        |            |              |        |       |
| 46.    | I can play jokes on myself like I play at others.  |        |            |              |        |       |
| 47.    | I can get dishonest when the need arises.  |        |            |              |        |       |
| 48.    | One should take help of a counselor/friend to resolve a conflict/problem if you can't manage it on your own. |        |            |              |        |       |
| 49.    | I help others at the time of need.   |        |            |              |        |       |
| 50.    | I can handle a situation better than others can handle it.   |        |            |              |        |       |
| 51.    | I leave my job in between if I find it to be very difficult.   |        |            |              |        |       |
| 52.    | I act/ behave keeping my interests as priority.  |        |            |              |        |       |
| 53.    | There is usually a disagreement between my brain and my heart regarding what I should do.                    |        |            |              |        |       |
| 54.    | I can easily get involved in gossiping.  |        |            |              |        |       |
| 55.    | I find myself satisfied in life.   |        |            |              |        |       |
| 56.    | I face ego problems when I have to apologize.  |        |            |              |        |       |
| 57.    | I use words like sorry and thank you quite often.  |        |            |              |        |       |
| 58.    | I believe that nobody is perfect and there is a scope for improvement for everyone.                          |        |            |              |        |       |
| 59.    | In matters of conduct, I prefer to conform to the expected norms.  |        |            |              |        |       |
| 60.    | I think everybody is right at their own place.   |        |            |              |        |       |

# COGNITIVE DIFFICULTY SCALE

Dr. Vishwanand Yadav,  
Dr. Suraj Mal  
&  
Indu and Diksha

## COGNITIVE DIFFICULTY SCALE

| क्रम सं० | कथन   | हमेशा | अक्सर | अनिश्चित | कभी-कभी | कभी-नहीं |
|----------|---|-------|-------|----------|---------|----------|
| 1        | आप जो भी काम करते हैं उनमें ज्यादा समय लेते हैं।  |       |       |          |         |          |
| 2        | आप जो काम कर रहे होते हैं उस पर ध्यान केंद्रित करने में समर्थ हैं।  |       |       |          |         |          |
| 3        | आपने यह अनुभव किया है कि आप जिन कार्यों को अच्छी तरह से करते हो उनको अब उतने अच्छे ढंग से नहीं कर पा रहे हैं। |       |       |          |         |          |
| 4        | आप मानसिक रूप से सचेत एवं जागरूक अनुभव करते हैं।  |       |       |          |         |          |
| 5        | किसी विषय-वस्तु को याद करना आपके लिए कठिन है।   |       |       |          |         |          |
| 6        | आप स्वयं को विभिन्न मामलों के विषय में निर्णय लेने में समर्थ पाते हैं।  |       |       |          |         |          |
| 7        | जो कुछ लोग कह रहे होते हैं उन्हें आप देर से समझते हैं।  |       |       |          |         |          |
| 8        | आप कोई सामान खरीदते समय पैसे जोड़ने में गलतियाँ करते हैं।   |       |       |          |         |          |
| 9        | आप अखबार और पुस्तकों की सामग्री को पढ़ने या समझने में समर्थ हैं।  |       |       |          |         |          |
| 10       | आप यह भूल जाते हैं कि आप घर के एक भाग से दूसरे भाग में गए थे।   |       |       |          |         |          |
| 11       | आप सड़क पर संकेत स्तम्भों (Sign Boards) पर ध्यान देते समय स्वयं को असमर्थ पाते हैं।                           |       |       |          |         |          |
| 12       | आप किसी को निर्देश देते समय दाएं और बाएं की उलझन में पड़ जाते हैं।  |       |       |          |         |          |
| 13       | आप अच्छी तरह से परिचित सड़क पर यह भूल जाते हैं कि किस ओर मुड़ना है।   |       |       |          |         |          |
| 14       | वांछित वस्तु के बाजार में उपस्थित होने के बावजूद भी वह वस्तु आपको दिखाई नहीं देती।                            |       |       |          |         |          |

| क्रम सं० | कथन  | हमेशा | अक्सर | अनिश्चित | कभी-कभी | कभी-नहीं |
|----------|--|-------|-------|----------|---------|----------|
| 15       | आपको सहसा इस बात पर आश्चर्य होता है कि आपने किसी शब्द का उचित प्रयोग नहीं किया है।   |       |       |          |         |          |
| 16       | आपको निर्णय लेते समय परेशानी होती है।  |       |       |          |         |          |
| 17       | आप अनुभव करते हैं कि आप लोगों को समय देकर भूल जाते हैं।  |       |       |          |         |          |
| 18       | आप पैन, अखबार, चश्मा या पुरतकें जैसी वस्तुएं रखकर भूल जाते हैं।  |       |       |          |         |          |
| 19       | आप यह अनुभव करते हैं कि आप ऐसी वस्तुओं को फेंक देते हैं जिनकी आपको आवश्यकता है और ऐसी वस्तुओं को रख लेते हैं जो बेकार हैं। |       |       |          |         |          |
| 20       | आप उस समय दिवा खान में खोए होते हैं जिस समय आपको किसी बात को ध्यान से सुनना चाहिए।   |       |       |          |         |          |
| 21       | आप अनुभव करते हैं कि आप लोगों के नाम भूल जाते हैं।   |       |       |          |         |          |
| 22       | आप घर पर कोई काम करना शुरू करते हैं तो (अनजाने में) किसी और काम को करने लग जाते हैं।                                       |       |       |          |         |          |
| 23       | आप यह अनुभव करते हैं कि वह बात जो आपकी जिह्वा (Tip of Tongue) पर है उसे आप बिल्कुल याद नहीं कर पाते हैं।                   |       |       |          |         |          |
| 24       | आप अक्सर यह भूल जाते हैं कि आप बाजार क्या करने आए थे।  |       |       |          |         |          |
| 25       | आप कार्यों/योजनाओं को बीच में ही छोड़ देते हैं।  |       |       |          |         |          |
| 26       | आपको पढ़े हुए या सुने हुए मजाक या चुटकलें दूसरों को सुनाने में परेशानी होती है।  |       |       |          |         |          |
| 27       | आपने महसूस किया है कि आपके सामने बड़ी कठिनाई आने पर साधारण लोगों से सहायता लेते रहे हैं।                                   |       |       |          |         |          |
| 28       | आप अनुभव करते हैं कि आप किसी व्यवसाय, कार्य या विशेष ज्ञान के विशेषज्ञ हैं।  |       |       |          |         |          |
| 29       | आप अक्सर अपने आपको निश्चित समय में किसी कार्य के बारे में निर्णय में असमर्थ पाते रहे हैं।                                  |       |       |          |         |          |

| क्रम सं० | कथन   | हमेशा | अक्सर | अनिश्चित | कभी-कभी | कभी-नहीं |
|----------|---|-------|-------|----------|---------|----------|
| 30       | आपने अनुभव किया है कि थोड़ी सी दबावपूर्ण परिस्थिति में आप इतना विचलित हो जाते हैं कि आप यह भी भूल जाते हैं कि आप क्या कर रहे हैं। |       |       |          |         |          |
| 31       | आप अनुभव करते रहे हैं कि आप अपने कार्यों में सूझ-बूझ की कमी के कारण असफल रहते हैं।  |       |       |          |         |          |
| 32       | आप अनुभव करते हैं कि आपके मन में इतने विचार होते हैं कि आप ठीक से निर्णय भी नहीं ले पाते।   |       |       |          |         |          |
| 33       | आप अनुभव करते रहे हैं कि किसी वस्तु पर ध्यान केंद्रित करने में आपको कठिनाई होती है।   |       |       |          |         |          |
| 34       | आप अपना जन्मदिन, शादी की तिथि या आपसे संबंधित कोई अन्य तिथि भूल जाते हैं।   |       |       |          |         |          |
| 35       | आप वस्तुओं या व्यक्तियों की संख्या गिनने या उन्हें बराबर-बराबर विभिन्न समूहों में बांटने में गलतियां कर देते हैं।                 |       |       |          |         |          |
| 36       | किसी पुस्तक या पत्रिका को पढ़ने के बाद किसी विषय की समझने में आपको कठिनाई होती है और आप उसे पुनः पढ़ना चाहते हैं।                 |       |       |          |         |          |
| 37       | आप यह अनुभव करते हैं कि अधिकांश लोगों की तुलना में आप अधिक भुलकड़ होते जा रहे हैं/या आपकी स्मृति सम्बंधी समस्याएं अधिक हैं।       |       |       |          |         |          |
| 38       | आप अनुभव करते हैं कि वस्तुओं या कार्यों को संगठित या व्यवस्थित करने में आपको कठिनाई आती रहती है।                                  |       |       |          |         |          |
| 39       | आप अनुभव करते हैं कि असावधानी/लापरवाही के कारण आप गलतियां करते रहते हैं।  |       |       |          |         |          |
| 40       | आपका ध्यान शीघ्र भंग हो जाता है।  |       |       |          |         |          |

# Impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students

### Abstract

The study was intended to find out the impact of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students of Jammu district of Jammu & Kashmir in relation to their gender. Emotional intelligence is considered as an important aspect which helps the students to do better performance in the future. Descriptive survey method was employed. In the present study 240 higher secondary students were selected through random sampling technique from eight (8) different Govt. and Private higher secondary schools of Jammu district. This work is purely on the basis of the M.Phil dissertation. The result of the study reveals that there is significant impact of emotional intelligence on cognitive difficulty and Academic Achievement of Higher Secondary Students in relation to Gender.

**Sarika Sharma**  
Head,  
Deptt.of Education,  
Central University of  
Haryana,  
Haryana

**Keywords:** Emotional Intelligence, Cognitive Difficulty, Academic Achievement, Higher Secondary Students.

### Introduction

It is evident from the literature, and is proven by the researches that emotional intelligence (also known as Emotional Quotient) has a pre-requisite role in everything, every action, every decision, and in every judgement of an individual. It is expected that emotions not only drive us to act but it also provides its help and guidance in determining the aims, objectives and goals of life as well, and it also attempts for pleasant ends and avoiding unpleasant one. In the current situations it is well known that the number of difficulties faced by children and youth may give rise to many psychosomatic problems which lead to anxiety, tensions, and frustrations and emotional upsets in everyday life. From the last twenty years, it has been analyzed that emotional intelligence has manifested as a novel theoretical approach for the exploration of individual differences, which has not been clearly elucidated by customary methods of cognitive abilities or personality traits. In spite of increasing curiosity among investigators and specialists, it leftovers uncertain and undecided that in what way the paradigm should be best addressed (Roberts, Zeidner, & Matthews, 2001). EI is basically an important factor for effective control and in screening good academic performance of students. The success of the student mostly depends upon their intelligence which enlightens his path of way towards progress and prosperity and makes him optimist to achieve the personal goals of life. When the student does not clearly grip the concepts in the class room, perhaps it indicates the sign of low emotional intelligence. While penetrating the term emotional intelligence it is found that the term emotional intelligence (EI) is correlated with academic performance, job performance, and creative thinking etc.

Daniel Goleman, who is considered as the father of emotional intelligence, believes that emotional intelligence is conquering the skills of self-awareness, self-management, social awareness and relationship management. Emotional Intelligence is the capacity to diagnose, comprehend, understand, and cope one's emotions and that of others.

According to the Goleman's model of intelligence which is known as a assorted model and it is branded by the five wide-ranging zones. They are: 1) knowing one's emotions (Self-awareness), 2) managing emotions (Self-management), 3) motivating oneself, 4) recognizing emotions in others (Empathy), and 5) handling relationships (Relationship management). These skills have significant role in the academic performance of students.

**Dinesh**  
Assistant Professor,  
Deptt.of Education,  
Central University of  
Haryana  
Haryana

**Muhammad Aarif Malik**  
Research Scholar,  
Deptt.of Education,  
Central university of  
Haryana, Haryana

In order to know the consequence of the manifestation of these components in the development of one's life are briefly being discussed as below:

Daniel Goleman, who is considered as the father of emotional intelligence, believes that "emotional intelligence is conquering the skills of self-awareness, self-management, social awareness and relationship management".

John D. Mayer & Peter Salovey (1990). Emotional Intelligence refers to "the capacity to understand and emotional information and to reason with emotions" (Mayer & Salovey 1997) emotional intelligence is defined as "The ability to perceive emotion, integrate emotion to facilitate thought, understand emotions, and to regulate emotions to promote personal growth".

### **Cognitive Difficulty**

The concept of cognitive difficulties is exceedingly comprehensive and not well-defined. In floppy terms cognitive difficulty refers to the problems and issues related with general awareness, concentration attention, perception, and reading difficulty, learning, memory and problem solving. In spite if an individual is having trivial cognitive difficulty then he may be able to function and work adequately. The individuals having the deep cognitive difficulty impedes their day to day functioning (Broadbent, Cooper, Fitzgerald and Parkes, 1982; Lasson, Alderton, Meideffer and Underhill, 1997). The term Cognition was first proposed by T. G. Bever and Jaques Mehler and the term was born in France when the Jaques Mehler moved from the United States of France. The term cognitive refers to the general perspective which involves attention, perception, learning, memory, reasoning, decision making and problem solving etc. It is usually seen that every individual can learn, remember, reason and solve problems with prodigious accuracy Cognitive psychology takes us in the direction of studying all its related aspects of mental processes and their vital role in thinking, feeling, and behaving. The other major broad categories of this study are memory, perception, acquisition of knowledge and expertise, comprehension, understanding and production of language, problem solving, creativity, decision making and reasoning etc. The huge amount of experiments in this field is at the peak, but mathematical models and computer simulations also play a gigantic role in this field. The behavior by cognitive psychologists is also measured in laboratory in order to arrive at the conclusion about covert mental processes. According to this discipline human mind is well-thought-out first as processor of information; it has been found that it has an ability to compute answers to problems in an analogous manner as the software of a computer. The

information processing approach is nothing but the relationship of mental processes and computation which has proved productive and prolific. The human mind is dynamic and respire through meaning. We often use symbols and signs in order to refer to objects, things, events and other experiences of life.

### **Academic Achievement**

The term Academic achievement always refers its glance towards the success and pleasure of an individual. This term is constantly considered as nebulous because it does not embrace so much that it could be defined in definite terms. Nevertheless, the academic achievement of an individual comprises of his/her abilities, capabilities, skills to do hard work, aptitude etc. According to Rao (1980) achievement is concerned to a great extent with the development of knowledge, understanding and acquisition of skills. It has extensively been observed that it is among the important goals and objectives of life which after getting, provide lots of pleasure for one in his/her life. According to the conducted researches in the said field it has been analyzed that, several factors play its gigantic role in the academic achievement of an individual which are functioning and operating within the individual and in his external environment.

### **Significance of the Study**

In 21<sup>st</sup> century, the world of scientific technologies the life of an individual moves from simple to very complex. In order to be settled in life one has to face very tremendous challenges in the prevailing situations of the society. In order to face these challenges one must have the ability to fight against this, so that he can make his life flexible, adjusted in the society, get renowned and achieve every success. Every individual in the society wants to be respected by others, loved by others and have self-esteem. Emotions are the basis of everything what people do, feel, act, decision, making judgement and the basis of characteristics of personality. Academic achievement is regarded as one of the fundamental aims within the realm of education that can be a measure of the achievement of the end goals of an individual's and an educational system's success in the future. Emotional intelligence plays a gigantic role in predicting the academic performance of students. Good academic achievement is the key to success in personal and professional life and it also fetch economic security and social respect. Academic achievement largely depends on the students cognitive and non-cognitive factors like, aptitude, achievement motivation, socio-economic conditions, attendance, personality traits and teaching learning methods. Good academic achievement of students displays their punctuality, sensitivity,

gregariousness, intelligence and emotional maturity.

Cognitive difficulty of students refers to their problems having in general awareness, concentration attention, perception, and reading difficulty, learning, memory and problem solving. Forgetting is another main factor of cognitive psychology which has an immense role in determining the cognitive difficulty of students at different levels. In the classroom, it is an established fact that the teacher must be acquainted with the interest, readiness and motivation of students in the classroom. Yet it is recognized that initially, the teacher should also know the ability, aptitude, intelligence, comprehension, cognitive abilities and emotional maturity of students. In order to make teaching learning process interactive and effective the teacher must have the knowledge about all the above mentioned cognitive and non-cognitive factors. Now a day's education has a very wide scope in the global world and competition is at its peak among students to top. It is difficult for students to manage their emotions so that they can face different situations in the school life. It is not an easy task to cope with emotions in order to best performance. The prediction for achieving success is mostly indicated by the emotional measures and the guardian and teachers are always found eager, to develop the intelligence of students and they are putting laid emphasis on their emotions for better academic performance. It has been analyzed that a student a student is affected by emotions in several ways. According to Mayer et al. (2000) suggested that emotions signal relationships between a person and a friend, a family, the situation, a society, and internally between a person and his or her memory. Good emotional intelligence of students may diminish their cognitive difficulties and accrue their academic achievement. These individuals can easily apprehend emotional information and are capable to smear that understanding for effective decision making and problem solving cases in life. They will also be competent to bring out pure reasoning about emotions and practice the emotional knowledge to develop their thinking.

The number of studies conducted on student's emotional intelligence and other variables. It is apparent from the facts that the research has been done in this field on the relationship between emotional intelligence and academic achievement but little research has been done on emotional intelligence, cognitive difficulty and academic achievement of higher secondary students of Jammu district of J & K state. Hence, the present study has been undertaken to unveil how emotional intelligence puts its effect on cognitive difficulty and academic achievement of higher secondary students. The researcher signifies a study in the sense

that how and why emotional intelligence bears its impact on the cognitive difficulties and Academic achievement of higher secondary students. One study is conducted on the Value among Prospective Teachers (B.Ed Students) by Dr. Sarika Sharma and Anita Rai which gives an insight in the area of teacher trainees.

### **Emotional Intelligence**

Emotional intelligence in this study brings up to the five different abilities such as, self-awareness, managing emotions, motivating one-self, empathy and handling relations with others. The five mentioned abilities have been reflected as the indication of emotionally well-being. Henceforth the related abilities in this investigation refer to the measurement of Emotional Intelligence "by using the Emotional Intelligence Test.

### **Cognitive Difficulty**

According to the investigation cognitive difficulty states the problems and issues related with general awareness, concentration, attention, reading, writing, learning, memory, comprehension, understanding, forgetting and problem solving.

### **Academic Achievement**

The term may be well-defined as an execution or improvement in a performance conceded successfully by an individual or a group of individuals at the end of an academic task. In the present study it states the percentage of aggregate marks obtained by a certain student of 12<sup>th</sup> class student in his/her 11<sup>th</sup> class in the end term examination.

### **Higher Secondary School**

A higher secondary school is that type of school where students are given secondary education. The students admitted in these schools typically fall between the age group of 17-19, after secondary education and before higher education.

### **Objective of the Study**

To study the impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of class higher secondary students with reference to Gender (Boys/girls).

### **Hypothesis of the Study**

There will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to Gender (Boys/ girls).

### **Methodology**

This study used a descriptive study design to collect the sample from the concerned higher secondary schools through random sampling method. Keeping in view the objective of the study the researcher selected the sample through the random sampling technique. A total sample of 240 higher secondary

students of class 12<sup>th</sup> standard. The investigation has been confined to 8 higher secondary schools of Jammu district.

#### Tools

1. Emotional Intelligence Test of Dr. Ekta Sharma by Prasad Psycho Corporation New Delhi
2. Cognitive Difficulty Scale by Dr. V. N. Yadav, Suraj Mal, Indu and Diksha by Prasad Psycho Corporation New Delhi 2016

#### Hypothesis

There will be no significant impact

of emotional intelligence on cognitive difficulty and academic achievement of higher secondary students with reference to gender.

#### Analysis and Interpretation

The following statistical techniques have been used in the present study for the analysis of data among higher secondary school students with reference to gender. Regression analysis was used to analyze the data.

| Gender Model | Sum of Squares | df  | Mean Square | F     | Sig. |
|--------------|----------------|-----|-------------|-------|------|
| Regression   | 1848.876       | 2   |             | 5.977 | .003 |
| Boys 1       | 22734.624      | 147 | 924.438     |       |      |
| Residual     | 24583.500      | 149 | 254.657     |       |      |
| Total        | 12561.140      | 2   |             | 3.200 | .044 |
|              | 288481.693     | 147 | 6280.570    |       |      |
|              | 301042.833     | 149 | 1962.460    |       |      |
| Regression   |                |     |             |       |      |
| Girls 1      |                |     |             |       |      |
| Residual     |                |     |             |       |      |
| Total        |                |     |             |       |      |

From the above given table: the calculated value of F ratio is 5.977 which is greater than the table value and p value i.e. .003 and .044 which is less than .05 level of significance. Which indicates that Emotional Intelligence has a significant impact on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to gender?

Henceforth the hypothesis stating that there will be no significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to gender is rejected.

#### Findings

In the light of the analysis and interpretation of the data as given above, the investigator arrived at the following:

1. There found significant impact of Emotional Intelligence on Cognitive Difficulty and Academic Achievement of Higher Secondary Students with reference to Gender.
2. High cause and effect relationship was found on the higher secondary students with its five

On the basis of above findings, it can be concluded that Emotional intelligence plays gigantic role to improve the cognitive difficulty and Academic achievement among students.

#### References

1. Berenson, R., Boyles, G., & Weaver, A. (2008). Emotional Intelligence as a Predictor for Success in Online Learning. *International Review of Research in Open and Distance Learning*, 9(2), 1-17. (ERIC Document Reproduction Service No. EJ 801 091).
2. Leeson, Peter, Joseph Ciarrochi and Peatrick C. L. Heaven (2008) Cognitive Ability, Personality and Academic Performance in Adolescence. *Personality and Individual Differences*, 45, 63.
3. Lekhi, V. (2005). "A study of emotional maturity of adolescents in relation to cognitive and Non-Cognitive variables," Ph.D. Thesis, P.U.Chandigarh.
4. Maree, J. G. & Ebersohn, L. (2002). Emotional intelligence and achievement: Redefining giftedness. *Gifted Education International*, 16, 261-273.
5. Miglani, D. (2001). Emotional intelligence as related to academic achievement of Adolescents. Unpublished M.Ed. dissertation, Panjab University, Chandigarh.

