

**ACADEMIC SELF-CONCEPT AND EMOTIONAL INTELLIGENCE AS  
PREDICTORS OF ACADEMIC ACHIEVEMENT AMONG  
ADOLESCENTS**



**BY**

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# **ACADEMIC SELF-CONCEPT AND EMOTIONAL INTELLIGENCE AS PREDICTORS OF ACADEMIC ACHIEVEMENT AMONG ADOLESCENTS**

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## **CERTIFICATE**

Certified that M.sc Research Dissertation titled “**Academic Self-concept and Emotional intelligence as predictors of Academic achievement among adolescents**” prepared by **Faiza Ali** has been approved for submission to Quaid-i-Azam University, Islamabad.

**(Dr. Rubina Hanif)**  
*Supervisor*

**DEDICATED TO  
MY DEAR MOTHER**

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## ABSTRACT

*The purpose of the study was to empirically examine the relationship of academic self-concept and emotional intelligence as predictors of academic achievement among adolescents. A convenient sample of 250 adolescents (n = 125 male and n = 125 female) in age ranging 13-15 years were selected from different educational institutions of Rawalpindi and Islamabad (Pakistan). In order to achieve the objectives of the study two instruments i.e.; the Academic Self-Concept Scale (Ahmad & Haque, 1997) and Emotional Intelligence Quotient Inventory (Baron, 1997) were used. In addition, a demographic sheet was used which comprised of personal information i.e.; gender, SES and age. The study consisted of two phases i.e.; pilot study and main study. Statistical analysis of the main study revealed a significant positive correlation among academic self-concept, emotional intelligence, its subscales and academic achievement in adolescents. All the analyses were done with respect to the subscales as well. Overall there was not shown mean differences between males and females. Simple linear regression suggested that Academic Self-Concept scale and Emotional Intelligence positively contribute to Academic Achievement. With respect to SES adolescents from high SES displayed significantly high correlation with ASC and EI whereas adolescents belonging to middle class and low SES showed somewhat different results. In some of the results on SES middle class showed low correlation and on some of them adolescents from low SES showed low correlation with ASC and EI.*

**INTRODUCTION**

Education no doubt remains the most outstanding developmental priority area in the world today. However the end product of this development is the academic achievement. However it could be proved catastrophic if the emotional and affective domain is ignored as significant and essential role for schools and communities. Personal health, achievement and leadership have been found necessary at school when studied widespread (Goleman, 1995). Dryden and Vos (1994) reported that personal and emotional development is at the very interior of various programs when educational prospects were studied. They declared the failure of addressing tasks if one's affective and internal traits have not been addressed furthermore they specified that learning takes place when necessary emotional intelligence skills are there.

The value of school is greater than just an institute where students come and do some definite tasks and get a precise result. Importance of school atmosphere is more than just to provide a favorable environment for teachers to do their work and only to teach their syllabus accordingly. Many other factors have been learned which includes ways to make your career more brighter, internal and social development as well.

Organization of those learning activities which includes the aspect of autonomous and pragmatic learning is needed. The dimension of emotional intelligence related with emotions is high in importance. Along with emotional skills, student's perception of their abilities also play significant role in attaining success. It has been defined as academic self-concept (Redd, Brooks, & McGarvey, 2001). The model of self-concept given by Shavelson, Hubner, and Stanton (1976), which deals with the g factor of self-concept also with g factor of academic self-concept. They gave this construct step wise which is comprehensive and includes all the subjects such as math, social science, English. Emotional intelligence skills and competencies are a key to creating

and maintaining a healthy and productive school climate (Choi,2005; Liu, 2008; Muijs, 1997). The mutual effect of academic self-concept and achievement has been debated in many researches. It also proves that variations in one can cause variations in other too.

Leading educators have identified and emphasized the importance of a healthy school climate for student learning and achievement (Goodlad, 1983; McQuary, 1984). Byrne (1988) noted that social comparison plays a vital role in the development of self-concept. Students are inclined to form their perceptions of selves using their classmates or schoolmates as a reference group. It is suggested that academic self-concept may differ as a function of not only their academic achievement but also the achievement of their reference group. Incorporating effects were found when students were positioned to the crowd who were high achievers, rise in the self-concepts were found (Marsh, Kong & Hau, 2000; Trautwein et al., 2006). So keeping in view the significance of variables the present study is designed to find out relationship of academic self-concept, emotional intelligence and academic achievement of school children.

### **Academic Achievement**

Academic achievement is generally regarded as a display of knowledge attained or the skills developed in the school subjects (Busri, 2000). Lent et al., (2000) defined academic achievement as central to those capabilities and skills which are important to learn in order to make more progress in their work. According to Steinberger (1993), Achievement encompasses student ability and performance; it has many facets because it does not deal with a single illustration. It reflects the overall personality of a child. It is intricately related to human growth and cognitive, emotional, social and physical development. It keeps on going in different times and stages not only in the life of schooling but in practical life as well.

In another study, Spence (1983) defined achievement as academic achievement is concerned with behavior that allows the students' performance to be assessed according to some internally or externally forced standard that

involves the students in challenging with other students or that otherwise contains some standard of distinction.

According to Chan (1988) and Rosen (1961) successful achievement is a process in which many factors are involved and through their contribution one can have the achievement. Training is necessary under the supervision of a skilled person who would teach that how one should use his abilities in a good way. Enjoying the different activities is an experience which comes with the passage of time (Shafique, 2002).

To achieve success in any activity at any age, the person must be flexible willing to adjust to new roles and undertake new activities even if they are not necessarily to his liking. A boy must adjust to the approved male role even though he might prefer to play feminine role. In work, the person must learn to adjust to the demands of his job even though it may not be exactly what he wanted or hoped for. The person must also be independent of others to the extent that he can make his own decisions and carry them out successfully without having relied upon the advice, guidance, or help of others (Elias et al., 1991).

Weiner (1986) was the first to extend attribution theory to the domain of academic achievement. Early theories focused on the internal-external dimension of causality. Weiner stressed the importance of additional, independent dimensions, notably stability whether people see the causes as stable and unchangeable or stable and changeable. Weiner argued that the stability dimension is most related to expectations about future performance. He said that changing people's attributions of poor performance to an unstable cause such as lower effort or bad luck would raise their expectations about future performance. Weiner's work focused that people's poor performance was due to low effort. He tried to convince people.

**Factors Contributing in Academic Achievement.** The following factors contribute in the academic achievement of students.

**Role of Institution and Teachers.** No one can deny the importance of schools and teachers' role in enhancing the potential of the students. It could be made better by giving them good response of their work, building a friendly relationship with them, making new ways of learning for them and the differences of personality which vary from person to person should be accepted. The passive way of study should be discouraged (West, 2001).

**Promoting Active Learning.** The facilitators in the institutions are the persons who can play a major role in the ideal learning of students. It is all about the taking interest in different things happening around students in the classroom. There has been done some studies on the lively learning of students. One of them shows that understanding is the main thing because if the information has not been understood then producing the content will not be good (Fitz-gibbon, 1996). Another study shows that giving students some effort in their learning can be useful. Different tasks can be given to them like acting like in a drama or other research projects (Nobel & Bradford, 1992).

Another practice which can be most widely used and can be done easily is that previous information in book should be revised again and again. Through this method the things being learned will be long lasting (West, 2001).

**Development of Thinking Patterns.** Teachers are not the source of the teaching but also helpful in the building of students' different thinking patterns which includes thinking about the best suited solution of the problems and adjustment in the environment. All this happens in a hierarchy which starts from learning and ends up at evaluation. It is analyzed by doing different activities. This will be better when it would be started from simpler level to a complex level (Sousa, 1995).

**Promoting Success in Students.** According to McInerney (2000) achievement of success is divided into nine steps which firstly starts from the retention of previous knowledge. Then is about the presentation of the required content in steps. Next is to giving the clarifications. Asking about different things and then checking whether it has been understood by student. Providing guidelines at the very basic levels, giving the feedback and then keeping an



eye on student's work. Difficulty of the material can be understood before the learning.

Ludowyke and Scanlon (1997) showed in their finding that vague tasks given in the class will not contribute to the success of students but teaching them everything carefully will give us the desired quality of work. It is the most practical way to maintain ideal success in their studies.

**Providing Effective Feedback.** Feedback matters a lot in the improvement of student which directly affects their achievement. It is the responsibility of the facilitator to guide the students equally whether they are bright students or not. Facilitator should not show any discrimination on providing the feedback because the student who is not competent enough but wants to be like good students (Nobel & Bradford, 1992). Report cards are one of the major examples of previous feedback and records and it also shows the achievement of a student in continuity.

**Developing Good Relationships.** it is all about the teachers who provide the good environment and tries to create a good way of teaching. If they teach in an unbiased way and they accept the individuality of ever student then they do not lose the interest of the class in their teaching style. The teachers who are strict and do not understand the students' concerns, they create bad relationship with them. The best way is to communicate with the students and then favorable student-teacher relationship can be built.

**Motivation.** Belasco and Stayer (1993) indicated that motivation is totally dependent on the thinking pattern, goal oriented behavior and mood of the person. Some of them can be motivated thorough a negative event and others from the very opposite event. Some students are determined and some do their work sluggishly so it differs among them. So it depends on the nature of the student, in some cases anxious students achieve high because when they get anxious they just focus on their work whole heartedly, however negative thinking can bring you to the adverse negative effects and it results in a low performance. Only positivity and internal motivation leads to achievement.

**Accepting Individual Differences.** Everyone has his own capabilities and capacities from their childhood and they develop it accordingly. Furthermore it is somehow dependent on the surroundings in which students have been developed. They learn at the level of their own capacity. There might have been differences in the use of different learning processes. Moreover role of educators or mentors who teach them is very important. Their one concern is to judge the knowledge or strategies which they would like to prefer. So students come from different backgrounds and they have raised up differently so individual differences must be accepted (Bennis, 1994).

**Role of Peers.** Friends are also important and the students who share common interests and mutual goals are more likely to be successful. It is believed that they have more positive attitudes and self-concept as well. They take more interest in different activities and get higher education but those who have friends of low achievement, they cannot improve as well and cannot gain much. Selection of friends is an important decision to be made because they play a central role in academic achievement.

**Goals of the Learning Process.** The knowledge being learned always have some value to the person who is under the process of learning. They want to get better grades than others and want to achieve more. The students who do this process by their will they are more knowledgeable and they fulfill their goals in a very satisfied way. Satisfaction is a quite personal goal of learning but getting a good place in academics and in career is a long lasting goal. Facilitators can assist in making better goals in both personal and practical life (Miserandino, 1997).

**Construction of Knowledge.** Knowledge increases with the passage of time because it makes associations with the previous knowledge and develops in the form of a tree. It increases the information of the student and continues. New knowledge can modify the things learned previously and polishes the skills learned with the previous learned things. The knowledge is diverse in this type of construction of knowledge and varies in nature with

person to person. It can be helpful in dealing with new people, new tasks and in new situations (Miserandino, 1997).

**Strategic Thinking.** This type of thinking should be used in the solution of problems and rationalization. Understanding of the situations is very important only then the knowledge can be applied properly. It can be well developed when learned by facilitators and if they give them constructive feedback then it would be more useful. Outcomes are improved when facilitators give advices to their students in this type of learning (Sousa, 1995).

**Characteristics of People with Strong Need to Achieve.** There are some characteristics which tells about students need to achieve high grades.

**1. Personal responsibility for performance.** On theoretical grounds, it has always been assumed that subjects high in Ach would prefer being personally responsible for a performance result because only under such conditions, they could feel satisfaction from doing something better. Horowitz (1961) confirmed this theoretical assumption. Feedback is a way of knowing that how well the subjects are doing in their particular work. Studies have confirmed the importance of performance feedback to them. Kagan and Mess (1962) conducted a study, which shows that boys with high Ach were more interested at mechanical activities such as carpentry or constructing model vehicles than those low in Ach.

**2. Preference for moderate risks.** The reason for choosing moderately difficult task is that such task is more diagnostic of how well they are doing. If the task is easy, they will not know whether success was due to their efforts because everyone can do it and if the task is very difficult, they will also not be able to tell what their efforts produced because everyone can do it and if the task is very difficult, they will also not be able to tell what their efforts produced because they will fail. Thus they seek moderately difficult tasks to get information on the impact of their efforts on performance.

**3. Innovativeness.** Doing something better often implies doing it differently from before. It may involve finding a different, shorter or more efficient path to a goal. High achievers avoid routine behaviors.

These were the traits of people with strong need to achieve and now I will describe the obstacles to achievement, for any sort of achievement there are always some problems and hindrance underneath it, these problems or obstacles which effect achievement are described below.

**Role of Socio Economic Status in Academic Achievement.** This is the most important dimension of the learning of a student and family size and neighborhood is also influential (Majoribanks, 1996). Child's socio economic status is determined by income level, occupational status and parent's educational level (Jeynes, 2002). It is found in many researches that SES affects student outcomes (Chittendon et a., 1968; Da la Fuente, 1999; Jeynes 2002; Eamon 2005; Majoribanks 1996; McNeal 2001; Seyfreid 1998). It has been studied that pupils belong to low SES have low academic achievement because they have less resources to get opportunities (Eamon, 2005; Majoribanks ,1996; Jeynes, 2002). The effect of SES on children's academic achievement is less clear and it has been linked to both positive and negative influences on academic achievement (Domina, 2005).

**Gender Differences in Academic Achievement.** The affect that sex has on student's academic achievement has been debated and heavily researched over the past several decades. Past research has indicated an academic achievement gap between the sexes that boys are ahead of girls. However, more recent research has shown that the achievement gap has been narrowing and that in some instances girls have higher academic achievement than boys (Chambers & Schreiber, 2004). Girls have been found to exert more effort at school that is why they have better performance at school level (Ceballo, McLoyd & Toyokawa, 2004). It is also found that girls perform better in reading than boys but boys performance are found much better in mathematics and science (Etile, 2005). Still some researchers have found little or no difference in achievement between sexes (Chamber & Schreiber, 2004).

**Role of Birth Order in Academic Achievement.** Smaller family size has been linked with academic achievement. It has been concluded that students with fewer siblings are likely to receive more parental attention and have more access to resources than children from large families and it leads to better performance in school so achievement is higher (Eamon, 2005; Majoribanks, 1996). Black, Devereux and Salvanes (2005) found on the sample taken from Norway that first born children get good amount of education. Herrera, Zajonc, Wieczorkowska and Cichomski (2003) found that first born children get more years of education and they have higher opportunities of career. Travis and Kohli (1995) reported that earlier birth order was related to the total number of years of education, particularly for those individuals from middle-class families. Sputa and Paulson (1995) found a relationship between earlier birth order and school achievement in a sample of adolescents. Paulhus, Trapnell and Chen (1999) found in a continuity of four researches that first born children achieve high. Many of these studies have been successful, by showing that getting people to attribute failures to low effort led to increased effort and improved performance in the future (Anderson, 1983; Andrew & Debus, 1978).

### **Self-Concept**

The self-concept broadly defined, is a person's perception of himself or herself, formed through one's experience with an interpretation of one's environment. Gordon (1969) defined self-concept, the structure of self referential meanings available to an individual's conscious interpretive processes. According to Hamachek (1992) Self-concept is the cluster of ideas and attitudes which we have about ourselves at any given moment. Eysenck (1972) defined self-concept as .The totality of attitudes, judgment and value of an individual's relation to his behavior, abilities and qualities. Self-concept embraces the awareness of these variables and their evaluations. Murphy (1938) defined self-concept as the individual knows himself.

Specific self-concept perceptions (e.g., academic, physical, social) are organized in a hierarchical structure with the general omnibus self-concept at the apex of the hierarchy (Bong & Skaalvik, 2003). Multidimensionality of

self-concept has been supported by the Shavelson model (Boresma et al., 1979). It is the view that one has of oneself. It is the set of perceptions that the person has about himself, the set of characteristics, attributes, qualities and deficiencies, capacities and limits, values and relationships that the subject knows to be descriptive of him. Self-concept, social abilities and personal development is important at each level of training and development in the areas of the pupil's personal and social competence (Haeusler & Milicic 1996). Self-concept can be described in two types.

**Positive Self-Concept.** A positive self-concept is one in which the individual perceives himself as capable and important, therefore they are able to perform normal or superior level. Individuals with positive self-concept are willing to receive constructive criticism. They are willing to take risks more often. Positivity in self-concept is controlled internally, believe in his struggle and capabilities, one can be saved from failures. They treat very well with fatigue and always believe that they can control their actions as well. They take responsibility for their acts and believe that they have control and influence over the events in their lives. They know how to deal with adversity in positive ways. They are able to handle ambiguous situations. They feel themselves able to influence their environment and feel proud of what they do as well. Those who have higher self-concept handle set-backs with a sense of control, even when events are outside of their influence or arbitrary (Shafique, 2002).

**Negative Self-Concept.** On the other hand, a negative self-concept is one in which the person perceives himself as incapable to such extent that he is unable to perform at a normal level. People with negative self-concepts avoid leadership roles, criticism and risk-taking. Those who have less motivation for learning are with low self-image. They often engage in socially unacceptable behaviors of all kind especially acts of delinquency or violence against others. People with negative self-concept have these experiences often and rarely challenge themselves. Those with negative self-concept frequently have an external locus of control. They have a belief that they are the mercy of fate or luck or others than their own efforts. These individuals quickly blame others

for their troubles and rarely feel responsible for their actions. Their usual concept is the evil made me do it (Shafique, 2002).

Song and Hattie (1983) have demonstrated that there is much evidence for accepting a model of self-concept similar to that proposed by Shavelson, Hubner and Stanton (1976). Academic self-concept is further subdivided into classroom, achievement and ability self-concepts. Social self-concept can be divided into peer and family self-concepts and presentation of self can be divided into confidence of self and physical self-concept. At the base of the hierarchy further divisions can be made (Valentine, 2001). For example, ability self-concept can be divided into subject specific self-concepts.

**Components of Self-Concept.** According to Hamachek (1992) self-concept is a collection of beliefs about the kinds of person we are or it is our own private mental image. one person sees himself too tall, another feels himself too innocent and still another person says about himself that he is too sentimental. Whatever may be the case, self-concept has four separate but interrelated components which are Physical self-concept, social self-concept, emotional self-concept, intellectual self-concept.

All the four components have uniqueness of their own but they are so much interrelated that our self-concept in one area may influence our self-concept in other areas. A person who has positivity component of self-concept, he can convey his feeling very well.

The interconnectedness of our own emotional circuitry is important to understand our concept of ourselves and to help us see that whether in others or ourselves a short circuit in one part of the self can be fixed directly. If a person is afraid of speaking in the social settings and tries to attend a workshop but she tries to get over and creates a new image for himself in his mind. Taking risks in a direction which can give him good results so his positive self-concept gets stronger but could not take be succeeded without taking risks.

In other instances, a short circuited aspect of the self has to be repaired indirectly. Illustration can be seen in many behaviors, for example a female student may not be as attractive as she would like to be low physical self-concept, but she can work hard to be good at her studies enhancing intellectual self-concept and can make an effort to be a pleasant person, ready to help others developing a positive self-concept. Similarly a male student can feel that he is not as smart as he would like to be low intellectual self-concept but he can work on his studies and can work on extra projects whenever possible enhancing intellectual self-concept and he can exercise daily to look good maintaining a physical self-concept. Both these persons can compensate for what they see as shortcomings in themselves by strengthening other aspects of the self (Franken, 1994).

**Academic Self-Concept.** Academic self-concept is defined as an individual's perception of self-efficacy in academic subjects (Bong & Skaalvik, 2003).

Academic self-concept is one of the facets of self-concept. Academic self-concept refers to individual's self-concepts that are formed specifically toward an academic domain as knowledge and perceptions about themselves in achievement situations (Bong & Skaalvik, 2003). According to Ahmad (1986) self-concept is a belief of pupils with regards to their academic ability. Recent studies have suggested there may be many facets to the construct of self-concept. Shavelson et al., maintained that there are seven identifiable characteristics of self-concept; in their view self-concept is organized, multifaceted, developmental, evaluative and differentiable.

Self-concept exists in steps. At the second level two more specific components are there; academic self-concept and non-academic self-concept. Academic self-concept is further divided into specific subject matter areas such as, mathematics, English and science at a third level; and similarly, non-academic self-concept is divided into social, emotional and physical components (Shafique, 2002).



Students' academic self-concept is significantly correlated with their future goals (Ahmavaara & Houston, 2007; Deosaran, 1978; Garg, Melanson, & Levin, 2007; Koumi, 2000; Marsh, 1991; Nagy et al., 2006). Marsh found that the mediating effect of academic self-concept on educational aspirations did not overcome the negative effect that school-level achievement had on educational aspirations (Marsh, 1991). Academic self-concept does appear to have an effect on the students' future goals in the majority of studies. Academic self-concept is important because it has effect on future educational aspirations (Ahmavaara & Houston, 2007).

### **Emotional Intelligence**

Hein (2005) defined emotional intelligence as the mental ability we are born with which gives us emotional sensitivity and potential for emotional learning management skills. Baron defined emotional intelligence as emotional intelligence is a cross-section of interrelated emotional and social competencies that determine how we understand and express ourselves, understand others and relate with them and cope with daily demands (Baron, 2006). In past twenty years much work had been done but with controversies. (Mayer, Salovey, & Caruso, 2000). Emotional intelligence is the ability to see the brighter side of the picture and appreciation and giving those feelings to others which give them the effect that they can understand others and rationalize (Mayer & Salovey, 1997). The involvement of brain areas in the fore seeking abilities have been proved (Hilgard, 1980; Mayer & Salovey, 1997). Great work is done by the neuroscientists and they have been able to explore bio-physiological minute refinements for studying human emotions. Amygdala is the part of the human brain responsible as emotional sentry, any deficits and impairments in human amygdala make them disable in gauging human emotions and the importance of emotions in different situations (Ekman & Davidson, 1994). Thus it shows that some areas in the brain are specific in function of gauging emotions. Like the other human tasks and chores it is significant for the students to have emotional and cognitive abilities such as reasoning and language.

**Historical Perspective of Emotional Intelligence.** The common thought for emotions in two millennia was emotions are in the way. It was the first academic use of the term emotional intelligence (Mayer & Salovey, 1997). Although Wechsler (1940) discussed the non-intellective factors in general intelligence but he concentrated more on intellective factors of intelligence. Wechsler considered Doll's work (1935) as an early attempt to measure the non-intellective aspect of general intelligence. Doll developed a structured interview called the Vineland social maturity scale designed to assess social competence. So Wechsler and Doll began the initial work on non-intellective intelligence as early as the 1930s.

Thorndike (1937) and Stern reviewed the attempts to measure the social intelligence. A widely known questionnaire was reviewed by Thorndike and Stern called George Washington Social Intelligence Test in 1926. Abraham Maslow (1950) wrote about the individual's emotional, physical, spiritual and mental strengths. In 1970s and 80s this led to define the. Researches were do emotional intelligence. Once intelligence was perfection but people recognized that there was more to life as well as emotions were prediction but it was being felt by people that it might have substantive value (Salovey, 2002).

These views by Wechsler and Doll got support when Howard Gardner suggested that intelligence encompass multiple dimensions, combining a variety of cognitive aspects with elements of non-cognitive intelligence or personal intelligence (Gardner, 1983).

Thorndike (1920) was one of the first to identify the aspect of emotional intelligence; he called social intelligence, which is the ability to manage men and women, boys and girls to act wisely in human relations. Gardner (1983) proposed that intrapersonal and interpersonal intelligences are important type intelligence typically measured by IQ and related tests.

**Modern Perspective of Emotional Intelligence.** Gardner's influential model of multiple intelligences includes two varieties of personal intelligence,

the interpersonal and intrapersonal intelligences. EI can be seen as elaborating on the role of emotion in these domains. The characteristics of an individual having interpersonal intelligence seem to have natural leadership abilities.

The characteristics of an individual having intrapersonal intelligence are having a strong character or will, sense of independence, has a realistic sense of personal strengths and weaknesses, often prefers to work, accurately expresses how he or she is feeling, has high self-esteem and a high sense of self-worth. Work done on non-cognitive aspect of intelligence when they coined the term Emotional Intelligence. (Salovey & Mayer, 1990). Commonly the term emotional intelligence is associated with Daniel Goleman. Baron (1997) defined non-cognitive intelligence as an array of personal, emotional and social abilities and skills that influence one's ability to succeed in coping with environmental demands and pressure

**Salovey's Theory of Emotional Intelligence.** Mayer and Salovey (1990) measured the difference between people's ability in the area of emotions. They found that some people were better at identifying their own feelings, feelings of others and solving problems involving emotional issues. This model is decidedly cognitive in focus (Mayer & Salovey, 1997).

Knowing one's emotions is about recognizing a feeling as it happens and is the keystone of emotional intelligence. Managing emotions is an ability to handle feeling in an appropriate way to build on self-awareness. Recognizing emotions in others is the fundamental people skill is another ability that builds on emotional self-awareness. Handling relationships is the art of relationship is a skill in managing emotions in others.

Salovey and Mayer (1997) listed four branches of EI which reflected their thoughts. They say that the branches are arranged from more basic psychological processes to higher.

**Self-awareness.** Emotional self-awareness: using gut sense to guide decisions, reading your own emotions and recognizing their impact. Accurate

self-assessment: knowing your own strengths and weaknesses. Self-confidence: a sound sense of your self-worth and capabilities.

***Self-management.*** Emotional self-control: keeping disruptive emotions and impulses under control. Transparency, trustworthiness; displaying honesty and integrity. Adaptability and flexibility in adapting to changing situations or overcoming obstacles. Achievement, the urge to improve performance to meet inner standards of excellence. Initiative readiness to act and seize opportunities. Optimism is seeing the upside in events.

***Social awareness.*** Empathy means sensing other's emotions, understanding their perspective and taking interest in their concerns. Organizational awareness, decision networks and politics at the organizational level. Service is about recognizing and meeting follower or customer need.

***Relationship management.*** Inspirational leadership: guiding and motivating with a compelling vision. Influence is wielding a range of tactics for persuasion. Developing others is about enhancing other's abilities through coaching, feedback and guidance. Change catalyst is about initiating, managing and leading in a new direction. Conflict management is about resolving disagreements. Building bonds are cultivating and maintain a web of relationships. Teamwork and collaboration is cooperation and team building

The conclusion might be that there is an intelligence based on emotion and people who have this capacity are less depressed, healthier, more employable and have better relationships. They have the ability to perform well.

**Goleman's Theory of Emotional Intelligence.** Goleman (1995) pointed out with a number of researches to the importance of social, emotional abilities for personal success and this led to his famous book emotional intelligence. Saying that emotional intelligence is important for success is quite misleading and simple as well. Mayer, Salovey and Caruso (1998) argued that EI itself is not responsible for success but it provides bedrock for

competencies. Goleman tried to represent this idea by making a distinction between Emotional Intelligence and Emotional Competencies.

Goleman (1998) defined emotional intelligence as a person's self-awareness, self-confidence, self-control, commitment and integrity and a person's ability to communicate, influence, initiate change and accept change.

Goleman (1998) defined emotional quotient as emotional intelligence is a different way of being smart, EQ is not destiny. It includes your feeling and using them to make good decisions, managing your feelings well; motivating yourself with zeal and persistence, maintaining hope in frustration, exhibiting empathy, interacting smoothly and managing your relationships effectively. Those emotional skills matter immensely, in marriage and families, in career and the workplace.

Goleman gave framework of EI while working with EI in 1998 which reflects Self-awareness, Self-management, Social awareness and Relationship management. This has been identified in initial researches at hundreds of corporations and organizations.

Integrating a great deal of research, Goleman (1998) presented a model of Emotional Intelligence with twenty-five competencies arrayed in five clusters (Boyatzis, 1982; Jacobs, 1997; Rosier, 1997; Spencer & Spencer, 1993).

**Baron's Model of Emotional Intelligence.** Baron (1980) has been developing a definition and measure of non-cognitive intelligence (Baron, 1988; Baron, 1992; Baron, 1996; Baron, 1997). He reviewed numerous theories that focused on variables thought to be related to normal, optimal and pathological emotional and social functioning. The key components of emotional intelligence were initially grouped on a logical and non-statistical clustering. Initially 11 factors were thought to determine successful functioning. Four additional factorial components of non-cognitive intelligence were added in the current version of the Baron Emotional Quotient Inventory.

The results confirmed that the EQ-I is a reliable and valid measure of Emotional intelligence.

Baron developed perhaps the first attempt to assess EI in terms of a measure of well-being. He was the first who used the term Emotional Intelligence. Baron (2000) defined EI in terms of an array of emotional and social knowledge and abilities that influence our overall ability to effectively cope with environmental demands. This array includes the ability to aware of and to understand oneself, the ability to be aware, to understand and to relate to others; the ability to deal with strong emotions and control one's impulses; the ability to adapt to change and to solve problems of a personal or a social nature. The five main domains in this model are Intrapersonal skills, Interpersonal skills, adaptability, Stress management and General mood (Baron, 1997)

There are the brief definitions of the 15 factors of emotional, personal and social intelligence. There are five domains of emotional intelligence in which 15 factors are included. The five domains included interpersonal relationships, intrapersonal relationships, stress tolerance, impulse control and general mood components. Emotional self awareness is the factor of intrapersonal relationships. It says that emotional self-awareness is the ability through which we can understand others feelings and it is the source through which one can be aware of such feelings. Component assertiveness is about our beliefs and thoughts. Using this factor one can defend his or her rights in a manner which will not give any harm to others. Expression of feelings is better using assertiveness. Self-regard tells us that the more we will understand others, the more we will give them respect and acceptance. Self-actualization is one of the potential abilities. It about what one wants to do and what he likes to do he enjoys more doing those things. Independence leads us to get free of emotional dependency. Empathy is about to mixed up with others feelings and give them the impression as you can feel their pain as well. Social responsibility gives us the moral sense, in which one should be a useful and cooperative member of his society. In reality testing one experiences the difference between emotional and objective world. What exists in reality and what is not. Flexibility is about psychological adjustment in varying situations.

Problem solving is factor which contributes in one's life to make him identify problems and to generate the possibly best suited solutions. The ability to withstand in stressful situations and try to cope with the stress in a positive manner is named stress tolerance. Delaying an impulse and controlling emotions is the factor of impulse control. Optimism is something which helps to maintain a positive attitude when negative things are happening around. Happiness is the feeling of satisfaction and positive expression.

**Gender Differences.** Goleman (1995) offers counter views of emotionally intelligent men and women. According to Goleman, men who are high in emotional intelligence are socially poised, outgoing, and cheerful. They have capacity for commitment to people or causes, for taking responsibility and for having an ethical outlook; they are sympathetic and caring in their relationships. They are comfortable with themselves and others. Their emotional life is rich.

Women who are emotionally intelligent tend to be assertive and express their feelings directly. Life holds meaning for them and they feel positive about themselves. Like the men they are also outgoing and gregarious. Their social poise lets them easily reach out to new people. They are comfortable enough with themselves to be playful and spontaneous. They rarely feel anxious or guilty.

### **Relationship between Self-Concept and Academic Achievement**

The idea that there is a relationship between self-concept and school performance is not new. Prescott Lecky (1945) was the first to point out that low academic achievement might be related to a student's self-perception being unable to learn academic material. Lecky's research, although simplistic and uncontrolled by today's standards opened the door to a research; how students feel about their abilities. For better or worse, consciously or unconsciously, affect their academic performance. Thus the idea suggested that academic achievement might not be simply an expression student's perception of his intelligence, which positively

helps them feel confident but negatively makes them feel hesitant and uncertain (Hamachek, 1992).

Researchers agree that academic self-concept is a multidimensional and hierarchical structure. The frame of reference plays an important role in the formation of academic self-concept. Academic achievement is substantially correlated with academic self-concept, less correlated with general self-concept and almost not correlated with non-academic self-concept.

Numerous reviews of self-concept research has been conducted and concluded that there is a moderately strong relationship between student's academic achievement and their self-concept of ability (Bloom, 1976; Byrne, 1984; Hamachek, 1992; Hansford & Hattie, 1982; Marsh, 1990; Wylie, 1979).

Literature (Byrne, 1984; Hansford & Hattie, 1982; Marsh, 1984) indicates that academic self-concept is clearly differentiable from general self-concept and that academic self-concept is more highly correlated with academic achievement than is general self-concept.

Hansford and Hattie's (1982) review is significant because of the sheer weight of the 128 studies they included in their meta-analysis. Correlations were found to range between .77 and .96, with an average of .21, although this is by no means a large correlation, the fact that it remains positive in the face of so many different variables across so many studies suggest that the relationship between self-concept academic achievement though the small, is real (Hamachek, 1995).

In a study of ninth grade students Blair (1967) found that intelligence scores as well as academic achievement were related to self-concept and noted that academic achievement tended to correspond with self-concept. Positive self-concept or high achievement is mutually reinforcing. A positive self-concept contributes to high achievement and high achievement in turn can enhance self-concept. Strathe and Hash (1979) pointed out that there are significant and positive correlations between self-concept and performance in



the academic role. It was about those students who are motivated to live up to what they believe about themselves. Students who have negative attitudes about themselves impose limitations on their own achievement.

In a research which was designed to investigate the relationship between self-concept of ability and academic performance of over 1000 male and female from the time they started seventh grade and completed tenth grade and found that self-concept was a significant factor in achievement at each grade level (Brookover, Erickson & Joiner, 1967).

Another study revealed that students achieving high grades in the school usually evaluate themselves more positively as compared to the students achieving normal grades. High-grade achievers evaluate themselves as more intelligent, more hardworking and more favorable to their teachers as compared to normal students (Dusek & Flaherty, 1981).

It is found in researches that self-concept and emotional intelligence has shared effect but it in turn affects academic achievement of the students as well (Paulhus, Trapnell, & Chen, 1999). Another important component of self-concept that has been widely studied in academic motivation and achievement domains is that of implicit theories of intelligence (Ablard, 2002; Blackwell, Trzesniewski, & Dweck, 2007; Dupeyrat & Mariné, 2005; Gonida, Kiosseoglou, & Leondari, 2006; Leondari & Gialamas, 2002; Spinath, Spinath, Riemann, & Angleitnerb, 2003).

Similar to the relationship between academic self-concept and academic achievement, the relationship between emotional intelligence and achievement is often referred to as having self-fulfilling effects (Furnham, 2001). Numerous researches have been conducted in the past and they suggested that academic self-concept and academic achievement is related with each other. A number of studies have shown that academic self-concept functions as a significant predictor of students' academic achievement (Choi, 2005). It is also examined and reported that both variables have the reciprocal relationship (Barker et al., 2005).

Moreover, Kornilov et al., (2008) showed that implicit theories of intelligence and personality are closely related in representing an individual's more general incremental or entity beliefs about himself or herself and correlate with goal orientations. Quantitative researches are also included in addressing the significant relationship of academic self-concept and academic achievement (Moller et al., 2009).

Hyde and Fennema (1990) found that Asian American girls are higher scorers than Asian American boys. Research findings suggest that these gender differences in self-concept hold across ability and achievement levels. Although some studies have found negligible gender differences in general academic self-concept between gifted girls and boys (Chan, 1988; Kelly & Jordan, 1990). Gifted girls seem to have higher verbal self-concepts than gifted boys (Li & Adamson, 1995), and gifted boys have higher self-perceptions of their math and physics abilities than gifted girls (Terwilliger & Titus, 1995; Ziegler, Heller, & Broome, 1996). Richwein (2000) found that boys tended to rate themselves higher than girls. Marsh (1989) Australian documented an absence of gender effect. Lau (1990) reported a significant gender effect, in favour of boys, on adolescents' academic self-concept.

## **Relationship between Emotional Intelligence and Academic Achievement**

Emotional intelligence is an increasingly popular construct and has been thought to responsible for success in just about every aspect of a person's life (Goleman, 1995b). Goleman have been described research suggested that emotional intelligence is important for success in life. The emotional competencies are linked and based on emotional intelligence. Similarly, people who are better able to regulate emotions found it easier to develop a competency such as initiative or achievement drives. It was found that cognitive abilities accounting for 30% of variability in academic grades at most, seventy percent of the variance remains to be explained (Swinburne center for Neuropsychology, Research Units, 2002).

Catell and Butcher 1968 tried to predict both achievement and creativity from ability, personality and motivation. The authors succeeded in showing the importance of personality in academic achievement however could not link motivation to it. Baron, Dielman and Cattell 1972 conducted another study to assess more fully the relative importance of both ability and personality variables in the prediction of academic achievement. One of the conclusion on which they reached was that IQ together with the personality.

Goleman (1995) reported that success is only 20% contributed by intelligence in our lives but the other factors counted much more. Saying that factor of communal status, fortune and affective intelligence are important. Once the skills related with affective and social component of intelligence has been taught it puts great affect on the academic achievement of student and keep consistently affecting it in the following years. It can have long lasting effects after teaching these skills (Elias et al., 1991). According to Ediger (1997) fundamentals of achieving high are emotions and feelings. He stated that stress should be put on the emotions because separation of this area from the fore seeking component cannot be done. Quality emotions and feelings help students give their best potential in classroom. Those who think negatively always have difficulty in the accomplishment of their goals. Richardson and Evans (1997) explored different ways to teach these affective and social abilities in many different cultures with varied ways. Development of the

understanding of their own emotions and others too was the main idea and learning this thing was helpful in the contact of students with one another was also done. Finnegan (1995) argued that institutions are the major source to learn the capabilities essential in emotional intelligence and they should help in learning. These abilities will help to achieve high in the place of their working and getting a good place in our society as well. This is possible only when learning has been done.

A number of studies have investigated the impact of adolescent EI on academic success (Epstein, 1999; Barchard, 2003; Furnham, 2001; Petrides et al., 2004). These studies indicated varied results because of the used tests of emotional intelligence had different validities and reliabilities. It is made confirmed from a study which showed that style of leadership enhanced academic achievement which is directly affected by the climate of the school; this was revealed by the forty two principles of the school. Diverse abilities of emotional intelligence verified that principle's attitude counts a lot. Those teachers who were working under polite natured principles were more positive. Students' performance below average level in studies and de-motivated attitude of teachers was because of their person in charges' style (Hey & Meber, 2000).

Preceding study on gender differences in emotional intelligence has shown that male and female does not create difference on emotional intelligence but there is a proof that they may have some difference on unambiguous abilities. Baron (2000) examined the scores on over seventy-seven hundred administrations of the emotional quotient inventory (EQ-i) and found that men and women did not differ on the sum of emotional intelligence women did score significantly higher on empathy, interpersonal relationships and social responsibility while men scored higher on self-actualization, assertiveness, stress tolerance, impulse control and adaptability.

## **Rationale of the Study**

Literature suggests that academic achievement is an important area of research for students. Many researches has been conducted in order to uncover the relationship of academic achievement with other variables i.e., self-concept, emotional intelligence in west (Marsh, 1990; Hamachek, 1995; Ediger, 1997; Epstein, 1999; Furnham, 2001; Barchard, 2003; Barker et al., 2005; Choi, 2005); but these researches identify relationship of each variable with academic achievement separately and these are very few in numbers. Theories suggest that it would be meaningful to study role of emotional intelligence and self-concept in adolescents from other cultures as well. It was observed, that in Pakistan, there has not been conducted much researches on academic self-concept. So keeping in view, need of time, the present study is designed to explore the relationship of academic achievement with academic self- concept and emotional intelligence among adolescents.

This research will help students to better understand the significance of academic self-concept and emotional intelligence in their higher academic achievement. As Ediger (1997) stated that emotions and feelings are necessary for the accomplishment of a goal and goodness. Emotional area of concern should be stressed by teachers because that it is not possible to apart if from cognitive aspect. Feelings and worth help students to give their best in classroom which increases academic achievement. Same is the relationship of academic self-concept and academic achievement has been explored. As Brookover, Erickson and Joiner (1967) found that self-concept was a significant factor in achievement at each grade level. Prediction of academic achievement of student has been predicted by academic self-concept (Choi, 2005).

Now this research will contribute to explore the relationship of variables. Some researches in west also reveals that students of those schools working under the authority of government suffer from lack of good resources to provide their children a good education, this is also the concern of researcher

to uncover this aspect. Discovering whether effects are there in the academic achievement of student or not.

Another objective of present study is to explore the role of gender regarding academic achievement and its correlates. It has been well documented in literature that gender play a significant role with reference to these variables (Goleman, 1995; Li & Adamson, 1995; Terwilliger & Titus, 1995; Ziegler, Heller & Broome, 1996; Hyden & Fennema, 1990; Kelly & Jordan, 1990; Richwein, 2000; Ceballo, Mcloyd & Toyokawa, 2004; Etile, 2005 ). The research would explain the gender difference in the relationship of academic self-concept, emotional intelligence and academic achievement. Much research has been done to explore the gender differences in relation to these variables, so to check the relationship in our culture. Further, present study also focused to see differences on some other demographic variables i.e., birth order, socio economic status.

A reason that could possibly tell us about the purpose of research is that after reviewing the previous researches it had been proved that academic self-concept and emotional intelligence does not predict academic achievement significantly in Asian countries ( Yahya, 1998; Radha, 1999; chigharof, 2001). In this context, where contradictory findings regarding the predictor role of self-concept and emotional intelligence are documented, the present study has sufficient justification to be conducted to explore the relationship of variables.

## Objectives, Hypotheses and Operational Definitions

### Objectives

1. To identify the relationship of academic self-concept and emotional intelligence among adolescents.
2. To investigate predicting role of academic self-concept and emotional intelligence for academic achievement among adolescents.
3. To explore the role of demographic variables (gender, age, SES, parental education, family size, no of siblings, birth order) with study variables.

### Hypothesis

1. High academic self-concept is positively related with high emotional intelligence in adolescents.
2. High academic self-concept and high emotional intelligence will positively predict the academic achievement of adolescents.
3. Female adolescents will show more positive academic self-concept than male adolescents
4. Female adolescents are more emotionally intelligent and higher in academic achievement than male adolescents.

### Operational Definition of Variables

**Academic Self-Concept.** Academic self-concept is the feature of self-concept. Pupils Perception of one's rank in his academics. It also serves as a feeling of their capacity with respect to their student's studies. Scores of the academic self-concept scale are used in the measurement of academic self-concept (Steinberger, 1993).

**Emotional Intelligence.** Emotional intelligence is defined as a collection of social and emotional knowledge and capabilities that manipulate the abilities of an individual to deal with the difficulty of environment. This collection includes the person to be in conscious. It has also included the communication and understanding of a self of an individual and relating this ability in treatment of sturdy emotions. It has also a nature of solving problems and taking up to changes

(Baron, 2000). In this research the scores on emotional intelligence inventory were taken for the assessment of emotional intelligence.

### **Operational definition of subscales of emotional intelligence**

**Self-regard.** Self-regard tells us that giving acceptance and respect others is related with the level at which we understand them.

**Emotional self-awareness.** It is the foundation of getting aware of those feelings which can be helpful in understanding others .

**Assertiveness.** Defending one's basic rights in a good way and it is also helpful in the good expression .

**Independence.** It is helpful in getting free of emotional reliance.

**Self-actualization.** Self-actualization is one of the potential abilities. It is about liking and disliking of doing things.

**Empathy.** Mixing up with other person's feelings and giving his or her impression as you can feel their pain as well.

**Social responsibilities.** It is about behaving as a sensible member of the society and feeling the responsibilities as well.

**Interpersonal relationships.** It is about the establishment of those relationships which are satisfactory reciprocally.

**Stress tolerance.** It is the ability to survive strongly in stressful situations and coping positively.

**Impulse control.** It is about controlling one's emotions in an effective way.

**Reality testing.** It is all about the reality of world and experiencing the difference between the objectivity and emotions.



**Flexibility.** Coping and adopting changes in daily life situations.

**Problem solving.** It is about finding most suitable solutions for interpersonal and intrapersonal problems.

**Optimism.** It is about looking at the brighter side of life.

**Happiness.** Feeling satisfied with self, with others and life in general (Baron, 1997).

**Academic Achievement.** Spence (1983) defined achievement as a task oriented behavior that assesses the behavior of the individual on the basis of some external or internal standard which analyzes the individual with the competition of others. In this study, over all percentages of the students of class 9<sup>th</sup> and 10<sup>th</sup> were the part of assessment is indicator of academic achievement. Their previous class percentages were reported by the students.

## METHOD

The research was carried into two phases i.e. pilot study and main study.

### Phase-I

#### Pilot Study

#### Objectives of the Study

The main objectives of the pilot study were to pre-test the scales in order to find out the flaws that may interfere in the findings of the main study and to see the direction of the results. More specifically, objectives of the pilot study were:

1. To measure the psychometric properties (reliability, item total correlation) of academic self-concept, emotional intelligence and its subscales among adolescents.
2. To see the relationship of academic self-concept, emotional intelligence and its subscales on a relatively small sample.

#### Sample

A sample of 60 students (male  $n=30$  and female  $n=30$ ) between the ages of 13 to 15 years ( $M= 14.33$ ,  $SD= .73$ ) was taken. The sample was taken from federal and model institutions of Rawalpindi and Islamabad for the pilot study. The students of 9<sup>th</sup> and 10<sup>th</sup> and four sections of both classes were included. The sample was taken from upper, middle and low socio-economic status. The students participated and co-operated voluntarily.

#### Instruments

**Academic Self-Concept.** To measure the academic self-concept of adolescents, 40 items, Academic self Concept Scale developed by Ahmad and Haque in 1997 was used. It is a five-point likert type scale with response categories strongly disagree scored as 1 and strongly agree scored as 5. Minimum scores are 40 and maximum scores are 200. The items numbers

3,4,9,11,12,13,14,17,19,20,21,23, 24,28,29,30,32,33,38 and 39 are reversely scored items. 0.89 is the reliability of the scale.

**Emotional Intelligence.** Emotional intelligence inventory developed by Baron (1996) with 15 subscales and total 117 items were used to measure emotional intelligence of adolescents. Minimum score is 117 and maximum score is 585. Five point likert scale is used for the expression of value as; 1 for not true of me and 5 for very often true of me. In this test 55 items are scored positively and 62 items are negatively scored. Reliability of the scale is 0.92. The item numbers 2,3,9,11,12,15,16,17,19,20,21,22,24,25,27,29,31,32,34,37,38,41,43,44,45,46,47,50,51,57,58,60,61,62,64,66,67,68,72,73,76,77,81,82,83,86,90,91,95,98,102,103,104,107,108,110,111,11, 113,115,116 and 117 are scored reversely .

Following is the facets of the basic five dimensions of emotional intelligence and no of items scored in subscales.

1. Intrapersonal domain included the subscales and no of items on which they scored are, self-regard (10,22,36,50,62,75,89,101,114),emotional self-awareness(6,8,21,31,46,56,78)assertiveness(20,33,59,72,85,98,111)independence(3,17,29,43,82,95,107)andself-actualization(5,19,32,45,58,71,84,97,110).
2. Interpersonal domain included empathy (16,39,46,54,63,87,105,109),social responsibilities (14,27,41,54,63,67,80,92,105) and interpersonal relationships (9,21,28,35,49,55,61,74,88,100,103).
3. Adaptability includes reality testing (7,31,34,47,60,73,78,86,99,112), flexibility(12,55,38,52,65,77,91,116) and problem solving (1,13,26,40,53,66,79,104).
4. Stress management includes stress tolerance (4,18,30,44,57,69,83, 96,108), impulse control (11,24,37,51,64,76,90,103,115).
5. General mood includes optimism (10,18,23,48,70,94,96,117) and happiness (2,15,28,42,55,68,81,93,106).

**Academic Achievement.** Academic achievement was measured on the basis of the percentages of 9<sup>th</sup> and 10<sup>th</sup> class students. Students reported previous class

percentages as students of class 9<sup>th</sup> reported their 8<sup>th</sup> class percentage and 10<sup>th</sup> class students reported their percentage of 9<sup>th</sup> class.

## **Procedure**

A Sample of 60 students (male  $n=30$ , female  $n=30$ ) was needed from the schools of Islamabad and Rawalpindi. At the initial level researcher had to entered in the federal and model schools and then meetings with principals were held to aware them about the cause of research. After that permission were given by them to researcher to move ahead in the research process. Then researcher took the second step to make the authorities believe that all the information would be kept hidden and goals of the study were made clear. The section in charge was told about the whole process and then preferably he was asked to choose punctual students in the class. The students included in the study were given the booklet to be filled out. ASC and EI were administered on the adolescent sample. The most careful instruction was about the marking of all the statements and putting down the statements would not be considered good. It was made confirmed by each participant that they have participated by their will. Time limit was not given to the students. Questions of the students were handled in the best suited way. They attempted the scale in one session.

## Results

**Table 1**

*Means and standard deviations of academic self-concept, emotional intelligence and its subscales (N=60)*

| Variables | n   | M      | SD    | $\alpha$ | Range |      | Skew  | Kurtosis |
|-----------|-----|--------|-------|----------|-------|------|-------|----------|
|           |     |        |       |          | mini  | maxi |       |          |
| ASC       | 40  | 144.27 | 23.77 | .881     | 93    | 183  | -.237 | -.860    |
| EI        | 117 | 290.63 | 43.31 | .858     | 192   | 386  | -.229 | -.590    |
| SR        | 9   | 18.82  | 6.38  | .674     | 9     | 34   | .650  | -.409    |
| ESA       | 7   | 21.10  | 4.72  | .244     | 11    | 34   | -.059 | 1.106    |
| Ind       | 7   | 20.77  | 7.47  | .002     | 12    | 66   | 3.802 | 22.38    |
| SA        | 9   | 21.32  | 4.9   | .415     | 9     | 34   | -.092 | .385     |
| Empathy   | 8   | 21.35  | 5.60  | .455     | 9     | 32   | -.134 | -.653    |
| SR        | 9   | 18.6   | 5.03  | .430     | 8     | 35   | .561  | 1.19     |
| Ass       | 7   | 19.15  | 5.26  | .445     | 9     | 35   | .554  | .555     |
| IR        | 11  | 24.77  | 5.75  | .456     | 12    | 37   | .099  | -.67     |
| RT        | 10  | 26.9   | 5.62  | .336     | 11    | 39   | -.321 | .241     |
| Flex      | 8   | 21.53  | 4.73  | .223     | 8     | 32   | -.377 | -.078    |
| ST        | 8   | 23.9   | 6.15  | .237     | 11    | 31   | 1.00  | 1.46     |
| Imp ctrl  | 9   | 24.57  | 6.24  | .592     | 10    | 42   | .273  | .339     |
| Opt       | 9   | 16.9   | 5.39  | .491     | 11    | 41   | .178  | -.007    |
| Happ      | 8   | 19.00  | 6.70  | .590     | 8     | 30   | .372  | -.603    |
| Prb solv  | 9   | 18.55  | 4.12  | .688     | 9     | 37   | .886  | .263     |

*Note.* ASC= Academic self-concept, EI= Emotional intelligence, SR= Self-regard, ESA= Emotional self-awareness, Ind= Independence, SA= Self-actualization, SR= Social responsibilities, Ass= Assertiveness, IR= Interpersonal relationships, RT= Reality testing, Flex= Flexibility, ST= Stress tolerance, Imp ctrl= Impulse control, Opt= Optimism, Happ= Happiness, prb solv= Problem solving.

Table no 1 shows that mean and standard deviation of adolescents on ASC and EI and on the subscales as well which are M= 144.27 and SD= 23.77; and for EI the M= 290.63 and SD= 43.31 respectively. The mean scores of ASC shows high mean scores but EI shows low mean scores. Same is the case with the mean scores and standard deviation of the subscales which shows low mean scores and standard deviations. The reliability of ASC is .88 which is significantly high and

the reliability of EI is .85 which is also satisfactory. The ranges of the reliabilities of subscales are from .002 to .688 which is not satisfactory but acceptable. The skew value is higher on the variable of ASC and EI. Self-regard, independence, stress tolerance and problem solving shows lower skew value. ESA, SA, RT and Flex shows higher skew values. All the values of subscales exist in the range of kurtosis except independence.

**Table 2**

*Item total correlation of academic self-concept (N=60)*

| Item no | <i>r</i> | Item no | <i>r</i> |
|---------|----------|---------|----------|
| 1       | .42**    | 22      | .44**    |
| 2       | .55**    | 23      | .20      |
| 3       | .14      | 24      | .58**    |
| 4       | .44**    | 25      | .60**    |
| 5       | .46**    | 26      | .65**    |
| 6       | .23      | 27      | .43**    |
| 7       | .27*     | 28      | .44**    |
| 8       | .66**    | 29      | -.35**   |
| 9       | .28*     | 30      | .73**    |
| 10      | .46**    | 31      | .34**    |
| 11      | .32*     | 32      | .63**    |
| 12      | -.36**   | 33      | .45**    |
| 13      | .31*     | 34      | .56**    |
| 14      | .48**    | 35      | .58**    |
| 15      | .67**    | 36      | .49**    |
| 16      | .58**    | 37      | .41**    |
| 17      | .62**    | 38      | .67**    |
| 18      | .69**    | 39      | .26*     |
| 19      | -.20     | 40      | .39**    |
| 20      | .70**    |         |          |
| 21      | .61**    |         |          |

Table no 2 shows item total correlation of academic self-concept. Most of the items have positive correlation between the items of academic self-concept except item no3, 6, and 12,19,23,29. Item no 3, 6 and 23 shows non-significant

correlation whereas item no 19 and 29 is negatively non-significant with the total correlation of academic self-concept.

**Table 3**

*Item total correlation of emotional intelligence (N=60)*

| Item no | <i>r</i> | Item no | <i>r</i> |
|---------|----------|---------|----------|
| 1       | -.31*    | 2       | .33*     |
| 3       | .07      | 4       | .50**    |
| 5       | .10      | 6       | .12      |
| 7       | .37**    | 8       | .09      |
| 9       | .21      | 10      | .40**    |
| 11      | .40**    | 12      | .22      |
| 13      | .15      | 14      | .19      |
| 15      | .15      | 16      | .09      |
| 17      | -.125    | 18      | .29*     |
| 19      | .33**    | 20      | -.05     |
| 21      | -.00     | 22      | .42**    |
| 23      | .10      | 24      | .03      |
| 25      | .12      | 26      | .46**    |
| 27      | .05      | 28      | .47**    |
| 29      | .04      | 30      | .30*     |
| 31      | .32*     | 32      | .48**    |
| 33      | .14      | 34      | .17      |
| 35      | .40**    | 36      | .25*     |
| 37      | .28*     | 38      | .27*     |
| 39      | .12      | 40      | .45**    |
| 41      | .32*     | 42      | .54**    |
| 43      | .08      | 44      | .07      |
| 45      | .47**    | 46      | .29*     |
| 47      | .15      | 48      | .30*     |
| 49      | .18      | 50      | .33**    |
| 51      | .38**    | 52      | .09      |
| 53      | .41**    | 54      | .32*     |

| Item no | <i>r</i> | Item no | <i>r</i> |
|---------|----------|---------|----------|
| 55      | .27*     | 56      | .25*     |
| 57      | .35**    | 58      | .12      |
| 59      | .23      | 60      | .23      |
| 61      | .34**    | 62      | .55**    |
| 63      | .21      | 64      | -.04     |
| 65      | .14      | 66      | .39**    |
| 67      | .16      | 68      | .34**    |
| 69      | .39**    | 70      | .48**    |
| 71      | .18      | 72      | .14      |
| 73      | .20      | 74      | .16      |
| 75      | .54**    | 76      | .29*     |
| 77      | .37**    | 78      | .13      |
| 79      | .21      | 80      | .27*     |
| 81      | .56**    | 82      | .16      |
| 83      | .18      | 84      | .24      |
| 85      | .19      | 86      | .16      |
| 87      | .19      | 88      | .37**    |
| 89      | .43**    | 90      | .43**    |
| 91      | .32      | 92      | .30*     |
| 93      | .31*     | 94      | .30*     |
| 95      | .37**    | 96      | .41**    |
| 97      | .25*     | 98      | .18      |
| 99      | .16      | 100     | .31*     |
| 101     | .19      | 102     | .37**    |
| 103     | .12      | 104     | .29*     |
| 105     | .08      | 106     | .34**    |
| 107     | .21      | 108     | .36**    |
| 109     | .17      | 110     | .33**    |
| 111     | .41**    | 112     | .44**    |
| 113     | .21      | 114     | .31*     |
| 115     | .29*     | 116     | -.146    |
| 117     | .44**    |         |          |



Table no 3 shows item total correlation of emotional intelligence quotient inventory. Item nos.

3,5,6,8,9,12,13,14,15,16,23,24,25,27,29,33,34,39,44,47,49,67,71,72,73,74,52, 78,79,58,59,60,82,83,84,85,86,87,63,65,91,107,109,98,101,03,105,113,1, 64,17 and 116 shows non-significant correlation. However all the other items show a positive correlation with emotional intelligence.

**Table 4**

*Item total correlation of subscales of Emotional Intelligence Subscale (N=60)*

| Item no's                | <i>r</i> | Item no's     | <i>r</i> |
|--------------------------|----------|---------------|----------|
| Self-regard              |          | Independence  |          |
| 10                       | .34**    | 3             | -.10     |
| 22                       | .51**    | 17            | -.00     |
| 36                       | .52**    | 29            | .16**    |
| 50                       | .38**    | 43            | .09      |
| 62                       | .49**    | 82            | -.02     |
| 75                       | .51**    | 95            | .34**    |
| 89                       | .44**    | 107           | .11      |
| 101                      | .51**    | Assertiveness |          |
| 114                      | .30**    | 20            | .09      |
| Emotional self-awareness |          | 33            | .22      |
| 6                        | .06      | 59            | .23      |
| 8                        | .12*     | 72            | .32*     |
| 21                       | .05      | 85            | .82**    |
| 31                       | .30**    | 98            | .37**    |
| 46                       | .34**    | 111           | .41**    |
| 56                       | .11      | Empathy       |          |
| 78                       | .12      | 16            | .25      |
| Self-actualization       |          | 39            | .50**    |
| 5                        | .21      | 46            | .20      |
| 19                       | .50**    | 54            | .65**    |
| 18                       | .50**    | 53            | .61**    |

| Item no                 | <i>r</i> | Item no                     | <i>r</i> |
|-------------------------|----------|-----------------------------|----------|
| 32                      | .52**    | 63                          | .47**    |
| 45                      | .75**    | 87                          | .56**    |
| 58                      | .32*     | 105                         | .47**    |
| 71                      | .39**    | 109                         | .49**    |
| 84                      | .31*     | Interpersonal relationships |          |
| 97                      | .37**    | 9                           | .28*     |
| 110                     | .44**    | 21                          | .23      |
| Social responsibilities |          | 28                          | .49**    |
| 14                      | .43**    | 35                          | .54**    |
| 27                      | .36**    | 49                          | .53**    |
| 41                      | .40**    | 55                          | .40**    |
| 54                      | .45**    | 61                          | .32*     |
| 63                      | .45**    | 74                          | .35**    |
| 67                      | .46**    | 88                          | .42**    |
| 80                      | .56**    | 100                         | .36**    |
| 92                      | .42**    | 103                         | .42**    |
| 105                     | .40**    | Flexibility                 |          |
| Reality testing         |          | 12                          | .29*     |
| 7                       | .27*     | 55                          | .39**    |
| 31                      | .47**    | 38                          | .19      |
| 34                      | .54**    | 52                          | .45**    |
| 47                      | .40**    | 65                          | .58**    |
| 60                      | .63**    | 77                          | .42**    |
| 73                      | .45**    | 91                          | .42**    |
| 78                      | .10      | 116                         | .38**    |
| 86                      | .26*     | Problem solving             |          |
| 99                      | .41**    | 1                           | .05      |
| 112                     | .15      | 13                          | .26*     |
| Stress tolerance        |          | 26                          | .56**    |

| Item no   | <i>r</i> | Item no         | <i>r</i> |
|-----------|----------|-----------------|----------|
| 4         | .61**    | 40              | .61**    |
| 30        | .60**    | 66              | .31*     |
| 44        | .31*     | 79              | .48**    |
| 57        | .42**    | Impulse control |          |
| 69        | .42**    | 11              | .49**    |
| 83        | .41**    | 24              | .21      |
| 96        | .50**    | 37              | .39**    |
| 108       | .56**    | 51              | .40**    |
| Optimism  |          | 64              | .35**    |
| 10        | .39**    | 76              | .46**    |
| 18        | .55**    | 90              | .58**    |
| 23        | .42**    | 103             | .57**    |
| 48        | .41**    | 115             | .53**    |
| 70        | .59**    |                 |          |
| 94        | .45**    |                 |          |
| 96        | .69**    |                 |          |
| 117       | .56**    |                 |          |
| Happiness |          |                 |          |
| 2         | .58**    | 68              | .39**    |
| 15        | .49**    | 81              | .65**    |
| 28        | .63**    | 93              | .49**    |
| 42        | .65**    | 106             | .57**    |
| 55        | .39**    |                 |          |

Table no 4 shows the item total correlation of all the subscales of emotional intelligence quotient inventory. Self-regard shows a positive correlation of all the items with the total of self-regard. Emotional self-awareness shows a low item total correlation because item no 6, 21, 56 and 78 shows non-significant correlation with the total of emotional self-awareness. Independence also shows a low correlation because only 2 items shows a positive correlation with the total of independence and item no 3,17,43,82,107 shows a non-significant correlation. 4 items of

assertiveness shows a positive correlation and 3 items (20,33,59) shows a non-significant correlation with the total of assertiveness. Items of self-actualization shows a significant positive correlation with the total of self-actualization except 1 item. Items of empathy show a positive correlation except 2 items. All the items of social responsibilities show a positive correlation with the total of social responsibilities. Items of interpersonal relationships, flexibility, problem solving and impulse control shows a positive significant correlation except 1 item. Reality testing shows a positive correlation with the total of reality testing except 2 items. All the items of happiness shows a positive correlation

**Table5***Inter scale correlation of emotional intelligence and its subscales (N=60)*

|    |      | 1 | 2      | 3      | 4     | 5     | 6    | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    |
|----|------|---|--------|--------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1  | EI   | - | -.42** | .78**  | .40** | .39** | .24  | .67** | .42** | .49** | .67** | .65** | .44** | .66** | .61** | .67** | .68** |
| 2  | ASC  |   | -      | -.45** | .03   | -.16  | -.04 | -.20  | .02   | -.20  | -.21  | -.25  | -.11  | -.31* | -.28* | -.30* | -.18  |
| 3  | SR   |   |        | -      | .33*  | .30*  | -.02 | .43** | .31*  | .43** | .52** | .44** | .28*  | .47** | .39** | .62** | .60** |
| 4  | ESA  |   |        |        | -     | -.05  | -.04 | .31*  | .26*  | .09   | .40** | .45** | .13   | .32*  | .12   | .28*  | .38** |
| 5  | ASS  |   |        |        |       | -     | .10  | .24   | .01   | -.03  | .07   | .22   | .12   | .05   | .05   | .19   | .19   |
| 6  | Ind  |   |        |        |       |       | -    | .13   | -.20  | -.07  | -.01  | .14   | .05   | .19   | .36** | -.05  | .11   |
| 7  | SA   |   |        |        |       |       |      | -     | .21   | .28*  | .38** | .49** | .05   | .32*  | .39** | .39** | .53** |
| 8  | EM   |   |        |        |       |       |      |       | -     | .55** | .46** | .05   | .28*  | .29*  | .01   | .52** | .18   |
| 9  | SR   |   |        |        |       |       |      |       |       | -     | .45** | .35** | .19   | .14   | .11   | .36** | .25   |
| 10 | Intr |   |        |        |       |       |      |       |       |       | -     | .32*  | .44** | .30*  | .31*  | .45** | .60** |
| 11 | RT   |   |        |        |       |       |      |       |       |       |       | -     | .03   | .41** | .41** | .29*  | .45** |
| 12 | FLX  |   |        |        |       |       |      |       |       |       |       |       | -     | .33** | .30*  | .35** | .19   |
| 13 | ST   |   |        |        |       |       |      |       |       |       |       |       |       | -     | .46** | .61** | .38** |
| 14 | IC   |   |        |        |       |       |      |       |       |       |       |       |       |       | -     | .20   | .26*  |
| 15 | OPT  |   |        |        |       |       |      |       |       |       |       |       |       |       |       | -     | .51** |

Note. ASC= Academic self-concept, EI= Emotional intelligence, SR= Self-regard, ESA= Emotional self-awareness, Ind= Independence, SA= Self-actualization, SR= Social responsibilities, Ass= Assertiveness, IR= Interpersonal relationships, RT= Reality testing, Flex= Flexibility, ST= Stress tolerance, Imp ctrl= Impulse control, Opt= Optimism, Happ= Happiness, prb solv= Problem solving.

\*\* $p < 0.01$ ; \* $p < 0.05$

Table no 5 shows that emotional intelligence and ASC shows negative correlation but emotional intelligence shows significant positive correlation with all the other subscales. ASC shows non-significant correlation with the subscales of EI except impulse control, optimism and problem solving. SR shows significant positive correlation with the subscales except independence. ESA shows positive correlation with the subscales except assertiveness, independence, social responsibilities, flexibility, impulse control and problem solving. Ass shows non-significant correlation with all the subscales. Ind shows non-significant correlation with all the subscales except impulse control. SA shows positive significant correlation with all the subscales except empathy and flexibility. EM shows significant correlation with the subscales except reality testing, impulse control and happiness. SR shows positive correlation with the subscales except flexibility, stress tolerance, impulse control and happiness. Interpersonal relationships show significant positive correlation with all the subscales. RT shows significant correlation with all the subscales except flexibility. Flexibility shows significant correlation with the subscales except happiness and problem solving. ST shows significant correlation with the other subscales. IC shows significant correlation with the subscales except optimism. Opt and happiness shows significant correlation with the subscales.

## **Discussion**

The pilot study was designed to provide a general understanding of the variables to be studied in the main study. The objectives of this study were to pre-test the scales in order to find out the flaws that may interfere in the findings of the main study and to study the relationship of academic self-concept with emotional intelligence among adolescents. The study was conducted on a small adolescent sample (male  $n=30$  and female  $n=30$ ). The age of adolescents ranged from 13 to 15 years.

Descriptive analysis indicating mean scores and standard deviation of adolescents on academic self-concept, emotional intelligence and its subscales showed that adolescents have high mean scores on ASC but low mean score on EI comparatively. On the subscales the mean scores are also low. The reliabilities of the scales obtained are .88

and .85 for ASC and EI respectively. The measured reliabilities were very close to the reliabilities mentioned in the original scales. Those reliabilities were .89 and .92 for ASC and EI respectively. The reliabilities of the subscales were ranged from .002 to .68 and these are acceptable at some extent but not satisfactorily high but the original reliabilities of the subscales ranged from .40 to .70. Then the minimum and maximum range of the scores of the scales and subscales were computed which told that the range of maximum scores are not very high and minimum scores are also low. The range of the skew exists within the mentioned range of skew for some of the subscales but it also exceeded from the original range of the skew as well.

The item total correlation shows that the items of ASC scale have positive item correlation with the total of the scale except six items. These six items showed non-significant correlation with the total of the scale. The item total correlation of EI tells that 54 items showed non-significant correlation whereas all the other items showed significant correlation with the total of the scale. Same case had been seen with the item total correlation of the subscales only three of the subscales showed positive correlation of all the items of the subscale with the total of the subscale whereas most of them showed positive item correlation with half of the items. The subscales which showed positive item total correlation with all the items of the subscales are self-regard, social responsibilities and happiness.

The correlation analysis showed that ASC has negative correlation with EI on the analysis of pilot study data. EI showed positive correlation with all its subscales. ASC showed correlation at the level where it became non significant negative correlation with the subscales of EI but interestingly it showed significant correlation with the subscale named impulse control. Independence was the subscale which showed frequently non significant correlation with the other subscales. Assertiveness was the one which showed non-significant correlation with all the other subscales. Emotional self-awareness showed significant correlation with 9 subscales and it was non-significant with 6 of the subscales. On the other hand independence showed non-significant relationship with all the other subscale apart from impulse control. Self actualization showed a good correlation overall

except two subscales. Social responsibilities, interpersonal relationships, flexibility, reality testing, stress tolerance and impulse control showed significant correlation with some subscales but some of them showed non-significant correlation. Optimism and happiness showed good relationship with the other subscales. As the research indicates that

ASC and EI are positively related with each other but the results of pilot study did not showed the results supported by previous research. This study was conducted on small sized sample so it can be the cause of the non significant results or for those results which did not show satisfactory relationship as mentioned in previous researches. So it is not possible to reach on the conclusion only on the basis of the results of pilot study. In next phase when main study would be conducted those results will be given the more precise and clear picture of the relationship of the variables.

## **Phase-II**

### **Main Study**

Part II of the study consisted of main study. The purpose of conducting the main study was to fulfill the objectives and to test the hypotheses formulated for present research.

### **Sample**

A sample of 250 adolescents (male  $n=125$  and female  $n=125$ ) was taken from different educational institutions of Rawalpindi and Islamabad for the study. Their ages ranged from 13 to 15 years. The sample was taken from upper, middle and low socio-economic status. The sample with these socio-economic statuses was taken from different federal government and model educational institutions. Hence the demographic variables were the adolescent's gender, age, socio-economic status and birth order.

### **Procedure**

The scales (i.e., ASC and EI) were administered on the adolescents sample (male  $n=125$  and female  $n=125$ ). Their ages ranged from 13 to 18 years. The sample was taken



from different educational institutions of Rawalpindi and Islamabad. When the permission was granted by the head of the institutions, the respondents were approached in groups. They were briefed about the research being carried out and were assured that all the information taken from them will be kept confidential and would only be used for the research purpose. ASC and EI were administered on the adolescents' sample. They were asked to give their responses as honestly as they could and not to leave any item of the scale unanswered.

Questionnaire booklet were distributed and completed during scheduled class times and participants were given instructions outlining ethical issues such as consent, confidentiality, voluntarily participation and anonymity. Participants were requested to rate items on all the scales. The data was collected through test administration by the researcher. Participants were notified about the length of the tests prior to test administration. An explanation of the purpose of the study as well as testing procedure was also conveyed to them. Consent from all the participants was obtained prior to the viewing of the instruments.

Once the respondents were comfortable, the instructions were given to them about the scales. They were asked to give their responses as honestly as they could. Hence as per requirement of the research, data was collected for the main study.

## RESULTS

**Table 6**

*Mean scores and standard deviation on academic achievement, emotional intelligence and with subscales (N=250)*

| Variables | <i>n</i> | <i>M</i> | <i>SD</i> | $\alpha$ | Minimum | Maximum | Skew  | Kurtosis |
|-----------|----------|----------|-----------|----------|---------|---------|-------|----------|
| ASC       | 40       | 404.78   | 45.92     | .891     | 312.00  | 538.00  | .316  | -.755    |
| EI        | 117      | 144.11   | 24.03     | .895     | 63.00   | 189.00  | -.036 | -.706    |
| SR        | 9        | 33.11    | 6.96      | .700     | 16.00   | 45.00   | -.377 | -.842    |
| ESA       | 7        | 22.24    | 4.42      | .207     | 8.00    | 34.00   | .204  | .278     |
| Ind       | 7        | 21.26    | 4.40      | .220     | 12.00   | 34.00   | .047  | -.372    |
| SA        | 9        | 31.95    | 5.65      | .260     | 8.00    | 33.00   | -.238 | .156     |
| Empathy   | 8        | 32.59    | 5.59      | .463     | 17.00   | 45.00   | .077  | -.508    |
| SR        | 9        | 33.84    | 5.93      | .494     | 18.00   | 44.00   | -.249 | -.660    |
| Ass       | 7        | 22.15    | 4.40      | .568     | 18.00   | 45.00   | -.406 | -.674    |
| IR        | 11       | 40.05    | 6.62      | .559     | 21.00   | 55.00   | -.128 | -.377    |
| RT        | 10       | 33.70    | 5.37      | .314     | 21.00   | 50.00   | .111  | -.262    |
| Flex      | 8        | 25.80    | 4.98      | .366     | 14.00   | 40.00   | .131  | -.330    |
| ST        | 9        | 29.91    | 5.37      | .433     | 11.00   | 45.00   | -.204 | .817     |
| Imp ctrl  | 9        | 29.14    | 6.19      | .527     | 11.00   | 43.00   | -.014 | -.245    |
| Opt       | 8        | 29.86    | 5.66      | .622     | 14.00   | 40.00   | -.310 | -.640    |
| Happ      | 9        | 33.69    | 6.68      | .687     | 14.00   | 45.00   | -.398 | -.636    |
| Prbsolv   | 8        | 28.94    | 5.05      | .518     | 14.00   | 40.00   | -.380 | -.352    |

*Note.* ASC= Academic self-concept, EI= Emotional intelligence, SR= Self-regard, ESA= Emotional self-awareness, Ind= Independence, SA= Self-actualization, SR= Social responsibilities, Ass= Assertiveness, IR= Interpersonal relationships, RT= Reality testing, Flex= Flexibility, ST= Stress tolerance, Imp ctrl= Impulse control, Opt= Optimism, Happ= Happiness, prb solv= Problem solving.

Table no 6 shows the mean scores and standard deviation of adolescents on ASC which are  $M= 404.78$  and  $SD= 45.92$ ; the mean score and standard deviation of adolescents on EI which are  $M= 144.11$  and  $SD= 23.03$  which shows low scores and the mean scores and standard deviation of adolescents on subscales ranges from  $M= 21.26$  to  $33.84$  and  $SD= 4.40$  to  $6.96$ .

The alpha reliabilities of the scales of academic self-concept scale and emotional intelligence quotient inventory is .89 which is satisfactorily high. The reliabilities of the

subscales ranges from .207 to .719. Minimum range of academic self-concept is 312.00 and max range is 538.00 and minimum range of emotional intelligence is 63.00 and max is 189.00. The minimum range of the subscales is from 8.00 to 21.00 and the maximum range is from 33.00 to 55.00. Skewness value of ASC is low but it is higher in EI. SR, SA, SR, ASS, IR, ST and Impulse control shows higher skewness. All the values of subscales fall within the range of Kurtosis.

**Table 7**

*Item correlation of academic self-concept (N=250)*

| Item no | <i>r</i> | Item no | <i>r</i> |
|---------|----------|---------|----------|
| 1       | .36**    | 28      | .55**    |
| 2       | .53**    | 29      | .55**    |
| 3       | .25**    | 30      | -.40**   |
| 4       | .58**    | 31      | .70**    |
| 5       | .38**    | 32      | .48**    |
| 6       | .39**    | 33      | .54**    |
| 7       | .33**    | 34      | .52**    |
| 8       | .56**    | 35      | .44**    |
| 9       | .39**    | 36      | .46**    |
| 10      | .51**    | 37      | .51**    |
| 11      | .49**    | 38      | .56**    |
| 12      | -.40**   | 39      | .49**    |
| 13      | .32**    | 40      | .43**    |
| 14      | .54**    |         |          |
| 15      | .53**    |         |          |
| 16      | .57**    |         |          |
| 17      | .64**    |         |          |
| 18      | .60**    |         |          |
| 19      | -.27**   |         |          |
| 20      | .61**    |         |          |

| Item no | <i>r</i> |
|---------|----------|
| 21      | .64**    |
| 22      | .50**    |
| 23      | .34**    |
| 24      | .62**    |
| 25      | .53**    |
| 26      | .59**    |
| 27      | .55**    |

Table 7 shows a positive item total correlation of all the items of academic self-concept scale with total of the scale.

**Table 8**

*Item total correlation of emotional intelligence scale (N=250)*

| Item no | <i>r</i> | Item no | <i>r</i> |
|---------|----------|---------|----------|
| 1       | .41**    | 27      | .24**    |
| 2       | .32**    | 28      | .48**    |
| 3       | -.10     | 29      | .17**    |
| 4       | .27**    | 30      | .29**    |
| 5       | .32**    | 31      | .30**    |
| 6       | .06      | 32      | .29**    |
| 7       | .27**    | 33      | .18**    |
| 8       | .12*     | 34      | .27**    |
| 9       | .24**    | 35      | .33**    |
| 10      | .35**    | 36      | .52**    |
| 11      | .21**    | 37      | .22**    |
| 12      | .42**    | 38      | .23**    |
| 13      | .17**    | 39      | .10      |
| 14      | .44**    | 40      | .45**    |
| 15      | .27**    | 41      | .38**    |
| 16      | .31**    | 42      | .55**    |
| 17      | -.00     | 43      | .09      |
| 18      | .31**    | 44      | .10      |
| 19      | .21**    | 45      | .47**    |

| Item no | <i>r</i> | Item no | <i>r</i> |
|---------|----------|---------|----------|
| 20      | .05      | 46      | .35**    |
| 21      | .05      | 47      | .15*     |
| 22      | .51**    | 48      | .33**    |
| 23      | .35**    | 49      | .37**    |
| 24      | .02      | 50      | .38**    |
| 25      | .33**    | 51      | .34**    |
| 26      | .53**    | 52      | .11      |
| 53      | .34**    | 83      | .26**    |
| 54      | .21**    | 84      | .40**    |
| 55      | .39**    | 85      | .24**    |
| 56      | .11      | 86      | .20**    |
| 57      | .23**    | 87      | .23**    |
| 58      | .28**    | 88      | .34**    |
| 59      | .15*     | 89      | .45**    |
| 60      | .11      | 90      | .17**    |
| 61      | .37**    | 91      | .34**    |
| 62      | .45**    | 92      | .40**    |
| 63      | .28**    | 93      | .32**    |
| 64      | .02      | 94      | .48**    |
| 65      | .36**    | 95      | .34**    |
| 66      | .19**    | 96      | .31**    |
| 67      | .26**    | 97      | .38**    |
| 68      | .34**    | 98      | .26**    |
| 69      | .22**    | 99      | .23**    |
| 70      | .31**    | 100     | .14*     |
| 71      | .21**    | 101     | .51**    |
| 72      | .07**    | 102     | .25**    |
| 73      | .21**    | 103     | .22*     |
| 74      | .28**    | 104     | .29**    |
| 75      | .51**    | 105     | .20**    |

| Item no | <i>r</i> | Item no | <i>r</i> |
|---------|----------|---------|----------|
| 76      | .25**    | 106     | .50**    |
| 77      | .29**    | 107     | .11      |
| 78      | .12      | 108     | .36**    |
| 79      | .32**    | 109     | .32**    |
| 80      | .45**    | 110     | .22**    |
| 81      | .46**    | 111     | .34**    |
| 82      | -.02     | 112     | .33**    |
| 113     | .38**    | 116     | -.01     |
| 114     | .30**    | 117     | .30**    |
| 115     | .22**    |         |          |

Table no 8 shows a positive item correlation of mostly items of the emotional intelligence except item no 3,17,20,21,24,43,44,52,56,60,64,78,82,107,116 which shows non-significant correlation with the total of the emotional intelligence quotient inventory.

**Table 9**

*Item total correlation of emotional intelligence with its subscales (N=250)*

| Item no     | <i>r</i> | Item no                  | <i>r</i> |
|-------------|----------|--------------------------|----------|
| Self-regard |          | Emotional self-awareness |          |
| 10          | .47**    | 6                        | .40**    |
| 22          | .45**    | 8                        | .41**    |
| 36          | .66**    | 21                       | .40**    |
| 50          | .47**    | 31                       | .40**    |
| 62          | .58**    | 46                       | .49**    |
| 75          | .64**    | 56                       | .42**    |
| 89          | .62**    | 78                       | .36**    |
| 101         | .62**    | Independence             |          |
| 114         | .46**    | 3                        | .33**    |

| Item no                 | <i>r</i> | Item no                        | <i>r</i> |
|-------------------------|----------|--------------------------------|----------|
| Assertiveness           |          | 17                             | .53**    |
| 20                      | .35**    | 29                             | .48**    |
| 33                      | .38**    | 43                             | .44**    |
| 59                      | .46**    | 82                             | .30**    |
| 72                      | .34**    | 95                             | .46**    |
| 85                      | .45**    | 107                            | .43**    |
| 98                      | .46**    | Empathy                        |          |
| 111                     | .48**    | 16                             | .30**    |
| Self-actualization      |          | 39                             | .42**    |
| 5                       | .35**    | 46                             | .43**    |
| 19                      | .36**    | 54                             | .43**    |
| 32                      | .47**    | 63                             | .55**    |
| 45                      | .55**    | 87                             | .31**    |
| 58                      | .46**    | 105                            | .47**    |
| 71                      | .41**    | 109                            | .28**    |
| 84                      | .49**    | Interpersonal<br>relationships |          |
| 97                      | .47**    | 9                              | .26**    |
| 110                     | .35**    | 21                             | .27**    |
| Social responsibilities |          | 28                             | .56**    |
| 14                      | .64**    | 35                             | .54**    |
| 27                      | .37**    | 49                             | .47**    |
| 41                      | .45**    | 55                             | .53**    |
| 54                      | .40**    | 61                             | .39**    |
| 63                      | .49**    | 74                             | .49**    |
| 67                      | .41**    | 88                             | .55**    |
| 80                      | .63**    | 100                            | .41**    |
| 92                      | .50**    | 103                            | .29**    |
| 105                     | .38**    | Flexibility                    |          |

| Item no         | <i>r</i> | Item no          | <i>r</i> |
|-----------------|----------|------------------|----------|
| Reality testing |          | 12               | .52**    |
| 7               | .21**    | 55               | .45**    |
| 31              | .48**    | 38               | .36**    |
| 34              | .51**    | 52               | .32**    |
| 47              | .36**    | 65               | .54**    |
| 60              | .51**    | 77               | .34**    |
| 73              | .43**    | 91               | .50**    |
| 78              | .13*     | 116              | .35**    |
| 86              | .33**    | Stress tolerance |          |
| 99              | .32**    | 4                | .50**    |
| 112             | .36**    | 18               | .44**    |
| Problem solving |          | 30               | .44**    |
| 1               | .48**    | 44               | .38**    |
| 13              | .34**    | 57               | .39**    |
| 26              | .67**    | 69               | .43**    |
| 40              | .59**    | 83               | .29**    |
| 53              | .57**    | 96               | .49**    |
| 66              | .30**    | 108              | .44**    |
| 79              | .50**    | Impulse control  |          |
| 104             | .31**    | 11               | .50**    |
|                 |          | 24               | .35**    |
| Optimism        |          | 37               | .41**    |
| 10              | .48**    | 51               | .56**    |
| 18              | .54**    | 64               | .30**    |
| 23              | .52**    | 76               | .45**    |
| 48              | .51**    | 90               | .50**    |
| 70              | .55**    | 103              | .48**    |
| 94              | .52**    | 115              | .53**    |
| 96              | .61**    |                  |          |
| 117             | .44**    |                  |          |



| Item no   | <i>r</i> | Item no | <i>r</i> |
|-----------|----------|---------|----------|
| Happiness |          | 2       | .50**    |
| 15        | .43**    | 68      | .38**    |
| 28        | .63**    | 81      | .56**    |
| 42        | .63**    | 93      | .48**    |
| 55        | .53**    | 106     | .64**    |

Table 9 shows a positive significant correlation of all the items of the subscales of emotional intelligence quotient inventory with the total of its subscales.

**Table 10***Correlation of emotional intelligence and its subscales (N=250)*

|    |          | 1 | 2    | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    |
|----|----------|---|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1  | ASC      | - | .60* | .52** | .15** | .26** | .09   | .37** | .35** | .43** | .38** | .37** | .43** | .39** | .22** | .44** | .43** | .49** |
| 2  | EI       |   | -    | .80** | .38** | .43** | .19** | .72** | .65** | .68** | .67** | .59** | .62** | .61** | .40** | .66** | .76** | .73** |
| 3  | SR       |   |      | -     | .19** | .26** | .02** | .59** | .53** | .64** | .53** | .34** | .47** | .36** | .19** | .60** | .70** | .58** |
| 4  | ESA      |   |      |       | -     | .16** | .05   | .28** | .31*  | .15*  | .28** | .41** | .13*  | .30** | .01   | .25** | .19** | .28** |
| 5  | ASS      |   |      |       |       | -     | .14*  | .35** | .14*  | .21** | .32** | .19** | .28** | .06   | .17** | .25** | .24** | .24** |
| 6  | Ind      |   |      |       |       |       | -     | .09   | -.06  | -.03  | -.13* | .22** | .08   | .16*  | .26** | -.10  | .04   | -.02  |
| 7  | SA       |   |      |       |       |       |       | -     | .48** | .48** | .42** | .38** | .29** | .35** | .19** | .44** | .51** | .53** |
| 8  | Empathy  |   |      |       |       |       |       |       | -     | .79** | .48** | .24** | .40** | .30** | .08   | .51** | .45** | .55** |
| 9  | SR       |   |      |       |       |       |       |       |       | -     | .45** | .32*  | .36** | .22** | .11   | .47** | .52** | .51** |
| 10 | IR       |   |      |       |       |       |       |       |       |       | -     | .25** | .46** | .35** | .18** | .48** | .65** | .52** |
| 11 | RT       |   |      |       |       |       |       |       |       |       |       | -     | .30** | .35** | .34** | .19** | .36** | .30** |
| 12 | Flex     |   |      |       |       |       |       |       |       |       |       |       | -     | .35** | .29** | .39** | .48** | .40** |
| 13 | ST       |   |      |       |       |       |       |       |       |       |       |       |       | -     | .21** | .57** | .34** | .46** |
| 14 | IC       |   |      |       |       |       |       |       |       |       |       |       |       |       | -     | .02   | .17** | .19** |
| 15 | Opt      |   |      |       |       |       |       |       |       |       |       |       |       |       |       | -     | .54** | .61** |
| 16 | Happ     |   |      |       |       |       |       |       |       |       |       |       |       |       |       |       | -     | .53** |
| 17 | Probsolv |   |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       | -     |

*Note.* ASC= Academic self-concept, EI= Emotional intelligence, SR= Self-regard, ESA= Emotional self-awareness, Ind= Independence, SA= Self-actualization, SR= Social responsibilities, Ass= Assertiveness, IR= Interpersonal relationships, RT= Reality testing, Flex= Flexibility, ST= Stress tolerance, Imp ctrl= Impulse control, Opt= Optimism, Happ= Happiness, prb solv= Problem solving.

Table 10 shows a positive correlation of academic self-concept, emotional intelligence and its subscales at the level of  $p < 0.05$ ,  $p < 0.01$ . Academic self-concept and emotional intelligence shows a positive correlation. Academic self-concept shows a significant correlation with subscales of emotional intelligence except independence. Emotional intelligence shows a significant correlation with all the subscales. Self-regard shows a significant correlation with all the other subscales. ESA shows a significant correlation with subscales except impulse control. Assertiveness shows a significant correlation except stress tolerance. Independence shows non-significant correlation with most of the scales except interpersonal relationships, reality testing, stress tolerance and impulse control. Self-actualization shows a significant correlation with other subscales. Empathy and social responsibilities shows a significant correlation except with impulse control. Interpersonal relationships, reality testing, flexibility and stress tolerance shows a significant correlation with subscales. Impulse control shows a significant correlation with subscales except optimism. Happiness shows a significant correlation with the other subscales.

**Table 11**

*Correlation among academic achievement, academic self-concept and emotional intelligence (N=250)*

|                        | 1 | 2    | 3     |
|------------------------|---|------|-------|
| Academic achievement   | - | .17* | .13*  |
| Academic self-concept  |   | -    | .61** |
| Emotional intelligence |   |      | -     |

Table 11 shows a significant relationship of academic achievement, academic self-concept and emotional intelligence. The significance level is  $p < 0.05$ ,  $p < 0.01$ .

**Table 12**

*Simple linear regression to see the effects of academic self-concept on academic achievement (N=250)*

| Model                 | <i>B</i> | <i>S.E</i> | $\beta$ | <i>t</i> | <i>P</i> | $\Delta R^2$ |
|-----------------------|----------|------------|---------|----------|----------|--------------|
| Constant              | 58.9     | 1.78       |         | 33.14    | .000     |              |
| Academic self-concept | .034     | .012       | .174    | 2.78     | .006     | .026         |

$R^2 = .03$ ;  $F = 7.77$ ;  $p = .00$

Table 12 shows the proportion of variance explained by ASC on academic achievement. Results revealed that ASC significantly predicts ACA ACH and accounts for 2.6% variance in academic achievement

**Table 13**

*Simple linear regression to see the effects of emotional intelligence on academic achievement (N=250)*

| Model                  | <i>B</i> | <i>S.E</i> | $\beta$ | <i>t</i> | <i>P</i> | $\Delta R^2$ |
|------------------------|----------|------------|---------|----------|----------|--------------|
| Constant               | 58.33    | 2.61       |         | 22.31    | .000     |              |
| Emotional intelligence | .014     | .006       | .134    | 2.13     | .034     | .014         |

$R^2 = .018$ ;  $F = 4.56$ ;  $p = .034$

Table 13 shows the proportion of variance explained by EI on academic achievement. Results revealed that EI significantly predicts ACA ACH and accounts for 1.4% variance in academic achievement.

**Table 14**

*Multiple regression analysis to see the effects of EI subscales on academic achievement (250)*

| Model            | B    | SE   | $\beta$ | <i>t</i> | <i>p</i> | $\Delta R^2$ |
|------------------|------|------|---------|----------|----------|--------------|
| Self-regard      | .088 | .042 | .130    | 2.07     | .004     | .013         |
| ESA              | .005 | .067 | .005    | .076     | .94      | -.004        |
| Assertiveness    | .028 | .067 | .026    | .415     | .678     | -.003        |
| Independence     | .023 | .068 | .022    | .345     | .730     | -.004        |
| SA               | .030 | .053 | .036    | .566     | .572     | -.003        |
| Empathy          | .066 | .053 | .08     | 1.25     | .211     | .002         |
| SR               | .097 | .050 | .123    | 1.95     | .052     | .011         |
| IR               | .024 | .045 | .033    | .528     | .598     | -.003        |
| Reality testing  | .136 | .055 | .156    | 2.48     | .014     | .020         |
| Flexibility      | .105 | .06  | .112    | 1.77     | .077     | .009         |
| Stress tolerance | .065 | .055 | .075    | 1.18     | .24      | .002         |
| Impulse control  | .027 | .048 | .036    | .57      | .570     | -.003        |
| Optimism         | .055 | .052 | .067    | 1.05     | .291     | .000         |
| Happiness        | .064 | .044 | .091    | 1.44     | .151     | .004         |
| Problem solv     | .166 | .058 | .18     | 2.86     | .005     | .028         |

$R^2 = .017$ ;  $F = 4.28$ ;  $p = .00$  of self-regard,  $R^2 = .000$ ;  $F = .006$ ;  $p = .94$  of emotional self-awareness,  $R^2 = .001$ ;  $F = .172$ ;  $p = .678$  of assertiveness,  $R^2 = .000$ ;  $F = .119$ ;  $p = .730$  of independence,  $R^2 = .001$ ;  $F = .320$ ;  $p = .572$  of self-actualization,  $R^2 = .006$ ;  $F = 1.57$ ;  $p = .211$  of empathy,  $R^2 = .015$ ;  $F = 3.81$ ;  $p = .052$  of social responsibilities,  $R^2 = .001$ ;  $F = .278$ ;  $p = .598$  of interpersonal relationships,  $R^2 = .156$ ;  $F = 6.16$ ;  $p = .014$  of reality testing,  $R^2 = .013$ ;  $F = 3.15$ ;  $p = .077$  of flexibility,  $R^2 = .006$ ;  $F = 1.39$ ;  $p = .24$  of stress tolerance,  $R^2 = .001$ ;  $F = .324$ ;  $p = .570$  of impulse control,  $R^2 = .004$ ;  $F = 1.12$ ;  $p = .291$  of optimism,  $R^2 = .008$ ;  $F = 2.07$ ;  $p = .151$  of happiness,  $R^2 = .032$ ;  $F = 8.20$ ;  $p = .005$  of problem solving.

Table 14 shows that among all the subscales self-regard and problem solving is significantly predict the academic achievement. Self-regard accounts for 1.3% variance and problem solving accounts for 2.8% variance in academic achievement.

**Table 15**

*Mean scores, standard deviation and the t-values of males and females, scores on emotional intelligence and its subscales and academic self-concept(N=250)*

| Variables                     | Male<br>(N=125) |       | Female<br>(N=125) |       | T    | P    | 95% CL |       | Cohen's D |
|-------------------------------|-----------------|-------|-------------------|-------|------|------|--------|-------|-----------|
|                               | M               | SD    | M                 | SD    |      |      | UL     | LL    |           |
| 1 Emotional intelligence      | 410.30          | 41.58 | 399.26            | 49.44 | 1.91 | .05  | 22.42  | -.34  | .24       |
| 2 Self-regard                 | 34.08           | 5.98  | 32.13             | 7.73  | 2.23 | .02  | 3.67   | .22   | .28       |
| 3 Emotional self-awareness    | 22.36           | 4.19  | 22.11             | 3.89  | .45  | .64  | 1.36   | -.84  | .06       |
| 4 Assertiveness               | 22.48           | 4.45  | 21.82             | 4.35  | 1.17 | .24  | 1.75   | -.44  | .15       |
| 5 Independence                | 22.16           | 4.50  | 20.35             | 4.11  | 3.32 | .001 | 2.89   | .74   | .06       |
| 6 Self-actualization          | 32.48           | 5.41  | 31.43             | 5.85  | 1.46 | .14  | 2.45   | -.35  | .19       |
| 7 Empathy                     | 32.72           | 5.87  | 32.47             | 5.31  | .35  | .72  | 1.64   | -1.14 | .04       |
| 8 Social responsibilities     | 34.44           | 5.39  | 33.24             | 6.38  | 1.61 | .10  | 2.68   | -.26  | .20       |
| 9 Interpersonal relationships | 39.71           | 6.44  | 40.40             | 6.80  | -.82 | .41  | .96    | -2.33 | -.10      |
| 10 Reality testing            | 34.06           | 5.20  | 33.35             | 5.53  | 1.04 | .29  | 2.05   | -.62  | .13       |
| 11 Flexibility                | 25.73           | 4.66  | 25.88             | 5.29  | -.22 | .82  | 1.09   | -1.38 | -.03      |
| 12 Stress tolerance           | 30.52           | 5.11  | 29.31             | 5.56  | 1.78 | .07  | 2.54   | -.12  | .23       |
| 13 Impulse control            | 29.28           | 5.94  | 28.99             | 6.46  | .37  | .70  | 1.84   | -1.25 | .05       |
| 14 Optimism                   | 30.32           | 5.58  | 29.40             | 5.74  | 1.28 | .92  | 2.33   | -.49  | .16       |
| 15 Happiness                  | 34.22           | 5.98  | 33.16             | 7.31  | 1.24 | 1.05 | 2.72   | -.60  | .16       |
| 16 Academic self-concept      | 144.61          | 24.91 | 143.61            | 23.21 | .32  | .74  | 6.99   | -4.99 | .04       |

Table 15 shows that gender difference on academic self-concept, emotional intelligence and its subscales are non-significant which shows that it does not vary on the basis of gender roles. Girls and boys did not show any variations on the basis of gender roles. The mean scores of boys are greater on the scale of EI which shows that boys are more emotionally intelligent than girls. The mean scores on the scale of ASC are nearly close to each other there is not any significant difference shows between the mean scores of girls and boys. So it shows that both have higher academic self-concept. However the subscale of self-regard shows that boy scored higher mean on self-regard which means that boys are more self-interested than girls. Emotional self-awareness mean scores of girls and boys are very close so it does not show any significant difference. Assertiveness shows higher mean scores of boys as compared to girls which tells about that boy have more boldness than girls. Independence is for obvious shows higher mean scores of boys than girls. Boys are more independent than girls. On the subscale of self-actualization boys shows high mean scores than girls. Mean scores of empathy are equal for girls and boys so both have the same feeling of empathy for others. Boys shows high mean scores on social responsibilities because boys are assumed more responsible in our social society than girls. Furthermore on the subscale of interpersonal relationships girls scored higher than boys so it shows that girls have more powerful relationships than boys. Realities testing mean scores are higher for boys and low for girls. The mean scores of flexibility are somewhat equal of girls and boys. The mean scores of boys on the subscales of stress tolerance and impulse control are higher than girls so it discloses that boys are more tolerant and they control their impulses more than girls. Same is the case has been found on the scales of optimism and happiness which shows higher mean scores of boys than girls which means that boys are more optimistic and happy than girls. When we see the significance level of scales on the basis of gender it shows that on ASC and EI gender shows significant difference but on its subscales it shows non-significant differences.

## **DISCUSSION**

The present research was basically conducted to assess the role of academic self-concept and emotional intelligence among adolescents with their age ranging from 13 to 18 years but first and foremost, it was of great concern to determine the Alpha reliability coefficients on the subscales of emotional intelligence which increased with the increase in sample size and came out to .89 for both scales which is exactly the same as originally reported in the scale of ASC and .92 for emotional intelligence and EI showed reliability near to the original one. The reliability of the subscales of emotional intelligence ranges from .20 to .70 but the original reliabilities of the subscales are ranged from .40 to .70. The subscales which showed less reliability in pilot study increased in the main study. So it is proved that the larger sample showed satisfactory results which were given by the previous researches. The mean scores and standard deviation increased with the increased sample but it showed still low mean scores of EI. The minimum and maximum range of the scores also increased. Skew range was much more precise as compared to the previous study. Skewness level existed between the range of the Skewness. All the subscales were falling in the range of kurtosis. Moreover item total correlation also became significant. As some of the items (3, 6, 12, 19, 23, 29) of academic self-concept did not show correlation in previous results but now these items showed significant correlation with the total of the scale. Item total correlation of emotional intelligence indicated in previous results that 54 items of the scale did not show correlation but when it was tested on larger sample, only 15 items were non-significant, all the other items became significant with the total of the scale.

In the item total correlation of subscales it was noticed in the previous results that 4 items of the subscale of independence were non-significant, same was the case in emotional self-awareness.3 items of assertiveness, 2 items of empathy, 1 item of self-actualization and interpersonal-relationships and flexibility, 2 items of reality testing, 1 item of problem solving and impulse were non-significant as well. The findings of main



study showed that all the items became significant and there was not any single item which showed non-significant correlation. Hence all the reliability and validity estimations determined for the scales gave satisfactory results. The findings provided satisfactory correlation and reliability nearly similar as reported in the scales and previous researches.

The present study demonstrated that all the variables i.e., academic self-concept and emotional intelligence correlated significantly with each other while academic achievement shows low significant correlation with academic self-concept and emotional intelligence. The findings of this research reveal that adolescents who are emotionally intelligent have positive academic self-concept but it does not show high significance with academic achievement. Here the first hypothesis has been proved that ASC and EI is significantly related to each other. Hence it is good to have the relationship of academic achievement with the variables of ASC and EI.

EI covers different aspects of a student and its results suggest that some of the aspects have showed higher reliability which means that students have higher sense of self-regard. Their social relationships and interpersonal relationships are good and they believe in optimism. But the reliability on independence and emotional self-awareness is comparatively low. This shows that adolescents of our society are not independent and the ESA is weak among them. The restrictions in our society do not allow to develop the awareness of our emotions or to express them. As well as the ASC shows the positive relation with all the subscales of EI but not with independence. As ASC showed no relationship with the subscales of EI in the pilot study but it gives satisfactory relationship with the subscales in the results of main study. ASC also showed negative correlation with EI in pilot study but the negative relation became significantly positive in main study. Only independence did not show good relationship so it means that academic self-concept is not related with the factor of independence. It does not play any role in making the self-concept of our students. Self-regard shows good correlation which tells about that students who are selfish of adolescents have relationship with ASC and EI and with other subscales as well. ESA shows relationship with other subscales but it is

not still not significant with impulse control it indicates that adolescents who are emotionally self-aware do not show relationship with impulse control. Their impulses are controlled than those who do not have the characteristic of ESA. Assertiveness shows relationship with all subscales but not with stress tolerance so it shows that boldness does not have relationship with tolerance of stress. Independence does not show significant correlation with other subscales but reality testing, interpersonal relationships, stress tolerance and impulse control are those subscales which have relationship with independence and it shows that these subscales have impact on the independence of adolescents. The subscale of self-actualization showed correlation with all the other subscales which means self-actualization of a student is highly correlated with the other scales. Empathy and social responsibilities shows a significant correlation with other subscales but it is not related with impulse control. The subscale of interpersonal relationships is positively correlated with the scales and its subscales so it gives the result that all the scales have positive impact on the interpersonal relationships of a student. Reality testing, flexibility and stress tolerance also shows significant relationship with all the subscales. Impulse control does not show positive correlation with the subscale but all the other subscales show strong correlation. In this phase of study happiness shows significant correlation with other subscales.

Earlier researches provide empirical evidence that academic self-concept, emotional intelligence and academic achievement are correlated with each other. The study of academic success has generated vast literature, which has been focused on the impact of cognitive abilities and personality on academic success. Literature (Byrne, 1984; Hansford & Hattie, 1982; Marsh, 1984; Byrne & Shavelson, 1988) shows that academic self-concept is differentiated from general self-concept and that academic self-concept is more highly correlated with academic achievement than is general self-concept.

In view of the previous research findings, the research variables were subjected to linear regression analyses to check that whether independent variables (academic self-concept and emotional intelligence) predicts academic achievement or significantly

related with them. Hence linear regression analyses determined the amount of variance in the dependent variables that could be accounted for by independent variable. From linear regression analyses it can be said that although the results are significant but the variance explained by academic self-concept and emotional intelligence is not that high. The p value indicates the significant relationship of academic achievement with ASC and EI although it is not very high. However in the light of these findings it can be considered that academic self-concept and emotional intelligence does have a low correlation and low predictors of academic achievement. The second hypothesis has been proved that ASC and EI both are predictors of academic achievement among adolescents.

Gender differences were also examined on variables employed in the study using t-test. The results of the present study indicate that there is not any significant gender difference in the relationship of academic self-concept and emotional intelligence. Girls and boys give significant differences on the basis of gender on the variables of ASC and EI but on subscales there has not been found any difference. The results of the subscales are non-significant on the basis of gender differences. It shows that gender differences impact on the academic self-concept and emotional intelligence of girls and boys. Baron (2000) analyzed the scores on over seventy-seven hundred administrations of the emotional quotient inventory (EQ-i) and found that men and women did not differ on the total EI. Multiple regression analysis was done on the subscales of emotional intelligence in order to see their role as predictors of academic achievement. It was found in the results that only self-regard and problem solving involved in the significant prediction of academic achievement.

The mean scores of t-test shows that on the variable of EI boys show higher mean scores than girls which means that boys are highly intelligent than girls. The level of intelligence is higher than girls. On ASC girls and boys both have showed mean scores similar to each other which means that the academic self-concept of girls and boys are equal for girls and boys. They have the similar academic self-concept. When the results of subscales were seen it was clear that on self-regard boys show higher mean scores than girls which tell about the fact on the basis of analysis that boys are more selfish than girls.

The mean scores on the subscale of emotional self-awareness did not show any significant difference and it means that girls and boys both have the same level of awareness of their self. Mean scores of assertiveness indicated that boys scored high which means that boys are more bold or forceful than girls. The subscale of independence show that mean score of boys are higher than girls so boys are more independent than girls which is known for sure in our society. The mean scores of boys on the subscale of self-actualization are higher than girls which show that boys are more self-actualized than girls.

Empathy shows closely scored means of girls and boys which shows that both have the same feeling of empathy for others both can feel the emotions of other and equally have the power to show these feelings as well. Mean scores of social responsibilities are higher than girls so it means boys are considered socially more responsible than girls. The mean scores of interpersonal relationships indicated that girls scored higher scores so girls have good interpersonal relationships as compared to boys. Another finding is that mean scores of boys on reality testing is higher than girls so it is proved that girls are more fantasy oriented than boys. Flexibility mean scores showed that boys and girls both have the equal ability to be flexible. Mean scores of boys on the subscales of stress tolerance and impulse control higher so it does mean that boys shows more tolerance than girls and they can control their impulses more than girls. Optimism mean scores and happiness also shows that boys scored higher so they are more optimistic and happier than girls.

Furthermore results were generated on the demographic variable of monthly income. The results showed that monthly income is significantly related with ASC and EI but it shows non-significant relationship with Ach. The students belong to high socio economic status showed high mean scores which depicts that they have high emotional intelligence. Those students from low socio economic status shows that they have comparatively low mean scores for EI and the students from middle class socio economic status showed low mean scores than the students from high ses and low ses. The examined relationship between achievement and social class, it was found to be strongly interrelated to the achievement (Maryuyama, Rubin and Kingsbury, 1981). Healey and

Blassic (1974) stated that there are no significant differences on the variable of self-concept. (Boersma & Chapman, 1983) gave the findings of no significant gender differences. There has been found no significant differences on the basis of birth order and age.

## **Conclusion**

It is concluded that ASC and EI are significantly related to ACH among adolescents. The scales of ASC and EI are interrelated to each other. ASC showed significant correlation with the scale of EI and subscales of EI as well. Overall ASC and EI are positively and significantly related to each other while both of them are predictors of academic achievement as well. The level of prediction of achievement is although not very high but the fact is that both variables have been proved as predictors of ACH. However girls and boys did not show significant differences on the basis of analysis. So there is not any effect of gender roles on the ACH of adolescents. With respect to age, class and birth order non significant differences were shown. As far as socio economic status has been concerned, adolescents from higher ses displayed more EI than the adolescents belong to middle and low ses, same was findings on the scale of ASC that adolescents from higher ses showed high ASC than the adolescents from middle and low ses. However the results showed positive relationships of ASC and EI and also proved them as predictors of ACH but this needs to be studied further as well.

## **Limitations**

While this study has contributed much needed much data on the variables of ASC, EI and ACH among adolescents (students) but every study has certain limitations so it has also.

- The sample was collected from the schools of Rawalpindi and Islamabad. These cities are the big cities of our country so the condition of the schools are much better than the other cities which are small and students studying in the institutions of those areas are not getting the quality of education like the students of these schools. So for the future study a national sample from other cities can be

included to check the results on the variables of research so to make this study more generalized to a larger population.

- There can be other multi factors which contribute to the academic achievement of adolescent students so those factors need to be explored.
- The criteria of the sample is restricted so in further study it can be made more widely accepted to make the results generalizable.

### **Implications**

This study has important implications.

- This study will provide foundation for the further study of different variables to see the impact on the ACH of adolescents.
- Adolescents ASC can be groom up to get the more significant relationship with academic achievement.

### **Suggestions**

In view of the limitations of the present study some suggestions could have been for future researches

- Qualitative studies can be done to get an insight of adolescents problems which could affect them in this age. These researches can provide more understanding of the significant impact of other factors on adolescents ASC and EI. This in turn affects their academic achievement.
- Further studies on the gender differences would provide more accurate data of adolescents.
- Other demographic variables can be examined in a more accurate way when the increase of the age ranges of the adolescents.

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