CHAPTER 5

RESULTS AND DISCUSSION
CHAPTER – FIVE

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The present investigation delves into the problems pertaining to roles of emotional intelligence, gender, and gender identity in mental health of adolescents (Study I) and impact of emotional intelligence training on mental health of adolescents (Study II).

The present chapter has been devoted to the discussion of findings of the present research. The data were analyzed with the help of parametric statistics (Chapter IV) to study both individual and interaction effects. The present chapter is divided into two parts. The first part will be elaborating independent roles of emotional intelligence, gender, and gender identity in mental health of adolescents (Study I) and impact of emotional intelligence training on mental health (Study II) while the second part will be devoted to the discussion of interaction effects in regard to mental health of adolescents.

(1) ROLES OF INDEPENDENT FACTORS IN MENTAL HEALTH

It has already been stated earlier that the present research comprises two studies, one pertaining to roles of emotional intelligence, gender, and gender identity while another will deal with effect of emotional intelligence training on mental health.

(i) ROLE OF EMOTIONAL INTELLIGENCE IN MENTAL HEALTH

The first problem of the study pertained to the role of emotional intelligence in mental health. It had been hypothesized that emotionally high intelligent adolescents would possess better mental health than emotionally low intelligent adolescents. A perusal of Table 14 reveals that average mental health percentile score of emotionally high intelligent adolescents (M = 54.77, Figure 3) is higher than that of emotionally low intelligent adolescents (M = 45.58, Figure 3).
Figure # 3: Average Mental Health Percentile Scores Of Emotionally High And Emotionally Low Intelligent Adolescents (Study I, As Per Table 14)

The obtained F-ratio (F = 216.93) for this difference between the two emotional intelligence groups in regard to their mental health is significant at .01 level of significance for 1 and 224 degrees of freedom (Table 17).

Fourteen t ratios were also computed to ascertain significance of differences between emotionally high and emotionally low intelligent adolescents belonging to various sub-groups considering one or both of the other two variables i.e., gender and gender identity (Table 18). It is also clear from Table 18 that average mental health percentile scores of emotionally high intelligent adolescents in various sub-groups are higher than that of emotionally low intelligent adolescents (Figure 4).

It is clear from Table 18 that 13 t ratios out of 14 are significant at .01 level of significance which again provide empirical ground to sustain the research hypothesis for difference between emotionally high and emotionally low intelligent adolescents in regard to their mental health, refuting the null hypothesis in this regard. Hence, it can be said that emotionally high intelligent adolescents truly enjoy better mental health than emotionally low intelligent adolescents. This is in line with the findings of Salovey & Mayer (1990), Goleman (1995, 1998), Bar-On (1997), Salovey et al. (1999),
Figure #4: Average Mental Health Percentile Scores Of Emotionally High And Emotionally Low Intelligent Adolescents Belonging To Various Comparison Groups (Study I, As Per Table 18)
Taylor (2001) argues that if a person who is emotionally intelligent then he can cope better with life’s challenges and control his emotions more effectively, both of which contribute to good mental health.

Bar-On (1997) defined emotional intelligence as “an array of non-cognitive capabilities, competencies, and skills that influence his/her abilities to succeed in coping with environmental demands and pressures”. He proposed that emotional intelligence is made up of a series of different skills and attitudes i.e., emotional self-awareness, assertiveness, self-regard, self-actualization, independence, empathy, interpersonal relationship, social responsibility, problem-solving, reality testing, flexibility, stress tolerance, impulse control, happiness, and optimism, which can be reasoned to be associated with mental health of a person.

**Emotional Self-Awareness** is the ability to recognize one’s feelings and to differentiate between them, to know what he is feeling and why, and to know what caused the feeling. Emotional self-awareness is crucial for enjoying success in every sphere of life because if a person is not able to recognize his feeling, he is at risk of behaving in a way that others may start avoiding him at the cost of his own mental peace. An emotionally low self-aware person can never build loving and trusting relationships because he is not aware of the impact of his behaviour on others. At the same time poor self-awareness may restrain him in expressing his feelings. In
contrast people who have high self-awareness recognize when they feel irritable, sad or angry and they also know what behaviour of their will disturb or trigger anger in others, they also come to know the cause of their emotions, and what incidents have caused these particular feelings (Purohit, 2008). It is clear that the characteristics of emotionally high self-aware person lead him to positive behavioural tendencies which not only comfort the people around him but also permits him to enjoy the state of harmony with oneself and with others which is highly essential for his mental health. Contrarily, an emotionally low self-aware person is at unharmoney with others and in turn forcing himself to an unbalanced state of mind. His unpredictable behavioural tendencies put him at loss in his social surrounding and reciprocally negative reactions of people towards him. All these situations provoke a state of unhappiness within oneself which can deprive him to enjoy a good mental health. Goleman (1998), too, suggested that individuals who had developed emotional self-awareness were able to communicate better thus, made their intentions more clear; the better communication skills help students to maintain better mental health status.

Salovey (2001) claims that the failure of emotional self-management leads to negative significant influences on health.

Salovey et al. (2002) found that those who had difficulty in identifying their own emotional reactions reported poor mental health.

Cote et al. (2010) found a significant relationship between self-awareness and mental health. He suggests that the person who is aware about own emotions lead a better mentally healthy life.

Fernandez-Berrocal et al. (2006) found that the ability to discriminate clearly among feelings (Emotional clarity) and the ability to self-regulate emotional states were associated with better psychological adjustment and consequently better mental health.
The relationship between emotional intelligence (as measured by the TMMS) and psychological adjustment variables such as depression, anxiety, and overall physical and mental health has been well documented in adult samples. For instance, individuals who score lower on emotional clarity, and individuals who report an inability to regulate their own emotional states show poor emotional adjustment on a number of measures (Salovey, 2001; and Fernandez-Berrocal et al., 2005).

Kerr et al. (2004) also found a link between alexithymia and adjustment of students. They observed that difficulty in identifying feelings was linked to difficulty in personal and social adjustment, leading to poor mental health.

Miller et al. (2005) also found that children who had greater emotional vocabulary and recognized emotions more accurately had better social functioning and better mental health. Raena (2010), and Faghirpour et al. (2011) found a significant positive association with emotional self-awareness and mental health of students.

It is clear that a self-aware student finds a broader room to interact with people with a positive outcome. Because of his better emotional self-awareness he behaves in an appropriate manner as the time and situation demand. He is an emotionally adept person who behaves in adapting manner in his personal-emotional life in family, school, work, and other situations while interacting with other people. His reactions during social interactions provide a comfortable and soothing interactive environment for others too in various social situations leading to better adjusted state in comparison to that person who is not emotionally self-aware. The lack of emotional self-awareness leads a person to react in various social situations in whimsical and impulsive ways leading to poor mental health.

**Assertiveness** is an important dimension considered by Bar-On (1997) under the realm of intrapersonal ability which involves the ability to communicate clearly, specifically, and unambiguously, while at the same time being sensitive to needs of others and their responses in a particular social interaction. Assertiveness
is another characteristic at a mid-point along a line drawn between passiveness and aggression i.e., it means constantly keeping in mind other people and their reactions so that even in uneasy or unpleasant situations, the other persons feel respected and accepted, not put down. This often results in constructive compromise, a win-win social situation. Assertive people have high probability of success in their domains because they can tell others what they want, what they believe in, or how they feel, in a clear and unambiguous manner while considering their positions (Purohit, 2008). It seems reasonable to believe that these specific characteristics of a high assertive person equip him with such potentialities which predispose him to inculcate and nurture an environment around him which provides opportunities to express himself comfortably without any destructive tendencies and also seeking positive responses from other people. In turn, this leads a high assertive adolescent to harmonious state of mind and a better mental health than low assertive adolescent who either remains at a disturbed state of mind with his pent-up emotions because of his pessimism or boiled up state due to his aggressive behaviour, consequently a poor state of mental health.

Nair et al. (2001), and Poyarazii et al. (2002) found that being assertive improved mental health.

Taremian & Mahjuie (1999) reveals that assertiveness and the promotion of psychological health level are correlated. The lack of this skill causes the individual to come to ineffective and incompatible manners and stresses. Education of such skills to children and adolescents brings up the sense of qualification, capacity of being effective, ability to deal with defeating problems objective and rational approaches to problem.

Nejad (2010) concluded that assertiveness training was found to be positively associated with mental health. The positive association between assertiveness training and mental health can be explained by the fact that people
with good assertiveness ability appears to appraise their life experiences as being helpful in maintaining high mental health in contrast to people with poor assertiveness.

Lawton (1951) also described mentally healthy people as those who are assertive i.e., who can say “No” to situations harmful to their best interest, can say “Yes” to situations that can add them, can show anger directly when injured, when rights are violated and can show affection directly and in the appropriate manner.


It is observable that high assertive people permits themselves to discharge their pent-up-emotions in socially approved manner and thus, developing the emotional competencies for better mental health status. Contrary to this, low assertive people are unable to express their emotions and feel burnt up which lead to exploding behaviour at various instances of social interactions in his environment.

**Self-Regard** is another dimension of emotional intelligence which can be expected to leave its impression on mental health of a person. It is the ability to respect and accept oneself as essentially good. Respecting oneself means essentially liking the way one is. It is the ability to appreciate one’s perceived positive aspects and possibilities as well as to accept one’s negative aspects and limitations and still feel good about oneself. It is knowing one’s strength, weaknesses and still liking oneself. This conceptual component of emotional intelligence is associated with general feelings of adequacies. People with good self-regard feel fulfilled and satisfied with themselves and at the same time they effectively know about their weak points and shortcomings which can be overcome by effort. In contrast, people who lack self-regard, have feelings of personal
inadequacy and inferiority. Thus, it seems that high self-regard leads a person to enjoy his life with appropriate self-confidence along with genuine consideration of his own limitations, which enables him to seek satisfaction in his life. In contrast, a person with poor self-regard lacks such self-confidence and remains engrossed with his weaknesses and shortcomings so much that he starts avoiding and tries to escape various adverse and competitive situations. He gives in before facing them and labels himself a failure which leads him to a state of poor motivation. It is clear that high self-regard prones an adolescent student to achieve high in his life, enjoy inner satisfaction which is very important for his good mental health. In contrast the low self-regard prones an adolescent student towards non-satisfying situation in his life, deprives him from good achievements leading to poor motivational state. These consequences invite severe stresses for which a low self-regard adolescent student has no appropriate coping strategies and probably forcing him to adopt non-productive, non-constructive strategies which may lead him to an unpleasant situation in his life and may deprive him of good mental health.

Rogers (1951), Kashni et al. (1987), Nelson et al. (2004), and Anzi & Owayed (2005) assert that self-regard contributes to full psychological adjustment. A student with high self-regard transits the passage of school life with fulfilled and appreciating attitude towards oneself and it always enables him to maintain his subjective well-being – a base for good mental health. Salovey et al. (1998) assert that high self-regard is associated with emotional repairing ability to control intrusive ruminative thoughts that often accompany stressful situations, and thus opens a room for better mental health.

Self-regard enables an adolescent student to deal with academic achievements and with temptations of alcohol, drugs, and sex. It seems that self regard is a key ingredient for facing the demands of transition-trauma-adjustment with success in a school and thus permits an adolescent to enjoy a better mental health. Hamberg (1992), Shield et al. (2001), Sjoberg (2001), Poyarzili et al. (2002),
Adeyemo (2004), and Summerfeldt et al. (2005) also observed a positive association between self-regard and adjustment of students, a core need to be stressfree and mentally healthy.

Nalini & Shankar (1977), Olmstead et al. (1991), and Ghufran (2006) stated that individuals who have low self-esteem tend to create burning problems to themselves as well as to their families and society and tend to be depressive, in contrast people with high self-esteem are generally happier, fare better in stressful situations, are less prone to depression, and lead healthier lives overall than people with low self-esteem (e.g., Antonucci & Jackson, 1983; Hobfoll & Lieberman, 1987; Myers, 1992; Crocker & Luthanen, 2003; Kernis, 2003a, 2003b; Croker & Park, 2004, and Sinha & Jain, (2004).

Diener (1984) stated that self-esteem is widely recognized as a central aspect of psychological functioning and its strongly related to many other variables including general satisfaction with one’s life.

**Self-Actualization** means the ability to realize one’s potential capacities. It is an ability to leave purposefully and is manifested by being involved in such activities which can help him to lead meaningful, rich, and satisfying life. It is a striving to actualize one’s potential which means, maximum development and utilization of one’s potential capacities i.e., abilities and talents. It is a striving to perform one’s best all the time, always being better than one’s own previous self, persistently trying to improve oneself. Hence, real self-actualization is being in tune with those things which excite oneself having goals or areas of interest that help him maximize his potential and perceive those activities with enthusiasm and vigor. It is clear that a self-actualized adolescent student will utilize his potential to the maximum to seek a satisfying life situation. His potentiality, enthusiasm and vigor, all together will lead him to be more successful in various life situations and thus enabling to enjoy a better state of mental health in comparison to an
adolescent student who is poor on self-actualization dimension of emotional intelligence.

Self-actualization is correlated with feeling of self-satisfaction in course of life during which developmental changes are going on. Hurlock (1953) asserts that the goal of developmental changes is to enable people to adapt to the environment in which they live and self-actualization is essential to this goal.

A self-actualized student has more efficient perception of reality and more comfortable relation with it. He can accept the good and bad, the highs and lows. Importantly such a student is aware of the fact, that he is not perfect, that he is as human as next person and that there are constantly new things to learn and new ways to grow. The self-actualizing adolescent student although comfortable with himself never stops striving for self-satisfying state of mind. A self-actualizing adolescent student strengthens his mental health in comparison to a stressed and dissatisfying state of mind of a low self-actualizing adolescent student.

According to Maslow (1943) self-actualized people have a healthy balance between many activities that make up their lives leading to a healthier mental state. A self-actualized person, due to his meaningful life, finds an easy way to adapt with life’s varying situations. Due to his acknowledgement about his own potential capacities, a self-actualized student is easily adept emotionally, is able to control his impulses and be effortful persistently achieving his goals. His emotional adeptness also helps him to act out in desirable manner which brings in equilibrium between his needs and desires and goal satisfaction. Consequently, he finds himself in a better state of mental health than a student who is low on self-actualization dimension of emotional intelligence. According to Boyam (2008), the self-actualized person sees reality as it is and accepts responsibility for it. He is as objective as a subjective well-being can be in his perception. He asserts that self-actualizing people know the difference between means and ends and good and evil and do not twist them in a
way that hurts themselves or others, making such people better adjusted to their life situations and thus, enjoy truly better mental health. Coleman (1964) describes a maladjustment person as a person who exhibits persistent non-integrative behaviour and hence unable to actualize himself. Boyam (2008) also asserts that self-actualizing person is not hung up on being as others think he should be. He is a person who is capable of doing what he feels good and natural for himself simply because that is how he feels. He does not try to hurt others, but he has respect for what is good for himself. Apart of it, such a person is concerned with the problems of others and problems of society and is willing to work to try to alleviate those difficulties. He is aware and sensitive to the people that are around him. Overall high self-actualized person has deeper and profound interpersonal relations than low self-actualized person. He is capable of fusion, greater love and more perfect identification than low self-actualized person could consider possible. All these lead to a tranquilled mental state and permits a high self-actualized student to enjoy true mental health. Engelberg & Sjoberg (2004) also observed that students who were high self-actualizing were able to deal with exalting emotional stress as well as able to deal with social adjustment problems related to their various life situations, consequently were more comfortable mentally and stress free.

According to Goldstein (1939), and Maslow (1954) a mentally healthy person is constantly progressing on the path of self-actualization. Goleman (1998) also asserts that an individual who is high self-actualizing will be able to communicate better, thus, making his intentions more clear and able to maintain better mental health.

**Independence** is the ability to be self-directed and self-controlled in thinking and actions, and to be free of emotional dependency. The ability to be independent rests on one’s degree of self-confidence and inner strength and a desire to meet expectation and obligation without becoming a slave to them. An independent person’s attitude, positive feelings and consideration of others’ suggestions lead him
to a path of comfortable state in his life. Lawton (1951) also asserts that independent people are able and willing to assume responsibilities appropriate to their age, make decisions with a minimum of worry, conflict and advice seeking and abide by choice they make, until convinced that it is a wrong choice, thus nurturing an environment for himself which boost good mental health.

It is clear that the qualities of independent people prone them to adapt with the demands of their environment perfectly and due to their healthy decision making ability which also involves consideration of other person’s suggestions helps such independent adolescents to manage with educational, social, personal, and emotional demands in better ways in comparison to those who are low on independence dimension of emotional intelligence. These low independent students are unable to put forth timely and healthy decisions in solving problems of their lives and ultimately depriving themselves from desirable success which proves for them severe stressors leading to poor mental health.

Decision making capacity of independent people prompts them to seek adjustive comforts following their decisions. Contrarily, the people who are low on this dimension of emotional intelligence are unable to take appropriate decisions demanded by time and situations, and thus prove themselves failures due to their non-decisive states. As a result, they remain in conflict with themselves, evaluate themselves inferior, and hence always try to cling to other people to take decisions for them which is a stressful and unpleasant situation for both, leading to poor mental health. Hamberg (1992), Goleman (1995, 1998), Huy (1999), Shields et al. (2001), Poyarazili et. al. (2002), Salovey et al. (2002), Adeyemo (2004), and Sriniwas & Tob (2006) also found that self-efficacy contributed uniquely to variance in students’ general adjustment level and mental health. Underwood & Hurley (1997) also found that adolescents who had effective self-regulatory skills and were independent could modulate their emotional expressiveness that evoked healthy emotions leading them to maintain good inter-personal relationship and thus seem to inculcate a mentally healthy environment for them.
Faghirpour (2009), and Faghirpour et al. (2011) stated that self-regulation was associated with mental health.

**Empathy** is the ability to see the world from another person’s perspective and hence is a powerful interpersonal tool and helps to establish effective collaboration and strengthened bonds between people. It is the ability to be aware of, to understand, and to appreciate the feelings and thoughts of others. Empathetic people care about others and show interest in and concern for them. Because of these qualities an empathetic person is recognized as a true human among people surrounding him and is able to enjoy true harmonious interpersonal relationships which is a key element for mental health of a social being like human. Findley et al. (2006) also found that high empathetic peers exhibited greater prosocial behaviour, less aggression and social withdrawal than low empathic students which seem to be a sign of better mental health.

Hamburg (1992), Chung et al. (1998) also states that empathy is the key ingredient for facing adjustment problems with success during a period of school transition. Shields et al. (2001), and Adeyemo (2004) also asserted that emotional regulation and empathy made unique contributions toward school adjustment and thus can be reasoned to play its vital role in mental health of students.

Brscket et al. (2004), Ahmadi (2005), Austim et al. (2005), Khosrojerdi & Khanzadeh (2007), Schutte et al. (2007), Safavi et al. (2008), Delfan Azari (2010), Raena (2010), Faghirpour et al. (2011), stated that social skill of empathy is correlated with mental health.

**Interpersonal relationship** is the key component of emotional intelligence and can be reasoned to exert its influence on mental health of a person as it permits him to enjoy true human relationships which are mutually satisfying and are characterized by intimacy and giving and receiving from the heart. Satisfaction of the basic human needs i.e., the need for intimacy, to feel close with other people and to
feel included, to feel understood, and to feel wanted by others, leads to the state of self-satisfaction within a person which can help him to feel relaxed and tranquiled during the stressful situations and thus enjoying a good mental health. It seems that perception of social success through better interpersonal relationship also enhances one’s self-esteem and thus a good mental health.

The satisfaction of human needs of belongingness is only possible when one has necessary social skills to initiate a social relationship, be dynamic in continuing it, and be able to resolve conflicts and remains mentally healthy in constructive manner, the ability to achieve healthy relationship is crucial for well-being. This is specially true for major life events. It seems clear that a person with good interpersonal relationship will have a better foundation of social skills in various social settings than a person who has poor interpersonal relationship.

Asarnow & Callen (1985) observed that subjects with poor interpersonal relationship showed less adaptive planning and evaluated physical aggressive responses more positively and positive responses more negatively than subjects with positive interpersonal relationship. The findings of Lead Beater et al. (1989) also supported this finding. Triesh (2001) observed that interpersonal perception was an important predictor of adjustment in stressful situation of school life, which layed the foundation stone for good mental health.

Adler (1938) equates adjustment with an ability to develop social relations which are beneficial to others and not merely designed for the purpose of self-aggrandizement. Coleman (1964) also defines adjustment as outcome of one’s effort to maintain harmonious relationship. He also describes a maladjusted person as with ego centricity and disturbed interpersonal relationship.

Deegan (1996), and Buysse et al. (2002) also confirmed that better interpersonal relationship ability equipped the children with the social competence to maintain better mental health.
Brscket et al. (2004), Ahmadi (2005), Austim et al. (2005), Khosrojerdi & Khanzadeh (2007), Schutte et al. (2007), Safavi et al. (2008), Delfan Azari (2010), Raena (2010), and Faghirpour et al. (2011) stated that social skill of interpersonal relationship is associated with mental health.

Social responsibility is the ability to demonstrate that the individual is constructive, cooperative and contributory member of the society. It means acting in responsible manner towards social norms, doing things for and with others even though one may not benefit personally, and accepting others and having a basic concern for them which ultimately enhance his self esteem – a core aspect of mental health. Socially responsible people are sensitive to the needs of others and also they are capable of taking a community oriented responsibility. They use their talents for collective good which also add their self-esteem.

It is clear that a person who has higher sense of social responsibility is able to maintain positive interactions with people around, which in turn positively affects his social relationships. It can be reasoned that a state of good relationship provides emotional and social support which paves way to a comfortable and enjoyable social-emotional environment leading to better mental health. It is reasonable to believe that an adolescent who is high on social responsibility dimension of emotional intelligence must attempt to seek socially desirable goals in the family, at school and in the society, which pleases not only himself but also family members, teachers, and significant people around him and which ultimately nurtures a healthy environment for development of good mental health. This may be the reason of the finding of the present research wherein socially high responsible adolescent have scored higher on the test of mental health than socially low responsible adolescents. Behaviour of socially irresponsible people blocks their ways to important goals of achievement, affection, and acceptance. His lack of basic concern for others’ needs deprive him from taking community-oriented responsibility and use his talents for collective good. Consequently, he is not able to establish good interpersonal relationship with others.
and thus, lacks emotional and social support and remains maladjusted and stressful leading to poor mental health.

Brscket et al. (2004), Ahmadi (2005), Austim et al. (2005), Khosrojerdi & Khanzadeh (2007), Schutte et al. (2007), Safavi et al. (2008), Raena (2010), Safavi (2010), Delfan Azari (2010), and Faghirpour et al. (2011) found a significant relationship between social consciousness and mental health.

**Problem-solving** is another dimension of emotional intelligence included in the adaptation meta-factor by Bar-On (1997). According to him, problem-solving is the ability to identify and define problem as well as to generate and implement effective solutions. It is associated with being conscientious, disciplined, methodical, and systematic in approaching problems and adversities in one’s life. This skill is linked with a desire to do one’s best and to confront adverse situations and problems rather than to avoid them.

People who are better problem-solvers identify obstacles that might prevent them from attaining their goals in family, school, social and workplace settings. They also apply logical and rational solutions to overcome such obstacles and remain adjusted in such stressful situations. Mowrer (1959) also asserts that adjustment to life situations occurs by the process of problem-solving which results in learning of effective methods for dealing with adversities, anxieties and conflicts of everyday life and thus permits a person to enjoy a good mental health. Lawton (1951) and Nezu et al. (1980) studied the difference between effective and ineffective problem-solvers in regard to psychological distress or maladjustment. The result indicated that the subjects who reported low depression, low anxiety and more internal control orientation having low psychological distress or maladjustment were self-appraised effective problem-solvers and those with high psychological distress were self-perceived ineffective problem-solvers. Similarly, Timothy et al. (1991), Priester & Clum (1993), and Happner et al. (2004) also observed that problem-solving
appraisal was significantly predictive of less depressive behaviour and psychosocial impairment leading to better mental health. It is clear that individual with high problem-solving ability is able to restore good mental health through adaptable problem-solving behaviour.

It seems that high problem-solving skills of an adolescent student enable him to sort-out his cognitive, social and personal problems very effectively leading to an achieved comfortable state of affairs because of which such an individual is able to enjoy good mental health. Petrides et al. (2006), Mavroveli et al. (2007), and Domitrovitch (2008) also found that people with high problem-solving ability received more nominations for balanced behaviour, sign of good mental health, and fewer nominations for their disruption, aggression, and dependence which are signs of poor mental health.

**Reality testing** is capacity of “tuning-in” to the immediate situation and viewing it in an objective manner. It also involves a search for objective evidence to confirm, justify, and support feelings, perceptions, and thoughts. This ability lets a person “tune-in” to a situation while keeping a broader and correct perspective without excessive fantasizing or day-dreaming. It enables him to focus and concentrate on ways of coping with what he discovers and to keep his emotions in control, uncoloured by illusions. It is quite reasonable to believe that an adolescent student who is high on this dimension of emotional intelligence, is truly a person who has an objective assessment of his abilities and also of the shortcomings. The acknowledgement of such reality about himself prompts him to improve on his shortcomings while trying for higher status of achievements in his life, at the one hand, and also protects him from depressive thoughts following failures, at the other hand, leading to a state of good mental health. Adler (1938) equates adjustment with an ability to evaluate oneself realistically. Lawton (1951) also describes well adjusted or mentally healthy people as those who get major satisfaction from real than imaginary accomplishment, who do not magnify successes and apply them to
unrelated areas, who know how to work when working, to play when playing, and who can compromise in a true sense when they encounter difficulties. Jahoda (1958) also asserts that a mentally healthy person is one who is capable of viewing situations objectively without distortion arising from his own personal needs. According to him, a mentally healthy person engages in continuously testing of reality, objectively determining the extent to which situations depart from or correspond to his needs, and accepting the conclusions. It is clear that an unblinkered reading of the environment leads to a better state of adjustment or good mental health through success in various spheres of life because it brings with it the capacities for identifying and addressing problems and recognizing and building on opportunities. Hence, reality-testing dimension of emotional intelligence is vital to adapting to life’s various situations as it is that capacity of a human which enables him to evaluate life situations objectively in a true sense without being perturbed by illusory thoughts and feelings and thus, restoring a good mental health even in adverse and stressful situations. Contrary to this, a person with poor reality-testing ability is unable to evaluate his life situations closely and clearly as they really are. Consequently, he fails to adjust and unable to restore a good state of mental health.

**Flexibility** is another dimension of emotional intelligence which seems to play its role in mental health of people. It is the ability to adjust one’s emotions, thoughts, and behaviour to changing conditions and situations. It applies overall ability to adapt to unfamiliar, unpredictable, and dynamic circumstances. Flexible people are capable to reacting the change without rigidity when evidence suggests that they are at fault. They are open to and tolerant to different ideas, orientation, ways, and practices. It is easy for them to handle multiple demands, shifting priorities, and rapid changes. Their capacity to shift thought and behaviour are in tandem with environmental changes happening around them and which require acute adaptation. All these qualities of a flexible person make him easily adjustable and enjoy his environment and maintain good mental health in turn.
Lawton (1951) also describes mentally healthy person as the one who can compromise when encounter difficulties. Horney (1959) also asserts that good mental health is restored through flexible style of interacting with others. Contrary to this, an individual who lacks this capacity tends to be rigid and obstinate. He adapts poorly to new situations and has little capacity to take advantages of new settings where he may be proved ineffective and inefficient leading to higher stress level in all spheres of his life and thus suffers a poor mental health. Such people are resistant to new ideas and are unable to adjust to changes and are not able to use new and different ways that the situations demand. Consequently, they are unable to adjust with environmental demands when obstructed, due to their nonadapting and rigid approach which forces them to deprive themselves from happy events. This may inculcate a chronic stressful environment which may be responsible for poor mental health of such people. Coleman (1964) also described a mentally unhealthy person as one who lacked insight and flexibility. This suggests that an adolescent student who is more flexible is aware of himself and his environmental demand and is better able to adapt to circumstances and to manage stress arising out of the demand of higher achievement, and as a result enjoys a good mental health.

It may be argued that successful adaptation depends not so much on any one regulatory process but on the ability to flexibly enhance our suppressed emotional expression in accord with demands of the situations. Bonanno et al. (2004) supported this flexibility hypothesis, and indicated that subjects who were able to manage expression of emotions evidenced better mental health in future. Recent research on coping has also indicated that the crucial element in successful adaptation and maintenance of good mental health is not much depend on which particular strategies are used, but rather whether coping strategies are applied flexibly in a manner that corresponds with the nature of the stressor (Chang, 2005). In a similar vein, emotion theories have increasingly argued that whether one expresses or suppresses
emotional expression is not as important for good mental health as is ability to flexibly express or suppress emotional expression as demanded by the situational context (Parrott, 1993; Barrett & Gross, 2002; Westphal & Bonanno, 2004).

It is clear that an adolescent student who is high on flexibility dimension of emotional intelligence is able to adopt appropriate coping strategies for personal adjustment vital to good mental health.

The present finding lends support to the observation model by Cunningham (1966) that individuals who suffer form a “general rigidity syndrome” would be expected to show little variability in behaviour, to be ethnocentric, and to have few methods available for solving problems. On the other hand, those who are high on fluency and flexibility can draw on their own inner resources to deal effectively with their inner conflicts and feeling states and thus feel mentally healthy.

**Stress tolerance** is the ability to withstand adverse events and stressful situations without falling apart by coping with stress in an active and positive manner. It includes having a repertoire of suitable responses to stressful situations and associated with the capacity to be relaxed and composed, to calmly face difficulty without getting carried away by strong emotions.

High stress-tolerance ability of students enables them to manage stresses in family and at school by adopting appropriate coping strategies which in turn make them better adjusted and enjoy good mental health.

Garner (2001) concluded that stress-management leads to emotional competence and to emotional socialization, which in turn contribute to better mental health. Engleberg & Sjoberg (2004) also observed that the students high on stress tolerance dimension of emotional intelligence were more able to deal with exalting emotional stress as well as were able to deal with social adjustment problems and thus ensuring their good mental health. Thus, stress tolerance is the ability of active
and positive coping to withstand adverse events and stressful situations without falling apart. It involves the capacity to choose various courses of actions for dealing with stress and being optimistic towards change and new experiences without being anxious or dreadful. A stress-tolerant person is confident about one’s abilities to overcome problems in life and remain calm, cool, and composed in challenging stressful conditions by exercising control over them. All these characteristics enable a person to restore a good mental health status. Lawton (1951) also describes mentally healthy people as those who make decision with a minimum of worry and conflict and are able to learn from defeats instead of finding excuses for them and accept the fact that the life is an endless struggle.

Coleman (1964) explains mental health as an outcome of the individual’s attempt to deal with stress and meet his needs. In contrast, people who are intolerant to stress have an ill effect on their mental health which can give rise to psychosomatic problems and difficulties in decision making in their lives. Moreover, without the capacity of stress tolerance, the qualities of reality testing, impulse control, and flexibility are all eroded and lead to poor mental health. Coleman (1964) also characterizes person with maladjustment and poor mental health as with low stress tolerance. Nezu & Ronan (1985) found that poor stress tolerance, was associated with depression and failure to adapt life situations efficiently. Nezu et al. (1985) observed that subjects having high stress tolerance were able to adapt effectively and thus were able to maintain good mental health in comparison to those who had poor stress tolerance. In a study by Schotte & Clum (1997), it was found that suicidal group subjects were poor stress tolerant and were unable to adapt effectively to life situations and also anticipated negative consequences for their nonadaptive reactions leading to poor mental health. In studies of D’Zurilla (1991), Marx et al. (1992), Sadowski & Kelly (1993), Thompson & Heller (1993), Christian et al. (1994), and Davilla et al. (1995), the results indicated a negative relationship between stress and mental health.
It is clear that stress tolerance is that positive competency of a person which prevents him from negative psychological and physical consequences leading to good mental health as a result of his effective adaptability skills. Contrary to this, a stress-intolerant person finds himself engrossed in a maladaptive behaviour leading to poor mental health. Such stress-intolerant people behave in an irrelevant manner and also involve themselves in negative behaviour such as depression, suicide, and aggression, which are signs of poor mental health.

**Impulse control** is the ability to resist or delay an impulse craving or temptation to act. It is the capacity for accepting one's aggressive impulse, being composed, and controlling aggression, hostility and irresponsible behaviour. It also gives a person the capacity to manage wisely and coolly a wide range of volatile emotional states and urges. It also focuses on a component of coping with behavioural impulses known as delayed gratification, the ability to wait for something. In his interesting “marshmallow study”, Mischel (1990) found that students who were able to wait, had positive behaviour and better mental health than their marshmallow-grabbing age-mates. It is common observation and well evident fact that impulsive children can not delay the gratification of their desires or impulsiveness to act even for better state of consequences and thus tempt to be maladjusted and unhappy, the signs of poor mental health.

People with effective impulse control look before they leap, consider before they act, and are able to resist and delay the urge to react in a kneejerk fashion. Such people plan well before they move forward, evaluate whole the situations, and remain calm and composed even in difficult circumstances. All these tendencies of a person with high impulse control lead him wise, reasonable, and to adopt appropriate behaviour patterns. People who exercise healthy impulse control, retaining their flexibility and spontaneity, remain relaxed and composed under stressful situations and thus enjoy better mental health and are ahead of others who have poor impulse-control.
Lawton (1951) characterizes a mentally healthy person as one who can endure pain and emotional frustration when necessary. Shaffer (1956) stressed on maintaining consequences without a kneejerk impulsive behaviour to be well adjusted and enjoying good mental health. According to him, mentally healthy people do not become overwhelmed by emotions. It is clear that people who lack proper impulse-control are rash, hot-headed, impatient, have a low frustration-tolerance and unpredictable ways of reacting — the conditions which pave way to maladjustment and poor mental health. In contrast, people with an effective impulse-control are more adaptive and thus are able to maintain good mental health. Goleman (1995, 1998), Greenberg et al. (1995), Salovey & Sluyter (1998), Huy (1999), and Shields et al. (2001) assert that impulse control dimension of emotional intelligence has a critical role to play in mental health. Kahana & Kahana (1975) found that several aspects of impulse-control (i.e., delay of gratification, reflectivity, and motor control) had consistent and significant relationship with indices of adaptation and mental health.

Khosrojerdi & Khanzaden (2007), Gardner & Qualter (2009), Faghirpour (2009), Maccann et al. (2010), Delfan Azari (2010), Raena (2010), and Faghirpour et al. (2011) found positive relationship between self-control and mental health of students.

**Happiness** is another dimension of emotional intelligence considered by Bar-On (1997) under the general mood meta-factor as an indicative of a person’s overall degree of emotional intelligence and hence, has been considered a vital factor in mental health of adolescent students. Happiness is an attitude and ability to feel satisfied with life, to enjoy oneself and others and to have fun. It combines self-satisfaction, general contentment and the ability to enjoy life. Happy people are able to take pleasure in what they have done and can do rather than being driven to think that they should do more. Happy students do not set unrealistically high goals which prevent them from frustrations. They are self-aware and if they become unhappy then
they are able to know their change of mood, understand what caused it and are also able to engage in better adaptive behaviour leading to better mental health. It is the contended and realistic attitude of a happy person which lead him to deal with problems in his life in effective and adaptive manner and thus prevents himself from any negative effect on his mental health. Contrary to this, an unhappy person is unable to cope with his life’s situations in an adjustable manner due to his discontented attitude and lack of drive, and thus inviting various failures and stressors which ultimately put negative impact on his mental health.

Lawton (1951) describes mentally healthy people as those who participate with pleasure in experiences belonging to each successive age level and who enjoy attacking and eliminating obstacles to happiness.

Coleman (1964) characterizes a mentally unhealthy person as full of dissatisfactions and unhappiness. According to him, an unhappy person can be reasoned to have more and continued stress than happy person, which may predispose him to suffer poor mental health. Nezu (1985), and Sadowski & Kelly (1993) also found that a negative mood state i.e., a state of unhappiness could lead to poor problem-solving adaptive behaviour, a source of poor mental health. Folkeman (1997), and Billings et al. (2000) provide empirical support for prediction that positive emotions like happiness are important facilitators for mental health.

Happiness and life satisfaction are also implied in health behaviour and well-being studies (Diener, 1984, 2000). Happiness is a part of special category of mental experiences that include such positive emotions as joy, pleasure, satisfaction, etc. Argyle et al. (1989) believed that happiness is composed of three related components: positive affect (pleasant moods and emotions), absence of negative affect and satisfaction with life as a whole. True happiness is living in ease and freedom, fully experiencing the wonders of life while life satisfaction involves the way
the individual feels about himself or herself. It refers to an individual's own global judgment of his/her quality of life, feeling of contentment and happiness. Both, happiness and life satisfaction are considered to be positive variables (Seligman & Csikszentmihalyi, 2000) and indicate on individual's subjective well-being. In addition, proper physical and psychological functioning is also considered to be the indicator of being healthy (Mckague & Verhoef, 2003).

Costa & McCrae (1992) showed that happiness was associated with greater extraversion and lower neuroticism, the finding supported by several researches (Furnham & Cheg, 1997; and Hills & Argyle, 2002).

Seligman et al. (2005) indicated that increase in happiness leads to alleviation of symptoms of depression.

**Optimism** is the last dimension of emotional intelligence considered by Bar-On (1997) under the general mood management meta-factor. It is the ability to look at brighter side of life and maintain a positive attitude even in a phase of adversity. It is a positive approach of daily living and opposite to pessimism, which is a common symptom of depression. It is the ability to stop thinking and saying destructive thing about oneself and the world around. Seligman (1998) differentiated pessimists from optimists by asserting that optimists view bad time as temporary and believe that they are not looser for ever. They see troubles and difficulties as delayed success and not as outright defeat and firmly believe that there will come a positive change. The optimists view misfortune as situational and specific and not as a manifestation of inescapable doom, and lastly optimists do not immediately shoulder all the blames if something goes wrong, rather they take external causes into consideration.

It seems that by virtue of his dispositional and state optimism an optimistic student is able to maintain his motivational level during the stressful course of study period in comparison to a pessimistic student who gives-in to stressful situations and
shows withdrawal behaviour, which is responsible for good mental health of optimistic students and for poor mental health of pessimistic students, respectively. Creed et al. (2002) found that high optimism was associated with high self-esteem and decreased psychological stress, while high pessimism was found to be associated with low self-esteem and increased psychological distress. It is reasonable to believe here that such dispositional tendencies of high optimistic students lead them to enjoy better mental health than high pessimistic students.

Lawton (1951) characterizes mentally healthy people as those who can use thinking as a blueprint for action and not as a device for delaying or escaping actions, and who can concentrate their energies on a goal that is important to them accepting the fact that the life is an endless struggle and there is always a positive outcome after appropriate efforts. Carver et al. (1989), Standton & Snider (1993), Brenner et al. (1994), Jonier et al. (2001), Overskeid (2000), and Grawitch (2003) also supported the findings that optimism increased adaptive behaviour, and thus mental health of the subjects in various life situations. Contrarily, a pessimistic person often faces failures and remains in stress and depressive and dominated by suicidal tendencies and thus, remains mentally unhealthy. Optimism has been linked to various aspects of psychological and physical well-being (Lai, 1995; Schweizer et al., 1999). Seligman (1991) observed that optimism and positive coping skills had enhanced one’s ability to deal with stress and depression and thus, maintained good mental health. He also reported that optimistic people experienced less depression and increased enjoyment in social interactions. This is due to their ability to expect positive future outcomes based on positive experiences, which in turn enhances one’s mental health.

Scioli et al. (1997) observed positive relationships between optimism, hope, and health. There is substantial evidence that optimists use different strategies to cope than do pessimists, and these coping differences contribute to the positive association between optimism and mental health (Scheir & Carver, 1985; Carver et
al., 1989; and Stanton & Snider, 1993). Isen et al. (1987) also found that feeling optimistic about a positive outcome and being in happy mood state improved creative problem-solving and adaptive behaviour.

Optimists cope more effectively with their stressors than do pessimists. There is substantial evidence that optimists use different coping strategies to cope than do pessimists and that these coping differences contribute to the positive association between optimism and better adjustment and well-being (Scheier et al., 1986; Carver et al., 1989; and Stanton & Snider, 1993). Optimists possess more extensive and supportive social networks, and report longer friendship than do pessimists and social networks influence psychological well-being by operating as a stress buffer (Cohen & Wills, 1985). Individuals who report that members of their social networks would provide them with emotional, instrumental, and informational resources if and when needed display lower level of distress and depressive symptoms in response to stressful life events than those who do not (Cohen & Wills, 1985).

People with optimistic explanatory style tend to enjoy good mental health. Optimism helps in sustaining immune functions under stress (Segerstrom et al. 1998). Scheier & Carver (1985) and Scheier et al. (2000) noted that people expecting the best and looking at the bright side of the things reported less fatigue, fewer aches, pains, and minor illness. They also noted that optimists tend to have better mental and physical health and recover more quickly when they become ill.

Numerous studies have shown that optimists enjoy generally better mental health than pessimists (Seligman, 1990; Peterson & Bosio, 1991; Scheier & Carver, 1992; Scheier et al., 2002; and Affleck et al., 2002).

People with an upbeat, optimistic explanatory style, on the other hand, tend to enjoy good health (Peterson & Bosio, 1991). They lead healthier, longer lives than do their gloom and doom counterparts (Scheier et al., 1989). Scheier & Carver (1992) showed that optimists cope more effectively with stress than pessimists. Positive
emotion may be part of the reason for this finding. Optimistic individuals have more confidence than pessimistic one’s that they will be able to achieve positive self-changes (Carver & White, 1994). Research has also found that college students who experienced high stress and low optimism had more somatic complaints than those who were stressed but were high on optimism (Lai, 1995).

Optimism is an outlook on life such that one maintains a view of the world as a positive place. Optimists generally believe that people and events are inherently good, so that most situations work out in the end for the best. It can be defined as expectations of positive outcome. It means having hope and a strong belief and confidence to deal with situations. Optimists are life’s big winners. Negative thinkers perform more poorly in school, work, and play, than those who cheerfully face obstacles. Pessimists are more susceptible to depression than the optimists (Clark, 1997; and Seligman, 1998). There are various personal and social outcomes of optimists' optimistic approach, which may include more achievement in any task and goal, higher level of life satisfaction, better health, more friends, and feeling of control over life, easier to make decisions and which may be vital to mental health of adolescents. Optimism plays an important role in the adjustment to stressful life events (Scheier et al., 2000). Greater optimism has been found to be associated with less mood disturbance in response to a variety of stressors (Scheier et al., 1986; and Carver et al., 1993).

Studies have reported that optimism helps in sustaining immune function under stress (Segerstrom et al., 1998). In a couple of studies optimism has been found to be negatively correlated with stress (Major et al., 1998; and Scheier et al., 2000). Seligman (1998) reported that optimistic people experienced less depression and increased enjoyment in social interactions.

Dinesh et al. (2007) also reported that the features of personal positivity, i.e., optimism, happiness, and life satisfaction, are negatively correlated with somatic
complaints and psychological distress. It means that when an individual has high optimism, satisfaction with life, and happiness, he/she is likely to have less somatic complaints and psychological distress.

Singh & Mansi (2009) suggests that optimists exhibit improved psychological well-being and better adjustment to stressful life events. People with high score on optimism display higher level of contentment, low level of distress, anxiety, and depressive symptoms. Optimistic people are more achievement oriented in any task in their life, feel easy in taking decisions, and take better solution in handling life problems. Optimistic people are less likely to develop physical ill health or suicidal tendencies when they face major stressful life events than individuals with a pessimistic style (Carr & Alan 2004). Thus, it can be concluded that an optimistic student will be more mentally healthy than a pessimistic student.

Mental health is directly tied to a person’s ability to deal effectively with the demands and challenges of everyday life to be well adapted and emotionally well-adjusted. It is cognitive – affective factors that influence the general well-being of an individual and his potential to meet desirable life expectations. Similarly relationship between low emotional intelligence level with worse mental health is measured by Salovey et al. (2005), and Extremera & Pizarro (2006). It means if a person will be emotionally more intelligent i.e., able to control his emotions efficiently or more self sufficient then he will be mentally healthy and vice-versa.

In a nutshell, it can be concluded that emotional intelligence is positively associated with mental health of adolescent students that is, an emotionally high intelligent student definitely enjoys a better state of mental health than adolescent student who is low in emotional intelligence. This is due to possession of various positive skills pertaining to emotional intelligence. 
(ii) ROLE OF GENDER IN MENTAL HEALTH

The second problem of the present research pertained to role of gender in mental health of students. It had been hypothesized that male adolescents would excel female adolescents in regard to their mental health.

A perusal of Table 14 reveals that average mental health percentile scores of male adolescents (M = 49.56, Figure 5) is lower than that of female adolescents (M = 50.79, Figure 5).

A higher score on the mental health battery is an indication of better mental health. The obtained F-ratio (F = 3.89, Table 17) for this difference is significant at .05 level of significance for 1 and 224 degrees of freedom. Furthermore, 14 t ratios were also computed (Table 19, Figure 6) for comparisons between two gender groups in regard to their mental health. Out of these 14 t ratios 7 t ratios are significant either at .05 level or at .01 level of significance.
Figure #6: Average Mental Health Percentile Scores Of Male And Female Adolescents Belonging To Various Comparison Groups (Study I, As Per Table 19)
Furthermore, gender difference in mental health was also studied in Study II. It is clear from Table 16 that average “difference mental health percentile scores” of males (M = 29.34, Figure 7) is higher than that of females (M = 26.49, Figure 7).

Figure # 7: Average “Difference Mental Health Percentile Scores” Of Male And Female Adolescents (Study II, As per Table 16)

The obtained F-ratio (F = 3.049, Table 20) is not significant at any acceptable level of significance for 1 and 64 degrees of freedom. Furthermore, 14 t ratios were also computed (Figure 8, Table 21) out of which 5 t ratios are found significant. Out of these 5 significant comparisons 3 comparisons are in favour of males while other 2 are in favour of females in regard to their mental health.
Figure #8: Average "Difference Mental Health Percentile Scores" Of Male And Female Adolescents Belonging To Various Comparison Groups (Study II, As Per Table 21)
Though, it was hypothesized that male adolescents would show better mental health than female adolescents, the finding of the present research is not supporting the hypothesis rather is contrary. If we consider the findings of the Study I, it has been observed that females do excel males considerably in regard to their mental health. That is, females have shown genuinely better mental health than males which is contrary to the research hypothesis. However, on post hoc-testing, it is observable that not all significant comparisons are in favour of females, rather there are some comparisons which show better mental health of males.

It is interesting to note that in two significant comparisons, that is between undifferentiated males and females, and between masculine males and females with low emotional intelligence, males have been found to enjoy better mental health than females.

While considering the finding of Study II, though males have been found to excel females in regard to their mental health, the results are not empirically supported. Here too, out of all significant comparisons 3 comparisons are in favour of males while 2 comparisons are in favour of females in respect of their mental health.

Looking at these diverse findings the author recommends further studies to throw more light on the aspect of gender difference in regard to mental health of adolescents.

It was expected that due to more deprived state of living and poorer nurturance specially in Indian context, female adolescents would be at disadvantage in respect of their mental health as the consequence of more stressors around them in comparison to male adolescents. The modern educated society is gradually coming out of sexism against females as the law and education both have put equal insistence for development of both the gender groups. It seems that this transformation of the society is still on the way and there may be lots of families who are still favouring sexism against female adolescents. This differential treatments to both the gender groups may be a root causal factor of differences in mental health of male and female adolescents as the number and the type of stressors faced by males and females
differ due to the differential treatment available for them which in turn exerting positive or negative impact on their mental health, as the case is.

Another important reason of the present finding seems to be attributable to the changing family structure due to modernization and higher mobility of the family members for earning. The joint family structure is reshaping itself into nuclear family structure and similarly large family is restricting to small family wherein state of only a male and a female child is preferred as compared to larger number of children in the past causing female children to suffer more being restrained at home for the maximum time due to socio-cultural constraints. This deprived conditions of nurturance forced female adolescents to face undesirable stressors for which they didn’t have appropriate coping strategies directly at their disposal leading to poor mental health of female adolescents. Today also wherever such conditions of nurturance prevails, female adolescents may be showing poor mental health. However, with the advent of education and other positive factors in family and in society, girl adolescents are finding more favourable environment around them, than male adolescents because of their emotional nurturance, permitting them to enjoy better mental health than their counter gender group.

With the changed scenario of the modern society both male and female children in a small nuclear family get almost equal opportunities for their personal, social, emotional, and educational development and consequently are able to maintain their mental health in almost similar fashion and thus no genuine difference is observed in the present research (Study II) in respect of their mental health. Here too excellence of either male and female adolescents in regard to their mental health is found in almost equal number of cases, providing a ground to reason that it is not a gender specific as a whole is responsible for differences between male and female adolescents as regards to their mental health, rather it indicates that apart of the gender there are certain environmental issues like family structure and education which may be altering the scenario. If it is in favour of girls than they are showing better mental health and if boys are privileged in the regard, they tend to be better mentally healthy than girls.
Haring et al. (1984) concluded that men showed a slight tendency to report higher levels of well-being than women. On the other hand, a meta-analysis by Wood et al. (1989) reported a similar, slight tendency toward more happiness, but for women rather than men. A number of studies found that females have scored higher than males on emotional intelligence dimensions which are positively correlated with mental health (Thingujam & Ram, 2000; Mayer et al., 2002; and Brackett & Mayer, 2003; and Tung & Dhillon, 2006).

Ahmadi (2005), Balalvand (2005), Omarae (2008), Yaghobi (2008), Faghirpour (2009), Hadadi Kohsari (2009), Gujjar et al. (2010), and Tannous & Matar (2010) also found that female adolescent students had better mental health than male adolescents.

Anand (1989), Reddy & Sunitha (2007) divulged that girls appear to possess better mental health, were capable of assessing the realities around them, were in a position to tide over the mental disequilibrium, Zeman & Garber (1996) showed that girls expressed sadness and affliction more often than boys. Singh (1998), Bhatia (2003), Davar (2001), Ahmad (2003), Kumar (2003), Gulati & Dutta (2004), Jain (2004), NCSTC (2004), Jha (2005), and Alim (2007) also concluded that females (on every stage age) feel the mental and adjustment problems in own lives more in comparison to males. Fernandez-Berrocal et al. (2004), Silveri et al. (2004), Pandey & Tripathi (2004), Aleem (2005), Austin et al. (2005), Brackett et al. (2005), Harrod & Scheer (2005), Van Rooy et al. (2005), Bindu & Thomas (2006), Goldenberg et al. (2006), Joshi et al. (2009), and Singh & Singh (2011) also found that boys were better at regulating emotions in comparison to girls. Nejad (2010) in his study male adolescent students of first grade had better mental health than female.

Dey & Manna (2010) found in their study that there was not significant relationship between male and female in regard to their mental health level. Women were perceived to be more skillful at not only dealing with their emotions but also understanding them, while men were more skillful at controlling impulses and tolerating stress (Fernandez-Berrocal et al., 1999; Thayer et al., 2003; Fernandez-Berrocal et al., 2004; Palomera, 2005; Palomera et al., 2006; and Sanchez et al., 2008).
(iii) ROLE OF GENDER IDENTITY IN MENTAL HEALTH

The third problem of the present research pertained to role of gender identity in mental health of students. It was hypothesized that androgynous adolescents would enjoy the best mental health while undifferentiated adolescents would be the worst in this regard. The masculine and the feminine adolescents would possess intermediate positions in regard to their mental health.

It is clear from Table 14 and Figure 9, that average mental health percentile scores of androgynous, masculine, feminine, and undifferentiated adolescents are 56.69, 51.97, 47.42, and 44.63, respectively (Figure 9).

![Figure # 9: Average Mental Health Percentile Scores Of Androgynous, Masculine, Feminine, And Undifferentiated Adolescents (Study I, As per Table 14)](image)

The obtained F-ratio for this difference ($F = 71.92$, Table 17) is significant at .01 level of significance for 3 and 224 degrees of freedom. Apart of it, Tukey’s HSD Test was also employed as a post hoc-test. It is clear from Table 22 that all the obtained six comparisons are significant at .01 level of significance.
Role of gender identity in mental health was also verified through Study II wherein average “difference mental health percentile scores” of four gender identity groups i.e., androgynous, masculine, feminine, and undifferentiated are 29.65, 30.07, 30.46, and 21.47, respectively (Table 16, Figure 10).

![Average “Difference Mental Health Percentile Scores” Of Androgynous, Masculine, Feminine, And Undifferentiated Adolescents (Study II, As per Table 16)](image)

Figure # 10: Average “Difference Mental Health Percentile Scores” Of Androgynous, Masculine, Feminine, And Undifferentiated Adolescents (Study II, As per Table 16)

Again Tuckey HSD Test was used as a post hoc-test. Three of the 6 comparison between androgynous and undifferentiated, masculine and undifferentiated, and feminine and undifferentiated are found significant at .01 level of significance.

The obtained significant statistics provide empirical ground to retain the research hypothesis pertaining to the role of gender identity in mental health of adolescent students, refuting the null hypothesis in this regard. It can be concluded that gender identity plays a true key role in mental health of adolescent students. It is clear that adolescent students with androgynous gender identity truly enjoy the best mental health while the students with undifferentiated gender identity are the poorest
in this regard. However, adolescent students with masculine gender identity though are at intermediate position between the above two extreme groups, genuinely excel adolescent students with feminine gender identity in respect of their mental health.

There is a large body of research that supports the proposition that “androgyyny is good”. For example, as compared to masculine and feminine gender types, androgynous men and women are found to be better liked (Major et al., 1981), more comfortable with their sexuality (Garcia, 1982), better able to adapt to the demands of varied situation (Prager & Bailey, 1985; and Shaffer et al., 1992), better adjusted (Orlofsky & O’Heron, 1987; and Williams & D’Alessandro, 1994), more satisfied with their interpersonal relationships (Rosenzweig & Duley, 1989), less likely to develop eating disorder (Thornton et al., 1991), happy with their lives in general (Dean-Chwich & Gilory, 1993; Peter, 2008), more flexible in coping with stress (McCall & Stuthers, 1994), more creative and optimistic (Norlender et al., 2000), and better able to reduce the stress of others (Hirokawa et al., 2001). All these characteristics of people with androgynous gender identity prone them to be enjoying better mental health than those with either masculine or feminine or undifferentiated gender identity.

The androgynous person possesses both masculine and feminine traits. Thus an androgynous individual can be both assertive and sensitive, both independent and understanding, leading to sound psychological health. In their study, Slavkin & Stright (2000) observed that most college students, both males and females, value androgynous person as the ideal one. Bem (1975, 1978) demonstrated that androgynous men and women behave more flexibly than more sex-typed (masculine and feminine). She asserted that androgynous people, like masculine sex-typed people, can display the “Masculine” agnatic trait of independence by resisting social pressure to conform to undesirable group activities. Yet they are as likely as feminine sex-typed individuals to display the “feminine” communal trait of nurturance by interacting positively with baby. Witt (1997) also observed that androgynous parents are viewed as warmer and more supportive than nonandrogyynous parents. In addition androgynous individuals appear to enjoy high self-esteem and are perceived as
better adjusted than their traditionally sex-typed peers, although this may be largely because of the masculine qualities they possess (Boldizar, 1991; Spence & Hall, 1996; and Lafkowitz & Zeldaw, 2006). Importantly, Wodhill & Samuels (2003) found that people with positive androgyny score higher on measures of mental health and well being than those with negative androgyny.

In some cultures masculinity is as advantageous as androgyny. Abadalla (1995) examined the self-efficacy of Arab students with respect to their decision making abilities and found that individuals whose gender roles were either masculine or androgynous, were higher in self-efficacy and thus enjoyed better mental health than those who adhered to feminine or undifferentiated roles.

Feminine role identification also has its own pitfalls. Those of either gender who are high on femininity tend to have lower self-esteem than either masculine or androgynous individual (Lau, 1989). Bramberger & Matthews (1996) also observed that femininity was associated with depression – a sign of poor mental health.

Hence, it can be concluded that androgynous adolescents enjoy the best mental health and the undifferentiated adolescents are the worst in this regard. The masculine adolescents stand second while feminine adolescents stand third in this regard.

(iv) IMPACT OF EMOTIONAL INTELLIGENCE TRAINING ON MENTAL HEALTH

A very important problem of the present research pertained to the effect of emotional intelligence training on mental health of adolescent students. Lots of researches have indicated role of emotional intelligence in respect of this crucial dimension of human life. However, a few researches have thrown light on the training aspect of emotional intelligence and its impact on mental health. For the purpose 40 male and 40 female adolescent subjects with low emotional intelligence were selected randomly from a larger population. Care was taken to select equal number of subjects (N = 10) in each gender group from four gender identity groups i.e.,
androgynous, masculine, feminine, and undifferentiated. One-half of the subjects (N = 5) in each sub-group were assigned randomly to the control (nontraining) condition and another-half (N = 5) were randomly assigned to the experimental (training) condition. The subjects of control group were initially tested for their mental health apart from their emotional intelligence. After a silent period of 18 days, all the subjects of control group were retested on both the tests. The subjects of experimental group were initially tested for their emotional intelligence and mental health as in the case of control condition. However, they were retested on the same dimensions after emotional intelligence training for 18 days which comprised of general emotional intelligence training for 3 days and specific emotional intelligence training which was performed for one dimension in a day and was given to only those subjects who were low on that particular dimension. In this way special emotional intelligence training continued for rest 15 days.

It has already been discussed earlier that difference between post-testing and pre-testing percentile scores on mental health battery has been considered as the criterion score and is termed as “difference mental health percentile scores” to study the impact of emotional intelligence training on mental health of the subjects. Here, it is of prime importance to observe whether emotional intelligence training is effective in regard to emotional intelligence itself. This problem has been dealt in preceding chapter (Table 25). It is clear from Table 25 and Figure 11 that subjects in experimental group excelled those in control group in respect of their average emotional intelligence scores. Total 20 t ratios were computed for the purpose. The first t ratio was obtained for comparison between pre- and post-emotional intelligence scores of control group. The obtained t ratio (t = 0.82, df = 39) is not found significant while the obtained second t ratio for the comparison between pre- and post-emotional intelligence scores of experimental condition (t = 28.80, df = 39) is significant at .01 level of significance. These findings provide ample statistical ground to reason that there is considerably more enhancement in emotional intelligence of the subjects in experimental condition as compared to the subjects in control condition.
Figure # 11: Pre And Post Emotional Intelligence Scores In Control And Experimental Conditions (Study II, As Per Table 25)
To verify this finding, furthermore 18 t ratios were computed for comparisons between control and experimental conditions at various sub-group levels, out of which 12 t ratios are found to be significant either at .05 level or .01 level of significance in favour of subjects in experimental group.

It is clear that emotional intelligence training had considerably raised emotional intelligence level of the subjects in experimental group in comparison to those in control group who were not given such training. Hence, there is empirical ground to accept the effectiveness of emotional intelligence training in enhancing emotional intelligence level of subjects.

Now the specific problem here is whether raised emotional intelligence through emotional intelligence training in turn betters mental health of adolescent students. It was hypothesized that raised emotional intelligence level through emotional intelligence training would improve mental health of adolescent students. More specifically, average “difference mental health percentile scores” of subjects of experimental (training) group would be higher than those of control (nontraining) group. It is clear from Table 16 that average “difference mental health percentile scores” of control group is \( M = 11.055 \) (Figure 12) which is quite lesser than that of experimental group \( M = 44.774 \) (Figure 12).

Figure # 12: Average “Difference Mental Health Percentile Scores” Of Control And Experimental Groups (Study II, As Per Table 16)
The obtained F-ratio for this difference (F = 426.487, Table 20) is highly significant for 1 and 64 degrees of freedom.

Furthermore, 14 t ratios were also computed for different comparisons between control and experimental groups in respect of their average “difference mental health percentile scores” (Table 26, Figure 13). It is clear that average “difference mental health percentile score” of subjects in experimental group is quite higher than that of subjects in control group. All the obtained t ratios are found significant at .01 level of significance and provide empirical ground to retain the research hypothesis in regard to impact of emotional intelligence training on mental health of adolescent students, refuting the null hypothesis in this regard. That is, the adolescent students who have undergone emotional intelligence training have shown genuinely better mental health than those who have not been given such training.

All this significant statistics provide sound statistical ground to conclude that emotional intelligence training not only enhanced emotional intelligence level of trainees but also exerted considerable positive impact on mental health of adolescent students.
Figure # 13: Average "Difference Mental Health Percentile Scores" Of Control And Experimental Condition Belonging To Various Comparison Groups (Study II, As Per Table 26)
Earlier in this chapter roles of various dimensions of emotional intelligence in mental health have been discussed. It has clearly been observed that the 15 dimensions of emotional intelligence i.e., emotional self-awareness, assertiveness, self-regard, self-actualization, independence, empathy, interpersonal relationship, social responsibility, problem-solving, reality testing, flexibility, stress tolerance, impulse control, happiness, and optimism, are playing their vital roles in mental health of adolescent students that is, the adolescent students who are high on these dimensions of emotional intelligence truly enjoy better mental health than those adolescent students who are low on these dimensions of emotional intelligence. It is real and of vital interest to observe the effect of increased emotional intelligence through emotional intelligence training on mental health of adolescent students. That is, the emotional intelligence training not only enhances emotional intelligence of the adolescent students undergoing the training, but in turn also improves them on mental health aspects of their lives. The findings are in consonance with those of Slaski & Cart (2003), Akerjordet & Severinsson (2004), Chan (2004), Kerr et al. (2004), Zeins et al. (2004), Adeyemo (2005), Geraghty (2006), Dearing (2007), Gupta & Kumar (2010), Nelis et al. (2009, 2011), Franchi (2012), Pittman (2012), and Ruiz-Aranda (2012).

2. INTERACTION EFFECTS OF FACTORS

So far the effect of single factor (i.e., emotional intelligence, gender, gender identity, and emotional intelligence training) on mental health of adolescent students have been discussed.

The joint effect of any two or more factors at a time can also be studied. Thus, it may be interesting to know, for example whether four sub-groups formed on the basis of emotional intelligence (high and low) and gender (male and female) would differ in respect of their mental health? In general, when a number of individual items are grouped according to several factors or classification and these factors are not
independent, there is said to be interaction between them. The interaction is a measure of the extent to which the effect upon the dependent variable of changing the level of one factor depends upon the levels of others. Thus, with the two treatments say ‘N’ and ‘P’ each of two levels (0 and 1), the effects of four treatment combinations can be written as \( N_0P_0 \), \( N_0P_1 \), \( N_1P_0 \), and \( N_1P_1 \). If the treatments are independent, the effect of varying “N” from \( N_0 \) to \( N_1 \), would be the same with \( P_0 \) to \( P_1 \) with P, the extent to which this is not so is a measure of interaction.

A. STUDY I

(A-i) Joint Role Of Emotional Intelligence And Gender In Mental Health

The specific problem in this regard was whether the two independent variables i.e., emotional intelligence and gender, play any joint role in mental health of adolescent students. On the basis of weightage model (Table 2), it was assumed that emotionally high intelligent males would enjoy the best mental health while emotionally low intelligent females would suffer the poorest mental health. The other two groups i.e., emotionally low intelligent males and emotionally high intelligent females, would possess the intermediate position in the same regard.

It is clear form Table 27 that average mental health percentile scores of emotionally high intelligent females is the highest (\( M = 54.92 \), Figure 14), however, the lowest average mental health percentile scores (\( M = 44.51 \), Figure 14) is of emotionally low intelligent males. Emotionally high intelligent males, and emotionally low intelligent females possess second (\( M = 54.6175 \), Figure 14), and third (\( M = 46.655 \), Figure 14) positions, respectively, in this regard.
Figure # 14: Average Mental Health Percentile Scores Of Four Sub-Groups Formed On Joint Basis Of Emotional Intelligence And Gender (Study I, As Per Table 27)

The obtained interaction F-ratio (F = 2.20, Table 17) for these differences is not significant at any acceptable of significance, which provides empirical ground to conclude that emotional intelligence and gender do not play any true joint role in mental health of adolescent students. In other words, the difference between emotionally high and low intelligent adolescents in respect of their mental health does not vary considerably for males and females. The same data also reveals the fact that the difference between males and females in regard to their mental health does not vary genuinely due to their differential levels of emotional intelligence i.e., high and low. We have seen earlier that emotionally high intelligent and female adolescents truly enjoy better mental health than emotionally low intelligent and male adolescents, respectively. However, the insignificant interaction effect between emotional intelligence and gender further signifies that the two factors are independent in respect of their roles in mental health of adolescents. In other words, the difference in mental health of emotionally high and low intelligent adolescents does not vary differentially for males and females or vice-versa.
Though, the interaction finding is in line with the observed findings in regard to individual roles of the two factors in the present research wherein female and high EI adolescents had shown better mental health than their counterparts i.e., male and low EI adolescents, interaction hypothesis can be refuted empirically accepting the null hypothesis in regard to joint role of emotional intelligence and gender in mental health of adolescents. This findings is not in line though not significance with that of Bindu & Thomas (2006) who observed that emotional intelligence had a greater role in determining overall maladjustment among females than males.

(A-ii) Joint Role Of Emotional Intelligence And Gender Identity In Mental Health

The second interaction problem of the research pertained to the joint role of emotional intelligence and gender identity of adolescents in their mental health. On the basis of weightage model (Table 3), it was assumed that emotionally high intelligent androgynous adolescents would enjoy better mental health while emotionally low intelligent undifferentiated adolescents would be the poorest in this regard. Similarly, emotionally low intelligent androgynous, emotionally high intelligent masculine and emotionally high intelligent feminine adolescents would possess second position while emotionally low intelligent masculine, emotionally low intelligent feminine, and emotionally high intelligent undifferentiated adolescents would stand at third position in regard to mental health.

A perusal of Table 28 and Figure 15 also clarifies that average mental health percentile scores of emotionally high intelligent androgynous adolescents is the highest ($M = 62.635$, Figure 15) while that of emotionally low intelligent undifferentiated adolescents is the lowest ($M = 39.815$, Figure 15). It is also clear that average mental percentile health scores of emotionally low intelligent androgynous ($M = 50.74$, Figure 15), emotionally high intelligent masculine ($M = 54.825$, Figure 15) and emotionally high intelligent feminine ($M = 52.175$, Figure 15) are higher than that of emotionally low intelligent masculine ($M = 49.115$, Figure 15), emotionally low
intelligent feminine (42.66, Figure 15), and emotionally high intelligent undifferentiated (M = 49.44, Figure 15), which are in consonance with expected outcome on the basis of weightage model in the present research.

Figure # 15: Average Mental Health Percentile Scores Of Eight Sub-Groups Formed On Joint Basis Of Emotional Intelligence And Gender Identity (Study I, As Per Table 28)

The obtained significant interaction F-ratio (F = 4.23, P<.01, df = 3, and 224) provides empirical ground to retain the research hypothesis refuting the null hypothesis in regard to joint role of emotional intelligence and gender identity in mental health of adolescents. It can be concluded that the difference in mental health scores of emotionally high and emotionally low intelligent adolescents varied truly for four gender identity groups. Alternatively, it can also be concluded that the differences in regard to mental health of adolescents in four gender identity groups, i.e., androgynous, masculine, feminine, and undifferentiated, truly varied for emotionally high and low intelligent groups. Furthermore, it can also be concluded that average mental health percentile scores of eight sub-groups differed considerably.

Earlier it has been found that emotional intelligence and gender identity play their true independent roles in mental health of adolescents. The significant interaction
effect between emotional intelligence and gender identity further signifies that the two factors also played their considerable joint role in mental health of adolescents.

(A-iii) Joint Role Of Gender And Gender Identity In Mental Health

The last first-order interaction problem of the research pertained to joint role of gender and gender identity in mental health of adolescents. On the basis of weightage model (Table 4), it was assumed that androgynous males would enjoy the best mental health while undifferentiated females would be the poorest in this regard. Similarly, it was expected that masculine males, feminine males, and androgynous females would stand at second position while undifferentiated females, masculine females, feminine females would possess third position in regard to their mental health.

It is clear from Table 29, and Figure 16 that average mental health percentile scores of these 8 subgroups i.e., androgynous males, androgynous females, masculine males, masculine females, feminine males, feminine females, undifferentiated males, and undifferentiated females, are 55.875, 57.50, 50.265, 53.675, 45.96, 48.875, 46.155, and 43.10, respectively.

![Figure # 16: Average Mental Health Percentile Scores Of Eight Sub-Groups Formed On Joint Basis Of Gender And Gender Identity (Study I, As Per Table 29)](image-url)
The obtained interaction F-ratio for these differences (F = 5.59, Table 17) is significant at .01 level of significance for 3 and 224 degrees of freedom, which provides sound statistical ground to retain the research hypothesis refuting the null hypothesis in this regard. It can be concluded that differences in average mental health percentile scores of these eight sub-groups were genuine. It can also be concluded that the difference between male and female adolescents in respect of their mental health varied truly for four gender identity groups i.e., androgynous, masculine, feminine, and undifferentiated. Alternatively, it can also be concluded that the differences among four gender-identity groups as regards to their average mental health percentile scores truly varied for males and females.

Though, it was expected that androgynous males would enjoy the best mental health, it has been found that the favour goes to androgynous females in the present research. However, the obtained lowest average mental health percentile scores of undifferentiated females was as per the research assumption. Similar controversies are found for second and third positions also.

This interaction effect was also observed in Study II of the research. Average “difference mental health percentile scores” of eight sub-groups are given in Table 30, and Figure 17.

![Figure #17: Average “Difference Mental Health Percentile Scores” Of Eight Sub-Groups Formed On Joint Basis Of Gender And Gender Identity (Study II, As Per Table 30)](image-url)
The obtained interaction F-ratio (F = 10.827, Table 20) is significant at .01 level of significance for 3 and 64 degrees of freedom, however, here too the obtained average “difference mental health percentile scores” are not in consonance with the proposed model of the present research.

A perusal of Table 29 (Study I) reveals the fact that androgynous females were the best while undifferentiated females were the poorest in respect of their mental health. Similarly, androgynous males stood second from top while undifferentiated males stood second from the bottom in the same regard. In the cases of masculinity and femininity dimensions, here too had been observed that masculine and feminine females excelled masculine and feminine males, respectively, in regard to their mental health.

Similarly, a perusal of Table 30 (Study II) revealed the fact that role of gender in mental health of four gender identity groups was quite unpredictable. Though, undifferentiated females showed the poorest level of mental health, feminine males have shown the best level of mental health, the other subgroups too were placed at unpredictable places in regard to their mental health.

Hence, it can be concluded that though the joint effect of gender and gender identity had been found significant and near to the observed findings pertaining to individual roles of gender and gender identity (Study I) it was quite unpredictable in Study II, where in the patterns of interaction effect were not as per the proposed interaction effect model in the present research. Therefore, further researches are recommended to shade more light on this aspect.

(A-iv) Joint Role Of Emotional Intelligence, Gender, And Gender Identity In Mental Health

The only second-order interaction effect (Study I) pertained to joint role of emotional intelligence, gender, and gender identity in mental health of adolescents. On the basis of weightage model (Table 7), it had been assumed that androgynous males with high emotional intelligence would enjoy the best mental health while
undifferentiated females with low emotional intelligence would be the poorest in this regard. Masculine males with high emotional intelligence, feminine males with high emotional intelligence, androgynous males with low emotional intelligence, and androgynous females with high emotional intelligence, would stand at second position; masculine males with low emotional intelligence, feminine males with low emotional intelligence, masculine females with high emotional intelligence, feminine females with high emotional intelligence, and androgynous females with low emotional intelligence would stand at third position while undifferentiated males with low emotional intelligence, undifferentiated females with high emotional intelligence, masculine females with low emotional intelligence and feminine females with low emotional intelligence would stand at fourth position in regard to their mental health.

Table 14 and Figure 18 depict average mental health percentile scores of 16 subgroups formed on joint basis of two levels of emotional intelligence (high and low); two gender groups (male and female) and four types of gender identity (androgynous, masculine, feminine, and undifferentiated).

![Figure 18: Average Mental Health Percentile Scores Of Sixteen Sub-Groups Formed On Joint Basis Of Emotional Intelligence, Gender, And Gender Identity (Study I, As Per Table 16)](image-url)
The obtained interaction F-ratio for these differences \((F = 10.39, \text{Table } 17)\) is significant at .01 level of significance for 3 and 224 degrees of freedom, providing empirical ground to conclude emotional intelligence, gender, and gender identity do play their genuine joint role in mental health of adolescents. Alternatively, it can be said that all the sixteen sub-groups did differ genuinely in regard to their mental health. Though, the interaction effect was found significant, the pattern of interaction effect is not in consonance with the hypothetical model of the present research. However, a close view on the observed data revealed some interesting findings. Mental health percentile scores of undifferentiated females \((M = 39.56, \text{Figure } 18)\) and of undifferentiated males \((M = 40.07, \text{Figure } 18)\) was the lowest. Similarly, androgynous females with high EI were at the top \((M = 65.05, \text{Figure } 18)\) while androgynous males \((M = 51.53, \text{Figure } 18)\) were at second position in the regard. These findings though not in consonance with research hypothesis but are quite in consonance with observed findings in perspective to individual role of independent variables. Further researches are recommended in this regard.

**B. STUDY II**

(B-i) Joint Effect Of Gender And Gender Identity On Mental Health

This first-order interaction effect has already been discussed dealing with Study I interaction problem between gender and gender identity.

(B-ii) Joint Effect Of Gender And Emotional Intelligence Training On Mental Health

Another interaction problem (Study II) pertained to joint effect of gender and emotional intelligence training on mental health of adolescents. On the basis of proposed interaction model (Table 5), it was expected that males in experimental (training) condition would show the best mental health while females in control
(nontraining) condition would be the poorest in this regard. The other two groups i.e., males in control and females in experimental conditions, would stand in between these two extreme groups in regard to their mental health. It is clear from Table 31 and Figure 19 that average “difference mental health percentile scores” of males in training condition (M = 47.263, Figure 19) is the highest while that of females in nontraining condition (M = 10.693, Figure 19) is the lowest. The second position in this regard is occupied by females in training condition (M = 42.286, Figure 19) and the males in nontraining condition occupied the third position (M = 11.417, Figure 19).

![Figure # 19: Average “Difference Mental Health Percentile Scores” Of Males And Females In Control And Experimental Conditions (Study II, As Per Table 31)](image-url)
The obtained interaction F-ratio ($F = 1.767$, Table 20) is not significant at any acceptable level of significance for 1 and 64 degrees of freedom, providing empirical ground to refute the research hypothesis in regard to joint effect of gender and emotional intelligence training on mental health of adolescents. It can be concluded that males and females profited equally from emotional intelligence training in respect of their mental health. Though, it had been observed that emotional intelligence training considerably enhanced mental health, this positive impact of emotional intelligence training virtually was same for both the gender groups.

**(B-iii) Joint Effect Of Gender Identity And Emotional Intelligence Training On Mental Health**

Another first-order interaction problem in the present research (Study II) pertained to joint effect of emotional intelligence training and gender identity on mental health of adolescents. On the basis of weightage model (Table 6) proposed to depict interaction effect in the present research, it had been hypothesized that androgynous adolescents would be at the most advantageous condition while the undifferentiated adolescents in control group would be at the least advantageous condition in regard to their mental health. The androgynous in control condition, the masculine in experimental condition, and the feminine in experimental condition would stand at second position while the masculine in control condition, the feminine in control condition, and the undifferentiated in experimental condition, would stand at third position in regard to their mental health. It is clear form Table 32 and Figure 20 that average “difference mental health percentile scores” of eight sub-groups i.e., androgynous in control, masculine in control, feminine in control, undifferentiated in control, androgynous in experimental, masculine in experimental, feminine in experimental and undifferentiated in experimental conditions are 11.512, 11.067, 12.758, 8.884, 47.795, 49.078, 48.166, and 34.058, respectively.
The obtained interaction F-ratio for these differences (F = 3.152, Table 20) is significant at .05 level of significance for 3 and 64 degrees of freedom which provides an empirical ground to believe that there did exist considerable joint effect of gender identity and emotional intelligence training on mental health of adolescents.

It had been observed earlier that gender identity and emotional intelligence training were vital to mental health. The significant interaction statistics further strongly suggest that adolescents with different gender identity i.e., androgynous, masculine, feminine, and undifferentiated, profited differently from emotional intelligence training. The research hypothesis in regard to impact of training seems to be true in case of adolescents with undifferentiated gender identity who benefited the least from emotional intelligence training. However, the other 3 gender identity groups i.e., androgynous, masculine, feminine, seem to be benefited from the training almost equally.
(B-iv) Joint Effect Of Gender, Gender Identity, And Emotional Intelligence Training On Mental Health

The last interaction problem of the present research (Study II) pertained to joint effect of three variables i.e., emotional intelligence training, gender, and gender identity on mental health of adolescents. On the basis of weightage model (Table 8) it had been hypothesized that androgynous males in experimental condition would be at the most advantageous position in regard to their mental health while undifferentiated females in control condition would be at the least advantageous position in regard to their mental health. The other sub-groups would fall in between these two extreme subgroups at second, third, and fourth positions depending on their weightages. Table 16 and Figure 21 depict average “difference mental health percentile scores” of 16 subgroups formed on joint basis of two levels of emotional intelligence training (nontraining and training), two types of gender (male and female) and four types of gender identity (androgynous, masculine, feminine, and undifferentiated).

![Figure # 21: Average Difference Mental Health Percentile Score Of Sixteen Subgroups Formed On Joint Basis Of Gender, Gender Identity, And Emotional Training Condition (Study II, As Per Table 16)](image-url)
The obtained second-order interaction F-ratio ($F = 14.383$, Table 20) is significant at .01 level of significance for 3 and 64 degrees of freedom which provided sound statistical ground to retain the research hypothesis, refuting the null hypothesis in this regard. It can be concluded that the 16 sub-groups did differ in respect of their average “difference mental health percentile scores”. Alternatively, it can also be said that effectiveness of emotional intelligence training as regard to mental health of adolescents truly differed depending on gender and gender identity of adolescents together. Though, as it was hypothesized, undifferentiated females had profited the least form emotional intelligence training in respect of their mental health, feminine males had been found to profit the most. The overall finding, though significant, does not fit exactly to the hypothetical weightage model of the present research, probably due to the complex combination of gender and gender identity, and hence needs further exploration.

(C) COMPARATIVE ATTRIBUTION OF EMOTIONAL INTELLIGENCE, MASCULINE GENDER IDENTITY, FEMININE GENDER IDENTITY AND OTHER FACTORS

Finally, $\beta$ coefficients are obtained (Table 33, Figure 22) to compute multiple $R$ to observe comparative attribution of three independent variables i.e., emotional intelligence, masculine, and feminine gender identity, in mental health of adolescents. Table 34 depicts relative contributions of emotional intelligence, masculine gender identity, feminine gender identity, and other factors including gender to mental health.
Figure # 22: Pie Diagram Showing Percent Contribution Of Independent Variables In Mental Health (Study II As Per Table 33)

All together 66% variance in mental health is attributable to three factors i.e., Emotional Intelligence (25%), Masculine Gender Identity (31%), and Feminine Gender Identity (10%). Rest (34%) variance is attributable to other factors including gender.
SUGGESTIONS

All education is of little use unless backed by emotional intelligence. The one thing all of us need and are seeking is happiness and joy. And happiness is feeling not knowing. The pressure of performing better than others is affecting a large number of teenagers (Bhatnagar, 2002). They are suffering from excessive tension to excel in studies, extra-curricular activities and emerge successful in competitive exams. This gives rise to negative emotions of jealousy and hatred, driving them to resort to underhand means of achieving quick results. Only an emotionally intelligent society can ensure accelerated growth on all fronts, without compromising on peace, love, compassion, and other humane values and thus making them mentally healthy (Bhatnagar, 2002).

Unless and until children know how to identify, understand, use, and manage these negative emotions, emotional intelligence cannot be inculcated in them who are the futures of tomorrow.

Since nearly 20 years of a person’s life is spent in different educational institutions such as school, college etc. and since this is the most active stage in any person’s life, it is better if emotional intelligence is fostered at that very age so that once the person is out of the educational setting, he is able to handle any kind of situation.

So, in order to foster emotional intelligence the various co-curricular activities can be included in the academic material which are currently being used by the various schools and colleges apart of emotional intelligence training as has been used in the present research.

1. Sports: It is a very effective way of developing the habit of coordinated actives in the students as teamwork is vital in today’s organizations. Team performance, rather than solely individual output, is the key to the most successful activities. A quick checklist of skills adolescents require to achieve during the activities performed in a team, are:
a. ability to be sensitive to team member’s feelings and concerns,
b. being receptive to others’ perspective,
c. helping others manage their emotions and social skills,
d. creating rapport with greater sensitivity to one’s own self, and therefore,
e. being able to manage and channelise emotions toward attaining team solutions (Breckenridge, 2000).

2. Theater sessions: In these sessions the students can be involved in street plays which are very close to real life situations making them aware that what real life situations can be as these plays can and should be based on real life incidences which make them realize that by using emotional intelligence one can behave in an effective manner.

3. Social work: Students should also be involved in social activities. They can accompany any local organization working in this direction so that a sense of sharing can be built in their personality.

4. Solidarity day: Such days can be celebrated in which the students can go to slum areas and interact with these people and knowing their every day problems. Since, these students come from better families this interaction will give them the true picture of the society in which they are living, thus, they will learn to respect the opportunities that they get in life and motivating them to make this earth a better place to live for others also.

5. Helping days: On these days the students can visit various institutions for the underprivileged such as old homes, orphanages etc. where they are allowed to serve and help the inmates just for a day to do their various routine works, making them more sensitive towards the needs of others and thus developing the helping behaviour in them.
6. **Sharing sessions** : The educational institutions must start such sessions in which the students should be encouraged to come forward and tell their experiences when they had helped some one and also about the times when they were helped by others so that by sharing these experiences the students can become more sensitive towards other human beings.

7. **Presentations** : Presentations must be made essential in which the students should study and present the life of famous people who worked hard all their lives to uplift the various social strata and also giving a touch of their own views.

8. **Spiritual upliftment** : One who is able to handle one’s ego deftly and is able to inculcate the virtues of humanity, gratitude, and politeness will go a long way towards achieving spiritual success. This renewed interest in spiritual development can be the breeding ground for a rigorous spiritual awakening programmes such as art of living, yoga etc. and soul searching exercises for students to deal with the demands and complexities of modern life, competitive working environments which involve stress and tensions (Datta, 2005).

Thus, there has to be a proper mix of useful intelligence, emotional strength, and spiritual upliftment in a human being in order to be successful in the fast changing and demanding environment, and to be mentally healthy at the same time.

Apart of enhancing emotional intelligence through specific emotional intelligence training and through co-curricular activities in school/college setups, there are other suggestions provided by various authors which can be employed in daily routine life to remain mentally healthy. This tips are summarized here below:

**1. Maintaining Good Physical Health**

Taking care of ones body is a powerful first step towards mental and emotional health. The mind and the body are linked. When a person improves his physical health, he will automatically experience greater mental and emotional well-being. For
example, exercise not only strengthens peoples heart and lungs, but also releases endorphins, powerful chemicals that energize them and lift their mood.

The activities a person engages in and the daily choices he makes affect the way he feels physically and emotionally.

- **Get enough rest.** To have good mental health, it’s important to take care of one’s body, that includes getting enough sleep. Most people need seven to eight hours of sleep each night in order to function optimally.

- **Learn about good nutrition and practice it.** The subject of nutrition is complicated and not always easy to put into practice. But the more one learns about what he eats and how it affects his energy and mood, the better he can feel.

- **Exercise to relieve stress and lift mood.** Exercise is a powerful antidote to stress, anxiety, and depression. A person shall look for small ways to add activity to his day, like taking the stairs instead of the elevator or going on a short walk. To get the most mental health benefits, 30 minutes or more of exercise per day is desirable. Brisk walking, jogging, sports, gym help in maintaining positive physical and mental health.

- **Get a dose of sunlight every day.** Sunlight lifts mood, at least 10 to 15 minutes of sun exposure per day is desirable. This can be done while exercising, gardening, or socializing.

- **Limit alcohol and avoid cigarettes and other drugs.**

2. **Taking Care of Oneself**

In order to maintain and strengthen one’s mental health, it’s important to pay attention to one’s own needs and feelings. A person does not let stress and negative emotions build up rather he shall try to maintain a balance between his daily responsibilities and the things he enjoys. If he takes care of himself, he will be better prepared to deal with challenges if and when they arise.
Tips and strategies for taking care of oneself

- **Appeal to one’s senses.** A person shall stay calm and energized by appealing to the five senses: sight, sound, touch, smell, and taste. Listening to music that lifts the mood, placing flowers where one will see and smell them, massaging one’s hands and feet, or sipping a warm drink, may also help.

- **Engage in meaningful, creative work.** Doing things that challenge one’s creativity and make him feel productive, whether or not he gets paid for it. Things like gardening, drawing, writing, playing an instrument, or building something in one’s workshop can be adapted.

- **Get a pet.** Pets are a responsibility, but caring for one makes a person feel needed and loved. There is no love quite as unconditional as the love a pet can give. Animals can also get a person out of the house for exercise and expose him to new people and places.

- **Make leisure time a priority.** Doing things for no other reason than that it feels good to do them. Going to a funny movie, taking a walk on the beach, listening to music, reading a good book, or talking to a friend are a few examples. Play is an emotional and mental health necessity.

- **Make time for contemplation and appreciation.** A person shall think about the things he is grateful for. Mediating, praying, enjoying the sunset, or simply taking a moment to pay attention to what is good, positive, and beautiful as he goes about his day, make a person to enjoy his days.

- **Pamper oneself:** Get an occasional massage, facial or pedicure (works for gents as well as the ladies), wear clothes that make them feel good, and do little things that are gratifying to the senses, like listening to music.

  Everyone is different; not all things will be equally beneficial to all people. Some people feel better relaxing and slowing down while others need more activity.
and more excitement or stimulation to feel better. The important thing is to find activities that a person enjoys and that give him a boost.

3. Limiting Unhealthy Mental Habits

One shall try to avoid becoming absorbed by repetitive mental habits – negative thoughts about himself and the world that suck up time, drain his energy, and trigger feelings of anxiety, fear, and depression.

4. Managing One’s Stress Level

Stress takes a heavy toll on mental and emotional health, so it's important to keep it under control. While not all stressors can be avoided, stress management strategies can help a person brings things back into balance.

5. Establishing Supportive Relationships

No matter how much time a person devotes to improving his mental health, he will still need the company of others to feel and be his best. Humans are social creatures with emotional needs for relationships and positive connections to others. We are not meant to survive, let alone thrive, in isolation. Our social brains crave companionship – even when experience has made us shy and distrustful of others.

Tips and strategies for connecting to others:

• **Get out from behind TV or computer screen.** Screens have their place but they will never have the same effect as an expression of interest or a reassuring touch. Communication is a largely nonverbal experience that requires a person to be in direct contact with other people, so a person shall not neglect his real-world relationships in favour of virtual interaction.

• **Spend time daily, face-to-face, with people.** Spending time with people one enjoys is a priority. One shall choose friends, neighbors, colleagues, and
family members who are upbeat, positive, and interested in him and shall take time to inquire about people he meets during the day that he likes.

- **Volunteer.** Doing something that helps others has a beneficial effect on how a person feels about himself. The meaning and purpose one finds in helping others will enrich and expand his life. There is no limit to individual and group volunteer opportunities one can explore. Schools, religious places, nonprofits and charitable organization of all sorts depend on volunteers for their survival.

- **Be a joiner.** Joining networking, social action, conservation, and special interest groups that meet on a regular basis may also help. These groups offer wonderful opportunities for finding people with common interests – people one likes being with who are potential friends.

- **Become part of a group:** Study after study reveals that people who are part of a regular, continuous group enjoy much lower levels of stress and are healthier and happier than people who are not part of a group.

- **Connect.** Maintaining positive contact with the people around with family, friends, colleagues, and neighbours at home, work, school will support and enrich a person every day.

- **Keep learning.** Those who kept up their interests in learning included professional learning as well as wider learning, including learning new skills – set a challenge a person will enjoy achieving. Learning new things will make, a person more confident, as well as being fun to do.

- **Take notice.** One shall enjoy the moment, whether he is on a train, eating lunch or talking to friends. One shall be aware of the world around him and what he is feeling. Reflecting on his experiences will help a person appreciate what matters to him.
• **Give.** Doing something nice for others, thinking someone, joining a community group, looking out, as well as in, seeing oneself and one’s happiness, linking to the wider community can be incredibly rewarding and will create connections with the people around (Foresight, 2008).

6. Building Great Relationships

If a person finds it difficult to connect to others or to maintain fulfilling, long-term relationships, he may benefit from raising his emotional intelligence. Emotional intelligence allows a person to communicate clearly, “read” other people, and resolve conflicts.

**Tips on dealing with emotions**

• **Learn to express feelings in appropriate ways.** It is important to let people close to one know when something is bothering a person. Keeping feelings of sadness or anger inside takes extra energy. It can also cause problems in his relationships and at work or school.

• **Think before act.** Emotions can be powerful. But before one gets carried away by his emotions and says or does something he might regret, he shall give himself time to think.

• **Strive for balance in life.** One shall make time for things he enjoys and shall focus on positive things in his life.

Gutpa & Kumar (2010) suggest that we must restructure the school curriculum to reflect forms of learning, which not only help in development of intellects of individuals but also improve the emotional intelligence of students, especially in case of adolescents. The design of intervention programmes for the students should be such so as to enable them increase their emotional intelligence because research evidences suggest that “emotional intelligence” can be more powerful than “intelligence quotient. Emotional intelligence can be developed and nurtured even in
adulthood and prove beneficial to one’s health, relationship and performance. Academic programmes which incorporate emotional intelligence training as part of the curriculum are being created at forward looking schools such as Nueva School in California. The “self-science” curriculum at Nueva deals with – self awareness, personal decision making etc. The direct association between emotional intelligence and mental health may support the value of teaching emotional intelligence. Increased feelings of control and competence should lead in turn, to more active effective coping and to better mental health and physical health outcomes. Assessment of individual with low emotional intelligence could provide suggestions for education and skill training, feedback to individuals with average or high emotional intelligence ability might give them a greater awareness of their own resources which should lower stress. Learning to trust their emotional knowledge may be especially beneficial for some of the overwhelmed individuals. So, parents and teachers should do efforts to increase emotional intelligence of students.

Levy (2011) emphasizes on two keys for becoming mentally healthy. The first key is to judge oneself by his efforts, not by the specific outcomes of his actions. Most of the factors that determine “outcome” are not under one’s control. What one can control is his effort. If one tries very hard and things don’t go well, it’s okay. The second key comes in the form of a simple yet powerful practice that will open up a wondrous new world: trying to move through one’s day viewing everything and everybody as if they were God. Many people believe in this idea from a philosophical perspective, but they don’t really take it seriously. In fact, it is real. If a person practices the awareness of it in the moment as his move through his day, it begins to influence how he thinks, feels, and acts. Only then does he become aware that we are all part of a single, vast soup of intelligent energy, all part of one great mind. When he actually experiences it, he will be totally transformed. He will live in constant joy, with a breathtaking sense of belonging, certain of his own immortality – the kind of happiness most people only dream of.
Faghirpour et al. (2011) assert that emotional intelligence play a very prominent role in education. It can help to learn and be effective in achieving national goals. Therefore he suggested that:

1. Emotional intelligence be used as one of assessed topics in schools by counselors and school officials,

2. For strengthening skills of emotional intelligence and attention to mental health of students, update programs for enhancing emotional intelligence shall be offered for all schools especially secondary school as a course. Emotional intelligence training programs for all teachers, administrators, and school counselors should be considered as periods of service education.

3. In order to strengthen student’s emotional intelligence and mental health needs planning be performed for coordination and integration and in it all of influencing factors (such as school, family and other social institutions) shall be considered simultaneously and in synchronized together. Therefore recommended training program be held by using the workshop with attendance of all the members.