CHAPTER 5
SUMMARY, FINDINGS AND EDUCATIONAL IMPLICATIONS

In the materialistic era of today, Darwin’s law of survival of the fittest is fully valid. Ostensibly, man appears to be contented but internally, he is full of conflicts. Unrest, anxiety and frustrations are occurring in all spheres of life which makes his life miserable and a burden. So there arises a craving for an effective stress buster—knocking the soul’s door. When all the human’s endeavours using outward sources go in vain, it is but natural to follow the inner senses and go within, and to know, to follow the path of the inner self. This kind of mental orientation helps one realize his inner potential and achieve inner satisfaction. In the present scenario, with so much of stress in the life; it is very difficult to exist in this world without the support of spirituality. Intentional Intelligence is the emerging field which have its roots in the spirituality (Steingard 2008). The issue related to understanding the real meaning, purpose of life and nature of man has baffled human beings. Thus, true type of intelligence lies in the experience of inner joy and happiness, seeking the truth, confiding in oneself and facing the challenges positively.

Mind is a captain of the ship, if a person explores the hidden corners of his uncontrolled mind, he will surely feel that this is an Alice in wonderland world of thoughts which may or may not have a ground reality. A sizable body of research exploring the nature of consciousness, carried on for more than thirty years in prestigious scientific institutions around the world, shows that thoughts are capable of affecting everything from the simplest machines to the most complex living beings. This evidence suggests that human thoughts and intentions are an actual physical “something” with astonishing power to change our world. Every thought we have is tangible energy with the power to transform. A thought is not only a thing; a thought is a thing that influences other things (McTaggart, 2008). A sound mind can enjoy its power up to the best in a positive manner, but for the baffled mind it makes the life miserable. To make lives free from irrelevant and negative thoughts, we need to work upon soul’s food and that is a new awareness experience full of compassion and gentleness, yet stable path for our millions of thoughts. The path followed for this experience is a surprise and a boon as it helps to discover a new resourceful and blissful world which helps in growth, healing and rejuvenation. The development of Intentional intelligence in a person through this new relationship with thoughts can make a person’s emotions, sensations, feelings and reactions to become less intense or at the best it makes a person well trained that he achieves a sort of detente with the uncontrolled thoughts in mind which will not interfere with the person’s peaceful living Orsillo and Roemer, 2011)
5.1. Anxiety

Anxiety is labelled differently in different fields. A psychiatrist would try to label it as "free floating" or "bound" anxiety, "acute" or "chronic", while psycho-analyst labels it as "conscious" or "unconscious" and a psychologist would classify it as "trait" or "state" anxiety (Vaghela and Yagnik, 2004). Rosen (2008) explained anxiety as a “major source of energy” and looked at anxiety as a positive factor. He admitted that no one could escape from it since people live in an unpredictable society. Living in a community, Rosen added, full of everyday changes lead to anxiety. American Psychiatric Association (2013) stated that Anxiety is not the same as fear, which is a response to a real or perceived immediate threat, whereas anxiety is the expectation of future threat. Anxiety is basically a feeling of future in threat or may be present in danger with worry and rumination as a pair of bodyguards. To break free from anxiety’s tight grip on our lives, we need to cultivate a new type of awareness—a compassionate, gentle, yet unwavering way of processing our reactions and surroundings that doesn’t trigger an urge to head for the hills (Orsillo and Roemer, 2011). This awareness can develop through training of the mind. Yogic and meditational practices and activities help an anxious, stressed and uncontrolled mind to permit the thoughts, feelings, emotions and sensations to come and pass by without any burden of its abolition or to fight against them. The path followed for this experience is a surprise and a boon as it helps to discover a new resourceful and blissful world which helps in growth, healing and rejuvenation.

5.2. Self esteem

Self-esteem has been defined as an individual’s sense of self-worth, or the extent to which a person values, approves of, appreciates, prizes or likes him or herself (Blascovitch & Tomaka, 1991) and has been related to many psychological domains including personality, behaviour, socioeconomic factors, health and clinical psychology. Self-esteem is a widely used construct both in popular and formal psychology (Baumeister et al., 2003; Lipnevich, 2006). Self-esteem can be either global or specific and there is a relationship between these two facets of self-esteem. Global self-esteem refers to an all round feeling of self-worth and confidence. Specific self-esteem refers to a feeling of self-worth and confidence with regard to a specific activity or behaviour (Lawrence, 2006). According to Branden, (1995) Self-esteem has two interrelated components. One is a sense of basic confidence in the face of life's challenges: self-efficacy. The other is a sense of being worthy of happiness: self-respect. Self-esteem is likely to arise in middle childhood. Self-esteem or self-worth of the child
refers to a relative measure between the child’s self-image and ideal (or desired) self, i.e. in the words of James (1890), self-esteem can be considered as the ratio of “our actualities to our supposed potentialities”. A low self-esteem therefore indicates a large discrepancy between the self-image and the ideal-self, and may be exhibited through several operations by the child (Lawrence (1996))

In the school environment, high levels of self-esteem increase the likelihood that youth will connect positively to peers, teachers, and the school as a whole, important determinants of academic success. Similar to self-esteem, a sense of positive school, peer, and family connectedness (feeling that one “fits in” and “belongs”) protects youth from engaging in negative health behaviour. Positive social connections decrease risktaking behavior by providing youth with prosocial and empowering opportunities. Youth who feel supported and cared for by parents, teachers, and peers report feeling more efficacious in making healthy, informed decisions and displaying features of resiliency to potential life stressors. Students spend a large portion of their time in school, school-based spiritual education and mindfulness, meditation and yoga based intervention and prevention programs should be implemented to increase youth self-esteem and positive school, peer, and family connections. These programs focus on getting students involved in interactive, student-oriented, decision-making, cooperative learning activities, as well as including aspects of parental involvement, peer counseling, tutoring, and mentoring.

5.3. Academic achievement

In the present day’s competitive scenario there is a stringent need for the students to prove their academic competence. In order to prove their academic competence they need to score higher in academic exams. Academic achievement plays major role in the student’s education context because, only through the academic performance they can prove themselves that they are competent and well enough in academic subjects. More often academic performance scores are used as criteria for deciding their higher education (Nivenitha, and Nagalakshmi 2017). Academic achievement of students is not only a pointer to the effectiveness or otherwise of schools but a major determinant of the future of youths in particular and the nation in general. Academic achievement is an attained ability or degree of competence in school task, usually measured by standardized tests and expressed in grades or units based on norms derived from a vide sampling of pupils' performance (Trow, 1956). According to Tany and Thomas (1977) achievement means performance in school or college in a standardized series of educational tests. The term is used more generally to desirable performance in the
subjects ent to performance in school or college in standardized series of education tests. In the words of Bajwa and Setia (1994), “Academic achievement refers to the pupil’s knowledge attainment and the skills developed in the school subjects which are assessed by the authorities with the help of achievement tests in the form of examination”.

5.4. **Locus of control**

The concept of Locus of control originated as a central component of Rotter's social learning theory of personality (Rotter, 1954). Locus of control addresses the extent to which a person believes that reinforcement is dependent upon his or her own behaviour or personal qualities. People with high perceived internal Locus of control believe that they will receive reinforcement based upon their own actions. By contrast, people with high external Locus of control believe that regardless of their own actions, their fate rests in the hands of luck, fate, or other, more powerful entities (Rotter, 1966). The construct of Locus of control is often viewed in relation to specific domains. A person may perceive high internal Locus of control in one area of life, such as social relationships, but high external Locus of control in another area, such as career advancement. Within this study, Locus of control was classified as internal and external Locus of control. Lelland (2010) refers Locus of control to be the extent to which a person perceives occurrences in one’s life to be within his or her own control. It is characterized as being either internal or external. Within this study, Locus of control is measured as internal as well as external Locus of control. The internal-external control construct was conceived as a generalized expectancy to perceive reinforcement either as contingent upon one's own behaviors (internal control) or as the result of forces beyond one's control and due to chance, fate, or powerful others (external control) (Lefcourt, 1981).

5.5. **Emergence of the Problem**

Many of the areas of Spirituality still remain in the twilight domain and cry for scientific and philosophic investigations. The review of research works show that among the many areas of field of Spirituality, Intentional Intelligence is an emerging field and needs to be investigated. The present age of competition inevitably leads to various sort of pressures and stress on adolescents, which may be exerted by various agencies like parents, teachers, peer groups or by own distorted notions of success and failure. Due to which adolescents who could not cope up with it, get indulged in anti-social activities like drug addiction, theft, violence, vandalism, suicidal attempts etc. It has been realized by educationists that in order to extend the training to the adolescents, so that they can face challenges, the research in this field is
needed. So, the focus of the present study is on the variables, such as Intentional Intelligence, anxiety, Self esteem and academic achievement. Often times, these variables (Too high level of anxiety, Low level of Self esteem affect the processes of cognition adversely as these may manifest themselves as major hindrances in the way of academic achievement of adolescents. Anxiety, Lack of Self esteem and low academic achievement among adolescents are serious problems faced by educationists, teachers, parents and administrators in the present time. Whether is these any significant effect of Intentional Intelligence Intervention Program on these variables is to be seen. These are some of the questions, the answers to which may make this study meaningful. The Intentionally Intelligent adolescent may create a healthy educational environment in the classroom and at home which will be conducive to the enrichment of his achievement and Self esteem. Also, the researcher has chosen Locus of control as a classifying variable. Motivated by the above considerations and by the importance of these said variables for adolescents, the investigator has taken the present study. The study aims to make some positive addition to the increase of knowledge connected with this approach of spirituality. Depending upon the nature and quantum of this concept and the understanding of the variables under study, the teachers, administrators, and policy makers can devise their teaching methods, curriculum and selection criteria respectively. The Counsellors and psychologists can also be benefited from the findings of the study. In such matters, the study will be of great significance. So, the study will serve as a useful feedback for one and all connected with education faculty, besides becoming a useful part of critical research literature. In the past years, there has been extensive research on various approaches of Spirituality. Although very few studies have been conducted on this emerging field. Steingard and Dufrese (2011) administered an Intentional Intelligence Training Program on 52 total individuals. They found a significant effect of this program on Attitudes, Performance, Relationships and outcomes of his employees. No study has been conducted so far in India as well as in abroad to find the effect of the Intentional intelligence intervention on Anxiety, Self esteem and Academic achievement of adolescents. So that is why this Intentional Intelligence intervention program along with the above said variables motivated the researcher to take up this research in the future direction.

5.6 Significance of the Study

Meditation, mindfulness and yoga integrated Intentional intelligence program is a technique to quiet and to focus the mind. It is linked to a variety of psychological and physiological health benefits, such as reduction in stress (Kabat-Zinn, Lipworth, Burncy and Sellers, 1986),
depression (Grossman et al., 2010), Frustation (Chan-Ob and Boonyanaruthee, 1999), Allienation (Hamilton, 1970), Anxiety (Bahrke and Morgan 1978; Tacón, McComb, Caldera and Randolph, 2003) in improving Self esteem (Taylor, 1995), achievement (Howell and Buro, 2011) and physical health conditions (Flinder, Oman and Flinder, 2007). Positive psychology suggests that positive intentions like hope, love, and forgiveness can lead to better individual health and organizational results (Steingard, 2008). Leadership studies demonstrate how consistent focus on core thoughts—like Gandhi’s emphasis on truth and nonviolence—lead to massive, unpredictable geopolitical transformations of nation-states. Sports psychology employs positive visualization of performance and victory as a foundation of athletic training. Education’s “Pygmalion effect” documents significantly higher academic achievement from students whom teachers expect to perform better, irrespective of the students’ tested abilities or past performance (Steingard, 2008). In addition, educators’ focus on “Being” moments and “being classes” results from states of mind rather than pedagogical techniques; that is, “being” produces more learning than “doing” (Steingard, 2008). Moreover, this therapeutic technique that increases a person’s receptivity for positive suggestions, evidences beneficial effects in a variety of medical treatments involving allergies (Sibbritt, Adams and Riet 2011), dermatology (Montgomery, Norman, Messenger and Thompson, 2016), neurology (Creswell, Way, Eisenberger and Lieberman, 2007), obesity (Dalen et al., 2010) and others.

All of these examples demonstrate the primacy of mind as the prima causa of action, and ultimately, of results. To be clear, this is not to say that action, in and of itself, is unimportant; obviously, what one does has a significant impact on the outcome on one’s life. Missing here is the idea that human achievement, or lack thereof, is fundamentally related to the thoughts about the situation, that is, one’s internal disposition is the primary cause of his or her circumstances in life. Moreover, it is not just the thoughts, but how deeply the thoughts are anchored and actualized in a person, both consciously and unconsciously, that controls action. Socialization, education, media, culture, religion, and other messaging influences powerfully shape thoughts, yet their mechanisms and effects are difficult to ascertain (Steingard, 2008).

Practicing Intentional intelligence intervention technique is a great solution to decrease many psycho social problems of adolescents. Meditation, mindfulness and Yoga integrated Intentional intelligence technique has been found to be the best efficient way to develop cognitive capabilities (Carmody and Baer, 2008) It reduces the symptoms of depression and
anxiety (Somerstein, 2010; Streeter et al., 2007), elevates self-esteem and life satisfaction, and increases perfectionism (Komiya and Taniguchi, 2011). Intentional intelligence process, which includes yoga mindfulness and meditation, is an economical technique for decreasing anxiety and related symptoms. Most people, when affected by anxiety usually have feelings that they have lost control over their conditions. It helps to restore normal feelings by training the disciplined body postures and breathing exercises associated with a regular program. It helps the person to cope with anxiety, relax the anxious mind and put on the new mindset (Sanchez and King-Toler, 2007). In an era of children acquiring conditions and diseases previously unknown in childhood, proper breathing, exercise, and deep relaxation may be the powerful healing force needed (Binzen, 2007). Also by working together with another child in a program, the child will develop team skills. This will help them later on in life when they have to work well with others.

Previous studies have shown that yoga is an excellent system for promoting healthy development and can be an incredibly effective means of facilitating wellness in children, adolescents as well as in adults. It improves self-esteem, emotional equilibrium, more energy and the ability to self-calm. Children who practice may not only be better able to regulate their emotions, manage stress and calm themselves, but studies have proved that they may also choose better foods to eat and engage in more physical activity than children who do not. The parents, teachers, doctors and other professionals working with children should understand the significance of such practices, and only then the society will get the productive human resource.

5.7. Statement of the Problem

EFFECT OF INTENTIONAL INTELLIGENCE INTERVENTION PROGRAM ON ANXIETY, SELF ESTEEM AND ACADEMIC ACHIEVEMENT AMONG ADOLESCENTS IN RELATION TO THEIR LOCUS OF CONTROL

5.8. Operational definitions of the key terms

Adolescents - Adolescents in this study refer to the people in the age group of 14 to 16 years and are studying in 9th standard of C.B.S.E board Government Schools of Chandigarh.

Intentional intelligence - Intentional intelligence is defined as one’s ability to (a) identify one’s current thoughts and (b) choose positive thoughts in one’s mind. The person who is Intentional intelligent can have control on his mind and are successful in controlling his senses inwards and outwards and can watch their thoughts and can control them. For the
purpose of the present study, the scale to measure Intentional intelligence was developed by
the researcher.

**Anxiety**- Anxiety can be interpreted as a mental condition in which the subject is perpetually
in a state of restlessness and fear which may arise from idiosyncratic apprehensions about the
future or sense of remorse or un fulfilment related with past. For the present study, the
concept of anxiety of adolescents has the same meaning as measures of self, social and
academic anxiety of adolescents explains. A scale was developed by the researcher to
measure these dimensions, hence assessing the overall anxiety of adolescents.

**Self esteem**- Self-esteem refers to general feelings of self-worth or self-value. In this study a
scale on self-esteem was developed for adolescents to measure this variable.

**Academic achievement**- Academic achievement refers to test scores, grades, and overall
academic ability and performance outcomes that students achieved in his/her class. In this
study Academic achievement was analyzed through the marks obtained by the students in
their previous examination- Summative assessment I(These marks were used as the pre test
data for academic achievement); Investigator also recorded the marks obtained by the
students in their final examination (Summative assessment II). These marks were used as the
post test data for academic achievement.

**Locus of control**- Locus of control can be defined as an extent to which people perceive their
lives as internally controlled by their own efforts and actions or as externally controlled by
chance or outside efforts. In this study the Locus of control scale by Nowicki and Strickland
(1973) was adapted by the researcher

5.9. Delimitations

As, it is not possible in a research to consider a wide range of factors so, the present
investigation was delimited to:

(i) The study was delimited to Government schools of Chandigarh affiliated to CBSE.

(ii) The Intentional intelligence intervention was delimited to 56 working days only.

(iii) The study was confined to 160 students of IX grade studying in three CBSE affiliated
schools of Chandigarh.

(iv) The present study examined the effect of Intentional intelligence intervention on
Anxiety, Self esteem and Academic achievement with Locus of control as classifying
variable. So the current study was delimited to these variables only.
The data collected for the present study was mainly quantitative in nature. Only structured tests (Quantitative data) were involved to measure different variables.

The study was classified into adolescents with internal and external Locus of control. The adolescents having average scores on the variable of Locus of control were not included in this study.

5.10. Objectives of the Study

The study is conducted keeping in mind the following objectives:

Procedural objectives:

1. To develop and standardize Intentional intelligence scale.
2. To identify children with internal and external Locus of control.
3. To administer Intentional intelligence intervention program on adolescents.

Testing objectives:

4(a). To study whether experimental and control groups differ in mean gain scores on variable of Intentional intelligence.
4(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Intentional intelligence.
4(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Intentional intelligence of adolescents.

4.1(a). To study whether experimental and control groups differ in mean gain scores on variable of Mindfulness viz. dimension I of Intentional intelligence.
4.1(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Mindfulness viz. dimension I of Intentional intelligence.
4.1(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Mindfulness viz. dimension I of Intentional intelligence of adolescents.

4.2(a). To study whether experimental and control groups differ in mean gain scores on variable of Cognitive flexibility viz. dimension II of Intentional intelligence.
4.2(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Cognitive flexibility viz. dimension II of Intentional intelligence.

4.2(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Cognitive flexibility viz. dimension II of Intentional intelligence of adolescents.

4.3(a). To study whether experimental and control groups differ in mean gain scores on variable of Thought control viz. dimension III of Intentional intelligence.

4.3(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Thought control viz. dimension III of Intentional intelligence.

4.3(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Thought control viz. dimension III of Intentional intelligence of adolescents.

4.4(a). To study whether experimental and control groups differ in mean gain scores on variable of Emotion regulation viz. dimension IV of Intentional intelligence.

4.4(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Emotion regulation viz. dimension IV of Intentional intelligence.

4.4(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Emotion regulation viz. dimension IV of Intentional intelligence of adolescents.

4.5(a). To study whether experimental and control groups differ in mean gain scores on variable of Intention viz. dimension V of Intentional intelligence.

4.5(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Intention viz. dimension V of Intentional intelligence.

4.5(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Intention viz. dimension V of Intentional intelligence of adolescents.

5(a). To study whether experimental and control groups differ in mean gain scores on variable of Anxiety.
5(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Anxiety.

5(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Anxiety of adolescents.

5.1(a). To study whether experimental and control groups differ in mean gain scores on variable of Self anxiety viz. dimension I of Anxiety.

5.1(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Self anxiety viz. dimension I of Anxiety.

5.1(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Self anxiety viz. dimension I of Anxiety of adolescents.

5.2(a). To study whether experimental and control groups differ in mean gain scores on variable of Social anxiety viz. dimension II of Anxiety.

5.2(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Social anxiety viz. dimension II of Anxiety.

5.2(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Social anxiety viz. dimension II of Anxiety of adolescents.

5.3(a). To study whether experimental and control groups differ in mean gain scores on variable of Academic anxiety viz. dimension III of Anxiety.

5.3(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Academic anxiety viz. dimension III of Anxiety.

5.3(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Academic anxiety viz. dimension III of Anxiety of adolescents.

6(a). To study whether experimental and control groups differ in mean gain scores on variable of Self esteem.

6(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Self esteem.
6(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Self esteem of adolescents.

6.1(a). To study whether experimental and control groups differ in mean gain scores on variable of General Self esteem viz. dimension I of Self esteem.

6.1(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of General Self esteem viz. dimension I of Self esteem.

6.1(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on General Self esteem viz. dimension I of Self esteem of adolescents.

6.2(a). To study whether experimental and control groups differ in mean gain scores on variable of Self esteem at home viz. dimension II of Self esteem.

6.2(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Self esteem at home viz. dimension II of Self esteem.

6.2(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Self esteem at home viz. dimension II of Self esteem of adolescents.

6.3(a). To study whether experimental and control groups differ in mean gain scores on variable of Self esteem at school viz. dimension III of Self esteem.

6.3(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Self esteem at school viz. dimension III of Self esteem.

6.3(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Self esteem at school viz. dimension III of Self esteem of adolescents.

7(a). To study whether experimental and control groups differ in mean gain scores on variable of Academic achievement.

7(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Academic achievement.

7(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Academic achievement of adolescents.
5.11. Hypotheses of the Study

1(a). There exists no significant difference between control and experimental groups in mean gain scores on Intentional intelligence of adolescents.

1(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Intentional intelligence of adolescents.

1(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Intentional intelligence of adolescents.

1.1(a). There exists no significant difference between control and experimental groups in mean gain scores on Mindfulness viz. dimension I of Intentional intelligence of adolescents.

1.1(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Mindfulness viz. dimension I of Intentional intelligence of adolescents.

1.1(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Mindfulness viz. dimension I of Intentional intelligence of adolescents.

1.2(a). There exists no significant difference between control and experimental groups in mean gain scores on Cognitive flexibility viz. dimension II of Intentional intelligence of adolescents.

1.2(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Cognitive flexibility viz. dimension II of Intentional intelligence of adolescents.

1.2(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Cognitive flexibility viz. dimension II of Intentional intelligence of adolescents.

1.3(a). There exists no significant difference between control and experimental groups in mean gain scores on Thought control viz. dimension III of Intentional intelligence of adolescents.
1.3(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Thought control viz. dimension III of Intentional intelligence of adolescents.

1.3(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Thought control viz. dimension III of Intentional intelligence of adolescents

1.4(a). There exists no significant difference between control and experimental groups in mean gain scores on Emotion regulation viz. dimension IV of Intentional intelligence of adolescents.

1.4(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Emotion regulation viz. dimension IV of Intentional intelligence of adolescents.

1.4(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Emotion regulation viz. dimension IV of Intentional intelligence of adolescents

1.5(a). There exists no significant difference between control and experimental groups in mean gain scores on Intention viz. dimension V of Intentional intelligence of adolescents.

1.5(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Intention viz. dimension V of Intentional intelligence of adolescents.

1.5(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Intention viz. dimension V of Intentional intelligence of adolescents.

2(a). There exists no significant difference between control and experimental groups in mean gain scores on Anxiety of adolescents.

2(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Anxiety of adolescents.

2(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Anxiety of adolescents.
2.1(a). There exists no significant difference between control and experimental groups in mean gain scores on Self anxiety viz. dimension I of Anxiety.

2.1(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Self anxiety viz. dimension I of Anxiety of adolescents.

2.1(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Self anxiety viz. dimension I of Anxiety of adolescents.

2.2(a). There exists no significant difference between control and experimental groups in mean gain scores on Social anxiety viz. dimension II of Anxiety.

2.2(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Social anxiety viz. dimension II of Anxiety of adolescents.

2.2(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Social anxiety viz. dimension II of Anxiety of adolescents.

2.3(a). There exists no significant difference between control and experimental groups in mean gain scores on Academic anxiety viz. dimension III of Anxiety.

2.3(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Academic anxiety viz. dimension III of Anxiety of adolescents.

2.3(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Academic anxiety viz. dimension III of Anxiety of adolescents.

3(a). There exists no significant difference between control and experimental groups in mean gain scores on Self esteem of adolescents.

3(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Self esteem of adolescents.

3(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Self esteem of adolescents.
3.1(a). There exists no significant difference between control and experimental groups in mean gain scores on General Self esteem viz. dimension I of Self esteem.

3.1(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on General Self esteem viz. dimension I of Self esteem of adolescents.

3.1(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on General Self esteem viz. dimension I of Self esteem of adolescents.

3.2(a). There exists no significant difference between control and experimental groups in mean gain scores on Self esteem at home viz. dimension II of Self esteem.

3.2(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Self esteem at home viz. dimension II of Self esteem of adolescents.

3.2(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Self esteem at home, viz. dimension II of Self esteem of adolescents.

3.3(a). There exists no significant difference between control and experimental groups in mean gain scores on Self esteem at school viz. dimension III of Self esteem.

3.3(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Self esteem at school viz. dimension III of Self esteem of adolescents.

3.3(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Self esteem at school viz. dimension III of Self esteem of adolescents.

4(a). There exists no significant difference between control and experimental groups in mean gain scores on Academic achievement of adolescents.

4(b). There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Academic achievement of adolescents.

4(c). There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Academic achievement of adolescents.
5.12. Variables involved in the study

A variable refers to a characteristic or attribute of an individual or an organization that can be measured or observed and that varies among the people or organization being studied. A variable typically will vary in two or more categories or on a continuum of scores, and it can be measured (Creswell, 2007).

The present study was delimited to the following variables:

**Independent variables** – These can never get affected by other variables and can stand alone. However these can be a cause of change in other variables for eg persons’ behaviour, mental state, knowledge, attitude etc. In the current experimental study Intentional intelligence intervention was the independent variable. Students were allocated control and experimental groups on the basis of random selections wherein the experimental group was given the eight week intervention and the control group was debarred from this. The investigator had also taken care of that the control group would not get any kind of treatment during that period to see the effects of both experimental and control groups over dependent variables.

**Dependent variables** – These are the variables being tested. Moreover these are the effect or some change in the selected subjects due to other factors or variables. In the current study the effect of independent variable (Intentional intelligence intervention) was studied on dependent variables- Intentional intelligence, Anxiety, Self esteem and Academic achievement.

**Classifying variable**- The adolescents were classified into two groups of internal and external Locus of control on the basis of the testing done by using Locus of control Scale which was developed by Nowicki and Stickland (1973) and adapted by the researcher herself for the current study.

**Extraneous variables**- These are the undesirable variables which also affect the dependent variables like independent variables. Although it is not possible to control or eliminate all the interfering factors yet one can minimize their effects, so it is important to control these variables up to the best either experimentally or by matching the different groups with respect to these variables. In the present study type of school, gender, grade, age, socio-economic status, facilitator, physical environment of the school, duration of the instruction etc were controlled administratively in a successful manner. Random sampling was done in order to have true representative data.

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5.13. Research design

Research design is a blueprint which contains a proper planned strategy and a systematic structure with procedures to be followed to find the valid answers or conclusions for the research questions. The plan is an overall scheme or programme of research. It includes an outline of what the investigator will do from writing the hypothesis and their operational implications to the final analysis of data (Kerlinger, 1973). “The present study was aimed at finding the effect of Intentional intelligence intervention program on anxiety, Self esteem and Academic achievement among adolescents in relation to their Locus of control. There are various methods and procedures which can be adopted for any research project. Among those experimental method was found to be appropriate for the current study. Pre- test post- test control group design was employed and random allocation of the subjects was done while forming the two groups. Intentional intelligence intervention and the Locus of control were the two independent variables. When two or more independent variables are used in any experiment, the researcher has to resort to factorial design (Weiner, Schinka and Velicer 2003; Best and Kahn 2001). In the current study, main and interaction effects of the variables were studied by employing 2X2 factorial design. To study the gains on anxiety, the difference between pre test post test scores were studied through 2X2 factorial design. The Intentional intelligence intervention and Locus of control were independent variables whereas scores on anxiety was considered as dependent variable. Another 2X2 factorial design was employed to study the gains on Self esteem of adolescents. Here also, Intentional intelligence intervention and Locus of control were independent variables and scores on Self esteem was considered as dependent variable. Third 2X2 factorial design was used to analyze mean gain scores on academic achievement of adolescents. Same as above, here also Intentional intelligence intervention and Locus of control were the two independent variables and scores on academic achievement was considered as dependent variable.

5.14. Sample and Sampling technique

“Sampling is the process by which a relatively small number of individuals or measures of individuals, objects, or events is selected and analyzed in order to find out something about the entire population from which it was selected. Hence, sampling helps to reduce expenditure, save time and energy, permit measurement of greater scope, or produce greater precision and accuracy. Sampling procedures provide generalizations on the basis of a relatively small proportion of the population. The representative proportion of the population is called a sample (Koul 2007, p. 111).
The sample in the current investigation was drawn at two levels:

- The school sample
- The student sample

The school sample

In the present study random sampling technique was used to select the schools for intervention. A list of Government Schools under the administration of Chandigarh was procured from District Education Office, Chandigarh. Of this list, six schools were randomly selected using the lottery method. Investigator personally visited all these six schools to assess them on matching criteria and to get permission from the authorities. Since the researcher had a written permission from the District education officer, so none of these schools denied for the research experiment. In order to ensure the unbiasedness and proper matching for the final selection of the schools, investigator had compared all of these six schools. After comparing the schools with regards to the criteria, investigator had shortlisted three schools with respect to the background of the students, type of the school (government schools), class environment, school size, sex composition (co-educational), cooperation from the school authorities and infrastructure of the school. The list of the three schools taken for the study is given below:

- Government high school sector 25, Chandigarh
- Government high school, sector 53, Chandigarh
- Government high school, sector 52, Chandigarh

The student sample

The current research was carried out on IX grade students, of the age ranging between 14-16 years. The initial student sample comprised of 350 students chosen from three schools of Chandigarh. An adapted test on Locus of control was administered to all 350 adolescents of these three schools. In accordance with the norms of the scale, the adolescents were divided into three groups- adolescents having internal Locus of control, the average scorers and adolescents having external Locus of control. After scoring, it was found that in chosen sample, 82 adolescents exhibited internal Locus of control, 166 adolescents scored average scores (average scorers may see themselves as partially in control of their lives. Perhaps they see themselves as in control at work, but not in their social lives or vice versa (Nowicki and Strickland, 1973) and 102 adolescents were found to exhibit external Locus of control. Furthermore, of the initial sample of 350, 160 students were randomly drawn to be a part of
experimental and control groups of which 40 in each group had internal Locus of control and 40 were randomly chosen for external Locus of control for both the experimental and control groups. Since the whole study lasts for more than 56 working days, so there was a probability that some of the participants might drop during or at the end (post testing phase). So to remain in the safe side researcher collected more than the required sample in both the groups and while doing the analysis such dropouts were dropped from the data.

The schools taken for the study and the total initial sample taken from each school has been presented in table 5.1 and the structure of group allocation i.e. experimental and control group has been shown in the figure 5.1.

**Figure 5.1: Schematic layout of the sample of the study**

![Figure 5.1: Schematic layout of the sample of the study](image)

<table>
<thead>
<tr>
<th>S.no</th>
<th>Name of the school</th>
<th>Internal LOC</th>
<th>Average scorers</th>
<th>External LOC</th>
<th>Total no. of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Government high school sector 25, Chandigarh</td>
<td>22</td>
<td>61</td>
<td>40</td>
<td>123</td>
</tr>
<tr>
<td>2.</td>
<td>Government high school, sector 53, Chandigarh</td>
<td>45</td>
<td>55</td>
<td>44</td>
<td>144</td>
</tr>
<tr>
<td>3.</td>
<td>Government high school, sector 52, Chandigarh</td>
<td>15</td>
<td>50</td>
<td>18</td>
<td>83</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>82</td>
<td>166</td>
<td>102</td>
<td>350</td>
</tr>
</tbody>
</table>
Out of this initial sample of 350 students, the final sample selected was 160. This final sample of 160 students was divided into two groups i.e., experimental and control groups where both the groups had equal students with internal and external Locus of control. The details of this distribution have been tabulated below in table 5.2:

Table 5.2: Final distribution of the sample

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the group</th>
<th>Students with Internal LOC</th>
<th>Students with External LOC</th>
<th>Total number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Experimental group</td>
<td>40</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>2.</td>
<td>Control group</td>
<td>40</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>80</strong></td>
<td><strong>160</strong></td>
</tr>
</tbody>
</table>

5.15 Tools used

The following tools were used for the purposed study:

1. Intentional intelligence intervention modules were developed by the investigator herself.
2. Intentional intelligence scale was developed and standardized by the researcher herself.
3. Multiple Anxiety scale was developed by the investigator herself.
4. Self esteem scale for adolescents was developed by the investigator.
5. Academic Achievement was assessed on the basis of aggregate scores of an adolescent. Academic achievement was analyzed through the aggregate marks obtained by the students in their previous examination- Summative assessment 1 (These marks were used as the pre test data for academic achievement); Investigator also recorded the marks obtained by the students in their final examination (Summative assessment II). These marks were used as the post test data for academic achievement.
6. Locus of control scale for children by Nowicki and Strickland (1973) was adapted by the investigator.

5.16 Procedure followed for the study

The present experimental investigation was conducted in two main stages: Selecting the sample for the experiment and conducting the experiment.
Stage I: Selecting the sample

The process of sample selection has already been discussed under the heading sample in the earlier section.

Stage II: Conducting the Experiment

The present study was conducted on IX class students studying in three schools of Chandigarh viz. Government high school, sector 25 Chandigarh, Government high school, sector 53, Chandigarh and Government high school, Sector 52, Chandigarh. The investigator discussed the proposed intervention programme with the principals and coordinators of these schools. A meeting with class teachers helped to chalk out the date and time schedules for the implementation of the experiment. After this the researcher established a rapport with ninth graders of these schools. An adapted Locus of control scale was administered on the total sample of 350 ninth graders studying in these schools. On the basis of scores obtained by them they were categorized into two groups viz. internal Locus of control and external Locus of control. These students were further allocated randomly into experimental and control groups in such a manner that both the groups comprised of 40 adolescents with internal and 40 with external Locus of control. Hence, the final sample comprised of 160 students divided in to two subgroups viz. 40 adolescents with internal Locus of control and 40 adolescents with external Locus of control in both experimental and control groups. Once the groups containing required number of participants were formed, the experiment was conducted in four phases viz. pre testing, administering intervention program, post testing, scoring, tabulation and analysis of data.

The experiment was conducted in four phases as described below:

Phase-I: Pre-Testing:

In the pre testing phase, self developed tests and sub tests to measure Intentional intelligence, Anxiety, Self esteem were administered on both experimental and control groups. Moreover the marks obtained by the students in their previous examination (Summative assessment 1) were also recorded. These marks were used as the pre test data for academic achievement. Pre testing lasted for approximately two working days.

Phase-II: Administering intervention program

In the second phase of this stage, 56 days Intentional intelligence intervention was given to the experimental group where daily sessions based on yogic, mindfulness and meditation
activities were practiced for 45 minutes duration. During this period the investigator had taken care that the control group was given no intervention and was totally debarred from any type of intervention.

Phase-III: Post-Testing

In this phase, same tests (the ones used in pre testing) on Intentional intelligence, anxiety and Self esteem were again administered on both experimental and control groups. The same tests were administered again to explore whether or not any gain has occurred in the score of dependent variables. Post testing also lasted for two working days. Investigator also recorded the marks obtained by the students in their final examination (Summative assessment II). These marks were used as the post test data for academic achievement.

Phase-IV: Scoring, tabulation and analysis of data

All the answer sheets were scored according to their prescribed scoring keys and data, thus obtained was subjected to statistical analysis.

5.17. Statistical techniques used for the analysis

The following statistical techniques were employed to analyse the obtained data in order to test the hypotheses.

ix. Descriptive statistics such as mean, median, standard deviation, skewness and kurtosis were worked out to ascertain the nature of distribution of scores.

x. Graphical representations were used to understand the data through visual presentations.

xi. t-test was employed to find out significant difference, if any, exists in the mean scores of experimental and control group on the dependent variable viz. Intentional intelligence, Anxiety, Self esteem and Academic achievement.

xii. 2X2 Factorial ANOVA was employed to study the impact of the intervention on selected dependent variables of the study. It was used to study the main as well as interaction effects. SPSS software was applied on the data in order to analyze the descriptive and inferential statistics.

5.18. Major findings of the study

The present study was undertaken to investigate the effect of Intentional intelligence intervention on Anxiety, Self esteem and Academic achievement of IX class adolescents with internal and external Locus of control. The major results of this investigation reveal that the
experimental group which were given Intentional intelligence intervention had significantly better scores on most of the dependent variables and its dimensions. Following sections presents the major and sub findings of the present research.

The findings of the current study have been summarized in four parts viz.

- Findings pertaining to mean gain scores on Intentional intelligence and its dimensions
- Findings pertaining to mean gain scores on Anxiety and its dimensions.
- Findings pertaining to mean gain scores on Self esteem and its dimensions.
- Findings pertaining to mean gain scores on Academic achievement.

5.18.1. **Findings pertaining to mean gain scores on Intentional intelligence and its dimensions**

1(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M= 12.15) demonstrated significantly higher mean gain scores on Intentional intelligence when compared to the students of control group (M=-0.400).

1(b). A significant difference was found between internal and external Locus of control groups of IX grade students on Intentional intelligence.

1(c). A significant interaction was found between Intentional intelligence intervention and Locus of control on Intentional intelligence. This means that both Intentional intelligence intervention and type of Locus of control interacted to produce a significant effect on Intentional intelligence. Significant differences were found between control and experimental groups in both the sub groups viz. internal and external Locus of control. A further analysis of results obtained revealed that:

- The sub group of adolescents with internal Locus of control of the experimental group (M=16.45) had developed significantly more Intentional intelligence than the sub group of adolescents having external Locus of control of the same group (M=7.850).
- The sub group of adolescents with internal Locus of control of the experimental group (M=16.45) had shown significantly more improvement in Intentional intelligence than the sub group of adolescents having internal Locus of control of the control group (M=0.400).
The sub group of adolescents with internal Locus of control of the experimental group (M= 16.45) had significantly developed more Intentional intelligence than the sub group of adolescents having external Locus of control of the control group (M=-1.200).

The sub group of adolescents with external Locus of control of the experimental group (M=7.8500) had significantly higher scores on Intentional intelligence than the sub group of adolescents having internal Locus of control of the control group (M=0.400).

The sub group of adolescents with external Locus of control of the experimental group (7.850) had significantly higher scores on Intentional intelligence than the sub group of adolescents having external Locus of control of the control group (M=-1.200).

Internal and external Locus of control sub groups of the control group did not differ significantly on Intentional intelligence.

1.1(a). An analysis of simple main effects revealed that the IX grade students in experimental group demonstrated significantly higher mean gain scores (M=2.250) on Mindfulness viz. dimension I of Intentional intelligence when compared to the students of control group (M=-0.0125).

1.1(b). A significant difference was found between internal and external Locus of control groups of IX grade students on Mindfulness viz. dimension I of Intentional intelligence.

1.1(c). A significant interaction was found between Intentional intelligence intervention and Locus of control on Mindfulness viz. dimension I of Intentional intelligence. This means that both Intentional intelligence intervention and type of Locus of control interacted to produce a significant effect on mindfulness. Significant differences were found between control and experimental groups in both the sub groups viz. internal and external Locus of control. A further analysis of results obtained revealed that:

The sub group of adolescents of internal Locus of control of experimental group (M=3.325) had significantly developed more Mindfulness than the sub group of adolescents having external Locus of control of the same experimental group (M=1.175).

The sub group of adolescents of internal Locus of control of experimental group (M=3.325) had significantly enhanced more Mindfulness than the sub group of adolescents having internal Locus of control of the control group (M=0.025).
The sub group of adolescents of internal Locus of control of experimental group (M=3.325) had significantly developed more Mindfulness than the sub group of adolescents having external Locus of control of the control group (M=-0.0500).

The sub group of adolescents of external Locus of control of experimental group (M=1.1750) had significantly higher scores on Mindfulness than the sub group of adolescents having internal Locus of control of the control group (M=0.0250).

The sub group of adolescents of external Locus of control of experimental group (M=1.1750) had significantly higher scores on Mindfulness than the sub group of adolescents having external Locus of control of the control group (M=-0.0500).

Internal and external Locus of control subgroups of the control group did not differ significantly on mindfulness viz. dimension I of Intentional intelligence.

1.2(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M=3.800) demonstrated significantly higher mean gain on the variable on Cognitive flexibility viz. dimension II of Intentional intelligence when compared to control group (M= 0.1125).

1.2(b). No significant difference was found between internal and external Locus of control groups of IX grade students on Cognitive flexibility viz. dimension II of Intentional intelligence.

1.2(c). No significant interaction was found between Intentional intelligence intervention and Locus of control on Cognitive flexibility viz. dimension II of Intentional intelligence. This means that Intentional intelligence intervention and type of Locus of control did not interact to produce any significant effect on Cognitive flexibility. A further analysis of results obtained revealed that:

- The sub group of adolescents with internal Locus of control of experimental group (M= 5.000) had significantly enhanced more Cognitive flexibility than the sub group of adolescents having external Locus of control of the same experimental group (M=2.600).

- The sub group of adolescents of internal Locus of control of experimental group (M=5.000) had significantly enhanced more Cognitive flexibility than the sub group of adolescents having internal Locus of control of the control group (M=0.2000).
• The sub group of adolescents of internal Locus of control of experimental group (M=5.000) had significantly developed more Cognitive flexibility than the sub group of adolescents having external Locus of control of the control group (0.0250).
• The sub group of adolescents of external Locus of control of experimental group (M=2.600) had significantly higher scores on Cognitive flexibility than the sub group of adolescents having internal Locus of control of the control group (M=0.200).
• The sub group of adolescents of external Locus of control of experimental group (M=2.600) had significantly higher scores on Cognitive flexibility than the sub group of adolescents having external Locus of control of the control group (M=0.250).
• Internal and external Locus of control sub groups of the control group did not differ significantly on Cognitive flexibility viz. dimension II of Intentional intelligence

1.3(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M= 2.512) demonstrated significantly higher mean gain scores on Thought control viz. dimension III of Intentional intelligence when compared to the students of control group (M=-0.0187).

1.3(b). A significant difference was found between internal and external Locus of control groups of IX grade students on Thought control viz. dimension III of Intentional intelligence.

1.3(c). No significant interactions were found between Intentional intelligence intervention and Locus of control on Thought control, viz. dimension III of Intentional intelligence. This means that Intentional intelligence intervention and type of Locus of control did not interact to produce any significant effect on Thought control. A further analysis of results obtained revealed that:

• The sub group of adolescents of internal Locus of control of experimental group (M=3.175) had significantly enhanced more Thought control than the sub group of adolescents having external Locus of control of the same experimental group (M=1.850).
• The sub group of adolescents of internal Locus of control of experimental group (M=3.175) had significantly enhanced more Thought control than the sub group of adolescents having internal Locus of control of the control group (M=0.0750).
• The sub group of adolescents of internal Locus of control of experimental group (M=3.175) had significantly developed more Thought control than the sub group of adolescents having external Locus of control of the control group (-0.450).
• The sub group of adolescents of external Locus of control of experimental group (M=1.850) had significantly higher scores on Thought control than the sub group of adolescents having internal Locus of control of the control group (0.0750).
• The sub group of adolescents of external Locus of control of experimental group (1.850) had significantly higher scores on Thought control than the sub group of adolescents having external Locus of control of the control group (-.450).
• The sub group of adolescents of internal Locus of control of control group (M=0.0750) had significantly developed more Thought control than the sub group of adolescents having external Locus of control of the same group (-.450).

1.4(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M= 2.250) demonstrated significantly higher mean gain scores on Emotion regulation viz. dimension IV of Intentional intelligence when compared to the students of control group (0.125).

1.4(b). A significant difference was found between internal and external Locus of control groups of IX grade students on Emotion regulation. viz. dimension IV of Intentional intelligence.

1.4(c). A significant interaction was found between Intentional intelligence intervention and Locus of control on Emotion regulation. viz. dimension IV of Intentional intelligence. This means that both Intentional intelligence intervention and type of Locus of control interacted to produce a significant effect on Emotion regulation. Significant differences were found between control and experimental groups in both the sub groups viz. internal and external Locus of control. A further analysis of results obtained revealed that:

• The sub group of adolescents of internal Locus of control of experimental group (M=3.200) had significantly enhanced more Emotion regulation than the sub group of adolescents having external Locus of control of the same experimental group (M=1.300).
- The sub group of adolescents of internal Locus of control of experimental group (3.200) had significantly enhanced more Emotion regulation than the sub group of adolescents having internal Locus of control of the control group (0.150).

- The sub group of adolescents of internal Locus of control of experimental group (3.200) had significantly developed more Emotion regulation than the sub group of adolescents having external Locus of control of the control group (M=0.100).

- The sub group of adolescents of external Locus of control of experimental group (M=1.300) had significantly higher scores on Emotion regulation than the sub group of adolescents having internal Locus of control of the control group (M=0.1500).

- The sub group of adolescents of external Locus of control of experimental group (M=1.300) had significantly higher scores on Emotion regulation than the sub group of adolescents having external Locus of control of the control group (M=0.100).

- Internal and external Locus of control sub groups of the control group did not differ significantly on Emotion regulation viz. dimension IV of Intentional intelligence

1.5(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M= 1.4875) demonstrated significantly higher mean gain scores on Intention viz. dimension V of Intentional intelligence when compared to the students of control group (M=-0.0375).

1.5(b). No significant difference was found between internal and external Locus of control groups of adolescents in mean gain scores on Intention viz. dimension V of Intentional intelligence.

1.5(c). No significant interaction was found between Intentional intelligence intervention and Locus of control on Intention viz. dimension V of Intentional intelligence. This means that Intentional intelligence intervention and type of Locus of control did not interact to produce any significant effect on Intention. A further analysis of results obtained revealed that:

- The internal and external sub groups of the experimental group did not differ significantly on Intention viz. dimension V of Intentional intelligence

- The sub group of adolescents of internal Locus of control of experimental group (M=1.900) had significantly higher scores on Intention than the sub group of adolescents having internal Locus of control of the control group (M=0.0250).
• The sub group of adolescents of internal Locus of control of experimental group (M=1.900) had significantly higher scores on Intention than the sub group of adolescents having external Locus of control of the control group (M= 0.100).

• The sub group of adolescents of external Locus of control of experimental group (M=1.0750) had significantly higher scores on Intention than the sub group of adolescents having internal Locus of control of the control group (M=0.0250).

• The sub group of adolescents of external Locus of control of experimental group (M=1.0750) had significantly higher scores on Intention than the sub group of adolescents having external Locus of control of the control group (M= -0.100).

• The internal and external Locus of control sub groups of the control group did not differ significantly on Intention viz. dimension V of Intentional intelligence.

5.18.2. Findings pertaining to mean gain scores on Anxiety and its dimensions

2(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M= -4.225) demonstrated significantly higher mean gain scores on Anxiety when compared to the students of control group (M=0.362).

2(b). A significant difference was found between internal and external Locus of control groups of IX grade students on Anxiety.

2(c). A significant interaction was found between Intentional intelligence intervention and Locus of control on anxiety. This means that both Intentional intelligence intervention and type of Locus of control interacted to produce a significant effect on Anxiety. Significant differences were found between control and experimental groups in both the sub groups viz. internal and external Locus of control. A further analysis of results obtained revealed that:

• The sub group of adolescents of internal Locus of control of experimental group (M= -5.4250) had shown significantly more reduction in Anxiety than the sub group of adolescents having external Locus of control of the same experimental group (M= -3.0250).

• The sub group of adolescents of internal Locus of control of experimental group (M=-5.425) had shown significantly more reduction in Anxiety than the sub group of adolescents having internal Locus of control of the control group (M=0.250).
• The sub group of adolescents having internal Locus of control of experimental group (M= -5.425) had shown significantly more improvement on Anxiety than the sub group of adolescents having external Locus of control of the control group (M=0.475).

• The group of adolescents of external Locus of control of experimental group (M= -3.025) had scored lesser scores on Anxiety than the sub group of adolescents having internal Locus of control of the control group (M=0.250).

• The sub group of adolescents of external Locus of control of experimental group (M=-3.025) had scored lesser scores on Anxiety than the sub group of adolescents having external Locus of control of the control group (0.475).

• The sub group of adolescents having internal Locus of control of the control group and the sub group of adolescents having external Locus of control of the same group did not differ significantly on Anxiety.

2.1(a). An analysis of simple main effects revealed that the IX grade students in experimental (M= -2.450) group demonstrated significantly higher mean gain scores on Self anxiety viz. dimension I of Anxiety when compared to the students of control group (M= -0.0125).

2.1(b). A significant difference was found between internal and external Locus of control groups of IX grade students on Self anxiety viz. dimension I of Anxiety.

2.1(c). A significant interaction was found between Intentional intelligence intervention and Locus of control on Self anxiety viz. dimension I of Anxiety. This means that both Intentional intelligence intervention and type of Locus of control interacted to produce a significant effect on Self anxiety viz. dimension I of Anxiety. Significant differences were found between control and experimental groups in both the sub groups viz. internal and external Locus of control. A further analysis of results obtained revealed that:

• The sub group of adolescents of internal Locus of control of experimental group (M=-3.000) had significantly declined more Self anxiety than the sub group of adolescents having external Locus of control of the same experimental group (M=-1.900).

• The sub group of adolescents of internal Locus of control of experimental group (M=-3.000) had significantly declined more Self anxiety than the sub group of adolescents having internal Locus of control of the control group (M=-0.0250).
The sub group of adolescents of internal Locus of control of experimental group (M=-3.000) had scored lower on Self anxiety than the sub group of adolescents having external Locus of control of the control group (M=0.000).

The sub group of adolescents of external Locus of control of experimental group (M=-1.900) had significantly lesser scores on Self anxiety than the sub group of adolescents having internal Locus of control of the control group (-0.0250).

The sub group of adolescents of external Locus of control of experimental group (-1.900) had significantly lower scores on Self anxiety than the sub group of adolescents having external Locus of control of the control group (0.00).

The sub group of adolescents of internal Locus of control of control group (M=-0.0250) has shown significant reduction in Self anxiety than the sub group of adolescents having external Locus of control of the same group (M=0.00).

2.2(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M=-0.6375) demonstrated significant reduction in mean gain scores on Social anxiety viz. dimension II of Anxiety when compared to the students of control group (M=0.0375).

2.2(b). No significant difference was found between internal and external Locus of control groups of adolescents in mean gain scores on Social anxiety viz. dimension II of Anxiety.

2.2(c). No significant interaction was found between Intentional intelligence intervention and Locus of control on Social anxiety viz. dimension II of Anxiety. This means that Intentional intelligence intervention and type of Locus of control did not interact to produce any significant effect on social anxiety. A further analysis of results obtained revealed that:

- The sub group of adolescents having internal Locus of control of the experimental group (M=-.7750) and the sub group of adolescents having external Locus of control of the same group (M=-.5000) didn’t differ significantly on Social anxiety.
- The sub group of adolescents of internal Locus of control of experimental group (M=-0.7750) had shown significantly better result on Social anxiety than the sub group of adolescents having internal Locus of control of the control group (M=0.0250).
• The sub group of adolescents of internal Locus of control of experimental group (M=-0.7750) had significantly improved more on Social anxiety than the sub group of adolescents having external Locus of control of the control group (0.0500).
• The sub group of adolescents of external Locus of control of experimental group (M=-0.500) had shown better performance on Social anxiety than the sub group of adolescents having internal Locus of control of the control group (M=0.0250).
• The sub group of adolescents of external Locus of control of experimental group (M=-0.500) had significantly lower scores on Social anxiety than the sub group of adolescents having external Locus of control of the control group (0.0500).
• The sub groups of adolescents having internal and external Locus of control of the control group didn’t differ significantly on Social anxiety.

2.3(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M= -1.1375) demonstrated significant reduction in mean gain scores on Academic anxiety viz. dimension III of Anxiety when compared to the students of control group (M= 0.3375).

2.3(b). A significant difference was found between internal and external Locus of control groups of IX grade students on Academic anxiety viz. dimension III of Anxiety.

2.3(c). A significant interaction was found between Intentional intelligence intervention and Locus of control on Academic anxiety viz. dimension III of anxiety. This means that both Intentional intelligence intervention and type of Locus of control interacted to produce a significant effect on Academic anxiety viz. dimension III of Anxiety. Significant differences were found between control and experimental groups in both the sub groups viz. internal and external Locus of control. A further analysis of results obtained revealed that:

• The sub group of adolescents with internal Locus of control of experimental group (M=-1.650) had shown significantly more improvement on Academic anxiety than the sub group of adolescents having external Locus of control of the same experimental group (M=0.625).
• The sub group of adolescents of internal Locus of control of experimental group (M=-1.650) had shown significantly better scores on Academic anxiety than the sub group of adolescents having internal Locus of control of the control group (M=0.250).
• The sub group of adolescents of internal Locus of control of experimental group (M=-1.650) had significantly improved much on Academic anxiety than the sub group of adolescents having external Locus of control of the control group (M= 0.250).

• The sub group of adolescents of external Locus of control of experimental group (M=-0.625) had shown significantly better results on Academic anxiety than the sub group of adolescents having internal Locus of control of the control group (M=0.250).

• The sub group of adolescents of external Locus of control of experimental group (-0.625) had shown significantly better results on Academic anxiety than the sub group of adolescents having external Locus of control of the control group (M= 0.425).

• The two groups of adolescents having internal and external Locus of control of the control group didn’t differ significantly on Academic anxiety.

5.18.3. Findings pertaining to mean gain scores on Self esteem and its dimensions

3(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M= 5.850) demonstrated significantly higher mean gain scores on Self esteem when compared to the students of control group (M= 0.437).

3(b). A significant difference was found between internal and external Locus of control groups of IX grade students on Self esteem.

3(c). A significant interaction was found between Intentional intelligence intervention and Locus of control on Self esteem. This means that both Intentional intelligence intervention and type of Locus of control interacted to produce a significant effect on Self esteem. Significant differences were found between control and experimental groups in both the sub groups viz. internal and external Locus of control. A further analysis of results obtained revealed that:

• The sub group of adolescents of internal Locus of control of experimental group (M= 8.125) had significantly improved much on Self esteem than the sub group of adolescents having external Locus of control of the same experimental group (M=3.575).

• The sub group of adolescents of internal Locus of control of experimental group (8.125) had significantly higher scores on Self esteem than the sub group of adolescents having internal Locus of control of the control group (M=0.875).

• The sub group of adolescents having internal Locus of control of experimental group (M=8.125) had significantly higher scores on Self esteem than the sub group of adolescents having external Locus of control of the control group (M=0.000).
• The sub group of adolescents having external Locus of control of experimental group (M= 3.575) had significantly higher scores on Self esteem than the sub group of adolescents having internal Locus of control of the control group (M=0.875).

• The sub group of adolescents of external Locus of control of experimental group (M=3.575) had significantly higher scores on Self esteem than the sub group of adolescents having external Locus of control of the control group (M=0.000).

• The sub groups of adolescents having internal and external Locus of control of the control group did not differ significantly on Self esteem.

3.1(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M= 1.500) demonstrated significantly higher mean gain scores on General Self esteem viz. dimension I of Self esteem when compared to the students of control group (M=-0.125).

3.1(b). A significant difference was found between internal and external Locus of control groups of IX grade students on General Self esteem viz. dimension I of Self esteem.

3.1(c). No significant interaction was found between Intentional intelligence intervention and Locus of control on General Self esteem viz. dimension I of Self esteem. This means that Intentional intelligence intervention and type of Locus of control did not interact to produce any significant effect on General Self esteem. A further analysis of results obtained revealed that:

• The sub group of adolescents having internal Locus of control (M=2.125) and the sub group of adolescents having external Locus of control (M= 0.8750) of the experimental group did not differ significantly on General Self esteem.

• The sub group of adolescents of internal Locus of control of experimental group (2.125) had significantly enhanced more General Self esteem than the sub group of adolescents having internal Locus of control of the control group (M=-0.0250).

• The sub group of adolescents of internal Locus of control of experimental group (M=2.125) had significantly developed more General Self esteem than the sub group of adolescents having external Locus of control of the control group (-0.2250).

• The sub group of adolescents of external Locus of control of experimental group (M=0.875) had significantly higher scores on General Self esteem than the sub group of adolescents having internal Locus of control of the control group (-0.0250).
- The sub group of adolescents of external Locus of control of experimental group (0.8750) had significantly higher scores on General Self esteem than the sub group of adolescents having external Locus of control of the control group (-0.225).
- The sub groups of adolescents having internal and external Locus of control of the control group didn’t differ significantly on general Self esteem.

3.2(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M=2.562) demonstrated significantly higher mean gain scores on Self esteem at home viz. dimension II of Self esteem when compared to the students of control group (M=0.450).

3.2(b). No significant difference was found between internal and external Locus of control groups of adolescents in mean gain scores on Self esteem at home viz. dimension II of Self esteem.

3.2(c). No significant interaction was found between Intentional intelligence intervention and Locus of control on Self esteem at home viz. dimension II of Self esteem. This means that Intentional intelligence intervention and type of Locus of control did not interact to produce any significant effect on Self esteem at home A further analysis of results obtained revealed that:

- The sub group of adolescents of internal Locus of control of experimental group (M=3.450) had shown significantly better scores on Self esteem at home than the sub group of adolescents having external Locus of control of the same experimental group (M=1.675).
- The sub group of adolescents of internal Locus of control of experimental group (3.450) has enhanced significantly more Self esteem at home than the sub group of adolescents having internal Locus of control of the control group (0.5758).
- The sub group of adolescents of internal Locus of control of experimental group (3.450) has developed significantly more Self esteem at home than the sub group of adolescents having external Locus of control of the control group (0.3250).
- The sub group of adolescents having external Locus of control of the experimental group (M=1.6750) and the sub group of adolescents having internal Locus of control of the control group (M=.5750) didn’t differ significantly on Self esteem at home.
- The sub group of adolescents having external Locus of control of the experimental group (M=1.6750) and the sub group of adolescents having external Locus of control of the control group (M=0.3250) did not differ significantly on Self esteem at home.
The sub groups of adolescents having internal and external Locus of control of the control group did not differ significantly on Self esteem at home.

3.3(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M=1.7875) demonstrated significantly higher mean gain scores on Self esteem at school viz. dimension III of Self esteem when compared to the students of control group (M=0.1125).

3.3(b). A significant difference was found between internal and external Locus of control groups of IX grade students on Self esteem at school viz. dimension III of Self esteem.

3.3(c). No significant interaction was found between Intentional intelligence intervention and Locus of control on Self esteem at school viz. dimension III of Self esteem. This means that Intentional intelligence intervention and type of Locus of control did not interact to produce any significant effect on Self esteem at school. A further analysis of results obtained revealed that:

- The sub group of adolescents having internal Locus of control of the experimental group (M= 2.5500) and the sub group of adolescents having external Locus of control of the same group (M=1.0250) did not differ significantly on Self esteem at school.
- The sub group of adolescents of internal Locus of control of experimental group (M=2.550) had shown more improvement on Self esteem at school than the sub group of adolescents having internal Locus of control of the control group (M=0.325).
- The sub group of adolescents of internal Locus of control of experimental group (M=2.550) had significantly developed more Self esteem at school than the sub group of adolescents having external Locus of control of the control group (M=-0.100).
- The sub group of adolescents having external Locus of control of the experimental group (M=1.0250) and the sub group of adolescents having internal Locus of control of the control group (0.3250) didn’t differ significantly on Self esteem at school.
- The sub group of adolescents having external Locus of control of the experimental group (1.0250) and the sub group of adolescents having external Locus of control of the control group (-.1000) did not differ significantly on Self esteem at school.
- The sub groups of adolescents having internal and external Locus of control of the control group did not differ significantly on Self esteem at school.
5.18.4. Findings pertaining to mean gain scores on Academic achievement

4(a). An analysis of simple main effects revealed that the IX grade students in experimental group (M=8.8875) demonstrated significantly higher mean gain scores on Academic achievement when compared to the students of control group (M=6.2375).

4(b). No significant difference was found between internal and external Locus of control groups of IX grade students on Academic achievement.

4(c). No significant interaction was found between Intentional intelligence intervention and Locus of control on Academic achievement. This means that Intentional intelligence intervention and type of Locus of control did not interact to produce a significant effect on Academic achievement. A further analysis of results obtained revealed that:

- The sub group of adolescents having internal Locus of control (M=9.8250) and the sub group of adolescents having external Locus of control of the experimental group (M=7.9500) did not differ significantly on Academic achievement.
- The sub groups of adolescents having internal Locus of control of the experimental (M=9.8250) and the control group (M=7.2000) did not differ significantly on Academic achievement.
- The sub group of adolescents having internal Locus of control of the experimental group (M=9.825) had significantly improved more on Academic achievement than the sub group of adolescents having external Locus of control of the control group (M=5.275).
- The sub group of adolescents having external Locus of control of the experimental group (M=7.9500) and the sub group of adolescents having internal Locus of control of the control group (M=7.2000) didn’t differ significantly on Academic achievement.
- The sub group of adolescents having external Locus of control of the experimental group (M=7.9500) and the sub group of adolescents having external Locus of control of the control group (M=5.2750) did not differ significantly on Academic achievement.
- The sub groups of adolescents having internal and external Locus of control of the control group did not differ significantly on Academic achievement.

It is to be noted that, for research to continue to refine, expand and enrich our knowledge of Intentional intelligence and its effects on physiological, psychological and spiritual wellbeing, it is necessary to develop broader paradigms for the field which include theoretical, empirical and research applications.
5.19. Educational Implications of the Research

The findings of any educational research always yield certain recommendations which can have valuable implications for students, teachers, counsellors, parents, policy makers, stakeholders and other people involved in the educational setting. The present investigation is also examined in this light. Though, this was a small scale investigation, yet several meaningful insights have emerged from the reported findings of the current study. Based on the major significant findings of the current study and from researcher’s own experiences during the whole intervention program the following implications are traced out:

- The findings of the current study clearly signify that Intentional intelligence intervention type programs are the right solution to help the students to deal with their anxiety in today’s stress filled education. The findings of this study are also backed by number of theoretical and empirical investigations and researches. A little time devoted to such practices on daily basis would bring improvement in the performance of the students. Thus, such kind of programs should be incorporated in a school timetable as a regular part in order to provide students with opportunity to participate in meditation, mindfulness and yoga based activities and get benefitted from it. Such an intervention program will help adolescents minimize their anxiety, stress and frustrations and grow up normally into young autonomous adults. The programme has the potentiality to contribute significantly for the development of human capital, especially in a developing country like India where school facilities and educational inputs are inadequate.

- Intentionally intelligent mind always replace emotional reactions to different situations with mindfully chosen responses. Intentional intelligence is found effective in reducing interpersonal tensions, intolerance of others and tendency towards isolations. Thus help the individual in improving their Self esteem at home and Self esteem at school. This kind of intervention also holds many interactive group activities which can help to support more effective and healthier way of socialization, which further help them to gain personal confidence and discover new ways of being in relationships. Through this, participants explore and become aware of one’s own skills and could try to reduce anxieties and enhance Self esteem. Various meditational and mindfulness indoor activities like meditation by art and meditation by games could be used effectively in the classrooms itself to focus the mind to consciousness.

- The results of the present investigation are quite encouraging to suggest that participation in Intentional intelligence intervention program is useful for the adolescent students in
enhancing their cognitive capabilities. These have important implications for the theory of cognitive psychology. Such interventions restore the mind body balance and add new productive energy in the individual’s body. These practices incorporate a kind of optimistic temperament which enables the person to handle his mind’s conflicts. Thus this valuable asset indicates promotive possibilities in educational system. It was found that the group of students (experimental) who participated in the intervention were found to be mindful, cognitive flexible, emotionally regulated, thought controlled and with positive intentions than those who did not undertaken the intervention (control group). They had better Self esteem at home as well as in school and have decreased levels of self, social and academic anxieties. These results can contribute to the personality theory. The study also found the positive effect of the intervention on the academic achievement of adolescents. Hence this knowledge could be utilized to refine pedagogic theories and for planning new instructional strategies.

- Various techniques, activities and practices that are included in the Intentional intelligence intervention are sufficient to tackle all levels and abilities of students. The results of the present study have important implications for practical application in the fields of adolescent development, educational and school practices and intervention programmes for adolescent students for development as well as remedial measures. Based on the observations during the investigation, investigator found and suggests that Intentional intelligence intervention has the power to influence cognitive, academic and personality characteristics positively, so it should become a part of remedial programmes to help slow learners and educationally backward students. Special programmes can be organized for students under stress, frustrations, and anxieties and for students with problem behaviour. Development of Intentional intelligence will make them more relaxed, optimist, calm, relaxed, mindful, tough-minded, emotionally stable, zestful, self-sufficient, resourceful, focused and composed. Hence this could place the adolescents in the right growth trajectory.

- Another important implication of this study is the development of integrated theory of yoga, meditation and mindfulness which can provide a fresh insight into the psychology of meditation. Intentional intelligence which is the capability of a mind to control thoughts constitutes the spiritual domain. Development of this faculty not only relates to mind control resulting in decreasing anxiety and increasing Self esteem, but also helps in improving academic achievement of all segments of population. Regular meditation not
only improves their concentration but also reduces depression and enhances their mental being and makes them mentally strong. Moreover this type of intervention can be easily followed in any type of institution irrespective of the religion.

- The results of the current research clearly indicate that the introduction of such type of practices in the school program would improve the academic results of the students by providing mind-body harmony. Students will be able to control their minds hence improve their concentration in the educational work by replacing irrelevant and negative thoughts with positive ones which will further eliminate stress related problems like anxiety, conflict, frustration and pressure through the practice of mindfulness meditation and yoga. This could help them to think before they react. Creative thinking can be promoted through such practices. Hence the students at all levels of Education from elementary to higher level could be asked to practice various mindfulness, meditation and yoga based activities for improving the quality of learning. Inspecting and supervising authorities could be given training on meditation practices.

- Though most benefited part of this would be the students, still teachers would also be benefited by this type of program to the great extent. As practice of meditation and yoga practices enable them to perform their task more effectively and will be able to create meditative and stress free atmosphere during teaching hours. In order to make school meditation programme successful, teachers should be given training on such practices and for developing skills to impart training to students. All above benefits can be obtained by introducing Intentional intelligence program as a practice in the institutional curriculum for students as well as teachers. Meditation practice has both cognitive aspects and Physical aspects for joyful learning and for teaching effectively.

- Prior to the intervention, every student is to be helped to develop a favourable attitude towards meditation and yoga. Learner’s level of readiness has to be taken care of. So that they get motivated to participate in these types of program with optimum efficiency which will be possible only when the students are physically, mentally and emotionally ready. Their queries regarding such type of intervention should be sought out in the initial sessions. Even teachers can discuss the benefits of such type of intervention with the parents through Parent Teachers Association to help the students to develop healthy and positive attitude towards mindfulness, meditation and yoga which will arose curiosity and encourage participation of the students.
Examination and academic related stress take a heavy toll on students now days. This is because too much importance is attached with the examination scores and results. Even normal students display abnormal behaviour due to heightened stress, anxiety and tension during examination periods. Special meditation mindfulness and yoga based camps during these periods can help the students to cope up with the stress in a better way.

The major findings of the present study revealed that Intentional intelligence program which integrates different forms of meditation, mindfulness and yogic activities is an effective strategy for developing Intentional intelligence and improving Self esteem and decreasing anxiety levels. Adolescent reform homes for delinquent adolescents, and intervention programmes by NGOs for those experiencing trauma and distress could use Intentional intelligence intervention to help these troubled adolescents to cope, adapt and move on in their lives. Even psychotherapists and counsellors need awareness and skills related to Intentional intelligence program as they see more adolescent clients with personal, academic and social anxieties, tensions and stress.

Studies that evaluate meditation effects on anxiety levels of students need to be conducted on school age population as it is believed that anxiety, stress and unpleasant painful events are most likely to interfere with attention, working memory and receiving and processing of new information. Theory should be formulated to initiate research inquiry whether more cognitive faculties such as learning, creativity, intelligence, etc. will be improved by the practice of meditation. Future research could also explore whether meditation enhances attention and memory and other cognitive capacities in ways that improve not only the academic achievement of adolescent high school students but also help them to achieve all-round development of body and mind.

In the light of the above implications, investigator recommends the educational authorities to take necessary steps to incorporate Intentional intelligence intervention program as part of the curriculum. The resources of the mind should be unveiled in the early stages of adult hood itself because it will help them to face all the challenges in life with a stable mind. These types of interventions in addition to other cognitive practices will help the children to develop a good morale in a value deteriorated society.
5.20. Suggestions for future research

Based on the current investigation, a number of areas have been identified where more research needs to be carried out. Though the present research is a small step in educational research yet it adds impetus in the future researchers to conduct studies on these suggested areas. The researcher in the present study by virtue of her experience in the field of study offers the following suggestions for further research which may further be explored.

- Effectiveness of Intentional intelligence intervention has been tested in the present study on ninth class students studying in government schools of Chandigarh. It would be also fruitful to replicate the present study on different levels of students and in other parts of the country.

- Number of dependent psychological variables in the study was limited. Effect of Intentional intelligence intervention on other variables like emotional intelligence, creativity, self confidence, learning habits etc. can also be studied.

- The scales namely, a) Intentional intelligence scale b) Multiple anxiety scale, c) Self esteem scale and d) Locus of control scale may be further validated on a larger sample in different parts of the country.

- The present study involved a sample of 160 students. A larger population may be involved in re-establishing the effectiveness of Intentional intelligence intervention for greater validation of results.

- This study reported the improvement of academic achievement and Self esteem when Intentional intelligence intervention was used on IX grade adolescents. Follow-up studies should continue to track the effect of intervention on their other parameters like self confidence, interest, creativity, intelligence etc.

- The present research was experimental in nature. It would be noteworthy, if the same variables be studied descriptively in the forthcoming researches.

- The present study is quantitative in nature where students' Intentional intelligence, anxiety, Self esteem and academic achievement are expressed empirically. Emphasizing on qualitative technique to deal with present investigation can be another fascinating area of research.

- The effect of intervention can be evaluated on students with learning disability and slow learners students by selecting the strategies integrated in Intentional intelligence practices in particular.
• A comparative study may be designed to compare the effect of Intentional intelligence intervention on private school students and government school students; urban school students and rural school students.

• An indepth and more lengthy study with more participants, and a follow up period is needed to more fully examine the benefit of such techniques for anxiety reduction and improving Self esteem and academic achievement in students.