CHAPTER 1

1.1 INTRODUCTION

Education may be considered as a lifelong process. It begins at birth and continues throughout life. The child learns through his experience. He gains experience when he comes in contact with different social institutions, persons, places, and things. Education may also be considered as a product. A person is said to be educated when he acquires knowledge, skills, attitudes, etc.

Education is an integral part of human life. It is the basic condition for the development of the ‘whole man’ and vital instrument for accelerating the well-being and prosperity of all, in every direction. Without education, man would still be living just like a splendid slave or like a reasoning savage. Therefore, it is one of those subjects which are talked about by all.

1.2 GREATNESS OF HUMAN LIFE

Body is the suitable vehicle for the soul to undertake its divine journey towards perfection. The soul, devoid of the body, cannot feel any sensation and so cannot achieve loftiness. Hence, the human life on this earth is to be proceeded in the carefully selected path and it may be destined to attain the goal of life.

“I must be worthy of life.

I am being well fed, well exercised and well rested.

Let me be well” – should be the slogan of everybody.

India is a great country with very ancient heritage and highly organized civilization. Hence, the whole world has a magnificent attraction towards it. At the summit of this greatness of our country, are the devoted Rishis and Yogis. They are the
real builders of India. They have conceived the plans for the future generation, about rules of life, ways for peace, means for measure, roots for expansion, etcetera. The pattern of life that they found out after hundreds of years of meditation is very perfect and wonderful. So everybody should follow the true path in his or her life to attain inner harmony.

We feel happy when we attain inner harmony. It is the same experience for us, when we hear a melodious song or enjoy a soft drink or receive happy news. During that time, we become entirely passive and unconsciously integrated with our mind. Happiness is the goal of our life for which we continuously exert ourselves physically, mentally, without any boredom or tiredness. The right, eternal and permanent happiness is the one that we have to attain in our life.

1.3 PROBLEMS IN MODERN LIFE AND SOLUTIONS

In the modern age, life is replete with comforts. The whole world is globally linked by communication and transport because of the advanced technology. In spite of having acquired and accumulated all these man-made wonders and naturally available prosperity, the mankind is contending with multifarious problems and suffering more and more. Apart from the suffering community, the good and noble people are also affected by the pollution of the thoughts of others. Even those who are secured and settled comfortably in life also face these sufferings.

The plain cause for this is no one is prepared to change his own concept or behavior. To bring about a great change, a radical movement is to be carried out in a well-planned manner. This behavioral change can be brought about the assurance of individual security, material prosperity, democratic fraternity and the freedom to live and enjoy the birth rights, by making everyone understand the wealth of nature.
1.4 MINDFULNESS MEDITATION

Mindfulness is the focusing of attention and awareness, based on the concept of mindfulness in Buddhist meditation, but is defined in many ways. It has been popularised in the West by Jon Kabat-Zinn. Despite its roots in Buddhism, mindfulness is not inherently religious and is often taught independent of religion. Modern clinical psychology and psychiatry since the 1970s have developed a number of therapeutic applications. Despite methodological weaknesses, the research on the application of mindfulness practices is promising. Research suggests that mindfulness practices are useful in the treatment of pain, stress, anxiety, depressive relapse, disordered eating, and addiction. There are also studies looking into the benefits of mindfulness for those who do not suffer from these disorders, such as Mindfulness-based stress reduction.

According to various prominent psychological definitions, Mindfulness refers to a psychological quality that involves bringing one’s complete attention to the present experience on a moment-to-moment basis, or involves paying attention in a particular way: on purpose, in the present moment, and non judgmentally, or involves a kind of non elaborative, nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in the attention field is acknowledged and accepted as it is. Bishop, Lau, and colleagues (2004) offered a two-component model of mindfulness the first component of mindfulness involves the self-regulation of attention so that it is maintained on immediate experience, thereby allowing for increased recognition of mental events in the present moment. The second component involves adopting a particular orientation toward one’s experiences in the present moment, an orientation that is characterized by curiosity, openness, and acceptance.

In this two-component model, self-regulated attention involves conscious awareness of one's current thoughts, feelings, and surroundings, which can result
in metacognitive skills for controlling concentration. Orientation to experience (the second component) involves accepting one's mindstream, maintaining open and curious attitudes, and thinking in alternative categories. Training in mindfulness and mindfulness-based practices, oftentimes as part of a quiet meditation session, results in the development of a Beginner's mind, or, looking at experiences as if for the first time. Practicing mindfulness can help people to begin to recognise their habitual patterns of mind, which have developed out of awareness over time and this allows practitioners to respond in new rather than habitual ways to their life.

For all these, the regular practice of meditation and its allied systems are the only course of action that can uplift the world and is the only solution and cure of all problems in life at all ages. As the present generation starts to go away from the life with Nature, meditation is to be introduced and inculcated and the world should be made aware of its influences.

1.5 MINDFULNESS IMPROVES PHYSICAL, MENTAL, AND EMOTIONAL HEALTH

While mindfulness is in many ways a simple practice, it benefits are numerous. Physically, mindfulness meditation has been shown to reduce cortisol and blood pressure, and to improve the immune system. Cognitively, mindfulness has been shown to decrease rumination and boost attention. Emotionally, mindfulness reduces emotional reactivity and improves resilience. While many of these studies are preliminary, they nonetheless begin to paint a powerful picture of the overall health benefits of mindfulness. However tenuous these preliminary studies are, they are augmented by current neuroscientific research that reveals how mindfulness meditation can significantly change the brain. And these changes are not just seen in cave-dwelling monks—they also occur in average hardworking, child-raising folks—like most of us.
1.6 THE BRAIN ON MINDFULNESS

Mindfulness meditation can change the brain; mindfulness fortifies our ability to manage difficult emotions. It alters the way we experience our sense of self. It is arguably these changes that contribute too many of the benefits reported by current research.

Mindfulness training has a notable impact on the limbic system, or the emotional system of the brain. Specifically, mindfulness meditation has been shown to reduce activity in the amygdala, a region of the brain that determines how much stress we experience and that is central in modulating our fear responses. For example, people with a very active amygdala tend to experience more depression and anxiety. Perhaps even more intriguing, however, is that mindfulness can actually change the size the amygdala. One study on overstressed businesspeople found that after eight weeks of mindfulness meditation training the size of the amygdala actually shrunk compared to those who were not practicing mindfulness. This reduction was correlated with less perceived stress. In those eight weeks subjects were actually able to change their brain and, consequently, reduce their stress.

Mindfulness meditation improves PFC functioning. Specifically, a study showed that mindfulness practice increased activity in the PFC such that attention span improved. Another study revealed that mindfulness increased activity in the anterior cingulate cortex—a part of the brain that is closely connected to the PFC and is correlated with empathy and decision making. As these regions show more activation subjects tend to report greater emotional stability and less reactivity.

Mindfulness is an opportunity for the brain to strengthen and enhance itself—it’s like taking the brain to the gym. From our experience of working with health-care professionals—some of the most highly stressed individuals in today’s workforce—you don’t need to spend hours on a meditation cushion to reap the benefits of these practices.
Our participants experience results with just five minutes a day of seated breath-awareness meditation or 10 minutes of mindful chair yoga. Ultimately, the impact comes from consistency of practice. It needs to be cultivated each day.

1.7 TYPES OF MEDITATION

The different types of meditation help keep our body and mind healthy. Meditation has existed for centuries and since the last couple of decades, the use of meditation has increased due to the rise of interest about the teaching of the eastern cultures and the stress and anxiety of modern life. Beside a practice for spiritual growth or a way to enlighten, people also use the different types of meditation with specific purposes such as:

- Meditation for anxiety, depression and stress.
- Meditation for pain relief.

The different types of meditation techniques that have evolved from Hinduism, Christianity, and Buddhism can be classified under five categories:

1) Concentration Meditation
2) Reflective Meditation
3) Mindfulness Meditation
4) Heart-Centered Meditation
5) Creative Meditation

A. CONCENTRATION MEDITATION

Concentration is at the heart of all meditation techniques, but in some techniques, focus is predominantly on building concentration. This is because in order to gain the fruits of meditation, we need to train the mind to concentrate and focus on an object or nothingness that is to cut all distractions. This allows our mind to be calm and awaken
beyond thought elaboration and even beyond your sense of self. Once we hold this view of awareness, we can use it for your wellness and for the greater good. It is more correct to say that it affects positively all the beings, our self included.

There are several types of meditation techniques in concentration meditation category that can help us to overcome distractions within and outside our mind and sustain mental focus. The different types of techniques that will help you gain concentration include

1. Zen meditation
2. Transcendental Meditation
3. Om meditation
4. Shine Meditation or Samadhi
5. Chakra Meditation

B. REFLECTIVE MEDITATION

Reflective meditation is also known as analytical meditation and refers to disciplined thinking. In order to successfully practice reflective meditation, we will need to choose a question, theme, or topic and focus our analysis or reflection upon it. Initially, our thoughts may wander to other topics but then we need to train our mind to come back to the topic in question. In order to do this, we need to learn concentration meditation first. It is one of the most important types of meditation and is considered to have a calming effect on the mind. It stimulates transformative power and provides us with great conviction and strength to change the course of our life.

C. MINDFULNESS MEDITATION
Mindfulness meditation is one of the most powerful and alternative meditation techniques, which lays emphasis on cultivating a highly receptive mindful attention toward any action or objects within your sphere of influence.

Mindfulness meditation is one of the important meditation types that help us to learn a simple thing to pay attention or be "mindful". This type of meditation is known to provide pain relief and help for those suffering from anxiety and depression. There are different types of techniques in this category that we can practice, like:

1) Vipassana meditation
2) Deep breathing meditation
3) Body scan meditation
4) Visualization meditation
5) Mindful breathing
6) Mindful eating
7) Sitting Meditation
8) Walking Meditation

D. HEART-CENTERED MEDITATION

Heart-centered meditation will help us to release all our fears and sadness and bathe in the radiance of loving kindness and compassion. It is also known as the heart chakra meditation. Practicing this meditation over a period of time will help us to heal our heart and that of others.

This meditation technique helps in opening the heart chakra and removes any negative energy that exists. In order to practice this meditation technique, choose a quiet place, set the right posture and focus on the heart area while inhaling and exhaling slowly but smoothly. We can also connect our heart to the heart of a teacher or a person we feel
that is compassionate. This is considered as one of the important types of meditation techniques.

E. CREATIVE MEDITATION OR VISUALIZATION

A different type of meditation technique, this form of meditation will enable you to consciously cultivate as well as strengthen different qualities of your mind. It focuses on strengthening qualities, such as appreciation, joy, compassion, patience, empathy, love, gratitude, compassion, humility, fearlessness, and tenderness, among others.

1.8 BENEFITS OF MINDFULNESS MEDITATION

Perspectives on Psychological Science study described it as "the nonjudgmental awareness of experiences in the present moment." With that in mind, here are some reasons why we might want to consider incorporating mindfulness meditation into your daily life.

1. It lowers stress -- literally. Research published just last month in the journal Health Psychology shows that mindfulness is not only associated with feeling less stressed, it's also linked with decreased levels of the stress hormone cortisol.

2. It lets us get to know our true selves. Mindfulness can help us see beyond those rose-colored glasses when we need to really objectively analyze ourselves. A study in the journal Psychological Science shows that mindfulness can help us conquer common "blind spots," which can amplify or diminish our own flaws beyond reality.

3. It can make your grades better. Researchers from the University of California, Santa Barbara, found that college students who were trained in mindfulness performed better on the verbal reasoning section of the GRE, and also experienced improvements in their working memory. "Our results suggest that cultivating mindfulness is an effective and
efficient technique for improving cognitive function, with widereaching consequences," the researchers wrote in the Psychological Science study.

4. **It could help our troops.** The U.S. Marine Corps is in the process of seeing how mindfulness meditation training can improve troops' performance and ability to handle -- and recover from -- stress.

5. **It could help people with arthritis better handle stress.** A 2011 study in the journal *Annals of Rheumatic Disease* shows that even though mindfulness training may not help to lessen pain for people with rheumatoid arthritis, it *could* help to lower their stress and fatigue.

6. **It changes the brain in a protective way.** University of Oregon researchers found that integrative body-mind training -- which is a meditation technique -- can actually result in brain changes that may be protective against mental illness. The meditation practice was linked with increased signaling connections in the brain, something called axonal density, as well as increased protective tissue (myelin) around the axons in the anterior cingulate brain region.

7. **It works as the brain's "volume knob."** Ever wondered why mindfulness meditation can make us to feel more focused and zen? It's because it helps the brain to have better control over processing pain and emotions, specifically through the control of cortical alpha rhythms, according to a study in the journal *Frontiers in Human Neuroscience*.

8. **It makes music sound better.** Mindfulness meditation improves our focused engagement in music, helping us to truly enjoy and experience what we're listening to, according to a study in the journal *Psychology of Music*.

9. **It helps us even when we're not actively practicing it.** You don't have to actually be meditating for it to still benefit your brain's emotional processing. That's the finding of a study in the journal *Frontiers in Human Neuroscience*, which shows that the amygdala
brain region's response to emotional stimuli is changed by meditation, and this effect occurs even when a person isn't actively meditating.

10. It has four elements that help us in different ways. The health benefits of mindfulness can be boiled down to four elements, according to Perspectives on Psychological Science study: body awareness, self-awareness, regulation of emotion and regulation of attention.

11. It could help your doctor be better at his/her job. Doctors, listen up: Mindfulness meditation could help you better care for your patients.

12. It makes you a better person. Sure, we love all the things meditation does for us. But it could also benefit people we interact with, by making us more compassionate, according to a study in the journal Psychological Science. Researchers from Northeastern and Harvard university’s found that meditation is linked with more virtuous, "do-good" behavior.

13. It could make going through cancer just a little less stressful. Research from the Jefferson-Myrna Brind Center of Integrative Medicine shows that mindfulness coupled with art therapy can successfully decrease stress symptoms among women with breast cancer. And not only that, but imaging tests show that it is actually linked with brain changes related to stress, emotions and reward.

14. It could help the elderly feel less lonely. Loneliness among seniors can be dangerous, in that it's known to raise risks for a number of health conditions. But researchers from the University of California, Los Angeles, found that mindfulness meditation helped to decrease these feelings of loneliness among the elderly, and boost their health by reducing the expression of genes linked with inflammation.

15. It could make your health care bill a little lower. Not only will your health benefit from mindfulness meditation training, but your wallet might, too.
16. **It comes in handy during cold season.** Aside from practicing good hygiene, mindfulness meditation and exercise could lessen the nasty effects of colds. Researchers from the University of Wisconsin School of Medicine and Health found that people who engage in the practices miss fewer days of work from acute respiratory infections, and also experience a shortened duration and severity of symptoms.

17. **It lowers depression risk among pregnant women.** As many as one in five pregnant women will experience depression, but those who are at especially high risk for depression may benefit from some mindfulness yoga. "Research on the impact of mindfulness yoga on pregnant women is limited but encouraging," study researcher Dr. Maria Muzik, M.D., an assistant professor of psychiatry at the University of Michigan, said in a statement.

18. **It also lowers depression risk among teens.** Teaching teens how to practice mindfulness through school programs could help them experience less stress, anxiety and depression, according to a study from the University of Leuven.

19. **It supports your weight-loss goals.** Mindfulness could be your best friend, according to a survey of psychologists conducted by Consumer Reports and the American Psychological Association. Mindfulness training was considered an "excellent" or "good" strategy for weight loss by seven out of 10 psychologists in the survey.

20. **It helps you sleep better.** We saved the best for last! A University of Utah study found that mindfulness training can not only help us better control our emotions and moods, but it can also help us sleep better at night. “People who reported higher levels of mindfulness described better control over their emotions and behaviors during the day. In addition, higher mindfulness was associated with lower activation at bedtime, which could have benefits for sleep quality and future ability to manage stress," study researcher Holly Rau said in a statement.
1.9 ANXIETY

Anxiety is something we all experience from time to time. Most people can relate to feeling tense, uncertain and, perhaps, fearful at the thought of sitting an exam, going into hospital, attending an interview or starting a new job. We may worry about feeling uncomfortable, appearing foolish or how successful we will be. In turn, these worries can affect our sleep, appetite and ability to concentrate. If everything goes well, the anxiety will go away.

Mild anxiety is vague and unsettling, while severe anxiety can be extremely debilitating, having a serious impact on daily life. People often experience a general state of worry or fear before confronting something challenging such as a test, examination, recital, or interview. These feelings are easily justified and considered normal. Anxiety is considered a problem when symptoms interfere with a person's ability to sleep or otherwise function. Generally speaking, anxiety occurs when a reaction is out of proportion with what might be normally expected in a situation.

Anxiety affects our whole being. It affects how we feel, how we behave and has very real physical symptoms. It feels a bit like fear but whereas we know what we are frightened of, we often don't know what we are anxious about. Anxiety is often triggered by stress in our lives. Some of us are more vulnerable to anxiety than others, but even those who become anxious easily can learn to manage it well. We can also make ourselves anxious with "negative self-talk" - a habit of always telling ourselves the worst will happen.

1.9.1 SYMPTOMS OF ANXIETY

- Trembling
- Churning stomach
- Nausea
- Diarrhea
- Headache
- Backache
- Heart palpitations
- Sweating/flushing
- Restlessness
- Easily tired
- Trouble concentrating
- Irritability
- Muscle tension
- Frequent urination
- Trouble falling or staying asleep
- Being easily startled
1.10 STRESS

Stress is a feeling that's created when we react to particular events. It's the body's way of rising to a challenge and preparing to meet a tough situation with focus, strength, stamina, and heightened alertness. The events that provoke stress are called **stressors**, and they cover a whole range of situations — everything from outright physical danger to making a class presentation or taking a semester's worth of your toughest subject.

The human body responds to stressors by activating the nervous system and specific hormones. The **hypothalamus** signals the **adrenal glands** to produce more of the hormones adrenaline and cortisol and release them into the bloodstream. These hormones speed up heart rate, breathing rate, blood pressure, and metabolism. Blood vessels open wider to let more blood flow to large muscle groups, putting our muscles on alert. Pupils dilate to improve vision. The liver releases some of its stored glucose to increase the body's energy. And sweat is produced to cool the body. All of these physical changes prepare a person to react quickly and effectively to handle the pressure of the moment. This natural reaction is known as the **stress response**. Working properly, the body's stress response enhances a person's ability to perform well under pressure. But the stress response can also cause problems when it overreacts or fails to turn off and reset itself properly.

But not all stress is bad -- some stress is good. In fact, everyone needs stress in their lives; without it, life would be dull and unexciting. Stress adds flavor, challenge and opportunity to life. Stress can pump you up, give you energy, supply that zest for living. Stress is an unavoidable part of life. The challenges caused by stress help to develop new skills and behavior patterns. The problems occur, however, when stress becomes excessive. It can become destructive and can turn into distress. Too much stress on your mind and body can make you feel miserable, worried, sad and ill. What most people think
of when they hear the word "stress" is actually distress? Distress is a negative emotion that most people generally try to avoid, but there is also a good kind of stress called eustress.

Think of eustress as a helpful agent in your body that calls your attention to a given task and gets you ready for optimal functioning. Eustress is the body’s way of marshalling its forces to prepare for battle, and making sure that all of the soldiers are sober, well-rested, and well-fed. Eustress is the kind of stress people are usually talking about when they say that they put things off until the last minute because they think it helps them focus. If their stress isn’t too intense, then it may actually be helpful for them. A lot of times, however, their stress does become distress and their effectiveness is impaired.

This stress response, also known as the fight-or-flight response, triggers many involuntary changes in your body, which give you an extra burst of energy so that you can fight or run away from perceived threats. This was a helpful response for us in earlier times, when most of the stresses we faced were physical--this burst of physical energy was needed to keep us alive in many cases. Nowadays, though, more and more of our threats are psychological--job stress, interpersonal conflict, etc.--and this response to stress, which can actually make us think less clearly, isn't always necessary, or even helpful.

1.10.1 SYMPTOMS OF STRESS

A) COGNITIVE SYMPTOMS

- Memory problems
- Inability to concentrate
- Poor judgment
- Seeing only the negative
- Anxious or racing thoughts.
- Constant worrying

B) EMOTIONAL SYMPTOMS

- Moodiness
- Irritability or short temper
- Agitation, inability to relax
- Feeling overwhelmed
- Sense of loneliness and isolation.
- Depression or general unhappiness

C) PHYSICAL SYMPTOMS

- Aches and pains
- Diarrhea or constipation
- Nausea, dizziness
- Chest pain, rapid heartbeat
- Loss of sex drive
- Frequent colds

D) BEHAVIORAL SYMPTOMS

- Eating more or less
- Sleeping too much or too little
- Isolating yourself from others
- Procrastinating or neglecting responsibilities
- Using alcohol, cigarettes, or drugs to relax
Nervous habits (e.g. nail biting, pacing

1.11 DEPRESSION

Everyone occasionally feels blue or sad. But these feelings are usually short-lived and pass within a couple of days. When you have depression, it interferes with daily life and causes pain for both you and those who care about you. Depression is a common but serious illness. Many people with a depressive illness never seek treatment. But the majority, even those with the most severe depression, can get better with treatment. Medications, psychotherapies, and other methods can effectively treat people with depression.

1.11.1 SYMPTOMS OF DEPRESSION

Depression is not uniform. Signs and symptoms may be experienced by some sufferers and not by others. How severe the symptoms are, and how long they last depends on the individual person and his illness. Below is a list of the most common symptoms:

- A constant feeling of sadness, anxiety, and emptiness
- A general feeling of pessimism sets in (the glass is always half empty)
- The person feels hopeless
- Individuals can feel restless
- The sufferer may experience irritability
- Patients may lose interest in activities or hobbies they once enjoyed
- He/she may lose interest in sex
- Levels of energy feel lower, fatigue sets in
- Many people with a depressive illness find it hard to concentrate, remember details, and make decisions
Sleep patterns are disturbed - the person may sleep too little or too much
Eating habits may change - he/she may either eat too much or have no appetite
Suicidal thoughts may occur - some may act on those thoughts.
The sufferer may complain more of aches and pains, headaches, cramps, or digestive problems. These problems do not get better with treatment

1.12 MINDFULNESS MEDITATION AND ANXIETY

Anxiety is the cognitive state related to the inability to control emotional responses to perceived threats. Anxiety is inversely related to brain activity associated with the cognitive regulation of emotions. Mindfulness meditation has been found to regulate anxiety. However, the brain mechanisms involved in meditation-related anxiety relief are largely unknown. We employed pulsed arterial spin labeling MRI to compare the effects of distraction in the form of attending to the breath (ATB) (before meditation training) to mindfulness meditation (after meditation training) on state anxiety across the same subjects. Fifteen healthy subjects, with no prior meditation experience, participated in 4 d of mindfulness meditation training. ATB did not reduce state anxiety, but state anxiety was significantly reduced in every session that subjects meditated. Meditation-related anxiety relief was associated with activation of the anterior cingulate cortex, ventromedial prefrontal cortex and anterior insula. Meditation-related activation in these regions exhibited a strong relationship to anxiety relief when compared to ATB. During meditation, those who exhibited greater default-related activity (i.e., posterior cingulate cortex) reported greater anxiety, possibly reflecting an inability to control self-referential thoughts. These findings provide evidence that mindfulness meditation attenuates anxiety through mechanisms involved in the regulation of self-referential thought processes.
1.13 MINDFULNESS MEDITATION AND DEPRESSION

Mindfulness-based cognitive therapy (MBCT) is psychological therapy that is designed to aid in preventing the relapse of depression, specifically in individuals with Major depressive disorder (MDD). It utilizes traditional Cognitive behavioral therapy (CBT) methods and adds in newer psychological strategies, like mindfulness and mindfulness meditation. Cognitive methods could include educating the participant about depression. Mindfulness and mindfulness meditation focus on becoming aware of all incoming thoughts and feelings and accepting them, but not attaching or reacting to them. Like CBT, MBCT functions on the theory that when individuals who have historically had depression become distressed, they return back to automatic cognitive processes that can trigger a depressive episode. The goal of MBCT is to interrupt these automatic processes and teach the participants to focus less on reacting to incoming stimuli, and instead accepting and observing them without judgment. This mindfulness practice allows the participant to notice when automatic processes are occurring and to alter their reaction to be more of a reflection. Research supports the effects of MBCT in people who have been depressed three or more times and demonstrates reduced relapse rates by 50%.

1.14 DEPRESSION, ANXIETY, STRESS AND ACADEMIC ACHIEVEMENT

Performance in academic life demands all aspects of well-being, those that include physical, social, emotional, spiritual, and psychological well-being (Crystal, Chen, Fuligni, Stevenson, Hsu, Ko, Kitamura, & Kimura, 1994). Students who are physically and psychologically stable are expected to perform better compared to those who are not physically, mentally and psychologically fit. In other words, those who are experiencing psychological problems, such as depression, anxiety and stress, may face problems in
managing their academic performance. Psychological stability is indeed an important predictor that could contribute to high academic achievement. Hence, it is very much crucial to review and examine the psychological well-being of the students. Depression, stress, and anxiety are among the psychological problems that are common among students. According to Porter (1990), up to 60% of university students left university without finishing their degrees.

Depression, anxiety, and stress were found to be interrelated to each other. The overlapping symptoms of these three psychological problems can lead to all sorts of academic problems that can give impact to academic achievement among students. For example, it has been found that students’ performance in school, college, and university is influenced by the symptoms of depression (Fine & Carlson, 1994; Stark & Brookman 1994), stress (Dusselier, Dunn, Wang, Shelly, & Whalen, 2005), and anxiety (Anson, Bernstein, & Hobfoll, 1984) which could lead to difficulties in concentration, lack of motivation and interest, poor attendance, and physical health such as headache and fatigability. These conditions will influence students’ academic achievement.

1.14.1 DEPRESSION AMONG STUDENTS

A depressed mood is the experience of unhappiness or distress. Depression may involve feelings of being sad, weak, disappointed, frustrated, despairing, helpless, and hopeless (Sarason & Sarason 2002). Many depressed individuals may be unable to perform well in academic life because they do not have courage in what they are doing. They may feel that they are not reaching the standard of performance set for them. As a result they continuously feel disappointed and despairing. They perceive things negatively and consider themselves as failures. This condition can definitely contribute too many serious problems in their academic life such as poor grades. Surtees, Wainright, and Pharoah (2002), in their survey, found these conditions reduced the likelihood of
achieving a first-class degree among first-year students, although this relationship disappeared when adjustment was made for other factors such as homesickness.

1.14.2 ANXIETY AMONG STUDENTS

Anxiety is a psychological disorder that is associated with significant suffering and impairment in functioning. It is a blend of thoughts and feelings characterised by a sense of uncontrollability and unpredictability over potentially aversive life events (Wilson, Nathan, O’leary, & Clark, 1996). The relationship between anxiety and academic performance has been studied in a variety of laboratory and natural settings. Individuals experiencing anxiety show apprehensions that often interfere with performance in everyday life as well as in academic situations. Anxiety in general is expected to have a negative effect on performance. One consistent finding shows that individuals who have a high level of anxiety perform less well than those who have low anxiety on evaluative or ego-threatening tasks (Vogel & Collins, 2000). In a study conducted by Anson et al. (1984) on the relationship between anxiety and academic performance, it was found that anxiety was significantly and negatively correlated with grades obtained by the students. The way students perceive and experience -their academic-related matters is also one of the factors that could affect the performance of the students. For instance, according to Vogel and Collins (2000), if an individual’s experience of previous achievement is negative, then the anxiety level is higher and this leads to lower performance. Consequently, if the experience is positive, then the anxiety level is lower and this leads to a higher performance. Overall, it is important to consider motives, aptitudes, cognitive assessments of the task, and past experience when analysing anxiety and examining how it relates to performance.

Another study on anxiety was conducted by Seligmen and Wuyek (2007). They found that highly-anxious students were significantly more likely to score lower on
measures of academic achievement and peer acceptance. Longitudinal analyses revealed that highly-anxious students, compared to their less-anxious peers, scored significantly lower on measures of academic achievement, aggression, and peer acceptance. All the above studies showed that anxiety can directly influence students’ academic achievement. It was reported that anxiety could effect students’ academic achievement in the sense that students with high anxiety level perform poorer compared to those with low anxiety.

1.14.3 STRESS AMONG STUDENTS

Stress is a mechanism of any internal or external demand made upon the body (Dusselier et al., 2005). Stress is considered as a state of individuals that result from their interaction with the environment that is perceived as too demanding and a threat to their well-being. The stressors are not only physical, but may also involve emotions. Stress was found to be a part of students’ life and could give impact on how students cope with the demands of academic life. Students reported experiencing academic stress at predictable times each semester with the greatest sources of academic stress resulting from taking and studying for exams, grade competition, and the large amount of content to master in a small amount of time (Rawson, Bloomer, & Kendall, 1999). One model that is useful to study in understanding stress among students is the person environment model (Misra & McKean, 2000). According to this model, individuals can appraise stressful events as challenging or threatening. When students perceived their education as a challenge, stress can bring them a sense of competence and an increase capacity to learn.

When education is perceived as a threat, stress can elicit feelings of hopelessness and a foreboding sense of loss, thus leading to lower academic achievement. Research shows that there exists a relationship between stressful life events and poor academic performance among college students and there is a connection between health-related quality of life and stress (Dusselier et al., 2005; Misra & McKean, 2000). Because stress
adversely affects psychological and physical health, undergraduate students reported that stress was the most common health factor impacting their academic performance (Dwyer & Cummings, 2001).

1.15 NEED OF BODY – MIND – SPIRIT RELATIONSHIP

The body-mind-spirit relationship is to be understood and practised in a proper manner. The cleanliness, posture, co-ordination and co-operation of the body are to be concentrated upon. The function of the mind, that is, feeling, willing, acting, reasoning and its various aspects are to be realized. The peace and joy of the inner soul must be gained.

The meditation is the only path that can bring about a hundred percent result in realizing the goal of life. The aim of our education may be considered to be final, only when it reaches this point. Yoga is the only way of integrating physical and psychological function of the body, and it can link the body and mind, mind and soul and finally soul with universe.
1.16 MINDFULNESS MEDITATION PRACTICES AND THE ACADEMIC ACHIEVEMENTS

All the mindfulness meditation practices enumerate the mind of the students to have full attention on their goal. They would set in with absolute interest which can be focused on achieving maximum score in the subjects, as scientists do in their research. The body becomes free of ailments. Mind is made concentrated, alert and aware of a single object. The unwanted thoughts that are common in teen ages are eliminated by the mindfulness meditation practices and hence, the students are able to go ahead and with the happiest mind, achieve everything they want to do in life, as body and mind are brought under and they become the servants, not the masters. So attention, grasping retention, memory, clarity of thought, and expression, are need for the students to become effective. Sound health, peaceful mind and happy soul are obtained in due course, and develop the consciousness to perfection and this may make the students well suited citizens of our proud country, with all round ability and nobleness. In schools, we must be taught, how we might get in touch with our innermost potential. Teachers are as unhappy as the students. So in schools, we bring happiness, when we do mindfulness meditation and promote the well being of the students as well as the teachers.

1.17 MEDITATION AND MEMORY

Many researchers have identified the different effects of meditation practices on many variables such as physical fitness, anxiety, disease control, attention, concentration, achievement motivation, emotional stability and learning. As memory is one of the major components of learning, memory studies have been given much importance for a long period till today. "Memory is the capacity of an individual to remember things". A forgetful man always fails in his endeavors. A student with poor memory fails to learn his subjects.
The following are the four characteristics of good memory:

1. Power of reproducing the things learnt.
2. Power of reproducing the things learnt with increase or decrease.
3. Power of retaining the things learnt.
4. Power of reproducing the things when it’s needed.

Men of strong and retentive memory can turn out tremendous work in a short time. He can master any subject very easily. In India, 'Gurukul system' of education had its unique advantages. It provided opportunity to develop memory to a remarkable degree, by learning everything by heart. The training of memory formed a very important part of education in ancient times.

There are many memory techniques available in the form of mnemonics and memory pills. But these have their own drawbacks. Hence, there is a necessity to identify and highlight a natural way of improving memory, by practicing meditation techniques which offer systematic and synchronized training to the mind. Meditation exercises help the brain cells to receive more blood in order to reach the optimal level of functioning. Meditation practices develop good thinking, provide good exercise to the mind and help in the improvement of memory level.

**1.18 MEDITATION AND ATTENTION**

People with very good memory sometimes fail to achieve in learning process. Many factors may contribute to this. Of them poor attention may be one of the reasons for poor achievement. 'Attention is the mental function that makes us fully aware of an element in our environment'. Not all the stimuli that activate our sensory receptors will receive additional processing. Because of the limitations in our cognitive resources, it is impossible for us to process all the stimuli available to us.
"Attention can be defined as the allocation of processing capacity to stimuli". Attention has its own role in human life right from the stage of infancy. As man grows older he learns to use attention as a selective mechanism and as a tool to improve his concentration filtering out the unwanted things.

Attention is considered as one of the components of learning and it plays a vital role in the process of learning. The learner with poor attention fails to learn successfully. The deviated mind affects the attention process for lack of concentration. One's mind should be clam and receptive before paying attention to a particular thing. The calm mind can be achieved by the practice of yoga, which in turn, increases the attention.

1.19 DEPARTMENT OF SCHOOL EDUCATION

Education should bring radical changes in human life, attitude and behavior. Children should be empowered to be global citizens with intellectual, scientific, social, cultural and human outlook. Education is not to cater to intellectual illumination alone. It should develop skills of problems-solving and social interaction to be inculcated and imbibed for the betterment of the individual and the society. Along with knowledge acquisition, education should direct towards the development of a myriad of desirable values like kindness, charity, tolerance, devotion to duty, self-confidence, truthfulness, Honesty and Non-Violence. Harmonious integrated personality of the child.

Education should train the mind to think creatively bringing out the latent talents of the individual. It should further enlighten, equip and entertain the children to face the challenges of day to day life and changing situations. As Pandit Jawaharlal Nehru has said, “Children are like buds in the garden and should be carefully and lovingly nurtured as they are the future of the nation and citizens of
tomorrow”. Education should be able to mould them and enable them to attain and achieve their goal.

The School Education Department functions with the target to fulfill the vision of the Honorable Chief Minister of the State and to attain the objectives in order to Universalize and Equalize Qualitative Educational Opportunities. The Structure of education in the state is based on the national pattern.

We have 12 years of schooling at three levels. The Elementary level comprises of eight years - Five years of Primary and three years of Upper Primary Stages. This is followed by two years of Secondary level and finally two years of Higher Secondary level. On completion of Higher Secondary level students are eligible to pursue their higher studies in the general academic streams and in the technical and professional courses.

<table>
<thead>
<tr>
<th>Level</th>
<th>Stage</th>
<th>Classes</th>
<th>No. of Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>Primary</td>
<td>1 to 5</td>
<td>5</td>
</tr>
<tr>
<td>Middle</td>
<td>Upper Primary</td>
<td>6 to 8</td>
<td>3</td>
</tr>
<tr>
<td>Secondary</td>
<td>High School</td>
<td>9 to 10</td>
<td>2</td>
</tr>
<tr>
<td>Higher Secondary</td>
<td>Higher Secondary</td>
<td>11 to 12</td>
<td>2</td>
</tr>
</tbody>
</table>

1.20 REASON FOR SELECTION OF TOPIC

Modern Society is provided with maximum amenities and facilities to provide comfort and satisfaction in life. But man is not mentally peaceful and he goes on craving for more and more, never contended with, whatever extends of sophistication attained. This is because the man thinks that happiness comes from the outer world. Really
happiness is a mental phenomenon and it comes from the inner self. So man must turn his mind inward to find comfort, satisfaction, happiness and meaning in life. The investigator feels that meditation is the only solutions for this and meditation should be emphasized, to make life meaningful and goal achieving and hence, the researcher undertook this study.

1.21 PURPOSE OF THE STUDY

The study was to find out the Effectiveness of mindfulness meditation practices on academic achievement of the +2 students. Only a few researches have been done in the relationship between mindfulness meditation and academic achievement. The investigator of this study is also an academic teacher he know both psychological distress and concrete problems in teaching. The mindfulness meditation practices help the teacher-trainees to interrelate the thoughts, emotions and behaviours.

Hence, an attempt was made to know to what extent the role mindfulness meditation practices is effective on academic achievement among the +2 students. So the investigator has taken an attempt to study the efficacy of mindfulness meditation therapy on anxiety, depression and stress in facilitating academic achievement among +2 students in trichy district

1.22 STATEMENT OF THE PROBLEM:

The purpose of the study is to assess the efficacy of mindfulness meditation therapy on anxiety, depression and stress in facilitating the academic achievement among +2 students from different schools of Trichy under the guidance of physical education teacher of the school.

1.23 OBJECTIVES OF THE STUDY
➢ To assess the level of anxiety, depression and stress among +2 students in schools.
➢ To assess the level of academic achievements among +2 students in schools
➢ To develop training strategies (Mindfulness meditation therapy) to reduce the level of anxiety, depression and stress and to enhance the level of academic achievements among +2 students in schools
➢ To implement the training strategies to enhance academic achievements among +2 students in schools.
➢ To find out the effect of training strategies (Mindfulness meditation therapy) in enhancing academic achievements among +2 students in schools.

1.24 ASSUMPTIONS OF THE STUDY

➢ The level of anxiety, depression and stress among students is high.
➢ The level of anxiety, depression and stress among students among students could be reduced.
➢ Mindfulness Meditation therapy are correlated.
➢ Students could be given training towards reducing anxiety, depression and stress and to enhance the level of academic achievements among +2 students in schools.
1.25 HYPOTHESES OF THE STUDY

- There may be a significant improvement among +2 students’ academic performance due to the effect of Mindfulness Meditation Therapy.
- There may be a significant improvement in reducing the level of anxiety, depression and stress among +2 students in schools.
- There would be a significant difference between control group and Experimental group in their academic academic achievement.
- There would be a significant difference between pre and post test of academic achievement among +2 students.
- There would be a significant difference between pre and post test of anxiety, depression and stress among +2 students.
- There would be a significant correlation between Mindfulness Meditation Therapy and anxiety, depression and stress among +2 students.

1.26 SIGNIFICANCE OF THE STUDY

- This study may be helpful for the students in schools to practice mindfulness meditation therapy for enriching their academic achievement level.
- This study may help to reduce the anxiety, depression and stress from the mind of the students.
- This study may assure students to develop a healthy body, peaceful mind and elevated spirit.
- This study may bring a change in the views of the students on academic achievement.
The research findings will bring to light the effectiveness of mindfulness meditation therapy to increase the performance of students in their academic achievement.

This study will create awareness of mindfulness meditation therapy among students.

The findings of this research will help to explore possibilities of further research into university students.

1.27 LIMITATIONS

The cultural and environment factors of the subjects will not be considered.

Emotional and other psychological factors will not be taken into consideration.

Certain factors like habits, life style, routine work, etc, will effect on the results of this investigation.

The study will bring about a great performance among students.

1.28 DELIMITATIONS OF THE STUDY

The following are the delimitations of the present study.

The study related to Mindfulness meditation therapy is applicable only for +2 students in school education and the conclusions cannot be extended beyond this population.

The experiment was spread over for a period of three months.

This experimental study was confined to schools in Trichy.

Selection of the subjects will be random and covenant sampling.

The study will be confined to certain limited schools from Trichy.
The Subjects for the study have differed in age, sex and geographic conditions, psychological factors, sociological factors and economical conditions.

1.29 DEFINITION OF TERMS

MINDFULNESS MEDITATION

Mindfulness Meditation is a western, non-sectarian, research-based form of meditation derived from a 2,500 year old Buddhist practice called Vipassana or Insight Meditation. It is a form of meditation designed to develop the skill of paying attention to our inner and outer experiences with acceptance, patience, and compassion. Mindfulness is the awareness that is not thinking but which is aware of thinking, as well as aware of each of the other ways we experience the sensory world, i.e., seeing, hearing, tasting, smelling, feeling through the body. “Mindfulness is non-judgmental, open-hearted, friendly, and inviting of whatever arises in awareness. It is cultivated by paying attention on purpose, deeply, and without judgment to whatever arises in the present moment, either inside or outside of us. By intentionally practicing mindfulness, deliberately paying more careful moment-to-moment attention, individuals can live more fully and less on ‘automatic pilot,’ thus, being more present for their own lives.”

ANXIETY

Anxiety is a mood. When it becomes a mental disorder, that is, characterized by excessive, uncontrollable and often irrational worry about everyday things that is disproportionate to the actual source of worry, it is diagnosed as generalized anxiety disorder (GAD). GAD occurs without an identifiable triggering stimulus. It is distinguished from fear, which is an appropriate cognitive and emotional response to a perceived threat and is related to the specific behaviors of fight-or-flight responses,
defensive behavior or escape. Anxiety occurs in situations only perceived as uncontrollable or unavoidable, but not realistically so. David Barlow defines anxiety as "a future-oriented mood state in which one is ready or prepared to attempt to cope with upcoming negative events," and that it is a distinction between future and present dangers which divides anxiety and fear. Symptoms of anxiety can range in number, intensity, and frequency, depending on the person.

**DEPRESSION**

Depression is a common mental disorder, characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, feelings of tiredness, and poor concentration. An illness that involves the body, mood, and thoughts and that affects the way a person eats, sleeps, feels about him or herself, and thinks about things. The signs and symptoms of depression include loss of interest in activities that were once interesting or enjoyable, including sex; loss of appetite, with weight loss, or overeating, with weight gain; loss of emotional expression (flat affect); a persistently sad, anxious, or empty mood; feelings of hopelessness, pessimism, guilt, worthlessness, or helplessness; social withdrawal; unusual fatigue, low energy level, a feeling of being slowed down; sleep disturbance and insomnia, early-morning awakening or oversleeping; trouble concentrating, remembering, or making decisions; unusual restlessness or irritability; persistent physical problems such as headaches, digestive disorders, or chronic pain that do not respond to treatment, and thoughts of death or suicide or suicide attempts.
STRESS

Psychological and physical response of the body that occurs whenever we must adapt to change conditions, whether those conditions are real or perceived, positive or negative. Although everyone has stress in their lives, people respond to stress in different ways. Some people seem to be severely affected while others seem calm, cool, and collected all the time. Regardless, we all have it. It's also important to note that there are two types of stress, Eustress (good stress) and Distress (not so good stress).

ACADEMIC ACHIEVEMENT

Academic achievement can be defined as excellence in all academic disciplines, in class as well as extracurricular activities. An academic achievement is something we achieve at school, college or university - in class, in a laboratory, library or fieldwork. It includes excellence in sporting, behavior, confidence, communication skills, punctuality, assertiveness, Arts, Culture, and the like.