

**A STUDY TO ACCESS THE EFFECTIVENESS OF MEDITATION ON THE  
STRESS LEVEL OF YOUNG ADULTS**

**A dissertation submitted to the Domain of Psychology**

**In partial fulfillment for the award of degree of**

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## CERTIFICATE

This is to certify that the student namely Kunchok Patak is a bonafide student of Department of psychology and he has successfully completed his dissertation work entitled “**A Study to access the Effectiveness of Meditation on the Stress Level of Young Adults**” at Lovely Professional University, Phagwara.

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## **ABSTRACT**

World is not as simple as it was before. In ancient times, life was comparatively simple. But with changes in time, people's wants are becoming needs. To achieve their wants they are struggling a lot. While struggling they are ignoring their health. With ignoring this, people are becoming victims of various diseases. Not only physical diseases but psychological problems are also faced by people. Psychological problem such as depression, anxiety, worry, and stress are some common psychological problem being faced by human. So there is a need to have some way which can help the people in curing their physical and psychological problems. Meditation is proposed as one of such technique which is effective enough to achieve this goal. So, the present study was designed to study the effectiveness of meditation on reducing the stress level of young adults in present day scenario. To conduct the study, a sample of 80 young adults was taken in the age range from 19-25 years. They were further divided into two groups (control group and experimental group). Firstly, stress level of both experimental and control group was assessed with the help of Cohen Perceived Stress Scale. This phase is called as pre-test. After that meditation was used as an intervention for experimental group only. They performed meditation for 30 minutes for 10 days. Whereas, No intervention was given to control group. After 10 days the stress level of both the groups was assessed again. This phase is called as post-test. Paired t-test compares how a group of subjects perform in two different test conditions. Therefore in the present study, the stress level during pretest and posttest of both the groups was compared with the help of paired t-test in order to see the effect of meditation on stress. The results revealed that there was no significant change in the pretest and posttest of control group. Whereas the scores of stress reduced remarkably in posttest as compare to pretest of experimental group. It suggests that meditation is effective in reducing the stress level of young adults.

## **ACKNOWLEDGEMENT**

I would like to express core thanks to lovely professional university for letting MA student to prepare dissertation on their favor topic. It leads us to gain new experience. It is a platform for student to express their knowledge. I have enjoyed very much in exploring the behavior of my subject. It gives me immense pleasure to express my humble thanks to authorities of Lovely Professional University for providing all the necessary facilities in conducting the dissertation program.

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I also love to thanks all of my subjects who are parts of my study. Without their company. I won't be able to complete it. Specially those who are in the experimental group. They had provided me their 30 minutes from their precious time for 10 days to do meditation. I would like to thanks them.

Last but not least, I would like to thanks all of my friends who helped me during my dissertation work. Thank you very much

**KUNCHOK PATAK**

## **DECLARATION**

I hereby declare that work entitled “**A Study to Access the Effectiveness of Meditation on the stress level of Young Adults**” has been carried out by me under the supervision of Dr. Radhika Gupta, Assistant professor, Department of psychology, Lovely Professional University, Phagwara. No part of this dissertation has formed on the basis for the award of any degree or fellowship previously.

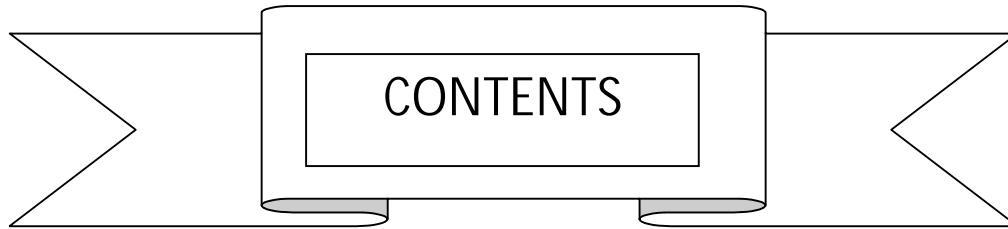
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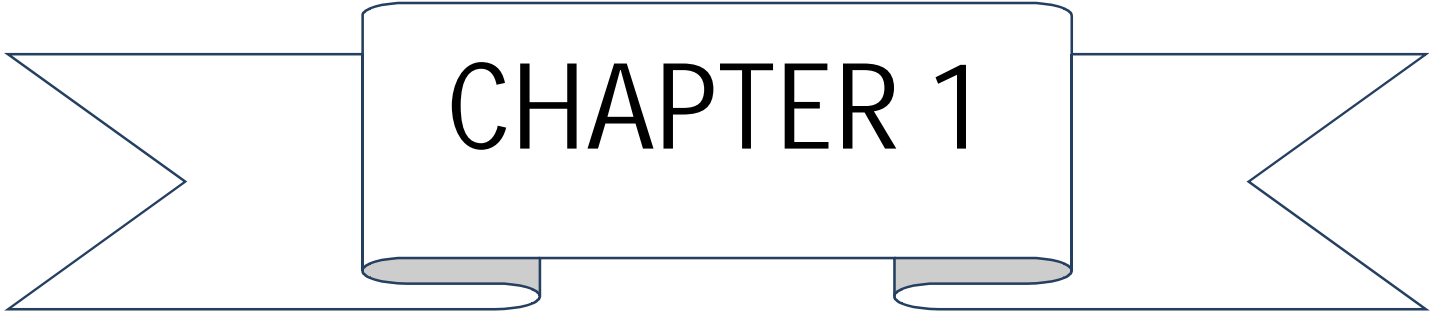
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# **INTRODUCTION**



Stress can be known as to place an emphasis moreover importance on something. Prevalence of stress is there from the inception of human civilization. Stress became major issues with improving of human civilization. It is our indispensable companion that is always with us. It is very common problem now days. Almost millions of peoples are suffering from Stress. The origin of the word stress traces back to 1920's and 1930's. Before 1920, there is no implied meaning or term stress. The word stress had been derived from Latin word 'stringere', which means to draw tight. It had long been used in Physics to refer to the internal delivery of a force exerted on a material body, resultant in strain. It is defined as physical response to environmental stimuli. Different field defined stress in different way.

In science, stress can be defined as physiological or biological stress is an organism's response to an environmental condition. It is a body's way of reacting to a challenge. When an individual is facing a stressful event, our body react to stress is by parasympathetic nervous system activation. It is because the body cannot keep this state for a long period of time. The parasympathetic system returns the body's physiological condition to normal.

Whereas in psychology, Stress is a negative emotional experience that leads to imbalance in hormone, neurotransmitter and affect the cognitive and behavioral of an individual. Many psychologist have given different definition of stress. . **Han seyle (1936)** defined stress as "the nonspecific response of the body to any demand or change. "**Lazarus (1966)** defined stress as "subjective experience of distress in response to perceived environmental problems".

In simple term stress can be known as physical response to environmental stimuli. Stress can be caused by various factors. It can be caused by relationship problem, Job, Exam, Standing long in line. The factor that causes stress is known as stressor. These stress are the stimuli that lead to the imbalance or malfunction in normal body functioning. Stress is of two types. That is acute stress and chronic stress. Acute stress is short term and victim can easily recover from this acute stress. Example of acute stress is exam stress, preparing to give speech. Whereas chronic stress are totally opposite to it. It is long lasting and harmful for health of human. Examples of chronic stress are soldier returning from war, death of spouse or your near one and dear one.

Many researchers have conduct research on stress. The main noticeable researcher on stress was Han Seyle. He defined stress as "the non-specific response of the body to any demand

or change.” He conducts numerous experiments on animals regarding stress. He concluded that stress leads to the uncomforted situation same in human and animals. Such as heart attack, stroke, kidney disease and rheumatoid arthritis. He coined the term stress in medical circles in the year 1936. He also provides two different types of stress. That is eustress and distress.eu-stress is a positive stress or well like in euphoria. Distress is a negative stress using the prefix (DIS) meaning not or lack of as in dislike or dishonest.

### **1.1 History of stress**

Existing word of stress originated on a rooftop in Canada, with some of rats freezing in the winter wind. It was in 1936 and by that point the owner of the rats, an endocrinologist named Hans Seyle, had become expert at making rats suffer for science.

He subjects them to extreme temperatures, make them go hungry for long periods, or make them exercise a lot. An interesting thing happen to know for Seyle was that no matter how different the tortures he applied for the rats were — from icy winds to painful injections — when he cut them open to examine their guts it appeared that the physical effects of his different tortures were always the same. There would be changes particularly in the adrenal gland. So Seyle began to suggest that subjecting an animal to prolonged stress led to tissue changes and physiological changes with the release of certain hormones which would then cause disease and ultimately the death of the animal.

### **1.2 Relations of stress and health**

Continuation of adaption to stressor may deplete the body’s resources and make it vulnerable to illness. Especially the chronic stress is the main agent that pushed us towards physical disorder such as ulcers, high blood pressure, and heart disease. It can also impair the function of the immune system, it force the body’s ability to fight invading bacteria and viruses (**Delahanty, Dougall, Browning, Hyman, and Baum, 1998**). Indeed emotional stress plays an important role in more than of all medical problems.

Psycho physiological disorders are physical disorders in which emotions are believed to play central role. A common misconception is that people with psycho physiological disorder are

not really sick and do not need medical attention. On the contrary, the symptoms of psychophysiological illness reflect physiological disturbances associated with tissue damage and pain. Stress can influence worsening disease and can cause death. Now a day's researchers are focusing on such illness as asthma, hypertension, ulcers, colitis, and rheumatoid arthritis. Researchers are trying to analyze the relationship between specific illness and characteristics of attitude, or ways of coping with stressful events. Researchers have concluded that stress is vulnerable to above mention disease.

### **1.3 Hormone and stress**

Arnold Berthold was curious to know how removal of testicles of rooster brought changes in anatomical and behavioral. Did the testicles somehow interact with their nervous system to bring about normal development and behavior? He concluded that may be they produced some substance that is essential for normal development and behavior. In 1848, he castrated two rooster and transplanted their testicles in their abdominal cavities. Rather than maturing into fat, tender, and inactive capons, the bird behave normally, defending their territories, crowing and strutting with all the vigor and enthusiasm of true roosters. Later on, he autopsied these roosters and found no evidence of nerve regeneration but discovered a rich network of capillaries connecting the testicles and the circulatory system.

In subsequent decades, organ removal studies similar to those conducted by him revealed a great diversity of chemical messengers-hormones- that are carries in the blood. It is released by many glands and organs and may stimulate or inhibit the activities of sensitive tissues or organ. On the following year, Han Seyle continued research related to hormones. He was a renowned endocrinology. He was inspired by the patients that shared common symptom. He termed it as "syndrome of just being a sick". He feel strange that why no one was paying attention to syndrome of the diseases.

His insight became more important a decade later in 1936, as he began his career as a postdoctoral biomedical researcher at McGill university in Montreal. His professor, J. B. Collip, was searching for new ovarian hormones; So Selye's first task was to retrieve a bucket of fresh cow's ovaries from the slaughterhouse. Collip ground the ovaries and prepared extracts with different solvents. He then tested these extracts on some female rats. He injects rats with cow

ovaries and later on autopsied it after few days of injection. He hopes to find anatomical changes. He discovered the following triad of anatomical changes.

- i. Considerable enlargement of the adrenal cortex
- ii. Intense shrinking of the lymphatic structures, including the thymus, spleen, and lymph nodes, and a major reduction in the number of eosinophil.
- iii. Deep ulcers in the lining of the stomach and duodenum.

No ovarian hormone had ever been shown to induce these changes, and he was enthusiastic about his good fortune. Later on, he tested extracts the placenta which had already been shown to produce other sex hormones. He discovered the same anatomical changes, when he tried extract of the pituitary glands; he was astounded to find the same effect. Why should three different glands produce the same hormone?

He was depressed. He had been looking for an ovarian hormone, but almost any treatment caused the same general effect. Then he flashed back to the human patients he had observed in medical school, all of whom shared the “syndrome of just being sick”. Perhaps these rats were showing a similar syndrome –some sort of physiological response to pain or stress. He concluded that may be his rats and sick human were showing the same types of physiological reactions to general trauma.

He again conduct an experiment designed to answer two questions, seyle used moderate cold(2 degree Celsius) as the first stressor and extreme cold (4 degree Celsius) as a second source of stress. He autopsied 10 rats from each group, all cold treated showed the triad of anatomical changes, while none of the control group showed any anatomical changes. He then transferred 20 of the remaining 90 cold-treated rats to an even colder chamber (-4 degree Celsius) along with 20 of the remaining controls. He found that the control rats survived much better than the cold treated rats following the transfer to -4 degree C.

His research finally concluded that several different changes occur in the body in response to different types of stressor. He noticed that the adrenal medulla had already been shown to secrete the hormone epinephrine, which raised blood pressure in response to stressor. He also knew that the medulla had some role in the very early part of the shock phase. But the increase in the size of the adrenal glands during the alarm stage was due to an increase in the size

of the cortex of the adrenal glands-not the medulla. He came to know that hormones are responsible for the stress causing agents.

#### **1.4 Model of stress**

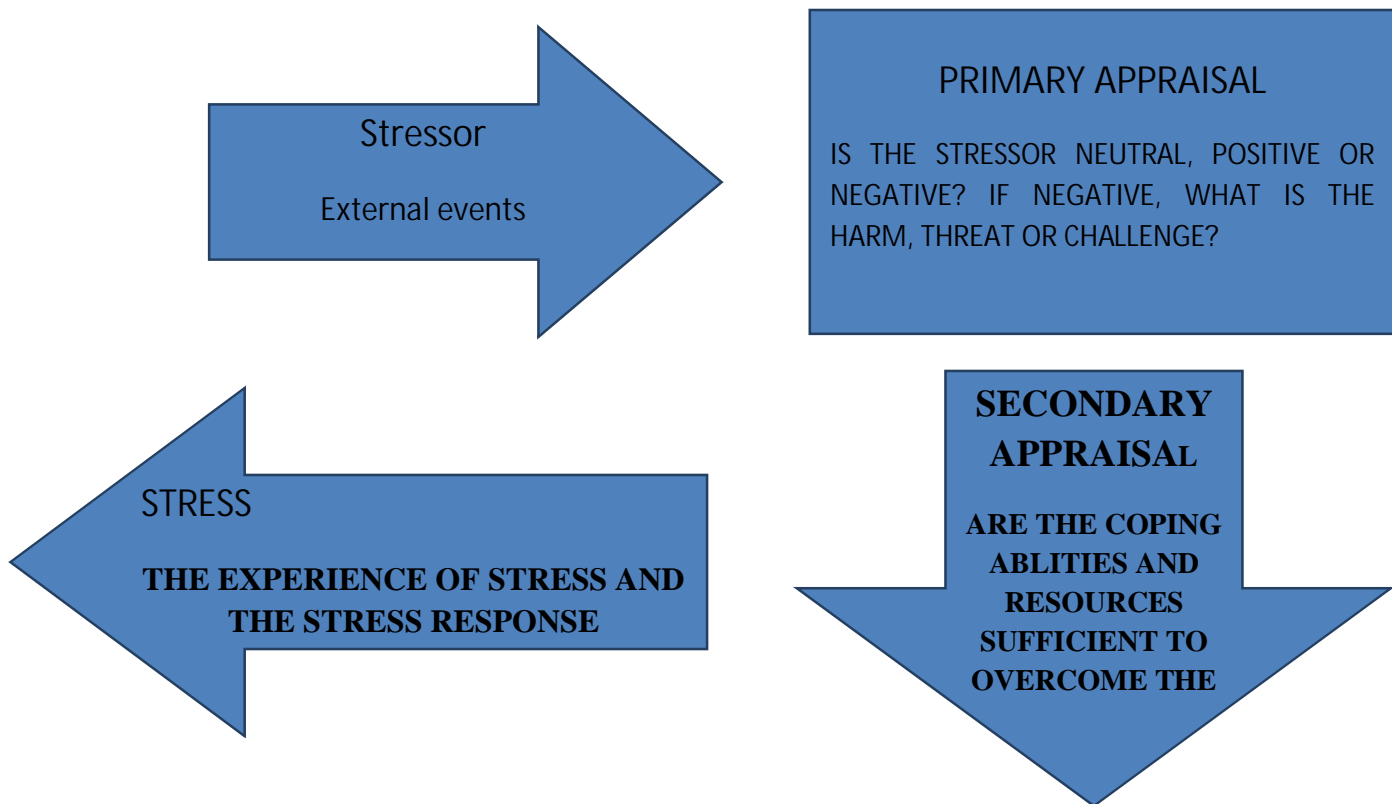
Stress is increasing day by day. A research was conducted on Indian workers on stress. It is settled that workers are getting more stressed. Although survey revealed that stress caused by work in India is 51% and personal finances is 50%. In the same way in England, The number of people treated at hospital in England for stress is rising every year. In America, the major source of stress among adults is Job stress.

Now the question arises. Can we overcome with stress? Or can we get rid of stress? The answer is yes, we can get rid of stress. Many psychologists have given different models of stress. These entire different models are emphasis on the reduction of stress. Cannon's fight-or-flight model (1929), Hans Selye general adaptation model (1956), Lazarus and Folkman transactional model are focused on the reduction of stress.

#### **Transactional model of stress**

In the 1970s, Lazarus's work on stress introduced psychology to understanding the stress response. This role for psychology took the form of his concept of appraisal. Transactional model can be simply stated as interaction occurs between a person and the environments. Stress results from an imbalance between demands and resources. Thus we become stressed when demands exceeds our resources. This model's emphasis on that a potentially stressful event will produce primary appraisal process in which an individual will assesses the degree of threat in relation to his or her wellbeing. When stimulus is perceived as threatening or challenge, the secondary appraisal will be activated. Individual will then engage in secondary appraisal to deal with situation & concerns coping options change undesirable conditions. The stress results will then feed back to the cognitive appraisal stages for further actions if required.

## 1.1 Transactional model of stress

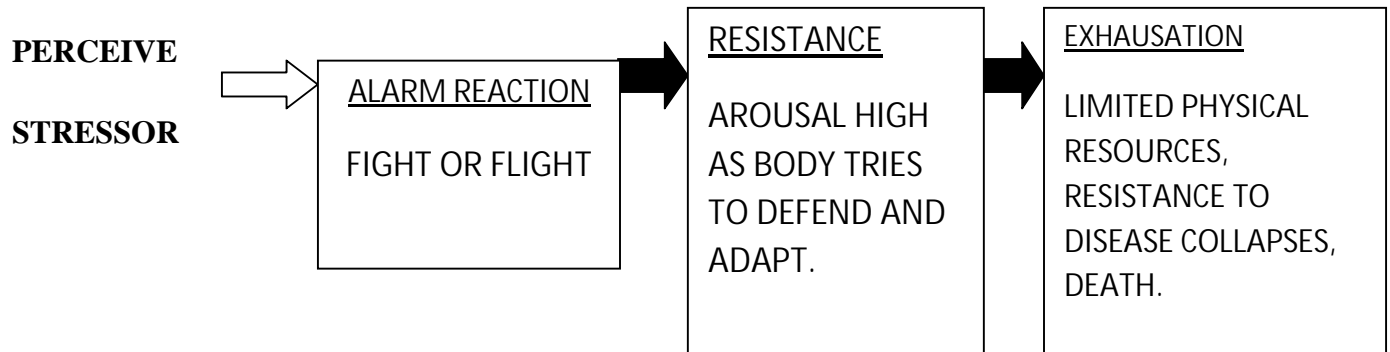


### General adaption syndrome

**Selye's** general adaption syndrome (GAS) was produced in 1956 and designated three stages in the stress process (Selye 1956). The first stage was called the **alarm stage**, which can be recognized as rise in activity, and happened soon after the individual was exposed to stressful situation.

Another stage was called **resistance**, in which involved coping and attempts to flashback the effects of alarm stage. The third stage was called **exhaustion**, it is the final stage after resistance, when the individual had been continuously exposed to the stressful situation and was incapable of facing further resistance.

## 1.2 GENERAL ADAPTATION SYNDROME



Apart from the above mention model of stress, yet there is one more technique .That is helpful in reducing stress. Most of the medical or psychology practitioner recommends this technique to the people who are having stress. This simple technique is known as meditation.

### 1.5 Meditation

We can metaphor our mind to an elephant. There is no harm and destruction, when an elephant is at its calm state. Ironically, when they turn into wild, it causes harm and destruction. Our mind is similar to an elephant. To tame our mind and reversed it back to calm state. We can use meditation technique. Meditation can help us to bring calm and reduce lots of unskilled thoughts. Meditation is the medium to change the emotional from Anger to Calm, Hatred to love. Meditation can be done by closing your eyes and repeating mantra. Mantra can be murmured by individual choice.

His holiness the 14<sup>th</sup> Dalai Lama defined meditation as “Meditation simply means transformation of mind”. The English word meditation has its origin from the Latin word **meditatio** meaning “to think, contemplate, and devise pounder”. The considered Tibetan word of meditation”gom”means to become familiar with states that are beneficial, concentration, compassion, correct understanding, patience, humility, perseverance.

In generally speaking meditation is defined as training one’s mind to bring calm and bring skilled thoughts into one self. The main purpose in our life is happiness. To achieved this happiness. We need to gain mental happiness. Happiness is of two kinds. **Mental comfort and**

**Physical comfort.** Among this two, mental comfort is much more superior. It is because, if our mental is clam, happy then small physical comfort, even small pain. We can subdue. On other hand, the mind is very restless or uncomfortable. The person may have best facilities but he may not be happy and full of worry. This worry leads him to stress. Therefore mental comfort is more important than physical comfort. We human are unique animal. We can train our mind. We can minimize this negative thoughts or unskilled thoughts. To train our mind is known as meditation. So there are positive relations between meditation, mental happiness, and stress. There is absent of mental happiness, who are suffering from stress. To overcome with this stress, we need to train our mind. In nutshell, we need to do meditation. By doing meditation, it brings mental calm. This mental calm will lead to mental happiness. If mental happiness prevails, Stress is nowhere to be noticed.

### **Types of meditation**

Different types of meditation are available to help us to keep our body and mind healthy. Existence of meditation technique was there from ancient period. The use of meditation have been influenced by eastern culture. In ancient time people use to meditate to enlighten. With changes in time, now a day's people use meditation to gain peace and control your own minds and welcome skilled thoughts. Different types of meditation techniques that have evolved from different religion can be classified under five categories.

- **Concentration**
- **Reflective meditation**
- **Creative meditation**
- **Mindfulness meditation**
- **Heart centered meditation**

### **Concentration meditation**



Concentration meditation is emphasis on concentration. It is because, in order to gain the fruits of meditation, you need to train the mind to concentrate and focus on an objects or nothingness, which will help in cutting distractions. It will allow your mind to be at calm state and awaken your thoughts.

### **Reflective meditation**

Reflective meditation is also known as analytical meditation and refers to **disciplined thinking**. In order to successfully practice reflective meditation, you will need to choose a question, theme, or topic and focus your analysis or reflection upon it. Initially, your thoughts may wander to other topics but then you need to train your mind to come back to the topic in question. In order to do this, you need to learn concentration meditation first.

### **Creative meditation**

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.

### **Mindfulness meditation**

Mindfulness meditation is one 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. It is one of the important meditation types that help you 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.

## **Heart centered meditation**

Heart-centered meditation will help you release all your 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 you to heal your heart and that of others.

So these are the five different types of meditation which are known to us commonly. They are very useful in bringing peace and stability in the mind.

## **USES OF MEDITATION**

In this running century, people are getting busier and they are totally forget about caring their health. They are putting too much pressure on their mind. With the reason of this pressure, they became the victim of mental ill like stress, anxiety, and fear. They sometime suffering from depression. to overcome this problem. Meditation is useful in reducing this suffering and there is no side effect of it.



# **REVIEW OF LITERATURE**

The issue of stress is very common. Almost millions of people are facing the problem of stress. Yet, people are ignoring the problem of stress, because they can't measure the consequences of stress. Stress can cause us harmful disease. Some people are aware of the consequences of stress and they are seeking the therapy. Many research had been conduct and still on search. Some of the research that had done on stress reduction have summarized below.

**Charu M. (2013).** He in his study stated that higher stress is directly proportional to quality of work life for IT professionals. He outlined few factors namely fair pay structure, steady role demands, supervisory support, congenial job environment, capability fit of the job, role autonomy and stress that directly affect the quality of work life. The main reason of stress amongst the associates of IT industry is the rapid change in technology.

**Chiesa, Alberto. Serretti, Alessandro. (2008).** Conduct a research on the reduction of stress with the use of mindfulness based stress reduction. Their study was effective and having valid result. MBSR showed a general effect on stress reduction in experimental group rather than control group.it was able to say that mindfulness based stress reduction is helpful in reducing stress.

**Deuskar, M. (2010).** Conduct research on stress reduction through yoga nidra. It contains resolve making, deep muscle relaxation, breathing exercise and imagery. He stick this yoga nidra on 95 working mother. He randomly assigned to an experimental group (42) and control group (53).He provided 30 sessions of yoga nidra for one and half month for experimental group. He conducts a test for both the group. Before this session happen. He uses smith stress symptoms inventory, Blood pressure, Plasma glucose and hemoglobin were selected as parameters of stress.Pre-test and post-test were taken. Univariate analysis of covariance was used for his study. It is concluded that stress can be reduced with the help of yoga nidra. While there is nil effect on control group.

**Disayavanish (1995).** Conduct an exploration on stress reduction. An experimental group of 100Mediators and a control group of 50 non-mediators in Chiangmai, Thailandparticipated

were measured pre/post vipassana meditation retreat. Results confirmed that compared to the control group, participants in the meditation program presented reduced levels of psychopathology based on the following SCL-90-R variables: obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Somatization did not seem to be affected by the meditation treatment. Gender did not appear to moderate the treatment effect.

**Gladies J. J. & Kennedy V. (2011)** - The author revealed a significant correlation between Organizational Climate and Job Stress among the women working in IT companies of India. According to him, learning how to manage stress is a very crucial issue that should be developed in IT companies so that they can reduce or eliminate the causes of stress and poor working environment.

**Goldstein, M, carly. Josephson, Richard. Et al. (2012).**Focus their studies on reduction of stress with the help of meditation techniques. They reviewed landmark studies and recent literature concerning the use of meditation for reducing blood pressure in pre-hypertensive and hypertensive individuals. They sought to highlight underlying assumptions, identify strengths and weaknesses of the research, and suggest avenues for further research, reporting of results, and dissemination of findings. Meditation techniques appear to produce small yet meaningful reductions in blood pressure either as monotherapy or in conjunction with traditional pharmacotherapy. Transcendental meditation and mindfulness-based stress reduction may produce clinically significant reductions in systolic and diastolic blood pressure. More randomized clinical trials are necessary before strong recommendations regarding the use of meditation for high BP can be made.

**Granath et al (2006)** compared the psychological and physiological benefits of a *Kundalini yoga* program and a stress management program based on cognitive behavior therapy principles. Participants in the both groups shared significant improvement in both psychological (self-rated stress and stress behavior as anger, exhaustion, quality of life) and physiological (blood pressure, heart rate, urinary catecholamine's, salivary cortisol) outcomes. There was no

significant difference between the two groups. The authors concluded that both “Cognitive behavior therapy and yoga are promising stress management techniques”.

**Grath, M.C and et al. (2003).**A study was conducted on 177 nurses. Nurse is very tough job and most of the nurse are plunged in stress during their working time. A study was based on avoidance behavior. During the study time nurse try to alleviate their stress with help of avoiding. The study clearly suggests that nurses are avoiding the emotional demands of patients as evidenced by 27% who report this as a cause of stress. It is suggested that a coping mechanism specific to nursing may be that nurses unconsciously reduce stress in their job by setting nursing objectives as physical objectives in their job.

**Grosswald, J, Sarina. Stixrud, R, William. Travis, Fred. (2009).**The main emphasis of study was based on reducing stress. Sample of student belonging to age 11-24 were included in this Study. Exploratory study was used for the study. Student were taught with transcendental meditation to reduce stress and anxiety. They practiced it twice a day in school. After month later, they draw conclusion that this meditation is bringing positive effect in reducing stress and anxiety.

**Harinath et al (2004)** have studied the Effects of *Hatha yoga* and *Omkar* meditation on cardiorespiratory performance, psychological profile, and melanin secretion. They find that Yogic practices for 3 months resulted in an improvement in cardiorespiratory performance and psychological profile. The systolic blood pressure, diastolic blood pressure, mean arterial pressure, and orthostatic tolerance did not show any significant correlation with plasma melanin. However, the maximum night time melanin levels in yoga group showed a significant correlation with well-being score. They conclude that yogic practices can be used as psychophysiology stimuli to increase endogenous secretion of melanin, which, in turn, might be responsible for improved sense of well-being.

**Kavitha. (2012).**The article focuses on the organizational role stress for the employees in the IT sector. It also highlights that women face more stress than men in the organization to be more specific married women faces more stress than the unmarried women.

**Kodavatiganti K. Bulusu V. (2011).**The aim of the article is to have a clear understanding of the phenomenon that causes stress among the academicians. According to the article women educators face comparatively higher level of stress than men counterparts. The stress amongst the academicians are caused because of lengthy working hours, inadequate resources and long working hours, classrooms that are over filled.

**Kumutha, V. Aruna, S. and Poongodi, R. (2014)** studies the effectiveness of progressive muscle relaxation technique on stress and blood pressure among elderly with hypertension. The study was conducted in the selected villages of rural health and training center of SRMC and RI at Vayalanallur.60 elderly with hyper tension in the age of group 60-70 years who are having mild and moderate level of stress and blood pressure. The study group (n=30) demonstrate the progressive muscle relaxation technique for 20 minutes for 21 days. Control group follow routine activities. There was a considerable variation in the level of stress and blood pressure as viewed with compared to control group.

**Patel, P. (2014)** studied to access the effectiveness of progressive muscle relaxation therapy on stress among staff nurses working in selected hospitals at Vododara city. Pretest and posttest experimental design was adopted to achieve the goal of the study by using instrument i.e. demographic data and stress assessment scale among thirty staff nurses. His study concluded that progressive muscle relaxation therapy is effective in reducing the stress level of the staff nurses.

**Pramanik (2009)** studied immediate effect of slow pace *Bhastrika* pranayama (respiratory rate 6/min) for 5 minutes on heart rate and blood pressure and the effect of the same breathing exercise for the same duration of time (5 minutes) following oral intake of hyoscine-N-butylbromide (Buscopan), a parasympathetic blocker drug. Heart rate and blood pressure of volunteers (n = 39, age = 25-40 years) was recorded following standard procedure. First, subjects had to sit comfortably in an easy and steady posture (*sukhasana*) on a fairly soft seat placed on the floor keeping head, neck, and trunk erect, eyes closed, and the other muscles reasonably loose. The subject is directed to inhale through both nostrils slowly up to the maximum for about 4 seconds and then exhale slowly up to the maximum through both nostrils for about 6 seconds.

The breathing must not be abdominal. After 5 minutes of this breathing practice, the blood pressure and heart rate again were recorded in the aforesaid manner using the same instrument. The other group (n = 10) took part in another study where their blood pressure and heart rate were recorded following half an hour of oral intake of hyoscine-N-butylbromide 20 mg. his study concluded that there is positive effect of yoga on reducing heart rate and blood pressure.

**Rainforth, V, Maxwell. Schneider, H, Robert. Et al. (2007).** Their studies indicate that stress is influencing in hypertension and cardio vascular disease. With this they are focusing on the reduction of stress with help of intervention. Therefore, they conducted an updated systematic review of the published literature and identified 107 studies on stress reduction and BP. Seventeen trials with 23 treatment comparisons and 960 participants with elevated BP met criteria for well-designed randomized controlled trials and were replicated within intervention categories. They have used bio feedback, relaxation-assisted bio-feedback, progressive muscle relaxation, stress management training, and transcendental meditation. Their studies had concluded that these intervention are helpful in reducing stress and especially with transcendental meditation bring significant reduction in stress.

**Reshma, and Salins, (2012)** Conducted a research on the effect of relaxation therapy on mild pregnancy induced hypertension. Their studies examines the efficiency of relaxation therapy on the level of stress and physiological parameters among the antenatal mothers with mild pregnancy Induced hypertension. Quasi experimental approach was accepted in the study to assess the effectiveness of relaxation therapy. They showed this experiment with 30 samples with paired t test method. In the result, they conclude that this relaxation therapy bring positive result in reducing stress.

**Sharma S., Sharma J. Devi A. (2012).**The level of stress within a role varies because of individual differences in mindset, age, gender, and their performance in job. However, various factors that influence stress are age where the younger employees are more stressed as compared to other employees, level of qualification, pay, and authorities of control, awards, and word of praise, improved designations and working couples. The study recommended a reinforcement approach that should be positive in nature so as to reduce the degree of stress at the workplace.



**Srivastav A.K. (2010)** the articles focus on the nature of role that causes stress. It says role performance encountered the problems of stress so they should be tried to reduce or eliminated. The nature of role stress was found to be heterogeneous which cannot be dealt with one uniform solution or intervention as a whole. Hence, specific problem related solution or interventions should be adapted for better organizational performance and effectiveness.

**Sundaram, Divya. Et al (2014).** The study was conducted on a sample of college students between 18-21 years of age including purposive sample sized 100(50 boys and 50 girls) college students from Bangalore. The Five Facet Mindfulness Questionnaire (FFMQ) was used to measure the level of mindfulness among the subjects and the pre-test, post-test model was used to compare the mindfulness of the participants before and after rendering relaxation therapy.it was concluded that mindfulness was better under the influence of relaxation training as it helped in a more relaxed and hence reduced anxiety and depression.

**Teymuri, and Gorji. (2013)** studies the effectiveness of relaxation and exercise in stress and anxiety of students. Their study was conducted in order to associate the effects of exercise and progressive relaxation therapy in lowering levels of stress and anxiety to examine the efficacy of two methods. They randomly assigned 120 samples (60 male and 60 female) to one of three conditions. They use paired t test and analysis of variance for their method. Their result concluded that it is effective in reducing stress.

**Upadhyay (2008).**The responses of Alternate Nostril Breathing (ANB) the *Nadisudhi* pranayama on some cardio-respiratory functions were investigated in healthy young adults. The subjects performed ANB exercise (15 minutes every day in the morning) for four weeks. Cardio-respiratory parameters were recorded before 68 and after 4-weeks training period. A significant increment in Peak expiratory flow rate (PEFR L/min) and Pulse pressure (PP) was noted. Although Systolic blood pressure (SBP) was decreased insignificantly, the significant decrease in pulse rate (PR), respiratory rate (RR), diastolic blood pressure (DBP) was shown from their studies. Results indicate that regular practice of ANB (*nadisudhi*) increases parasympathetic activity.

**Weiss M. (1983).** -The Author investigated the sources of Job stress that is linked to Job dissatisfaction, Job related tension and anxiety and reduced productivity and effectiveness. He tried to reduce sources of stress so that he can prevent the deleterious health consequences. Through his study he determined the potential of social support that alleviate the deleterious consequences of stress.

So these are some of research conduct by different researcher. All of their research were mainly based on the reduction of stress, anxiety, and depression with the help of meditation and yoga. This intervention is really helpful in reducing stress.

## **2.1 Statement of problem**

In this modern world, peoples are the victims of stress. Very few people are aware of stress and its effects. Even if they did, they are not taking care of it. Harshness, competition, rivalry are putting most of people into stress. People are failing to cope with it. Due to this reason, their minor stress became chronic stress. It leads to harmful disease like coronary heart disease, diabetes, heart attack, that can cause death. So there are lots of coping methods to overcome stress. Meditation is one of them and very effective one. The present study aimed to study the effectiveness of meditation on reducing stress level.

## **2.2 Objectives**

While focusing on this study, following objectives were framed for the present study.

- I. To study the effect of meditation on the stress level of young adults.
- II. To study the change in the level of pretest and posttest conditions among young adults of experimental group and control group.

## **2.3 Hypothesis**

The meditation technique will be effective in reducing the stress level of young adults.

- I. The mediation will be effective in reducing the stress level of young adults.
- II .The scores of control group will remain the same in two test conditions i.e. pretest and posttest whereas the scores of experimental group in posttest will reduce in comparison to pretest conditions.



# CHAPTER III

## **METHOD AND PROCEDURE**

To conduct a research, it is very essential to have a research method. Proper method helps to obtain valid results. It also adds reliability in the research. The purpose of the present research was to study the effect of meditation on reducing stress. The following methods and procedures were used to study these correlates. This chapter is organized under following headings.

- Research design
- Sampling
- Psychological measure
- Stastical technique

### **3.1 Research design**

This study is Quasi experimental in nature. Convenience sampling method was implemented to collect the 80 sample. Sample was divided into experimental group (N=40) and control group (N=40).Pre-test and post –test was conducted for both the groups. Ten days meditation intervention was given only to experimental group for 30 minutes. In this session they will perform three meditation techniques. No intervention was given to control group. Following 10 days, posttest was conduct for both groups. Paired t-tests was applied to obtain the results.

### **3.2 Sampling**

In the present study, 80 young adults were taken with the help of convenience sampling. Their age ranges from19-25 years. Sample was further divided into experimental and control group. Experimental group was given intervention (meditation) for 10 days for 30 minutes. Whereas, control group was not given any intervention.

### **3.3 Psychological Measure**

Following test was used in the present study to collect the required information from the subjects. A brief description of the test is given below.

**Perceived stress scale: -** (PSS 10, Cohen and Williamson, 1998)

Perceived stress scale was developed by Cohen and Williamson in the year 1998 to measure the stress level of an individual. It contain 10 question with four options. It is a four point rating

scale. Subject has to read the question carefully and tick on his or her preferred much answered 0(never), 1(almost never), 2(sometimes), 3(fairly often), 4(very often).

**Scoring-**Rules of scoring is simple for this perceived stress scale. Apparently this is four rating scale. So the scoring ranges from 0 to 4. If the subject has tick on option number 1 then he/she will be awarded 1 mark. In the same way if she /he tick on option no 0 then subject will score 0. Maximum mark should be four and minimum will be zero. After scoring, add all the marks. It can be interpret as 0-12 is low stress level, 13-25 is average and 25-40 is high stress level.

Along with the test, meditation was used as an intervention for reducing stress level. The description of the process and procedure of meditation is described as follows-

**Meditation technique:** - Meditation is mainly used to train ones individual's mind. So that you can control your unskilled thought. If one succeed in controlling ones unskilled thought. There is less chance of anxiety, stress, and depression. There are three steps in this meditation technique. First two are based on concentration and last one is based on breathing.

**Analytical technique-**it is a kind of meditation where you can focus on one thing and try to analyze it. In this kind of meditation we are analyzing the cause and effect of things that you are holding in your mind to focus. For example:-analysis of anger

**Single pointed mind:** It is a method where you simply close your eyes and emphasize on one thing. In this kind of meditation, Where we have to focus on one thing, but this cannot happen immediately when you are closing your eye. You have to be patient for this. For example: focus on match stick, your love one, your beloved god.

**Breathing:** It is a kind of meditation where you simply focus on breathing process (inhale and exhale).while doing meditation, you are focusing on breathing and it will help you in reducing your maladaptive thought.

The entire student involved in the experimental group practiced this three step meditation technique for 30 minutes for 10 days.

### **3.4 Statistical technique**

Paired t-test was used to compare a sample group's scores before and after an intervention i.e. the paired t-test compares how a group of subjects perform in two different test conditions.



**CHAPTER IV**

**RESULT  
AND  
DISCUSSION**



The purpose of the research was to study the effectiveness of meditation in reducing the stress level of young adults. A sample of 80 young adults was taken for the study. They were further divided into two groups (control group and experimental group). Firstly, stress level of both experimental and control group was assessed with the help of Cohen Perceived Stress Scale. This phase is called as pre-test. After that meditation was used as an intervention for experimental group only. They performed meditation for 30 minutes for 10 days. Whereas, Control group was not given any intervention. After 10 days the stress level of both the groups was assessed again. This phase is called as post-test.

The results are presented in the table 4.1. The table revealed that there is no significant differences between pretest and posttest of control group ( $t=-.518$ ) but there is significant difference between pretest and posttest of experimental group ( $t=10.124$ ). The lower mean score of stress ( $X=15.25$ ) in posttest than the pretest ( $X=23.85$ ) of the experimental group suggest that the meditation is remarkably able to reduce the stress level of young adults. Whereas there is no much difference between the mean scores of stress in pretest ( $X=22.475$ ) and posttest ( $X=22.7500$ ) of control group.

**Table no 4.1 Showing Mean, SD and t-value of Control Group and Experimental Group**

GROUP	PRETEST STRESS		POSTTEST STRESS		t-value
	MEAN	SD	MEAN	SD	
<b>CONTROL GROUP</b>	<b>22.47</b>	<b>4.79</b>	<b>22.75</b>	<b>5.59</b>	<b>-.518</b>
<b>EXPERIMENTAL GROUP</b>	<b>23.85</b>	<b>6.03</b>	<b>15.25</b>	<b>3.12</b>	<b>10.124**</b>

\*\*Significant at 0.01 level

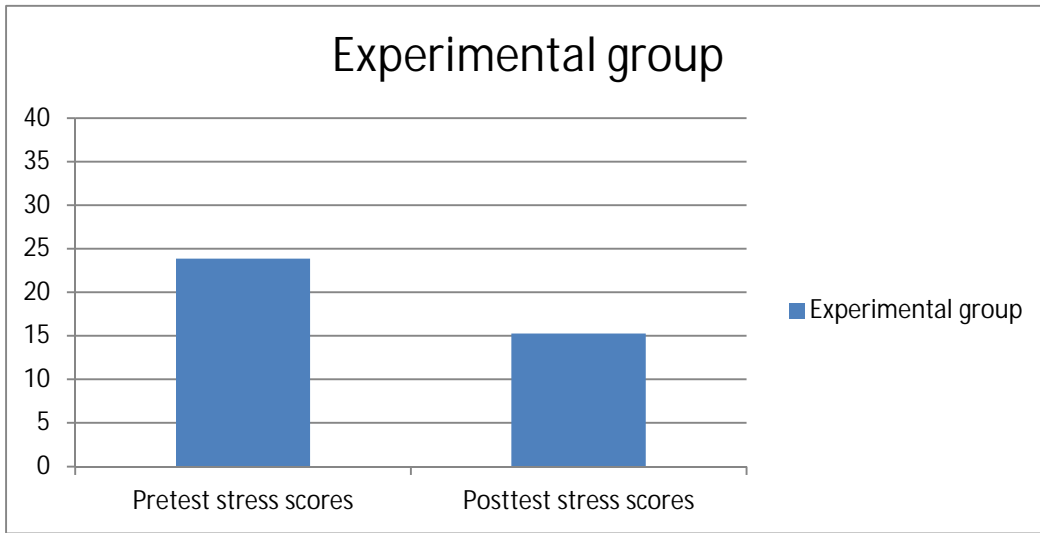
The results revealed that students in the experimental group experienced significant reduction in their stress level but control group did not experience any such reduction in their stress level. The reduction in the stress level of experimental group can be attributed to the meditation which was done by this group for 10 days for 30 minutes.

During meditation session, initially students were not so serious and feeling a little bit awkward to perform meditation. While performing meditation, they were looking at each other face and smiling. In order to make them feel comfortable the students were encouraged and proper procedure of meditation was taught to them. After that they started doing it in a much better way.

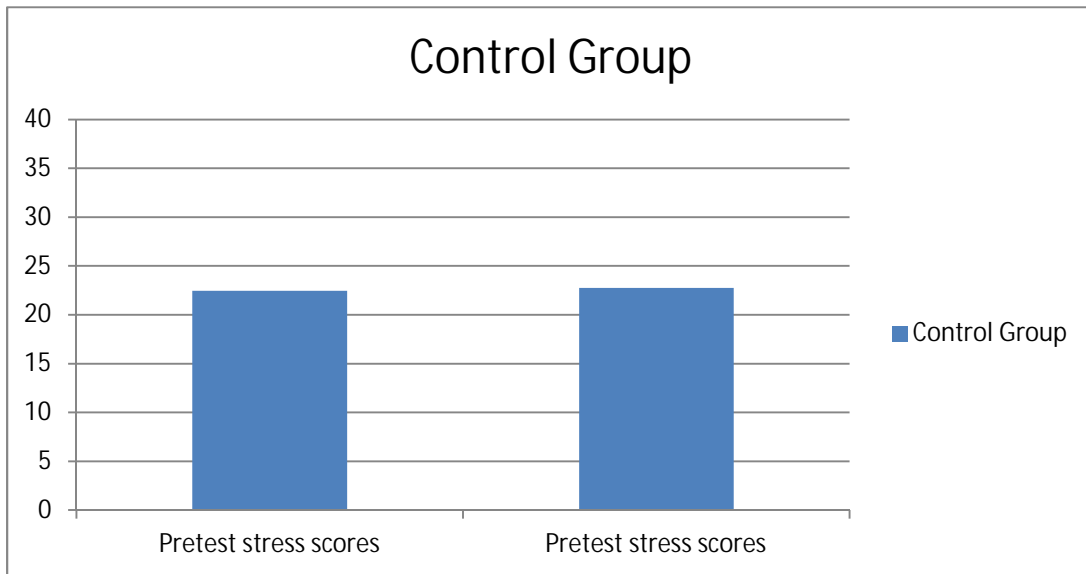
Meditation simply means transformation of negative thoughts into positive thought, to replace an unskilled thought with a skilled thought. While doing meditation it brings lots of change in the psychological and physiological functions of an individual. Meditation removes all of our negative thoughts and fills our mind with positive thoughts. It will make person to think and act calmly (HH the 14<sup>TH</sup> Dalai Lama, 2012).

Meditation also brings lots of change in the physiological functioning of an individual. It can reduce the blood pressure and can bring persons heart beat to normal level (Goldstein, 2012).

#### 4.1 Showing the Mean score of pretest and posttest of experimental group



#### 4.2 Showing the Mean score of pretest and posttest of control group



#### 4.4 Conclusion

Meditation was effective in reducing stress level of young adults. Those who were in the experimental group showed significant reduction in their stress level. Hence, the hypothesis 1

which states that the mediation will be effective in reducing the stress level of young adults is accepted.

Still further, the hypothesis 2 which states that the scores of control group will remain the same in two test conditions i.e. pretest and posttest whereas the scores of experimental group in posttest will reduce in comparison to pretest conditions is also accepted.

Overall, it can be concluded that meditation is an effective way to reduce the stress level of young adults. Doing meditation every day for about 30 minutes can make a person more stable, calm and positive to handle the various hustles and bustles of life.

#### **4.5 FUTURE SCOPE OF MEDITATION**

The present research studies the effect of meditation on the stress level of young adults. Most of the people are becoming the victim of stress and they are ignoring it. They ignore because they are unaware of the consequences of stress. Even if they know, they don't know the ways to cope with it. The present study revealed that meditation is one of the easiest and important techniques in reducing the stress level of young adults. So meditation should be made as an integral part of an individual's life so that a person can successfully and peacefully face the hustles and bustles of life.

##### **Limitations and Suggestions**

- In the present study the sample size was 80 young adults. The sample should be large so that it can be generalized to the population. Gender differences should also be considered.
- The meditation sessions were held for only 10 days but for future studies it is suggested that meditation session should be held for at least 1 month.



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