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Research Article

# Impact of Pyramid Meditation On Anxiety and Stress Among Youth

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**Abstract:** A pyramid is a polyhedron with any base and three or more triangular faces that meet at a point called an apex or a pyramid is a three-dimensional shape with triangular sides. The pyramidal structure is a storehouse of energy. The pyramid is said to have the power to heal your chakras and align your mind. There are three main examples of a pyramid in our real life, are perfume bottles, tents in military camps and the roof of a house. Pyramid meditation is designed to increase vision and for other many benefits such as strengthening eye muscles, improving hearing, lowering blood pressure, relieving arthritis symptoms and treating insomnia. It can also help improve memory and cognitive function, as well as healthy skin and hormonal balance. Now a day, anxiety and stress are common problem among the youth. This study talks about the effect of Pyramid meditation on the variables of stress and anxiety among adults. There are 200 participants participated in this survey out of which 100 were meditation practitioners and other 100 participants were non-practitioners. To assess the level of anxiety, Beck Anxiety Inventory and for stress, perceived stress scale by Cohen were administered. The data was processed using statistical computations like mean, median, mode and standard deviation. The results reflected a significant difference between the scores of meditation practitioners and non-practitioner youths. It was found that those who practice pyramid meditation had considerably low level of anxiety and stress than that of those who do not meditate.

**Key words-** Anxiety, Stress, Pyramid Meditation, Meditation, Spirituality, Meditative and Non-meditative.

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## 1. INTRODUCTION

Anxiety and stress are contemplated as the body's spontaneous reciprocation to any stressful episode. These are considered as notions of fear or uneasiness about what's to come in the near future. One may feel nervous and fearful while going to attend an interview for job, or delivering a speech, or doing anything new which one doesn't have experience of. But, if these opinions are tremendous, exit for more than six months, and are intrusive with daily chores, one may encompass an anxiety disorder. One of the most common forms of emotional disorders is anxiety disorder and can affect anyone at any age[1]. As per the definition by the Association, the vulnerability of women is more than men to be diagnosed with an anxiety disorder. The APA (American Psychological Association) defines anxiety as "an emotion characterized by feelings of tension, worried thoughts and physical changes like increased pressure. "If one's ability to observe keenly can lead to distinguish between normal feelings of anxiety and an anxiety disorder that needs therapeutic attention. K Jacobs and his co-worker characterize anxiety as an overpowering sense of uneasiness; the belief that something not good is occurring or will occur; a class of mental disorders characterized by debilitating and chronic anxiety (for example: panic disorder, generalized anxiety disorder, post-traumatic stress disorder and phobias. Other than anxiety, there are many mental health conditions which are mistakenly considered as anxiety by people in general but require different streamline to be explored like in the fast pace of life, stress is also one of the most common experiences that people witness[2]. *Stress is a kind of feeling related to emotional or physical tension. Such event of tension may occur due to any thought or happening that makes the person feel frustrated, angry, or nervous. Another form of Stress is the response of the body to a demand or challenge of the event. Sometimes it is taken in a positive way also as it can help an individual to avoid danger and meet a deadline.* The very first attempt to define stress was done in 1936 by Hans Selye. As Hans Selye (1936) states "the stress is non-specific response of the body to any demand for change". When it comes to time and energy, everyone has it in limited quantity but the expectations from the same amount of time and energy is increasing day by day which as a result has created an alarming situation for aspirants in general and researchers to develop more effective ways to cope up with the pressure of being able to achieve everything that one aspires. Many therapies have been developed and effectively used for the same purpose and at the same time after slight modification some of the ancient spiritual practices like meditation are also being used to ease down the disturbed state[3]. Etymological background of the word 'Meditation' puts forth the Latin expression 'meditatio', from a verb meditari, which means "to think, to devise, to contemplate". The oldest proof of the practice of meditation is found in Hindu scripture, Tantra Sutra in which Adi yogi Shiva introduced 112 types of meditation techniques which are said to be designed for 112 types of human beings to uplift the level of the consciousness. Later Yog Rishi, Patanjali introduced a chain of practices to reach the state of awareness. In his Yog Sutra, he introduced eight steps- Yam, Niyam, Aasan, Pranayam, Dharna, Dhyan, Samadhi. Patanjali's model stresses more on premeditative physical and mental readiness of an individual. He talked about the principles of lifestyle, rules, and regulations, physical fitness, balanced diet, breathing exercises and then meditative state. In addition to this, modern development of mediational practices as means of psychological wellbeing has its origin from the early references of some of the spiritual practices as discussed in some or other scriptures[4-5]. A key concern in the psychological investigative processes of meditation is the lack of an operational definition. Still, researchers and practitioners are trying to develop a scientific understanding of these practices. In present-day psychological literature, meditation is utilized as a generic and wide term to comprise all those diverse connotations of yoga as a spiritual discipline and of dhyana and upasana. Second, the term reveals to the understanding of other set of practices which are quite popular among various traditions like Budhism, Christianity, Taoism, Jewish, etc. Third, it also covers many other psychological techniques developed by researchers, for example, Clinically Standardized Meditation by Carrington. Relaxation, breathing deliberately, closing the eyes, focusing attention on an entity, repeating sounds mentally, looking into the thought process with no judgment, rhythmical movement of the body, and so on are all well thought of as meditation. Carrington (1987) noted that the term is utilized as a "conglomerate word" and according to this concept; numerous "*different* techniques and intents" are grouped[6]. Shapiro (1982) referred to meditation as "a family of techniques which have in common a conscious attempt to focus attention in a non-analytical way and an attempt not to dwell on discursive, ruminating thought". As a result, it can infer that meditation is an umbrella term, which subsumes a number of diverse practices. In the ancient times the purpose of meditation used to be the development of consciousness but in modern era the focus has been shifted to mental wellbeing only[7]. Such paradigm shift in the priorities related to the outcome of the meditational practices has resulted in the reshaping of existing practices, like:

- Dynamic Meditation
- Mindfulness-based Meditation Training (MMT)
- Mantra Meditation (chanting)
- Mindfulness Based Stress Reduction Program (MBSR)
- Sudarshan Kriya
- AnapansatiYog (Breathing) Meditation

### *1.1 Background of Research*

### *1.2 Meditation and Anxiety*

Stinson and his co-worker conducted quasi experimental study on 49 nursing students to assess the success of mindfulness meditation on anxiety. A statistically significant decrease in trait anxiety was noticed in the intervention[8]. Reive and his co-worker examined the effects of a 10-week MMI on neurophysiology, in age group of 7 to 10 years. Preliminary results exemplified the potentially positive effects of mindfulness meditation on preadolescents; this time on neurophysiologic functioning[9]. Gul and his co-worker assessed the success of MBSRP (Mindfulness based stress reduction program) and SM (Sufi Meditation) in the treatment of females' Neurotic anxiety. Results revealed that SM was more successful in reducing anxiety apparently[10]. The reason being that the Muslim population's belief system matches to SM. This provided a fresh way to future research. Vernon and his team member investigated the efficacy of Transcendental Meditation on active-duty military service members with anxiety and PTSD[11]. The results revealed that

active-duty military Service Members with PTSD or ADNOS who regularly practice Transcendental Meditation (TM), in addition to getting traditional treatments, experienced reduction in medication reliance and the severity of psychological symptoms compared with those who didn't participate in TM but received same therapies.

### *1.3 Meditation and Stress*

In the course of longitudinal, quasi-experimental research, Croswell and Yun examined virtual meditation as a stress management policy on educational institutions. Traces were found to support of the effectiveness of sound meditation or self-guided meditation in comparison with VR meditation method[12]. GoldsteinEllen. et al., conducted a randomized controlled trial to investigate the success of exercise training and mindfulness on indicators of stress and mental health by investigating the shared mediators of program effects. Findings supported that both exercise training and mindfulness can potentially get better global mental health, together with adaptive responses to stress[13]. Zollars, Irene. et al., assessed the impact of mindfulness meditation on mindfulness, perceived stress and mental well-being. The results suggested that by and large mental health of participants was improved by practice[14]. Nomusankar S. and Balaji investigated the impact of Yoga and Meditation on Stress levels of Industrial Employees.The comparative analysis of both the scores obtained from Pre and Post-tests suggested that both meditation and yoga can potentially reduce the stress levels of the individuals[15].

### *1.4 Meditation, Stress and Anxiety*

Walker, Annette Rosemarie assessed the efficacy of mindfulness meditation as a spiritual practice to manage work related stress and anxiety among Jamaican secondary school principals[16]. The results found the technique helpful for the participants to reduce their work-related stress. A meta-analysis was conducted by Breedveltet al. to assess the effects of meditation, yoga and mindfulness on depression, anxiety and stress in students[17]. Moderate effects were noticed which decreased substantially when the interventions were compared to active control. Assessed the impact of Meditation Intervention and Yoga was assessed by Lemay **et al.,** on Students' Anxiety and Stress Levels. The outcomes demonstrated the benefits of yoga and meditation to manage the stress of academic life, anxiety and mindfulness[18]. Paul investigated the capacity of Mindfulness Meditation to manage Anxiety and Stress in nursing students. Significant reduction in the level of anxiety was noticed in biofeedback group among the three groups at post-intervention[19].

### *1.5 Types of Meditation[20]*

a) Buddhist Meditation Techniques
Loving Kindness Meditation (Metta Meditation) (LKM)
Mindfulness-Meditation (MnM) Vipassana Meditation (VM)
Zen Meditation (Zazen) (ZM)
b) Chinese Meditation Techniques
Qigong Meditation / Chi kung Meditation (QM / CkM)
Taoist Meditation (TaM)
c) Christian Meditation (ChrM)
d) Guided Meditation / Visualization Meditation (GuM / ViM)
e) Hindu Meditation Techniques
Mantra Meditation / Chanting Meditation (MnM / ChM)
Self-Enquiry and "I Am" Meditation (SEIAM)
Transcendental Meditation (TM) (TM)
Yoga Meditation (YM)
f) Sufi Meditation Techniques Sufi Meditation (SuM)

## 2. MATERIALS AND METHODS

### *2.1 The objectives of the study*

- To study Anxiety among meditation and non-meditation groups of adults.
- To study stress among meditation and non-meditation groups of adults.
- To compare the stress among adults due to interaction between meditative and anxiety among adults.

### *2.2 Hypothesis*

- There will be a significant difference in anxiety levels between meditative and non-meditative groups of adults.
- There will be a significant difference in stress levels between meditative and non-meditative groups of adults.
- There will be a significant difference in stress among adults due to interaction between meditative and anxiety among adults.

### *2.3 Data Collection*

The survey has been conducted at Swami Vivekan and Meditation Pyramid Centre, Ludhiana, Punjab. Wherein, practitioners come weekly and proper sessions of meditation (anapansatiyog). The meditation conducted under the supervision of experienced and certified instructors, after obtaining the needed approval from the said organization [21]. For Inclusion criteria concern, sample of 100 non-practitioners were collected. Also, Exclusion criteria concern, random sampling was conducted on 100 participants in the Ludhiana district who had never meditated in their life. The whole study was conducted on 200 participants from two different groups of adults [22]. One group consisted of a hundred participants who had been meditating for at least last six months [23].

### *2.4 Meditation Technique*

Anapanasati meditation technique associated with Pyramid structure was used in the intervention. In Anapansati, Ana means 'in breath', Apana means 'out breath' and Sati means 'be with'. Meditation done inside a pyramid is considered thrice more powerful in terms of energy. Current structure including instructions and guidelines of the meditation technique was pioneered by Patriji and popularized by PSSM (Pyramid Spiritual Society Movement) [24]. The meditation practice involved the instructions like-sit properly in a comfortable body posture, relax the body and then start paying attention to the inhalation and exhalation of the breath. Apart from the practice, it is required to keep a pyramid in the hands or hang above the head. There are specific guidelines about the structure of the pyramid which involves each side of the pyramid must rise at an angle of

51-51.5 degrees to the top but no suggestions are given about the material to be used to make the pyramid.

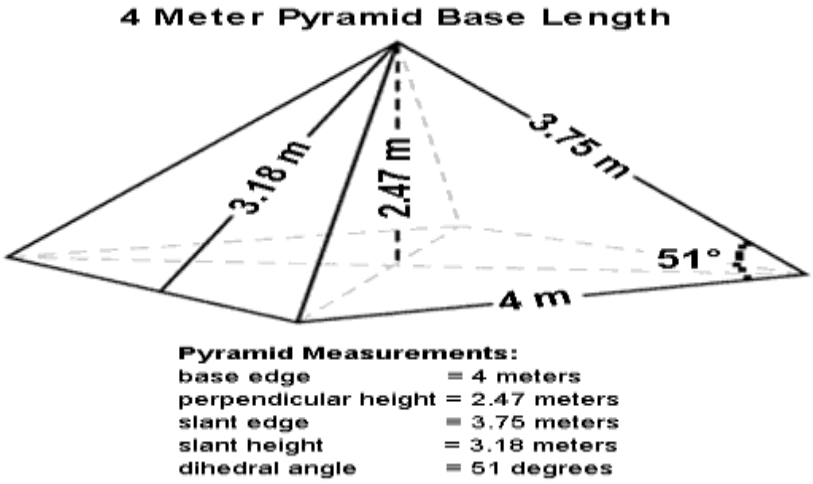



**Fig 1. 4 Meter Pyramid Base Length**

### *2.5 Tools Used*

- Beck Depression Inventory II by Aaron T. Beck, Robert A. Steer, and Gregory K. Brown
- Perceived Stress Scale (PSS) by Sheldon Cohen.

## 3. DATA ANALYSIS AND INTERPRETATION

The research strives for scientific and empirical solution of the problem which calls for collection of data from the sample selected out of target population and then the analysis and interpretation of the collected data to reach at the conclusion. This segment is the core of the research as it presents the brief picture to the data along with the meaning underlying. For interpretation, the existing complex factors are divided into simple facts and these simple facts are put collectively in the new arrangement [25]. It indicates the significant facts and associations to give sense to the data and also gives convinced generalizations on the data [26]. This study was carried out with the objective to study the effect of meditation on stress and anxiety among meditative and non-meditative groups of adults. The goal was achieved in the framework of the hypotheses. The data pertaining to anxiety and stress were collected from 200 adults consisting of 100 meditative and 100 non-meditative adults. Various statistical methods have been used to analyze the data in order to screen the data for meaningful purpose and to test the hypotheses. Two types of analysis were carried out for this purpose:

(i) Description of the scores presented in terms of the frequency distribution, mean, median, mode, S.D., skewness and kurtosis.

(ii) For inferential purpose, to compare anxiety and stress among meditative and non-meditative groups of adults, t-ratio has been calculated;

(iii) To compare the stress among adults due to interaction between meditative and anxiety among adults, 2x2 ANOVA was employed.

### *3.1 The data is presented in two sections*

**a)** In section I, frequency distribution, mean, median, mode, S.D., skewness and kurtosis are dealt with for the variables of anxiety and stress among meditative and non-meditative groups of adults.

**a)** In section II, two things are dealt with: (i) the significance of difference between means for the variables of anxiety and stress among meditative and non-meditative groups of adults; (ii) significant difference in stress among adults due to interaction between meditative and anxiety among adults.

### *3.2 Section a): Distribution of Scores*

Before performing the authentic analysis of data and discussion of outcomes related to the hypotheses, it is advantageous to express the characteristic of distribution of scores of anxiety and stress of meditative and non-meditative groups of adults in order to make sure whether the condition of basic assumptions implicit in some of the statistical techniques used here were satisfied. The measures of skewness, kurtosis, mean, median, mode and standard deviation have been shown in the Tables 4.1 to 4.12 and figures 4.1 to 4.6 for description of scores.

**Table 4.1 Frequency Distribution of scores of Meditative and Non-meditative Group of Adults on the variable of Anxiety**

| Class Interval | Frequency |
|---|---|
| 5-10 | 3 |
| 10-15 | 43 |
| 15-20 | 65 |
| 20-25 | 46 |
| 25-30 | 28 |
| 30-35 | 12 |
| 35-40 | 3 |
| **Total** | **200** |

***Table 4.1 illustrate that the frequency distribution of scores of Meditative and Non-meditative group of adults on the variable of anxiety of total 200 adults and shows that maximum frequency between the 15-20 interval and the minimum 5-10 and 35-40 interval.***

**Table 4.2 showing Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of scores of Meditative and Non-meditative Group of Adults on the variables of Anxiety**

| Group | Mean | Median | Mode | S.D. | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| **Meditative and Non-meditative Group of Adults** | 19.78 | 19.00 | 17.45 | 6.63 | 0.875 | 0.491 |

For normalcy, the variable of anxiety among meditative and non-meditative groups of adults was tested. Table 4.2 reveals that the values of mean, median and mode of the scores of meditative and non-meditative groups of adults on the variable of anxiety as 19.78, 19.00 and 17.45 respectively which are very near to each other. The values of skewness and kurtosis in case of meditative and non-meditative groups of adults are 0.875 and 0.491 respectively which reveals that the distribution is positively skewed and leptokurtic. These distortions are very less. Hence, there is no harm in taking the distributions as normal.

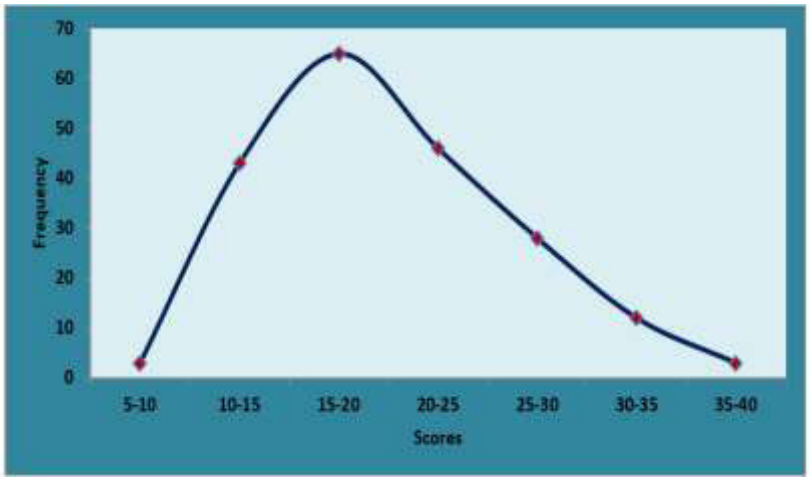



***Fig 4. 1 shows the frequency polygon of scores between meditative and non-meditative group of adults on the variable of Anxiety.***

**Fig. 4.1 Frequency Polygon of scores of Meditative and Non-meditative Group of Adults on the variable of Anxiety**

**Table 4.3 Frequency Distribution of scores of Meditative Group of Adults on the variable of Anxiety**

| Class Interval | Frequency |
|---|---|
| 5-10 | 2 |
| 10-15 | 31 |
| 15-20 | 39 |
| 20-25 | 21 |
| 25-30 | 7 |
| 30-35 | 0 |
| 35-40 | 0 |
| **Total** | **100** |

***Table 4.3 illustrate that the maximum frequency distribution of scores of meditative group of adults on the variable of anxiety shows between 15-20 interval and minimum between 30-40.***

**Table 4.4 showing Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of scores of Meditative Group of Adults on the variable of Anxiety**

| Group | Mean | Median | Mode | S.D. | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| **Meditative Group of Adults** | 16.86 | 17.00 | 17.28 | 3.93 | 0.070 | -0.675 |

For normalcy, the variable of anxiety among meditative group of adults was tested. Table 4.4 reveals that the values of mean, median and mode of the scores of meditative group of adults on the variable of anxiety as 18.86, 17.00 and 17.28 respectively which are very near to each other. The values of skewness and kurtosis in case of meditative group of adults are 0.070 and -0.675 respectively which reveals that the distribution is negatively skewed and platykurtic. These distortions are very less. Hence, there is no harm in taking the distributions as normal.

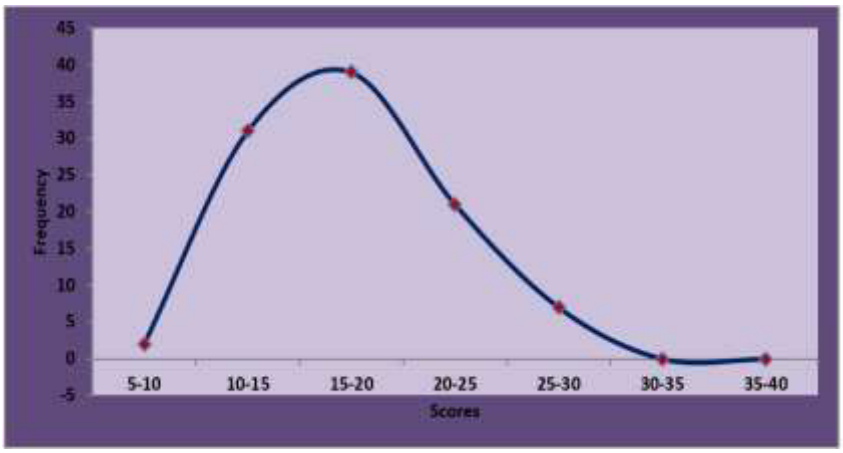



***Fig. 4.2 shows frequency polygons of scores of meditative group of adults on the variable of anxiety is maximum score between 15-20.***

**Fig. 4.2 Frequency Polygon of scores of Meditative Group of Adults on the variable of Anxiety**

| Table 4.5 Frequency Distribution of scores of Non-meditative Group of Adults on the variable of Anxiety | |
|---|---|
| **Class Interval** | **Frequency** |
| 5-10 | 1 |
| 10-15 | 12 |
| 15-20 | 26 |
| 20-25 | 25 |
| 25-30 | 21 |
| 30-35 | 12 |
| 35-40 | 3 |
| **Total** | **100** |

***Table 4.5 illustrate that the frequency distribution of scores of non-meditative group of adults on the variable of anxiety is maximum between 15-20 and not so much difference between 25-30, and minimum between 5-10.***

| Table 4.6 showing Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of scores of Non-meditative Group of Adults on the variable of Anxiety | | | | | | |
|---|---|---|---|---|---|---|
| **Group** | **Mean** | **Median** | **Mode** | **S.D.** | **Skewness** | **Kurtosis** |
| **Non-meditative Group of Adults** | 22.69 | 22.00 | 20.62 | 7.46 | 0.370 | -0.597 |

Or normalcy, the variable of anxiety among non-meditative group of adults was tested. Table 44.6 reveals that the values of mean, median and mode of the scores of non-meditative group of adults on the variable of anxiety are 22.69, 22.00 and 20.62 respectively which are very near to each other. The values of skewness and kurtosis in case of non-meditative group of adults are 0.370 and -0.597 respectively which reveals that the distribution is positively skewed and platykurtic. These distortions are very less. Hence, there is no harm in taking the distributions as normal [27].


***Fig. 4.3 shows frequency polygons of scores of non-meditative group of adults on the variable of anxiety is maximum score between 15-20.***

**Fig. 4.3 Frequency Polygon of scores of Non-meditative Group of Adults on the variable of Anxiety (N=100)**

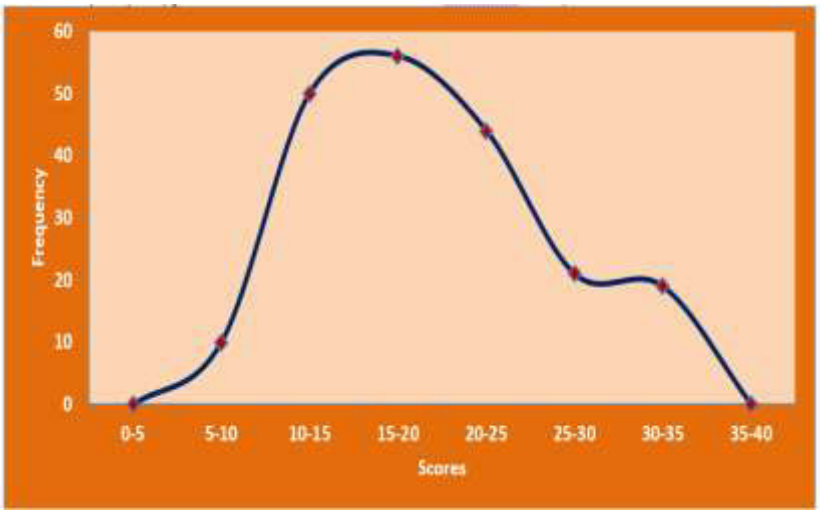
| Table 4.7 Frequency Distribution of scores of Meditative and Non-meditative Group of Adults on the variable of Stress | |
|---|---|
| **Class Interval** | **Frequency** |
| 5-10 | 10 |
| 10-15 | 50 |
| 15-20 | 56 |
| 20-25 | 44 |
| 25-30 | 21 |
| 30-35 | 19 |
| **Total** | **200** |

***Table 4.7 illustrated the frequency distribution of scores of meditative and non-meditative group of adults on the variable of stress is maximum between 15-20.***

**Table 4.8 showing Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of scores of Meditative and Non-meditative Group of Adults on the variable of Stress (N = 200)**

| Group | Mean | Median | Mode | S.D. | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| **Meditative and Non-meditative Group of Adults** | 18.83 | 17.00 | 13.34 | 7.09 | 0.396 | -0.991 |

For normalcy, the variable of stress among meditative and non-meditative groups of adults was tested. Table 4.8 reveals that the values of mean, median and mode of the scores of meditative and non-meditative groups of adults on the variable of stress are 18.83, 17.00 and 13.34 respectively which are very near to each other. The values of skewness and kurtosis in case of meditative and non-meditative groups of adults are 0.396 and -0.991 respectively which reveals that the distribution is positively skewed and platykurtic. These distortions are very less. Hence, there is no harm in taking the distribution as normal.




***Frequency polygon of scores of meditative and non-meditative group of adults on the variable of stress also can see in fig. 4.4. is maximum between 15-20.***

**Fig. 4.4 Frequency Polygon of scores of Meditative and Non-meditative Group of Adults on the variable of Stress**

**Table 4.9 Frequency Distribution of scores of Meditative Group of Adults on the variable of Stress**

| Class Interval | Frequency |
|---|---|
| 5-10 | 5 |
| 10-15 | 39 |
| 15-20 | 36 |
| 20-25 | 17 |
| 25-30 | 2 |
| 30-35 | 1 |
| **Total** | **100** |

***Table 4.9 illustrated that the frequency distribution of scores of meditative group of adults on the variable of stress is maximum between 10-15 but not more difference with 15-20.***

**Table 4.10 showing Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of scores of Meditative Group of Adults on the variable of Stress**

| Group | Mean | Median | Mode | S.D. | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| **Meditative Group of Adults** | 13.76 | 13.50 | 12.98 | 3.72 | 0.831 | 0.989 |

The variable of stress among meditative group of adults was tested for normalcy. Table 4.10 shows that the values of mean, median and mode of the scores of meditative group of adults on the variable of stress as 13.76, 13.50 and 12.98 respectively which are very near to each other. The values of skewness and kurtosis in case of meditative group of adults are 0.831 and 0.989 respectively revealing that distribution is positively skewed and leptokurtic. These distortions are very less. Hence, there is no harm in taking the distribution as normal.

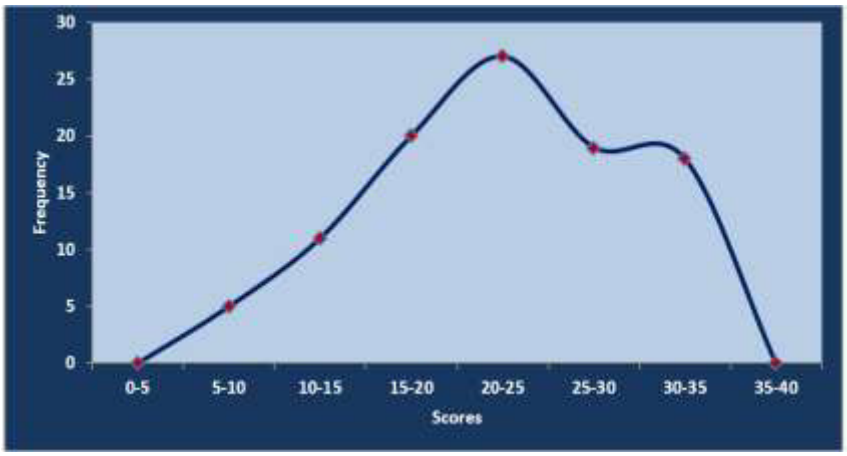



**Fig. 4.5 Frequency Polygon of scores of Meditative Group of Adults on the variable of Stress**

**Table 4.11 Frequency Distribution of scores of Non-meditative Group of Adults on the variable of Stress**

| Class Interval | Frequency |
|---|---|
| 5-10 | 5 |
| 10-15 | 11 |
| 15-20 | 20 |
| 20-25 | 27 |
| 25-30 | 19 |
| 30-35 | 18 |
| **Total** | **100** |

***Table 4.11 illustrated that the frequency distribution of scores of non-meditative group of adults on the variable of stress is maximum and minimum between 20-25 and 5-10 respectively.***

**Table 4.12 showing Mean Median, Mode, Standard Deviation, Skewness and Kurtosis of scores of Non-meditative Group of Adults on the variable of Stress**

| Group | Mean | Median | Mode | S.D. | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| **Non-meditative Group of Adults** | 23.90 | 25.00 | 27.20 | 5.94 | -0.427 | -0.877 |

For normalcy, the variable of stress among non-meditative group of adults was tested. Table 4.12 reveals that the values of mean, median and mode of the scores of non-meditative group of adults on the variable of stress as 23.90, 25.00 and 27.20 respectively which are very near to each other. The values of skewness and kurtosis in case of non-meditative group of adults are -0.427 and -0.877 respectively revealing that the distribution is negatively skewed and platykurtic. These distortions are very less. Hence, therefore there is no harm in taking the distributions as normal.

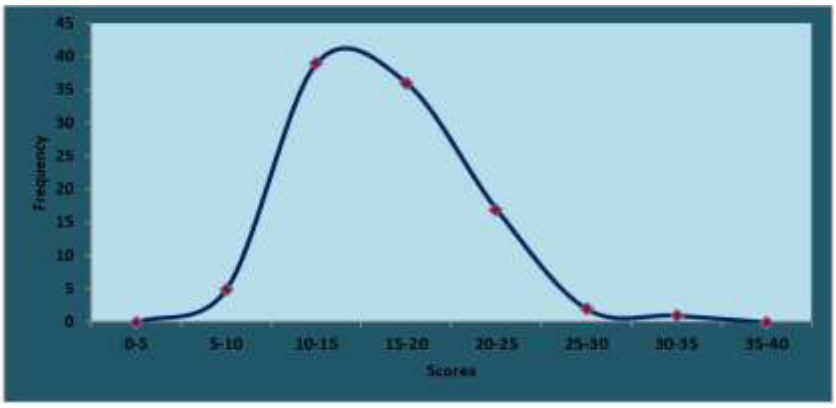



***Fig. 4.6 represents frequency polygon of scores of non-meditative group of adults on the variable of stress is also maximum between10-15.***

**Fig. 4.6 Frequency Polygon of scores of Non-meditative Group of Adults on the variable of Stress**

Tables 4.1-4.12 & Figs. 4.1-4.6 indicate that the meditative and non-meditative groups of adults are normally distributed on the variables of anxiety and stress irrespective of their gender.

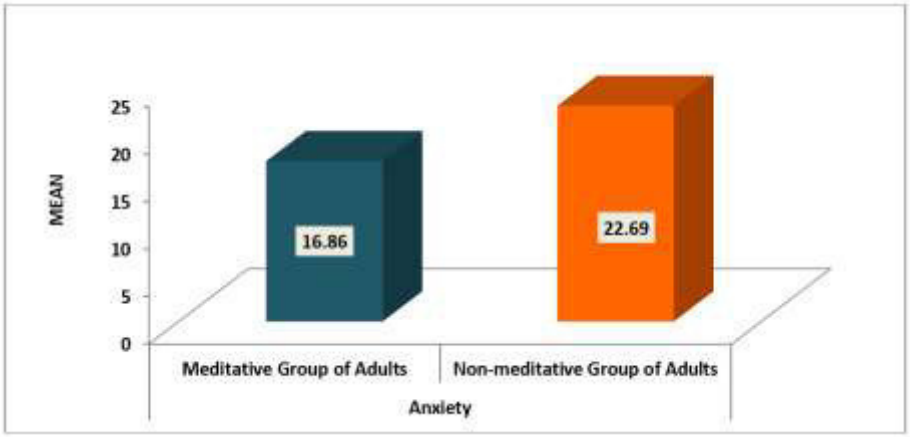
### *3.3 Section b): Significance of difference of means*

To explore the significance of difference between the means, if any, of anxiety and stress of meditative and non-meditative group of adults, anxiety and stress were examined in terms of their scores in the test in these variable and t-test was used.

**Table 4.13 Significance of Difference between Mean Scores of Anxiety among Meditative and Non-meditative Group of Adults**

| Group | Variable | N | M | S.D | $SE_M$ | t-ratio | Sig./Not Sig. |
|---|---|---|---|---|---|---|---|
| **Meditative Group of Adults** | **Anxiety** | 100 | 16.86 | 3.93 | 0.39 | 6.91 | Sig. at .01 level |
| **Non-meditative Group of Adults** | | 100 | 22.69 | 7.46 | 0.75 | | |

Table 4.13 reveals that the mean scores of the variable of anxiety of meditative and non-meditative groups of adults as 16.86 and 22.69 respectively. The t-ratio is calculated as 6.91 with $d_f$=198 which is significant at .01 level. This exposes that there exists a significant difference between mean scores of the variable of anxiety of meditative and non-meditative groups of adults. Therefore, hypothesis **1** which states that 'There will be a significant difference in level of anxiety between meditative and non-meditative groups of adults,' stands accepted.




***As mean score of anxiety of meditative group of adults were found to be lesser than that of non-meditative group of adults, hence it may be concluded further that meditative group of adults have lower level of anxiety than their non-meditative group of adults.***

**Fig. 4.7 Bar Graph showing Difference between Mean Scores of Anxiety a mong Meditative and Non-meditative Group of Adults**

**Table 4.14 Significance of Difference between Mean Scores of Stress among Meditative and Non-meditative Group of Adults**

| Group | Variable | N | M | S.D | $SE_M$ | t-ratio | Sig./Not Sig. |
|---|---|---|---|---|---|---|---|
| Meditative Group of Adults | Stress | 100 | 13.76 | 3.72 | 0.37 | 14.47 | Sig. at .01 level |
| Non-meditative Group of Adults | | 100 | 23.90 | 5.94 | 0.59 | | |

Table 4.14 exposes that the mean scores of the variable of stress of meditative and non-meditative groups of adults as 13.76 and 23.90 respectively. The calculated t-ratio is 14.47 with $d_f$ =198 which is significant at .01 level. This exposes that there exists a significant difference between mean scores of the variable of stress among meditative and non-meditative groups of adults. Therefore, hypothesis **2** which states that 'There will be a significant difference in level of stress between meditative and non-meditative groups of adults,' is accepted.

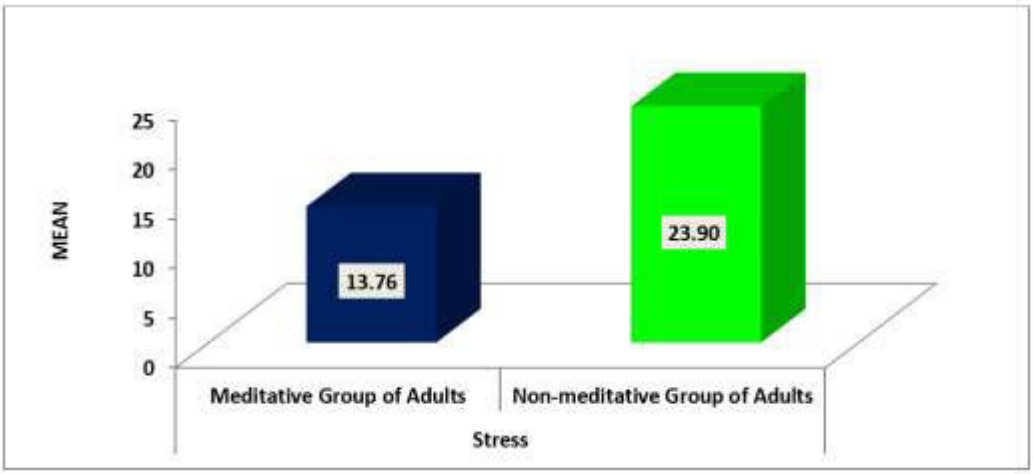



**Fig. 4.8 Bar Graph showing Difference between Mean Scores of Stress among Meditative and Non-meditative Group of Adults**

As mean score of stress of meditative group of adults were found to be lesser than that of non-meditative group of adults, hence it may be concluded further that meditative group of adults have lower level of stress than their non-meditative group of adults. To ascertain the interactional effect of meditation and anxiety on stress among adults, 2x2 ANOVA was employed on the scores of stress with respect to meditation (Meditative and Non-meditative) and anxiety (High and Low). The main and interactional effects of meditation and anxiety on stress among adolescents are given in Table 4.15.

**Table 4.15 showing Summary of 2x2x2 ANOVA of Metacognition, Emotional Intelligence and Family Environment of Adolescent Netizens on the variable of Communication skills**

| Source of Variation | SS | $d_f$ | MS | F-Value |
|---|---|---|---|---|
| Meditation (A) | 979.58 | 1 | 979.58 | 41.24** |
| Anxiety (B) | 216.61 | 1 | 216.61 | 9.12** |
| Meditation x Anxiety(AxB) | 142.11 | 1 | 142.11 | 5.98* |
| Within Group (Error) | 2470.57 | 104 | 23.76 | |
| Total | 4876.25 | 107 | | |

***Significant at 0.05 level**

## 4. DISCUSSIONS

Pyramids are the optimal elevated locations for meditation students. They contribute to the decrease of physical stress and anxiety. The precise angles of the pyramid contribute to the alignment and equilibrium of our physical, mental, emotional, and intellectual bodies. It can help you to improve and correct your vision. There are available courses that can help you strengthen and modify your eye muscles. Pyramid meditation can strengthen and intensify a variety of hearing impairments [28]. Hypertension is a common disorder that can result in a variety of health complications. If daily meditation is practised, this can be significantly reduced. This form of meditation can help you alleviate tension and appreciate life to the utmost. The ability to

cure fractures and broken bones is one of the most remarkable and uncommon benefits of pyramid meditation. This is an excellent option for those with a busy schedule and an active lifestyle [29]. The three most common examples of a pyramid in real life are perfume bottles, tents in military barracks, and house roofs. Pyramid meditation is designed to improve vision as well as provide numerous other benefits, including fortifying eye muscles, enhancing hearing, reducing blood pressure, alleviating arthritis symptoms, and treating insomnia [30]. In addition to enhancing memory and cognitive function, it promotes healthy epidermis and hormonal equilibrium [31]. Nowadays, anxiety and tension are prevalent issues among youth. This study examines the impact of Pyramid meditation on stress and anxiety variables among adults. One hundred meditation practitioners and one hundred non-practitioners participated in this survey, respectively [32]. Beck Anxiety Inventory and Cohen's perceived stress scale were administered to evaluate the level of anxiety and stress, respectively. Statistical calculations such as mean, median, mode, and standard deviation were utilised to analyse the data [33]. There was a significant difference between the scores of adolescents who practised meditation and those who did not [34]. Those who practise pyramid meditation were found to have significantly lower levels of anxiety and tension than those who do not meditate. Anxiety and tension are considered to be the body's natural response to any distressing event. These are regarded as feelings of apprehension or unease regarding the near future. One may feel anxious and apprehensive when attending a job interview, delivering a speech, or attempting anything new for which one has no prior experience [35].

### *4.1 Main influence (a) of Meditation (Meditative and Non-meditative) on Stress of Adolescents*

Table 4.15 reveals that the F value for the difference in mean score of stress with respect to meditation among adolescents came out to be 41.24 which is significant at .01 level. This indicates that stress among adolescents with meditative and non-meditative differ significantly. Hence it may be concluded that the stress among adolescents differ significantly with being meditative and non-meditative.

### *4.2 Main influence (b) of Anxiety (High & Low) on Stress among Adolescents*

Table 4.15 reveals that the F value for the difference in mean score of stress with respect to anxiety among adolescents came out to be 9.12 which is significant at .01 level. This indicates that stress among adolescents with high and low anxiety differs significantly. Hence it may be concluded that the stress among adolescents differ significantly with high and low anxiety levels.

### *4.3 Interactional effect*

### *4.4 Interactional Influence (a X b) of Meditation and Anxiety on Stress of Adolescents*

Table 4.15 reveals that the F value for the difference in mean scores of stress among adolescents due to interaction between meditation (Meditative and Non-meditative) and anxiety (High and Low) came out to be 5.98 which is significant at .05 level. It indicates that adolescent doing meditation and non-meditation and high and low anxiety differ significantly on stress. Hence hypothesis 3 stating, 'There will be a significant difference in stress among adults due to interaction between meditative and anxiety among adults' stands accepted.

## 5 CONCLUSIONS

### *4.5 From The Above Results, Following Conclusions Can Be Drawn*

This study talks about the effect of Pyramid meditation on the variables of stress and anxiety among adults. Both meditative and non-meditative groups of adults are normally distributed on the variable of anxiety separately as well as collectively. The both groups of adults are normally distributed on the variable of stress separately as well as collectively. A significant difference is obtained between mean scores of the variable of anxiety of meditative and non-meditative groups of adults. Further as mean score of anxiety of meditative group of adults is found to be lesser than that of non-meditative group of adults, hence it may be concluded further that meditative group of adults have lower level of anxiety than their non-meditative group of adults. Also, a significant difference is found between mean scores of the variable of stress among meditative and non-meditative groups of adults. Further as mean score of stress of meditative group of adults were found to be lesser than that of non-meditative group of adults, hence it may be concluded further that meditative group of adults have lower level of stress than their non-meditative group of adults. Also, a significant difference was found in stress among adults due to interaction between meditative and anxiety among adults i.e. adolescents doing meditation and non-meditation and high and low anxiety differ significantly on stress.

### *4.6 7. Suggestions For Further Work*

- Qualitative approach can be used to assess the effects of other meditational practices.
- The research can be replicated at larger level for a large number of subjects to validate the findings in efficient manner.
- The study has provided great information about the effects of meditation practices on stress and anxiety among adults. Therefore, it can potentially contribute to academicians and policy makers in considering such type of practices to be included in the curriculum for the benefit of students and society in general.
- The study can be conducted to assess the effects of other meditational practices on the same variables.
- Similar kind of research can be conducted with adolescents also.
- Longitudinal study can be conducted to compare pre and post results.

## 6. AUTHORS CONTRIBUTION STATEMENT

Vivek Shukla, Surya Kant Pal and Nitendra Kumar have equally contributed to conceptualization, literature analysis, and review drafting. Supervision was performed by Dr. Priyanka Agarwal and Sadhana Tiwari. Project administration was performed by

Vivek Shukla and Surya Kant Pal. All authors have read and agreed to the published version of the manuscript. All authors confirm the final authorship for this manuscript. All authors have made significant scientific contributions for the research in the manuscript.

### *4.7 Ethical statement*

All approval were taken suitably from respondents for data collection after telling purpose of study to ensure consensus, rest any kind of approval was not involved in the present study. Ethical committee approval from the relevant institutional ethical committee with appropriate approval number was not applicable in the present study. Permission from the database/records owner (mostly of that institution) to use the record information for the relevant study and subsequent publication is not applicable for the present study. No database/open records are used in the study.

## 4. CONFLICT OF INTEREST

Conflict of interest declared none.

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