

# Effectiveness of Online Meditation Programs

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## ABSTRACT

**Purpose** – The purpose of this study is to find out how effective meditation is as a tool in tackling stress in the eyes of the participants.

**Design/Methodology/Approach** – The empirical study involves designing a questionnaire to study the impact of an online meditation program on the participants. The research design is descriptive and research falls in the category of exploratory to study the benefits of online meditation, descriptive as it categorized the participants as those who did meditation earlier or not and those who had health ailments or not, explanatory to find the reasons for shortfalls in the effectiveness of the online meditation programs, correlational as it studied the correlation between expectation fulfillment and ease of doing meditation and being an experienced practitioner

**Findings** – The program either met expectations or exceeded expectations of the participants. The major causes for shortfall in effectiveness were – 1. It was difficult to practice and listen and watch at the same time 2. Participants found difficulty in breathing 3. Scientific reasons for doing meditation were not known to participants 4. Health problems acted as a restriction 4. Teaching focused on subject more than the learner

**Research limitations/implications**– The meditation program was of 21 days and was free of cost and was attended by large number of participants but very less number of people came forward for feedback. 2. The attendance could not be mapped. 3. The access of internet in rural areas is a major limitation in the reach of such programs across the globe.

**Originality/value** – This study focuses on effectiveness of online meditation programs and a unique questionnaire is designed based on the literature review related to Stress, Superbrain yoga and Sudarshan Kriya Yoga, Essentials of Educational Technology and Global Health Estimates of suicides in the world by World Health Organization and other related researches

**KEYWORDS:** Stress Management, Meditation, Education Technology, Healthy living

## 1. INTRODUCTION

The Pandemic Covid-19 has emerged as a challenge for the entire world & has led to many paradigm shifts. When there are such shifts which cause changes in the fundamental ways of execution of methodologies, managing risks, handling

limitations, developing alternate strategies and spreading awareness become far more important because of emerging uncertainties. The treatment for any disease can be classified in n number of ways and few taxonomies are listed below.

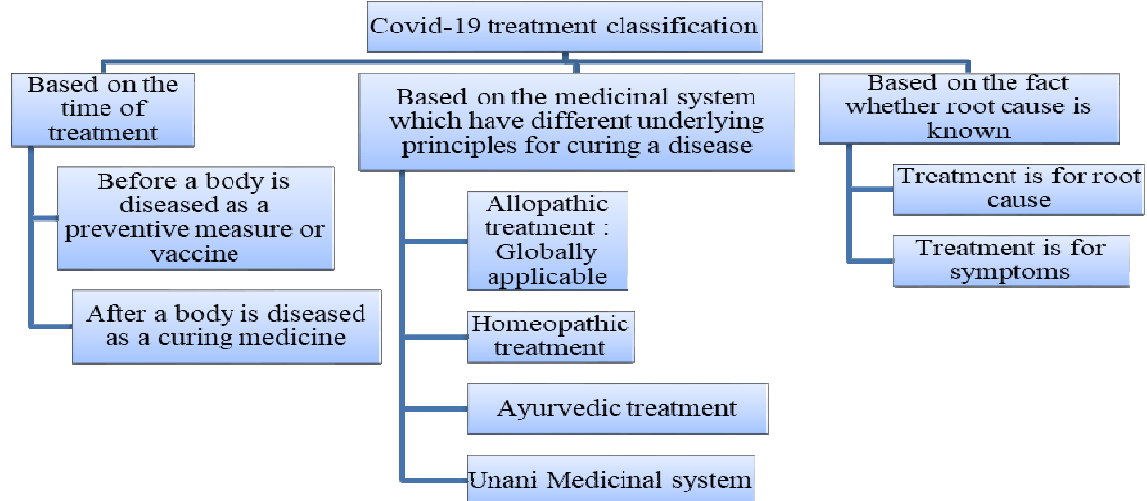
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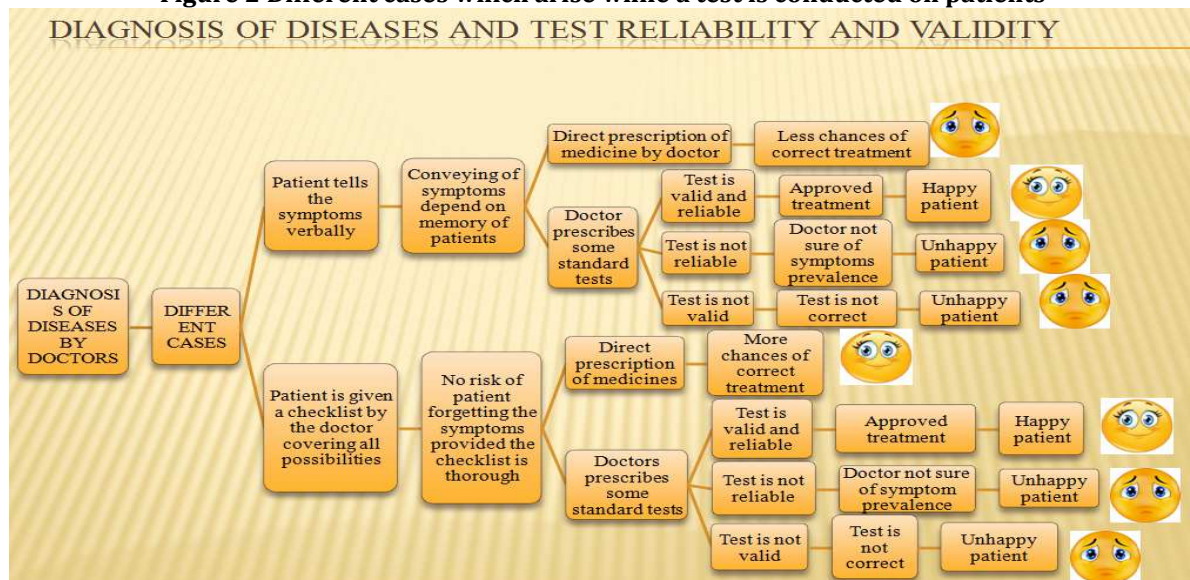
**Figure 1: Possible Covi-19 treatment classifications based on general awareness & (Suggestions by Dr.Kanupriya on Whatsapp, 2020)**

According to (Co, 2020) the Covid-19 has shown the world that a suddenly emerging virus can bring so any uncertainties that when Yogguru Baba Ramdev declared Coronil as a medicine after trials the Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (hereinafter referred to as "Ministry of Ayush did not accept it as a medicine for COVID-19 straight because the experimental results and evidence were not available with the authorities. It appeared that the medicine invented was to treat symptoms as root cause is not known yet.

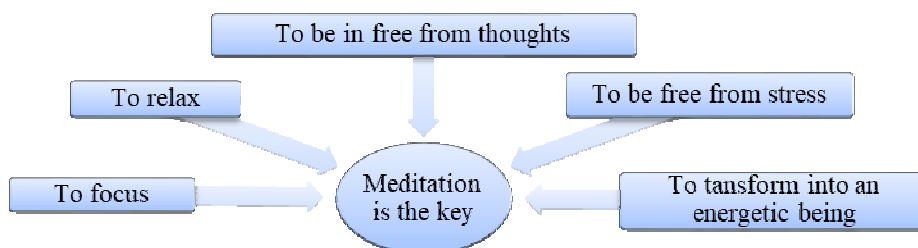
According to (Sher, June 2020) social isolation, anxiety, fear of contagion (medium of transmission), uncertainty, chronic stress and economic difficulties may lead to the development or increase in severity and seriousness of stress-related disorders and suicidality in vulnerable populations.

According to Honourable Sri Sri Ravishankar Ji (Ravishankar, 2011) meditation is a skill to calm the mind and to get in touch with the source of energy that people are and it gets access to the enormous intelligence and energy that reposes within people. It is a single state where people are alert and conscious and at the same point of time relaxed and in deep rest.

It's a time of double uncertainty because of uncertainty about treatment as well the uncertainty about the measurement system (Bhoraniya, 2018) (AIAG, 2010) analysis which is used to differentiate between corona infected and non infected people. The general awareness about Measurement System Analysis is low in general public and when the testing capacity is utilized to its full potential with so many patients there is a risk of ignorance by the testing authorities. No patient (customer) is bothered to know whether the diagnostic center is revealing whether the validity (whether the test serves the purpose of differentiating between infected and non-infected), reliability (results are repeatable i.e on testing again the same result should repeat), standardized conditions (the basic environmental condition like humidity and any other patient specific condition like fasting are followed) and objectivity (the inference drawn based on the result should not vary people) conditions are fulfilled. Patients are also not aware about their rights as customers of medical treatment service and the essential good test characteristics. To add to the uncertainty is the non-usage of the an elementary quality tool like a checklist by doctors which makes the fate of a patient more dependent on the memory of a doctor as shown in below figure.

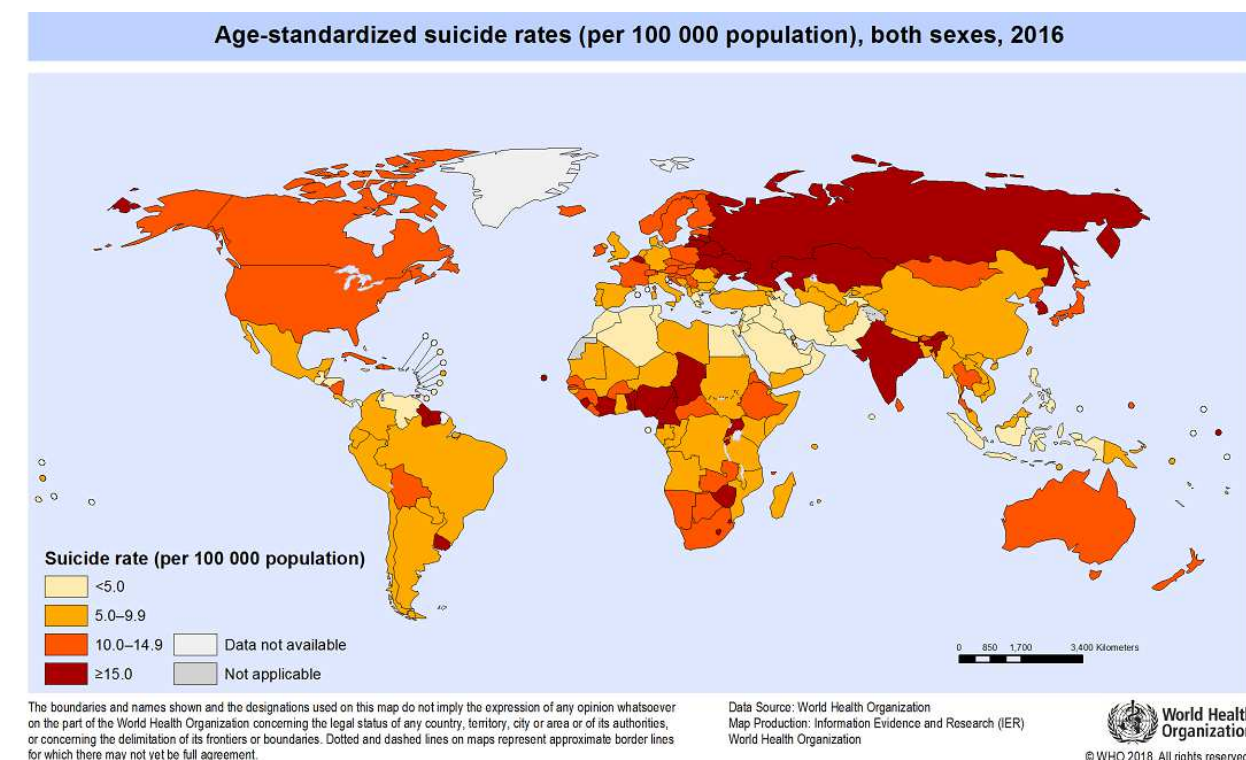
**Figure 2 Different cases which arise while a test is conducted on patients**

So when there is so much uncertainty with respect to treatment availability, testing of patients and doctor's memory (when excessive workload is there) methods like meditation are emerging as a savior for patients as there is too much stress in patients.



**Figure 1: Applications of meditation according to Sri Sri Ravishankar (Ravishankar, 2011)**

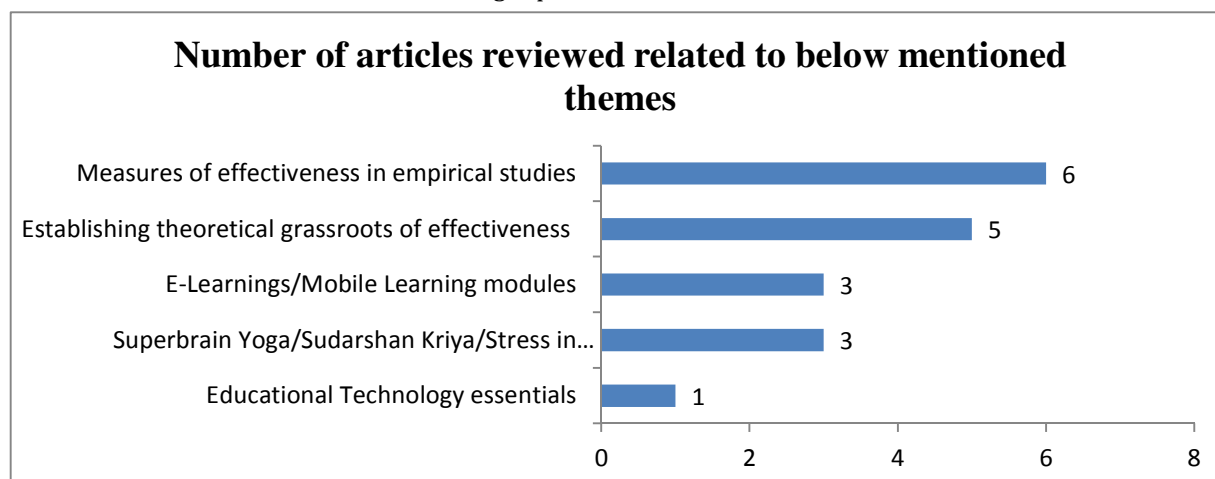
Even without considering the effect of pandemic on suicidal rates in countries India is a country where suicidal rates are very high as shown in the figure below and stress must be definitely a cause for same.



**Figure 4: World Health Organization Suicidal Statistics (WHO)**

## 2. LITERATURE REVIEW

The literature was reviewed based on the following aspects.



**Figure 5: Theme based segregation of literature reviewed (R.Krishnan) (S.Poornima & T, 2013) (D'Souza, October 2018) (BYadav & S.Pingle, 2016) (Cowan) (Chris Watkins, 2002) (Zope & Zope, 2013) (D'Souza, October 2018) (G. & Jayalakshmi, 2016)**



**2.1. Measures of effectiveness in empirical studies**

Two kinds of definitions were observed. The first kind are the general definitions at the institute, program, training level and the other type are defined based on the outcome achieved in specific type of training program.

**Table 1 Definitions of effectiveness based on empirical studies**

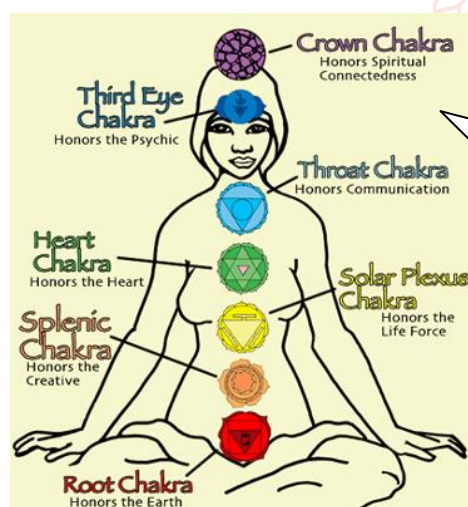
| S. No | Author   | Training Program  | Definition based on outcome of specified training program  |
|-------|--|---|--|
| 1     | (R.Krishnan)   | Entrepreneurship development Program                        | Training is effective if the trainees launch their own enterprise within a specific duration (eg:6 months).  |
| 2     | (S.Poornima & T, 2013)   | Employee development program                                | The program is effective if participants perception is that they are satisfied with respect to duration of the development program, development modules, resource person, development programs provide an opportunity for exchange of experience and information, content and topics were covered within scheduled timeframe, feedback towards development modules were considered, efficiency in the job improved after the program, gives job satisfaction, helps to reduce difficulties during work and there is improvement after the development program. |
| 3     | (T, 2012)  | Training for State Bank of Mysore Head Office staff         | The program is effective if employee perception is that employee efficiency on job increased, it helped in improving the interpersonal skills, technical skills, it reduced the difficulties at work, it improved the participant, the participant did not face any difficulties in applying the skills, knowledge acquired during the training program to practice, it increases the ability to take quick decisions, it gives job satisfaction.  |
| 4     | (Trakru & Jha, 2019)-Shank                                     | E-Learning effectiveness                                    | Measures of effectiveness of external e learning training programs are 1.learning gains with respect to student performance 2.examination test scores 3.course completion rates and these provide an overall indication of course success with respect to students.  |
| 5     | (BYadav & S.Pingle, 2016)                                      | Life skills program effectiveness                           | Effectiveness is defined as the improvement in the mental health of participants that is improvement in the ability to cope up with stressors (studies, exams, expectations of parents and teachers) in life, systematic way of doing work to avoid unnecessary tension, efficiency to handle and manage emotions.   |
| 6     | (Chhadva & Kacker, 2013)                                       | Life skill effectiveness on adolescents                     | Effectiveness was measured based on the statistical tests to find whether there was a significant difference in social etiquette and communication, self esteem and hygiene, participant knowledge on life skills, self care, non turbulence, social contact, communication and responsibility, anxiety state.   |
| 6.1   | Marlow Svatek 2012   | Life skill effectiveness on students in a village           | Effectiveness was measured based on it's impact in reducing dropout rates from schools and spreading awareness on issues like reproductive health, disease prevention, future planning and self esteem.  |
| 6.2   | Tahereh Mahdevi  | Life skill effectiveness on students in a village           | Effectiveness was measured based on it's impact on happiness, quality of life, emotional regulation and hence whether significant on psychological health, social relationship and physical health.  |
| 6.3   | Botvin, GL, Baker E, Dusenbury L, Botvin EM, and Diaz T (1984) | Effectiveness of a drug abuse prevention trial              | Effectiveness was measured by reduction in the usage of alcohol, smoking, drugs like marijauna, delinquency and crime.   |
| 6.4   | Griffin KW, Botvin GJ, Nichols TR and Doyle MM                 | Effectiveness of universal drug abuse prevention approach   | Effectiveness is measured for youth who are at high risk of substance use initiation   |
| 6.5   | Griffin KW, Botvin GJ, and Nichols TD                          | Effectiveness of universal school based prevention approach | Effectiveness was measured with respect to preventing youth violence and delinquency. Effectiveness was also mapped in terms of reduction in decreased verbal aggression, physical aggression, fighting and delinquency.   |

**2.2. Theoretical Definitions of effectiveness****Table 2 Theoretical definitions of effectiveness**

| S. No | Author                     | Level  | General Definitions defined at the level specified   |
|-------|----------------------------|--|--|
| 1     | (Worku, 2019)              | Teaching Aid                                 | Effectiveness means the extent to which media plays a role for learners to bring changes it is supposed to that is to facilitate better understanding during student's learning as a result of using the medium. |
| 2     | (Cowan)                    | Applicable for all levels                    | Effectiveness is the ratio of actual outcome to possible or ideal outcome.   |
| 3     | Alfred et al               | Institute                                    | Ability of an institution to match its performance to established purposes as stated in its mission. An institution is effective when results produced match its mission within limits of costs and resources.   |
| 4     | Midlands Technical College | Institute                                    | An internal process of planning and evaluation that is intended to ensure that the college's performance matches it's purposes, a global process that uses assessment strategies to demonstrate accountability.  |
| 5     | (232, May 2018)            | Educational Organizational Management System | Extent to which planned activities are realized and planned results achieved.  |

**2.3. Superbrain Yoga /Yogic Exercises/ Sudarshan Kriya Yoga/Stress**

According to (D'Souza, October 2018) Superbrain Yoga cleanses the energy centers needed for brain to function efficiently and ear produces necessary energy connection to the left and right brain. Chakras absorb, digest and allocate prana to the different parts of the body and are responsible for the proper functioning of human metabolic (life sustaining chemical reactions (food to energy, food to proteins, lipids and nucleic acids & elimination of nitrogenous wastes) activities. This study concluded that superbrain yoga was effective in improving concentration, memory and confidence in school students of class 1-5 and memory and concentration in school students of 1-5.



SBY moves energy trapped in the basic and sex chakras through the major energy centers and finally upto the crown chakra that controls the pineal gland and overall brain health.

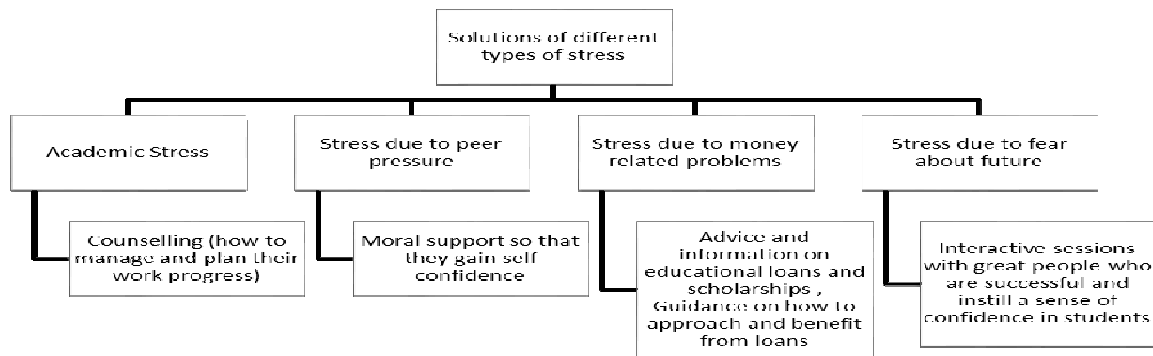
Outcome – Energy centers and aura are bigger.

**Figure 6 Various body chakras (Otero)**

The author (Zope & Zope, 2013) mentioned that among the many yogic breathing exercises sudarshan kriya yoga is one which is good for stress, post traumatic stress disorder, depression, stress related medical illnesses, substance abuse and rehabilitation of criminal offenders.

**Figure 7- Problems of present times and the possible solutions (Zope & Zope, 2013)**

The author (G. & Jayalakshmi, 2016) Students of dental colleges and MBBS suffer maximum from stress and the solutions to different types of stress are shown below in figure 8.

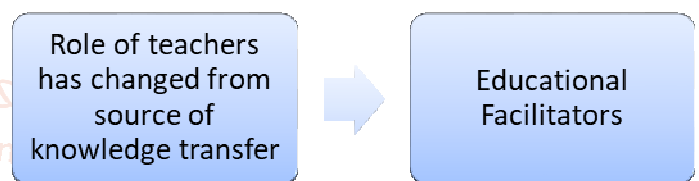


**Figure 8 Solutions to different types of stress (G. & Jayalakshmi, 2016)**

#### 2.4. E-Learnings

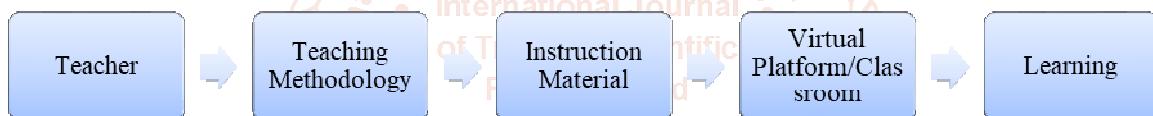
In the study (Shree, January-June 2018) mobile learning module was found effective for increasing the knowledge of rural women with respect to balanced diet where women were given videos installed in a memory card. In the research paper (Choudhary & Sharma, 2018) various e-learning initiatives by the Indian government were discussed like National Academic Depository etc. The increasing focus on e-learning have opened a new world for yoga /meditation practitioners as there is growing focus on internet based learning. The paper (Trakru & Jha, 2019) proves that there is no significant difference with respect to

effectiveness of e-learning with respect to city, course & gender. Both are same class of cities and equipped with same technology to use e learning. The paper also mentions that there is a change in the role of teachers as shown below.



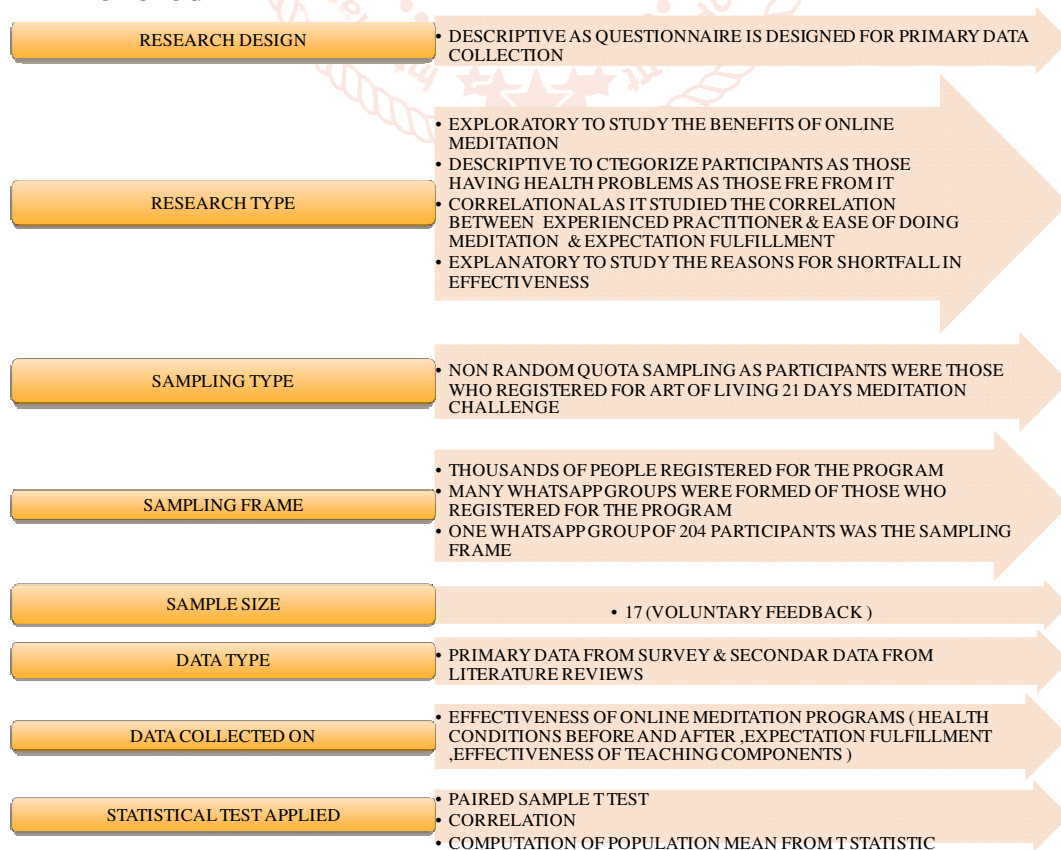
**Figure 9 Change in the role of teachers**

#### 2.5. Educational Technology Essentials



**Figure 10 Components of teaching (Mangal & Mangal, 2018)**

### 3. RESEARCH METHODOLOGY



**Figure 11 Important points related to research methodology**

**4. OBJECTIVES**

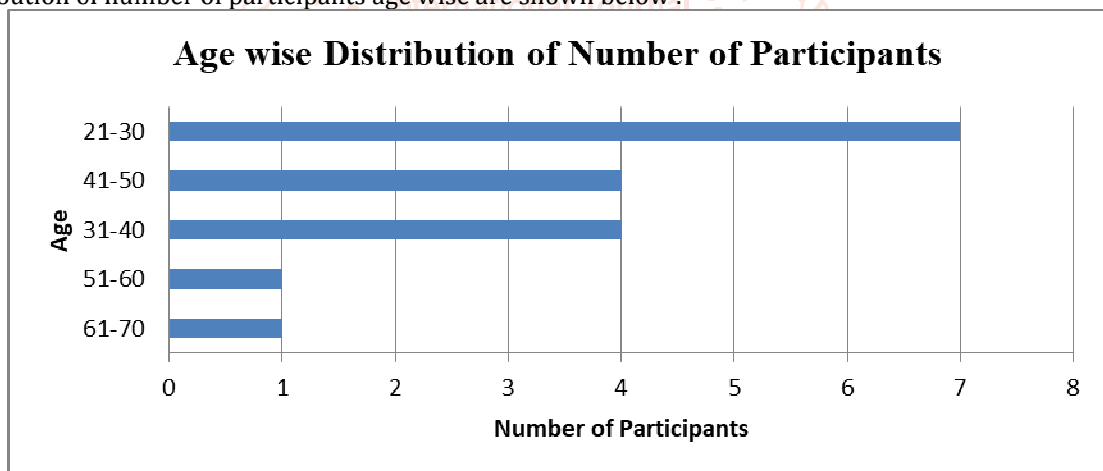
1. To find out whether there was an improvement in the health condition after meditation program denoted by improvement in sleep, state of mind, communication, overall health of the participants with respect to asthma, blood pressure, diabetes etc and reduction in stress.
2. To find out the population mean score confidence interval based on sample score (t statistic) for expectation fulfillment & determine effectiveness of the program from quality management perspective.
3. To find out whether there was a correlation between –
  - a) Being experienced practitioner and expectation fulfillment
  - b) Being experienced practitioner and doing meditation at ease
4. To find the effectiveness of teaching components and population mean confidence interval based on t-statistic related to same.
5. To find out the 5 major reasons for shortfall of effectiveness based on sample.

**5. FORMULATED HYPOTHESIS****Table 3 List of formulated hypothesis**

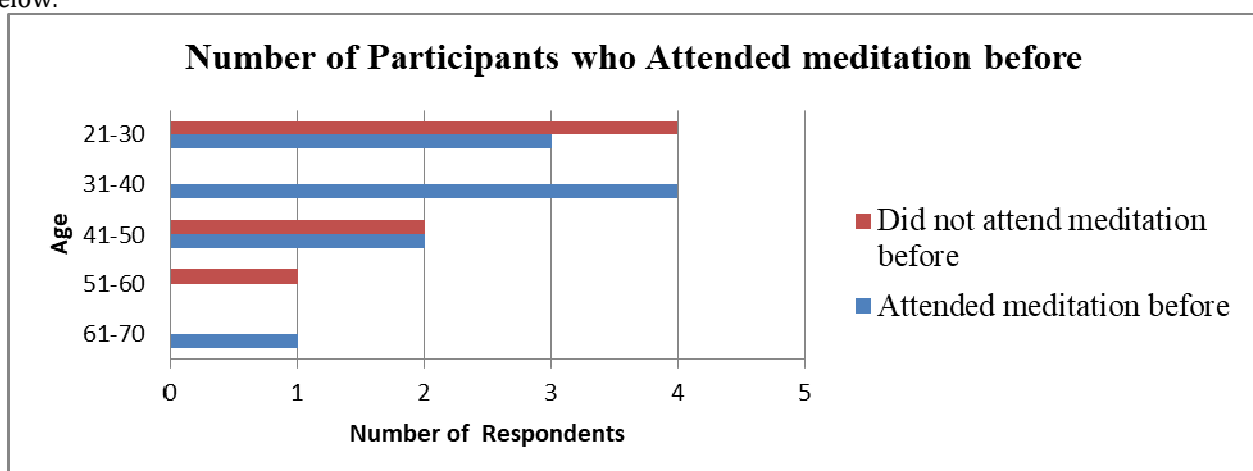
| S. No | Hypothesis       | Description   |
|-------|------------------|---|
| 1     | H <sub>01</sub>  | It is believed that the sleep condition did not improve (difference (D=0) after the meditation program. |
|       | H <sub>01a</sub> | It is believed that the sleep condition improved (difference (D>0) after the meditation program.        |
| 2     | H <sub>02</sub>  | It is believed that the state of mind did not improve (difference (D=0) after the meditation program.   |
|       | H <sub>02a</sub> | It is believed that the state of mind improved (difference (D>0) after the meditation program.          |
| 3     | H <sub>03</sub>  | It is believed that the communication did not improve (difference (D=0) after the meditation program.   |
|       | H <sub>03a</sub> | It is believed that the communication improved (difference (D>0) after the meditation program.          |
| 4     | H <sub>04</sub>  | It is believed that the stress levels did not improve (difference (D=0) after meditation program.       |
|       | H <sub>04a</sub> | It is believed that the stress levels reduced (difference (D>0) after the meditation program.           |
| 5     | H <sub>05</sub>  | It is believed that the overall health did not improve (difference (D=0) after the meditation program.  |
|       |                  | It is believed that the overall health improved (difference (D>0) after the meditation program.         |

**6. FINDINGS BASED ON DATA ANALYSIS**

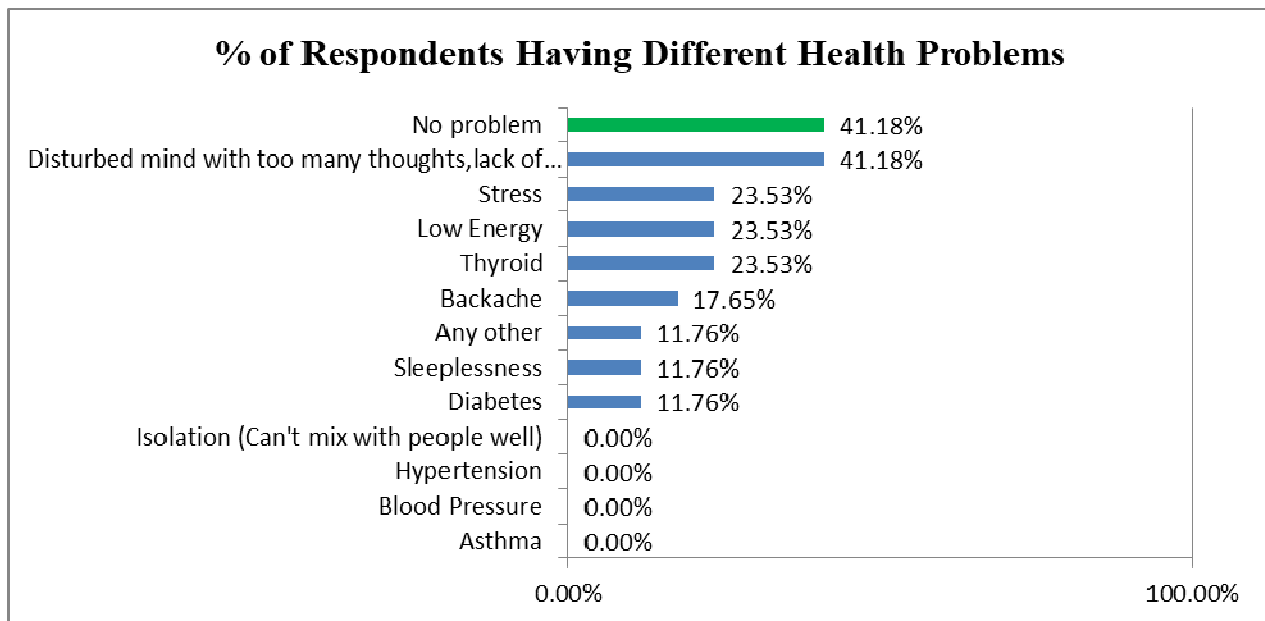
1. The distribution of number of participants age wise are shown below :

**Figure 12 Age wise distribution of number of participants**

2. The distribution of the respondents based on their previous experience and familiarity in meditation techniques is shown below.

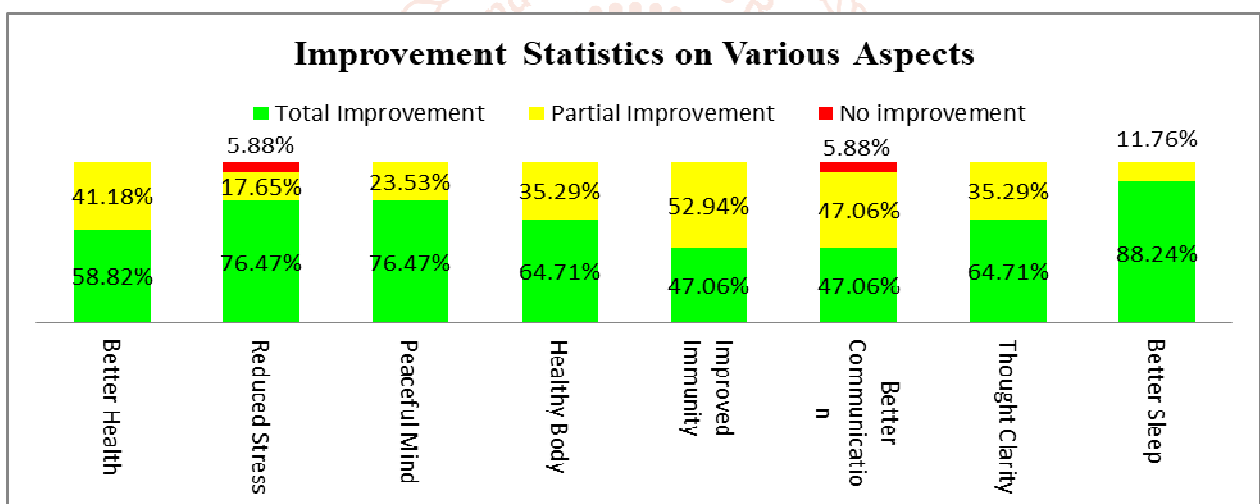
**Figure 13 Age wise familiarity of meditation of participants**

3. The distribution of respondents having different health problems is shown below.



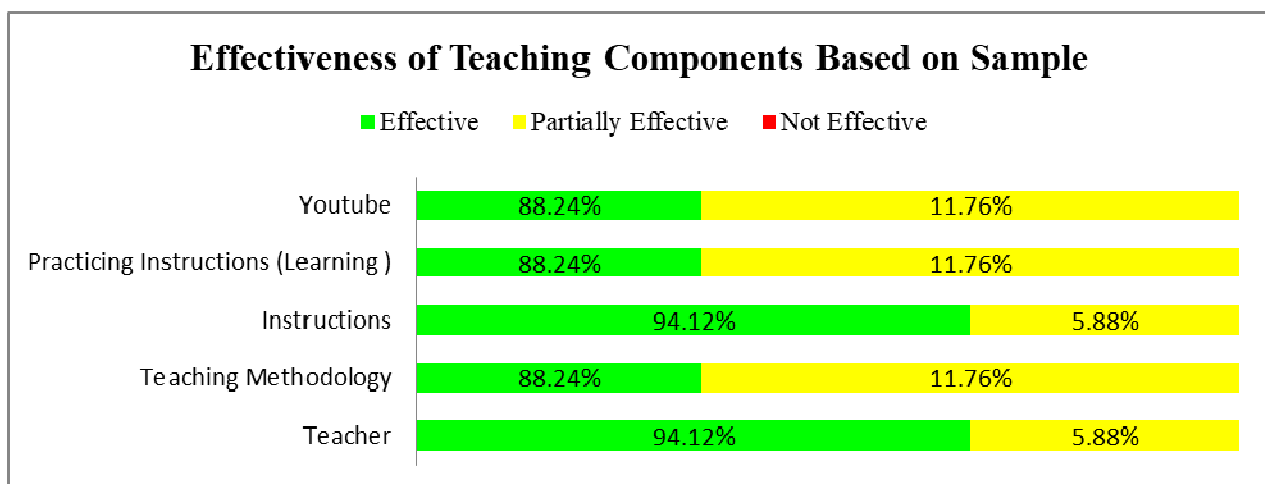
**Figure 14 Distribution of respondents having health problems**

4. The outcomes of the course appear impressive as at least 47% of the respondents felt total improvements in all aspects such as sleep, stress, thought clarity, immunity, communication, peace of mind, body health and overall health as shown below. Only 5.88 % did not find any improvement in stress reduction and communication.



**Figure 15 Improvement achieved through meditation**

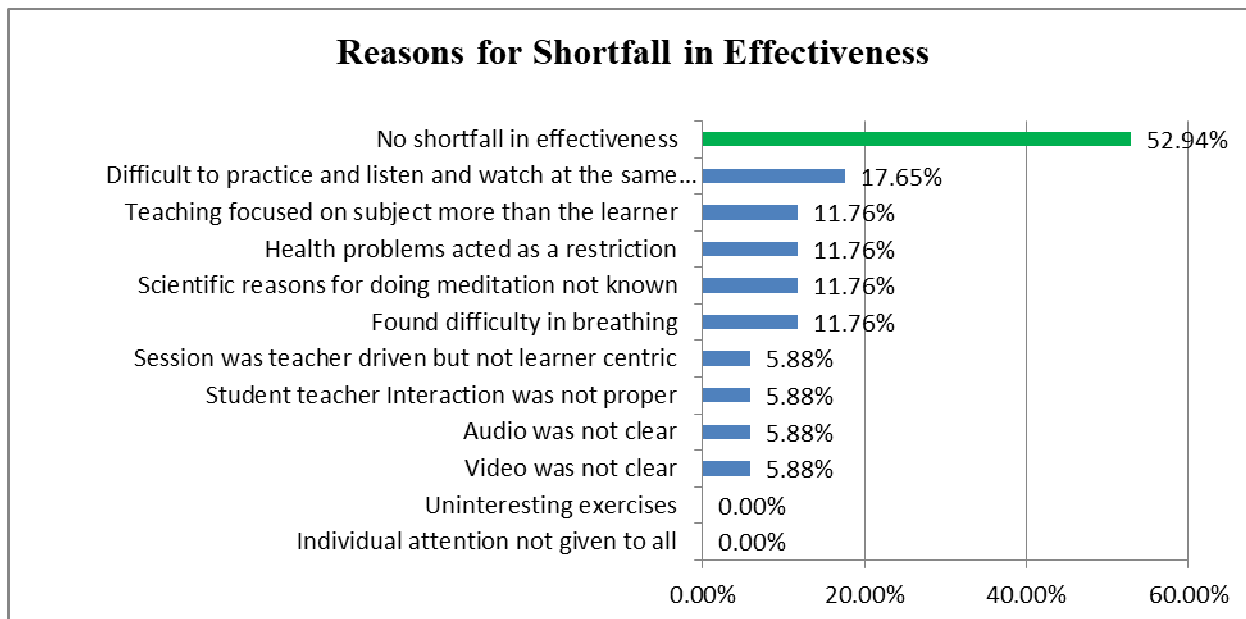
5. The respondent reply on effectiveness of teaching components is shown below using figure 14.



**Figure 16 Effectiveness of teaching components based on sample**

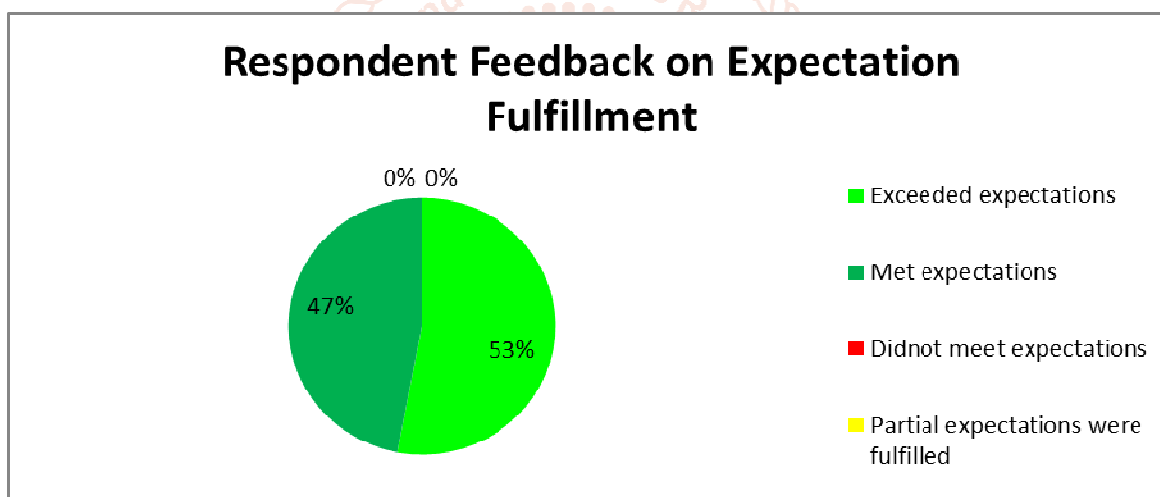


6. The various reasons for the shortfall in the effectiveness of the training program based on the feedback by respondents.



**Figure 17 Reasons for shortfall in effectiveness based on sample statistics**

7. The respondent feedback on whether their expectations were met or not was extremely positive as expectations of 100% of the respondents were met and around 53% felt that the it exceeded their expectations or in other words delighted them



**Figure 18- Respondent feedback on expectation fulfillment**

## 7. CONCLUSIONS

The effectiveness was measured based on (Cowan)'s definition which is the ratio of actual outcome to ideal outcome. The expected ideal outcomes are listed below with respect to meditation program as shown below. There were 2 kind of participants in the meditation program which are denoted by before state 1(having health problems) and before state 2(having no health problem) and after state 1(having partial improvement) and after state 2 (having total improvement).

| BEFORE STATE 1 :HAVING HEALTH PROBLEMS   | BEFORE STATE 2 :NO HEALTH PROBLEM                              | AFTER STATE 1 :PARTIAL IMPROVEMENT   | AFTER STATE 2 :TOTAL IMPROVEMENT   |
|--|--|--|--|
| <ul style="list-style-type: none"> <li>✖ Sleeplessness</li> <li>✖ Disturbed mind with too many thoughts, lack of concentration</li> <li>✖ Isolation (Can't mix with people well)</li> <li>✖ Stress</li> <li>✖ Backache , Asthma ,Blood Pressure , Diabetes , Hypertension ,Thyroid , Low energy ,any other health problem</li> </ul> | <ul style="list-style-type: none"> <li>✖ No Problem</li> </ul> | <ul style="list-style-type: none"> <li>✖ Better Sleep</li> <li>✖ Peaceful Mind &amp; Thought Clarity</li> <li>✖ Better communication</li> <li>✖ Reduced Stress</li> <li>✖ Better Health , Improved Immunity ,Healthy Body</li> </ul> | <ul style="list-style-type: none"> <li>✖ Better Sleep</li> <li>✖ Peaceful Mind &amp; Thought Clarity</li> <li>✖ Better communication</li> <li>✖ Reduced Stress</li> <li>✖ Better Health , Improved Immunity ,Healthy Body</li> </ul> |
| Score : 0  | Score : 1  | Score : 1.5  | Score : 2  |

**Figure 19 Before and After state of participants who attended meditation programs**

The participant score improved either by 1 (for total improvement) to 0.5 (for partial improvement) and by 0 for no improvement from the initial state which can be before state 1(having health problems) or before state 2 (no problem). Important point to note is out of the 17 participants 5 participants were not able to do meditation at complete ease so their improvement score was reduced by 50 percent and the results are shown below.

**1.1 There was a significant difference observed in the sleep of the participants because of meditation program which was evident on application of paired sample t test at 0.05 level of significance.**

| t-Test: Paired Two Sample for Means |                       |                      |
|-------------------------------------|-----------------------|----------------------|
|                                     | Before state of sleep | After state of sleep |
| Mean                                | 0.882352941           | 1.661764706          |
| Variance                            | 0.110294118           | 0.194852941          |
| Observations                        | 17                    | 17                   |
| Pearson Correlation                 | 0.777433287           |                      |
| Hypothesized Mean Difference        | 0                     |                      |
| df                                  | 16                    |                      |
| t Stat                              | -11.56554818          |                      |
| P(T<=t) one-tail                    | 1.75189E-09           |                      |
| t Critical one-tail                 | 1.745883669           |                      |
| P(T<=t) two-tail                    | 3.50378E-09           |                      |
| t Critical two-tail                 | 2.119905285           |                      |

The one tailed p value states that there was an improvement in the sleep condition (p value is less than 0.05) hence null hypothesis H01 is rejected.

**1.2 There was a significant difference observed in the state of mind of the participants because of meditation program which was evident on application of paired sample t test at 0.05 level of significance.**

| t-Test: Paired Two Sample for Means |                      |                     |
|-------------------------------------|----------------------|---------------------|
|                                     | Before state of mind | After state of mind |
| Mean                                | 0.588235294          | 1.345588235         |
| Variance                            | 0.257352941          | 0.475643382         |
| Observations                        | 17                   | 17                  |
| Pearson Correlation                 | 0.901072898          |                     |
| Hypothesized Mean Difference        | 0                    |                     |
| df                                  | 16                   |                     |
| t Stat                              | -9.75438271          |                     |
| P(T<=t) one-tail                    | 1.93905E-08          |                     |
| t Critical one-tail                 | 1.745883669          |                     |
| P(T<=t) two-tail                    | 3.87811E-08          |                     |
| t Critical two-tail                 | 2.119905285          |                     |

The one tailed p value states that there was an improvement in the mind state (p value is less than 0.05) hence null hypothesis H02 is rejected.

**1.3. There was a significant difference observed in the communication of the participants because of meditation program which was evident on application of paired sample t test at 0.05 level of significance.**

| t-Test: Paired Two Sample for Means |                      |                     |
|-------------------------------------|----------------------|---------------------|
|                                     | Before communication | After communication |
| Mean                                | 1                    | 1.617647059         |
| Variance                            | 0                    | 0.125919118         |
| Observations                        | 17                   | 17                  |
| Pearson Correlation                 | #DIV/0!              |                     |
| Hypothesized Mean Difference        | 0                    |                     |
| df                                  | 16                   |                     |
| t Stat                              | -7.176604325         |                     |
| P(T<=t) one-tail                    | 1.10135E-06          |                     |
| t Critical one-tail                 | 1.745883669          |                     |
| P(T<=t) two-tail                    | 2.20271E-06          |                     |
| t Critical two-tail                 | 2.119905285          |                     |

The one tailed p value states that there was an improvement in the communication (p value is less than 0.05) hence null hypothesis H03 is rejected.

**1.4 There was a significant difference observed in the stress level of the participants because of meditation program which was evident on application of paired sample t test at 0.05 level of significance.**

t-Test: Paired Two Sample for Means

|                              | Before stress | After stress |
|------------------------------|---------------|--------------|
| Mean                         | 0.764705882   | 1.529411765  |
| Variance                     | 0.191176471   | 0.319393382  |
| Observations                 | 17            | 17           |
| Pearson Correlation          | 0.788545557   |              |
| Hypothesized Mean Difference | 0             |              |
| df                           | 16            |              |
| t Stat                       | -9.06923098   |              |
| P(T<=t) one-tail             | 5.25226E-08   |              |
| t Critical one-tail          | 1.745883669   |              |
| P(T<=t) two-tail             | 1.05045E-07   |              |
| t Critical two-tail          | 2.119905285   |              |

The one tailed p value states that there was an improvement in the stress (p value is less than 0.05) hence null hypothesis H04 is rejected.

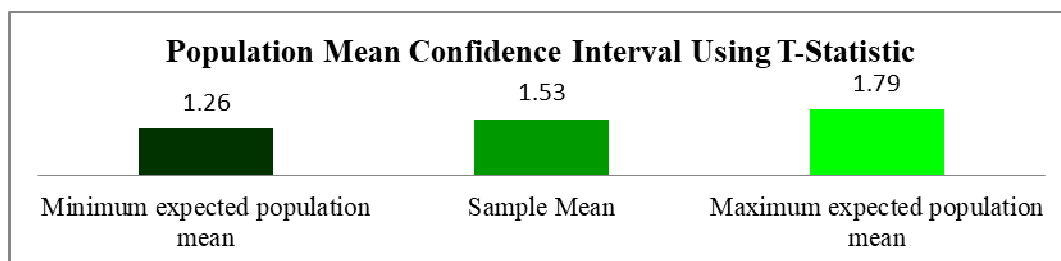
**1.5 There was a significant difference observed in the overall health of the participants because of meditation program which was evident on application of paired sample t test at 0.05 level of significance. Here the participant was considered healthy and awarded average score 1 if he/she did not suffer from backache, asthma, blood pressure, diabetes, hypertension, thyroid, low energy & any other and 0 if he suffered from any of the above ailments.**

| t-Test: Paired Two Sample for Means |                       |                      |
|-------------------------------------|-----------------------|----------------------|
|                                     | Overall Health Before | Overall Health After |
| Mean                                | 0.411764706           | 1.196078431          |
| Variance                            | 0.257352941           | 0.372344771          |
| Observations                        | 17                    | 17                   |
| Pearson Correlation                 | 0.934296338           |                      |
| Hypothesized Mean Difference        | 0                     |                      |
| df                                  | 16                    |                      |
| t Stat                              | -14.28229897          |                      |
| P(T<=t) one-tail                    | 7.951E-11             |                      |
| t Critical one-tail                 | 1.745883669           |                      |
| P(T<=t) two-tail                    | 1.5902E-10            |                      |
| t Critical two-tail                 | 2.119905285           |                      |

The one tailed p value states that there was an improvement in the health (p value is less than 0.05) hence null hypothesis H05 is rejected.

So, the participants felt that there was significant improvement with respect to the following –

1. Sleep 2. State of mind 3. Communication 4. Stress 5. Overall Health and looking at these benefits meditation programs should be made mandatory for all institutions of Primary, Secondary and Tertiary Education as these are available free of cost and are conducted by Art of Living Foundation.
2. From Quality Management perspective the ideal outcome is customer satisfaction and since it met the expectations of all the respondents and exceeded the expectations of 53% of the participants so this outcome was also achieved and hence the program is successful. The graph below shows the expected minimum and maximum satisfaction level for the participant population using t statistic which also shows that all participants will be satisfied as the mean is greater than 1 which represents score for satisfied customers.



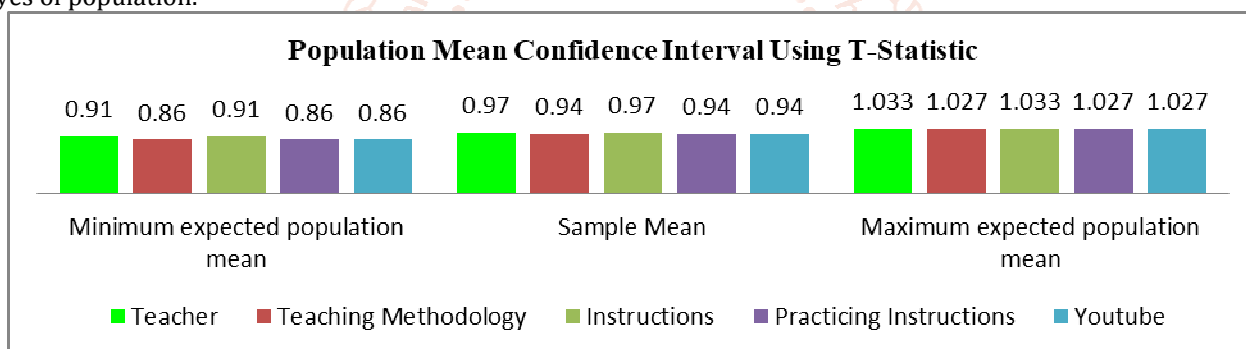
**Figure 20 Population mean confidence interval using t statistic at 95% level of confidence**

3. The correlation coefficient between –

a) Being experienced practitioner and expectation fulfillment was 0.40849

b) Being experienced practitioner and doing meditation at ease was 0.5092 which is not a very strong correlation.

4. Considering the premise that the program is effective if the components of teaching are effective the computed values for population mean confidence interval are shown below. As all the minimum expected population scores are greater than or equal to 0.86 where 1 represents complete effectiveness all the teaching components will be at least 86% effective in the eyes of population.



**Figure 21 Population mean confidence interval using t statistic at 95% level of confidence**

5. Five major causes for shortfall in effectiveness based on sample were –

- A. Difficult to practice and listen and watch at the same time
- B. Teaching focused on subject more than the learner
- C. Health problems acted as restriction
- D. Scientific reasons for doing meditation not known
- E. Found difficulty in breathing
- F. The increasing focus on e-learnings have opened a new world for yoga /meditation practitioners as there is growing focus on internet based learning and organizations like the Art of Living have come forward for reducing stress of the world by conducting online meditation programs according to (team).
- G. In order to push the medical fraternity to give best solutions to patients awareness of Measurement System Analysis should increase among the citizens so that they do not accept medical reports blindly.

## 8. LIMITATIONS

- A. The study is based on a very less number of participants.

B. The study is based on the free 21 days meditation program conducted by the Art of Living Foundation and was taken by Sri Sri Ravishankar Ji himself who is an expert in spirituality and meditation. The effectiveness of meditation programs conducted by other organizations might differ and need to be studied.

- C. Access of internet is a limitation for people from rural area and they can't avail the benefits of such programs without internet.

**Table 4 Digital Divide in India (Numbers from Key Indicators of Household Social Consumption on Education in India report, 2017-18) (Sudevan, 2020)**

|                  | With Computer (in %) | With Internet (in %) |
|------------------|----------------------|----------------------|
| Rural Households | 4.4                  | 14.9                 |
| Urban Households | 23.4                 | 42                   |



As it was not mandatory to give feedback for getting certificate all participants did not come forward and give voluntary feedback.

## 9. FUTURE RESEARCH PROSPECTS

- A. Age wise health problems can be analyzed and the impact of meditation can be seen on each health problem by using the various medical tests.
- B. Analysis can be done on the awareness of Measurement System Analysis on different citizens age group wise and necessary actions can be taken based on result.
- C. Regression analysis can be done to prepare a model for execution of instructions showing its dependence on teacher, teaching methodology, instructions and virtual platform like youtube.

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