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Research Article

EVALUATION OF MEDITATION TO MODIFY HUMAN ATTITUDE

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ABSTRACT

Although quality of life and facilities are increasing day by day but satisfaction level and mental health are deteriorating globally. Happiness quotient is fallen down and psychosomatic disorders, behavioral and adjustment problems are mushrooming in every sphere of society. Main reason behind all these is negative attitude of persons due to which one becomes pessimist and can't see the brighter aspects of life. Stressors are always there but it's the ability of humans to handle the stress which protects them and it comes from positivity in the attitude. In *Yog sutra, Maharshi Patanjali* clearly mentions that person becomes like his attitudes so one should control the attitude through meditation.

Taking this as baseline, a study was conducted on 20 apparently healthy volunteers to assess the effect of meditation practice of Heartfulness Institute's point A&B meditation to see its transformational efficacy in increment in positivity of Mental Attitude. For this, volunteers were selected randomly and to measure their attitude, LIKERTSCALE is framed and evaluation of attitude was done before and after meditation trial of 21 days. For meditation evaluation, a seven scale criteria is formed to evaluate intensity with which volunteers performed meditation and to record the evidence.

After statistical analysis, this meditation practice was found highly significant in changing the human attitude and increasing its positivity. This result is quite enthusiastic after such a short span of trial and may be a landmark in maintaining mental health and quality of life if practiced regularly. It is a nondrug therapy advisable for masses requiring no vigorous training as indicated by the fact that no volunteer was practicing any spiritual practice earlier, they all were novice.

INTRODUCTION

An attitude^[8] is a part of human behavior which includes a settled way of thinking or feeling about something. It involves the ideas, values and beliefs of a person which ultimately lead to his way of thinking, inclinations, habits and finally manifest in his behavior. A person with negative attitude faces so many problems in all aspects of life be it personal, professional or social. Negative mind never yields anything positive. In this new age of modernization, utilitarianism & technological advancement, the society is becoming ill. Intolerance, violence, nonacceptance, hatred, communalism, anxiety, depression & psychosomatic disorders are in full bloom, crimes based on caste, sex, races are also increasing due to increase in

negative attitude of persons. World is deteriorating empathically and society is becoming value neutral. The only possible ray of hope is through changing negative attitudes to positive and holding and increasing their positivity. This is not easy yet possible to do and Meditation is one such method of control the attitude.

Maharshi Patanjali conceptualized *Ashtang Yoga* and gave a concept of controlling attitudes through meditation practices when he says
 ध्यानहेयास्तदवृत्तयः । (*Patanjali Yogasutra 2/11*)^[1]

Means we should control and curb the attitudes of mind through meditation because these are the attitudes which make the basis of behavior.

वृत्तिसारूप्यमितरत्र ॥ (Patanjali Yogasutra 1/4) [1]

Means person becomes like his *Vrittis* or attitudes.

Taking this as reference, a study was done and 20 volunteers were subjected to do meditation and assessment of their meditation practice was done on the fixed seven scale criteria.

AIMS AND OBJECTIVES

To evaluate the effect of meditation practices on point A & B of heart (provided by Heartfulness Institute with prior permission) in the modification of human attitude.

Plan of Study

Selection of patients-For clinical study 20 apparently healthy volunteers attending the OPD of the Rajiv Gandhi Government Post Graduate Ayurvedic College & Hospital, Paprola, Kangra (Himachal Pradesh) were selected on the basis of inclusion criteria.

Selection Criteria

Consent-Written and informed consent of apparently healthy volunteers was taken before inclusion in the trial.

Inclusion Criteria

1. Apparently healthy volunteers willing for trial.
2. Group of 18 - 30 years irrespective of sex, race, religion and socio-economic status.
3. Written consent of the volunteers was obtained before inclusion in the trial.

Exclusion criteria

1. Volunteers not willing for the trial.
2. Volunteers below 18 and above 30 years.
3. Volunteers having any associated chronic ailments like D.M., Cardiac disorder, Renal disorder and Alcoholic liver disease, Chronic hemolytic anemia, Psychiatric disease.
4. Pregnant and Lactating mothers.

Laboratory investigations

The routine hematological examination was done before the clinical trial to rule out any other pathological condition.

Blood -Hb gm%, TLC, DLC, ESR, FBS, B. Urea, S. Creatinine, S. Uric acid, S. Cholesterol, SGOT, SGPT

Study Design

Prospective and retrospective - Prospective

Randomised or not -Randomised

Number of volunteers for trial- 20

Duration of trial -3 weeks

Meditation (Dhyana) & Technique

देशबन्धचित्तस्य धारणा ।

तत्रप्रत्ययैकतानताध्यानम् ॥ (Patanjali Yogasutra 3/1,2) [2,3]

Dhyana or meditation is "sustained attention" and the "application of mind to the chosen point ". *Dhyana* is contemplating, reflecting on whatever *Dharana* or suggestion one has focused on. The stage proceeding meditation is called *Dharana*. *Dharana*, which means "holding on", is the focusing and holding one's awareness to one object. Each volunteer has practiced the given meditation technique as follows-

Dharana- It is taken in two terms-Thought & Place

- 1- Thought taken-All the men and women of the world are mine brothers & sisters.
- 2- Place (*Desha*)- Place (*Desha*) is Heart region (Point A & B)

Technique of (Meditation) [5]

Heartfulness Institute Meditation technique to meditate on heart's point A & B [In accordance to meditation on one *Desha* as described in (Patanjali Yogasutra 3/1, 2) [2,3] as shown in diagram below-

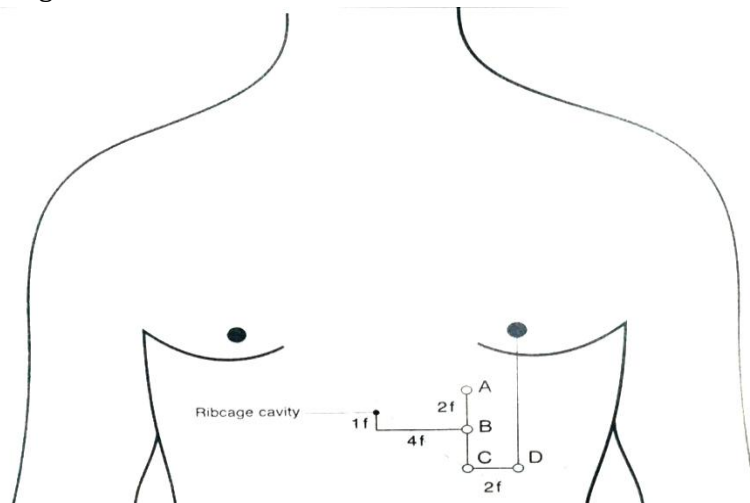


Diagram No. 1 [5]

This Institute chooses the heart as a place to focus. Here 1 finger Inferior to the lower end of Sternum and from there 4 fingers Left Lateral Side is Point "B". Point "A" is situated 2 fingers Superior to the Point "B".

The process of meditation was divided into two parts.

1. **Focus at night-** Volunteers were asked to take *suggestion* & Meditate on their chosen *Pradesha* with the same thought as given in *Dharna* at night before going to sleep. Meditation was done on Point "A" of heart region.
2. **Cleaning at morning-** Volunteers were asked to clean their *Desha* (Place where they were meditating on Heart) with the thought that "All the impurities, grossness & heaviness are melting and going out in the form of Smoke from the front" from my Point "B". "And imagine that as this process is going on, the structures behind are glowing". This was advised to done in the morning earliest. This was a kind of active meditation.

Evaluation of Intensity of Meditation Practices:

A seven point criteria was made to measure the intensity of meditation practice during whole duration of trial, the points were viz. willingness, sincerity etc.

The intensity of meditation practice was being assessed on the basis of VAS on following parameters from the first day of starting of meditation practice upto end of trial.

1. Willingness - (during meditation)
2. Sincerity- (during meditation)
3. Focus- (during meditation)
4. Acceptance - (for meditation)
5. Devotion - (for the practice)
6. Feeling - (arising during meditation and its continuation upto next meditation session)
7. Love- (for overall practice)

This should be recorded just after completion of every session except point no 6 i.e. feeling which will be assessed just before beginning of next session.

Time of practice- 10 minutes morning and 10 minutes at night.

Follow up- After 3 weeks (on the day of completion of Individual meditative practice)

Total duration of trial-3 weeks

Assessment was done on the basis of subjective and objective criteria for intensity of meditation and grading pattern of LIKERT SCALE adopted before & after practicing the technique of meditation to assess the attitude.

Criteria for assessment of Attitude

It was done on the basis of LIKERT SCALE.^[6,7] Likert scale is a semantic scale to measure the attitude. It consists of following steps:

Step 1- Statements collection

Step 2- Direction judging

Step 3- Discarding of neutral (or unable to judge) statements

Step 4- Formatting the items to measure intensity.

Step 5- Pilot test

Scoring -To bring all the individual item scores on the same level, negative was given reverse scoring pattern.

1. **Statement Collection:** In this various statements are framed on all the aspects touching human lives like self, family, education, society, learnings, love etc.
2. **Direction Judging:** For this, a questionnaire was made of 365 questions and was distributed to judges. Judges were selected from all the fields like politics, administration, army, medical, Ayurveda, police, academics, engineering, students, business community etc. The eminent personalities from the above said fields were selected and they were requested personally to be the part of work and contribute as a judge. They were requested to judge the statement in terms of positive and negative.

(QUESTIONNAIRE)

Evaluation of Meditation Practices to Modify Mental Attitude

Judges Copy to Develop Likert Scale

1) Life is very complicated and painful.

जीवन बहुत जटिल एवं पीड़ादायक है।

2) Family members, friends, relatives are not supportive.

परिवार के सदस्य, मित्र एवं रिश्तेदार सहायक नहीं होते हैं।

Discarding the Neutral Statements: After collection of questionnaires from various judges, all of them are compiled to find the only direct + or - are kept, neutral, not attempted, ambiguous, unclear statements are discarded and if one of the judges has attempted any of the questions in these terms, such questions were considered invalid from the whole compilation.

Formatting the Items to Measure Intensity: In order to measure the intensity of the statement judged, percentage of positive or negative is calculated. Percentage was calculated as

No of positive or negative questions ÷ total no of valid questions x100

After % calculation, only those statements are kept finally whose % score was 90% or above to it. In this order, total questions were reduced to 134. Now this was the LIKERT SCALE ready to be given to the volunteers under trial.

Final Likert Scale Questionnaire

1) Life is very complicated and painful.

जीवन बहुत जटिल एवं पीड़ादायक है।

(a) Strongly agree (b) Agree (c) Neutral (d) Disagree (e) Strongly Disagree

2) Family members, friends, relative are not supportive.

परिवार के सदस्य, मित्र एवं रिश्तेदारसहायक नहीं होते हैं।

(a) Strongly agree (b) Agree (c) Neutral (d) Disagree (e) Strongly Disagree etc.

Scoring: Now each question is given 5 options and each option carries a score corresponding to it in order of increasing positivity. For example, in a positive statement the score with options are- Strongly agree-5, Agree-4, Neutral-3, Disagree-2, Strongly disagree-1

Now this questionnaire was given to volunteers before starting the meditation practice and they were requested to attempt the questions instantly and naturally and honestly. After that the forms were collected and data was noted down in a table as before trial score. Now all the volunteers were subjected to meditation practices for 21 days with duration of 10 minutes in the evening and morning. Again after 21 days, on the day of completion of trial, again LIKERT SCALE Questionnaire was given to them and requested to attempt simultaneously as requested before. And all the data was noted down as after trial score of the individuals. Alongwith the difference between before and after trial score was noted down.

Final assessment of results

The improvement was assessed on the basis of increment of the positive attitude score. Volunteers were assessed before and after meditation for positive inclination of attitude on the basis of scoring pattern and percentage increment in positivity was calculated.

Statistical Analysis

- The data collected & compiled from this clinical trial was sorted out, processed further by subjecting to statistical method i.e. WILCOXAN SIGN RANK TEST.
- This test was done on the two sets of observations in trial group.
 - One is on the criteria of meditation intensity which signifies the role of them in doing meditation and relationship of each factor with meditation.
 - Secondly on evaluation of increment in positivity of attitude after meditation process, it incorporates the after trial and before trial values indicating change in attitude & increment in positivity.
- The obtained result were interpreted as: Highly significant at $p < 0.001$, Moderately significant at $p < 0.01$, Significant at $p < 0.05$, Insignificant at $p > 0.05$

Presentation of Data

The data collected & compiled from this clinical trial was sorted out, processed and presented in the following sections:

1. Demographic profile
2. Effect of meditation practices

Demographic Profile

	Maximum	Percentage%
Age	19(20-25)	95
Sex	19(females)	95
Marital Status	20(unmarried)	100
Socio economic status	11(Uppermiddle)	55
Habitat	16(Rural)	80
Mental status	11(Normal)	55
Religion	18(Hindu)	90

Effect of Meditation Practices

Table 1: Overall intensity of meditation practices before and after study

A table consisting of seven criteria to measure intensity of meditation was framed and data was collected for 3 weeks in the morning and evening both times and average was calculated before and after trial as shown below.

Criteria for overall intensity of meditation practices for 20 volunteers	Average before trial=Total BT score /20	Average after trial=total AT score/20
Willingness	67.75	72.15
Sincerity	67.5	70.2
Focus	51.75	68.5
Acceptance	60.75	71.4
Feeling	55.25	69.3
Devotion	56.75	72.95
Love	61.2	74.2
Total average % of intensity of meditation	60.13	71.24

Table 2: Statistical analysis of criteria of Intensity of meditation before & after trial and whole average % of it, during trial period

S. No.	Criteria of Intensity of meditation	Average % during Trial	W _{critical}	W _{Stat}	Significance (value) P value	Significance
1.	Willingness	67.06	40	57.5	Willingness p=0.378	Insignificant
2.	Sincerity	66.11	25	53.5	Sincerity p=0.720	Insignificant
3.	Focus	59.51	40	31	Focus p=<0.016	Significant
4.	Acceptance	61.85	25	27.5	Acceptance p=0.064	Insignificant
5.	Feeling	61.74	25	20	Feeling p=0.022	Significant
6.	Devotion	65.79	46	25	Devotion p=<0.003	Moderately Significant
7.	Love	65.09	46	43	Love p=<0.036	Significant

Table 3: Before Trial (BT) and After Trial (AT) score of Positivity in Attitude of 20 volunteers on Likert scale

Volunteers	SCORE on Likert Scale		DIFFERENCE	%CHANGE $(\frac{DIFFERENCE}{BT})100$
	BT	AT		
V ₁	565	589	24	4.24
V ₂	591	592	1	0.16
V ₃	568	609	41	7.21
V ₄	541	553	12	2.21
V ₅	611	622	11	1.80
V ₆	578	607	29	5.01
V ₇	500	558	58	11.6
V ₈	541	571	30	5.54
V ₉	562	608	46	8.18
V ₁₀	608	646	38	6.25
V ₁₁	592	593	1	0.16
V ₁₂	615	618	3	0.48
V ₁₃	578	598	20	3.46
V ₁₄	571	607	36	6.30

V ₁₅	517	521	4	0.77
V ₁₆	599	600	1	0.16
V ₁₇	582	606	24	4.12
V ₁₈	553	557	4	0.72
V ₁₉	586	612	26	4.43
V ₂₀	591	632	41	6.93

Table 4: Statistical analysis of change in positive inclination of attitude:

Total Score on Likert Scale BT	Total Score on Likert Scale AT	Total Difference	W _{critical} at 0.05 level	W _{Stat}	P(value)	Significance
11449	11899	450	n=20 W _c =52	0	0.0000885	Highly significant

Here $W_{critical} > W_{stat}$, so null hypothesis is rejected & alternate hypothesis is accepted i.e. meditation practices are highly significant in increasing the positive inclination of mental attitude in apparently healthy volunteers.

DISCUSSION

Table No.1

- Willingness-** It increased from 67.75 % to 72.15% (Table No.1) during trial. It showed that volunteers enjoyed the process of Meditation and their willingness to do Meditation increased with time.
- Sincerity-** Volunteers were already 67% sincere and showed increase of 3% i.e. up to 70% after trial. It shows that volunteers got seriously indulged in process and became more serious and sincere with time, a positive effect of this practice.
- Focus-** In volunteers, where already Focus was 51.75% it increased to 68.5% i.e. 16.75% change (Table No.1). It showed that Focus of Individuals kept on increasing significantly from day 1 to day 21.
- Acceptance-** In trial group, it was increased from 60.75% to 71.4% i.e. 10.65% (Table No.1). So we can say Meditation had increased acceptance and approval in the volunteers successfully.
- Feeling-** In volunteers, feeling increased from 55.25 % 69.3% i.e. 14.6% (Table No.1) change which is statistically as well as visibly significant. This happens when a person meditating regularly is shifted towards feelings which is most needed now a days in society.
- Devotion-** In devotion great increase was seen in the level of volunteers i.e. 56.75% to 72.95% i.e. 16.2% in volunteers (Table No.1), which is moderately significant and again a positive shift due to meditation.
- Love-** In this criteria great increment of 13% was seen in volunteers (Table No.1)

Overall there is incremental change of 11.11% in all criteria.

Thus we can say that Meditation was greatly significant in change in criteria involved in meditation, and if 100% intensity is there, it can produce far better results which is a matter of further exploration.

Table No.2

- Willingness-** In Table No.2, $p=0.378$ for Willingness factor of Meditation intensity although shows the insignificance of this factor for meditation in this trial but the final results further established the gravity of Meditation. Even if one is not 100% willing but is sitting to do meditation, he is going to get good results. Meditation is needed to be done even if less Willingness is there.
- Sincerity-** In Table No.2, $p=0.720$ for sincerity during practice of Meditation although shows the insignificance of this factor for meditation in this trial and it may be concluded that sincerity has cast no deciding impact on Meditation process. Person just needs to sit and try to meditate.
- Focus-** Again in table no.2, $p<0.016$ indicates that focus is found significant factor for meditation which is evident as one need to focus on the thought or place taken as suggestion, without it no Meditation is possible.
- Acceptance:** In this p value is $p=0.064$ in Table No.2. This is found to be insignificant factor. Obviously one takes time to accept new process, in this trial what we found that even if acceptance % is less, the process or practice is going to cast its impact.

5. **Feeling:** Here p value is $p=0.022$ in Table No.2 which is significant factor for intensity of Meditation. To feel what you are doing is the core or soul of any practice. Needless to say, meditation is a self-experiencing process, if one feels by heart it definitely yields good result.
6. **Devotion:** Here p value is $p<0.003$ in Table No.2, it is moderately significant factor for Meditation in this trial, a feeling like devotion takes time to cultivate, in short span of trial it was found to cast moderate impact.
7. **Love:** Love is the highest energy. It propels the strong feeling of interest. Without being interested or involved, we cannot accomplish any practice with accuracy. More deeply we engrossed in any practice, more results we are going to get. This truly signifies p value= <0.036 as shown in Table No.2 which is found significant factor.

Table No. 4**Meditation and Change in Attitude**

As shown in Table No. 4, highly significant effect as indicated by $p < 0.00008$ in this trial, was observed on change of attitude after doing Meditation i.e. Meditation process was found to be significant as changing human attitude. The overall (among 20 volunteers) change in positive inclination of attitude was highly significant.

CONCLUSION

The following conclusions can be drawn from this research work:

1. Meditation practices have shown significant effect on the change of attitude or increase in the positivity of attitude of volunteers. Though time and duration of the trial was very short still it was proved highly significant and there was marked change in attitude in this trial. This

establishes the transformational quotient of Meditation on behavioral patterns.

2. In the present research work, the average VAS for criteria of intensity of Meditation was initially 60.13 % and at the end of study after expensing only 10 minutes morning & 10 minutes evening for meditation, it improves upto 71.24% which is quite impressive and establishes the fact that by practicing meditation regularly, it intensifies the intensity of Meditation also.

REFERENCES

1. Shri Swami Omanand Teerath, Patanjali Yogapradeep, Gorakhpur, Geeta Press, Samvat 2059, Page No.154, 291.
2. B.K.S. Iyenger, The Illustrated Light on Yoga, United Kingdom, Harper Collins Publishers Limited, 2016, Page No.178, 179.
3. I.K.Taimini, The Science of Yoga, Chennai, The Theosophical Publishing House, 2015, Page No.278, 279.
4. Dr.K.S.Balasubramanian, Yoga Vedanta and Sahaj Marg Vol-1, Kolkata, -published under license by Spiritual Hierarchy Publication Trust, 2015, Page No 15-21.
5. Dr.K.C. Varadachari, Collected Works of Dr.K.C. Varadachari Vol-1, Kolkata-published under license by Spiritual Hierarchy Publication Trust, 2016, Page 93.
6. Likert scale available at <https://www.surveymonkey.com>>Likert
7. Likert scale available at <https://en.m.wikipedia.org/wiki/likert>
8. Attitude (in psychology) available at <https://en.m.wikipedia.org/wiki/attitude>

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