

Research Article

Analysis of the Changes in Feelings and Memory Power of Children Due to Meditation Practice

K Madhava Chandran^{1*}, T Valsan², N Vijayaraghavan³, NP Radhakrishnan⁴

¹Social Researcher and President, WEDO (NGO), Kozhikode, Kerala, India

²Vice - President, WEDO, Kozhikode, India

³Founder Director, Satyananda Yoga Research Centre (SYRC), Kozhikode, India

⁴Managing Trustee, SYRC, Kozhikode, India

*Correspondence to: K Madhava Chandran; E-mail: madhavachand@yahoo.com

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Abstract

This paper reports the results of a study on the effect of meditation practice on the feelings and memory power of children. It was carried out among children (students) from Kozhikode, Kerala, India by Satyananda Yoga Research Centre, Kozhikode and WEDO (NGO), Kozhikode using a questionnaire containing the 12-item feeling inventory proposed by Gauvin and Rejeski (1993) and the level of memory of the children. The data was analyzed as percentages, score and through statistical test. The results reveal the effect of daily meditation for three minutes practiced by the children for one month on improving positive feelings and reducing negative feelings experienced by them. More effect of meditation practiced at the school on feelings is observed in the case of children who had done meditation earlier itself. Meditation has also helped in improving the memory power of the children. The usefulness of conducting meditation programmes with a research component in more educational institutions for creating a scientific data base on the effects of meditation, which can be transferred to the public through awareness programmes/media is highlighted in the paper.

Introduction

Practice of meditation improves the mental state of people mainly through the process of relaxation. It involves awareness of body, breath, thoughts, and by removing negative thoughts/feelings and emotions. (<https://www.hsph.harvard.edu/india-center/mental-well-being/>-accessed 3rd October 2021). Good feelings will help to achieve a positive psychological condition for people.

Pressure experienced through studies is a major factor contributing to reduction in positive feelings and increase in negative feelings by many children. This could be more for girls who experience the menstrual cycle, which can also lead to psychological problems. It is in this background that a study on meditation was conducted among girl students in Kerala, India

Methodology

The study was carried out jointly by Satyananda Yoga Research Centre (SYRC), Kozhikode,

Kerala, India and WEDO (NGO), Kozhikode during 2022.

A meditation programme was organized by SYRC through Dr. N. Vijayaraghavan, yoga/meditation expert and Founder Director of this yoga centre for 50 children (students) of the Govt. Achuthans Girls Higher Secondary School, Chalappuram, Kozhikode, Kerala, India. It involved one day awareness class on meditation, followed by daily practice of guided meditation provided through a recorded audio by the children for three minutes for a period of one month. Data was collected from them before and after one month of meditation through a questionnaire containing the 12 item feeling inventory (Gauvin and Rejeski, 1993), with 5 responses scored from 1 to 5 [1]. A

question on the level of memory of the children was also included. The level of memory of the children was also scored for the 5 responses for this parameter in the same manner as in the case of feelings. The sum of scores of the responses was worked out as the total feelings score and total memory score of each respondent. The responses of 40 children, who answered the questionnaire were considered for analysis and interpretation as percentages, score and t test.

Results

Table 1 shows the changes in level of experience of the positive and negative feelings by the children through meditation.

Sl. No.	Positive feelings	Level of experience of the feeling	Before meditation	After 1 month of meditation
			Children (%) reporting	Children (%) reporting
1	Refreshed	Strongly and Very strongly	5.0	40.0
2	Calm	Not at all	12.5	2.5
		Moderately, Strongly and Very strongly	65.0	87.5
3	Enthusiastic	Slightly and Moderately	52.5	65.0
4	Relaxed	Moderately, Strongly and Very strongly	55.0	82.5
5	Energetic	Moderately and Strongly	57.5	75.0
6	Happy	Strongly and Very strongly	40.0	45.0
7	Revived	Moderately, Strongly and Very strongly	47.5	77.5
8	Peaceful	Moderately, Strongly and Very strongly	55.0	70.0
9	Upbeat/buoyant	Not at all	5.0	2.5
		Slightly	10.0	25.0
Sl. No.	Negative feelings	Level of experience of the feeling	Before meditation	After 1 month of meditation
			Children (%) reporting	Children (%) reporting
1	Fatigued	Strongly and Very strongly	22.5	10.0
2	Tired	Moderately and Strongly	50.0	42.5
3	Worn out	Moderately	42.5	25.0

Table 1: Changes in the experience of feelings by children through meditation.

Table 2 gives the total feelings score of the children before and after meditation.

Details	Range of total feelings score	Children (%) reporting
Before meditation	31-49	82.5
	23-30	17.5
	Total	100
After meditation	33-54	95.0
	28-29	5.0
	Total	100

Table 2: Total feelings score of children before and after meditation

Total post meditation feelings score of children who have done and not done meditation earlier is given in Table 3.

Group	Range of total feelings score	Children (%) reporting
Children who have done meditation earlier	33-40	60.0
	42-48	40.0
	Total	100
Children who have not done meditation earlier	28-29	10.5
	33-40	57.9
	42-44	26.3
	Total	100

Table 3: Total post meditation feelings score of children who have done and not done meditation earlier

Table 4 shows the change in memory power of children through meditation.

Level of memory	Children (%) reporting	
	Before meditation	After meditation
Very low	2.5	Nil
Low	32.5	5.0
Medium	10.0	7.5
High	50.0	82.5
Very high	5.0	5.0
Total	100	100

Table 4: Change in memory power of children through meditation

The result of statistical test of difference in memory power score of children before and after meditation is shown in Table 5.

Mean memory score of children	
Before meditation	After meditation
3.2	3.9
t stat = -3.450; significant at $p < 0.001$	
The maximum possible memory power score under the study is 5 (score for very high memory power reported by children)	

Table 5: Statistical significance of the difference in memory power score of children before and after meditation

Discussion

Based on the data presented in Table 1, changes in the level of experience of different feelings after meditation for a period of one month, compared to before its practice are interpreted below. It may be noted that in the case of some of the feelings, the proportion of children

reporting two or more levels of its experience (when considered together) are reported

Positive feelings

- Feeling refreshed: The proportion of children experiencing this feeling strongly and very strongly (when considered

together) has increased from 5 % before meditation to 40 % after meditation.

- Feeling calm: When compared to 65 % children feeling calm moderately, strongly and very strongly (when considered together) before meditation, a higher proportion (87.5 %) have experienced it in this manner post meditation.
- Further, while 12.5 % children report not at all experiencing calmness before meditation, the proportion reporting in this manner has reduced to 2.5 % after meditation.
- Feeling enthusiastic: While 52.5 % of children report feeling slightly and moderately enthusiastic before they did the meditation, after one month of meditation, the figure has increased to 65 % children.
- Feeling relaxed: The proportion of children reporting moderately, strongly and very strongly relaxed before meditation practice (55 %) has increased to 82.5 % experiencing relaxation in this manner after one month of meditation.
- Feeling energetic: While 57.5 % of children felt energetic moderately and strongly before meditation, 75 % reported feeling energetic moderately and strongly after one month of meditation.
- Feeling happy: The proportion of children who felt strongly and very strongly happy increased from 40 % before meditation to 45 % after meditation.
- Feeling revived: When compared to only 47.5 % children reporting as feeling revived moderately, strongly and very strongly before practice of meditation, a very high proportion (77.5%) felt revived in this manner after one month of meditation.
- Feeling peaceful: 70 % of children felt peaceful moderately, strongly and very strongly after one month of meditation, as compared to only 55 % before meditation.
- Feeling upbeat or buoyant: 10 % children who felt slightly buoyant before meditation changed to 25 % after meditation practice. The proportion of children who did not feel buoyant at all reduced from 5 % before meditation to 2.5 % after its practice.

Negative feelings

- Feeling fatigued: While 22.5 % reported feeling very strongly and strongly fatigued before the start of meditation, it reduced to 10 % children reporting so after meditation.
- Feeling tired: 50 % children reported feeling moderately and strongly tired before meditation practice. However, the proportion reduced to 42.5 % after start of meditation
- Feeling worn out: While 42.5 % felt moderately worn out before meditation practice, only 25 % felt in this manner after one month of meditation practiced at the school.

It can be inferred from the data presented in Table 2 that before meditation at the school, 82.5 % of children had a total feeling score in the range of 31 to 49. However, after one month of meditation, this has increased to a higher score (in the range of 33 to 54) for more number of children (95%). Further, while 17.5 % of children had a lower range of feelings score (23 to 30) before meditation, only 5 % get a lower feeling score in the range of 28 to 29 after one month of meditation (Table 2). This trend of improvement in feelings among the children may be attributed primarily to the positive effect of meditation practiced for 1 month.

Even though there is no statistically significant difference in the total post meditation feelings score of children who have done and those who have not done meditation earlier, it can be made out from Table 3 that in the case of children who had done meditation earlier, 40 % have a score in the range of 42 to 48, while 26.3 % of those who have not done it earlier fall in the comparatively lower score range of 42 to 44 (Table 3). This could be due attributed to the positive effect of the already practiced meditation on their psychology, which may be reinforced by the present meditation programme imparted by SYRC, Kozhikode for them at the school.

Memory power

Improvement in the memory power of children through meditation is evident from the data presented in Table 4. The proportion of children reporting high level of memory has increased from 50 % before the start of meditation to 82.5 % after one month of meditation. While 32.5 % children reported low memory power before meditation, the figure has reduced to 5 % after meditation. Statistical significance of the difference in mean memory power score of the children before and after meditation can be inferred from Table 5. Hence, these results establish the influence of meditation practice even for a period of one month in improving the memory power of children.

The results of a study reported by Madhava Chandran, et al. (2022) reveal the effect of yoga practice (which involves meditation, in addition to physical postures/asanas) in improving positive feelings and reducing negative feelings of adult yoga practitioners [2].

Conclusion

This study has shown the effect of meditation on the feelings experienced by the children and their memory power. It should be noted that improvement in various positive / negative feelings and memory power has been achieved through daily meditation by the children for three minutes for a period of one month only at the school. Better results can be expected if they are able to continue daily meditation for a comparatively longer duration, as well as for more period at the school or at home. This is going to help in improving their quality of life and education. More effect of meditation

practiced at the school on the feelings is observed in the case of children who had done meditation earlier itself. Considering the positive outcome of this study, it will be useful if meditation programmes are organized for students by more number of educational institutions, along with a research component by the agencies imparting the meditation training/academic/research institutions. This will help to buildup of a scientific data base on the effects of meditation, which should also be transferred to the public through awareness programmes/media etc. for creating better knowledge and informed decision on the adoption of such health promoting practices.

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