A Comparative Study on Effect of Different Variation of Chakra Meditation on Brow Chakra of Athletes

Poonia Sonesh[1]* Mukherjee S. S.[2]

[1]Ph.D. Scholar, Lakshmibai National Institute of Physical Education, Gwalior (M.P)

[2]Professor, Lakshmibai National Institute of Physical Education, Gwalior (M.P)

Abstract – Chakra verbally means "Wheels of light". Our body has 7 major and many minor chakras. (Shiv Samhita, 2012) These 7 chakras are situated from base of spine to the top of head. These are psychic centre of the astral body governing a group of functions (The serpent power, 1919). To attain the purpose of the study, 45 students were selected as subjects from Lakshmibai National Institute of Physical Education, Gwalior, Madhya Pradesh. The age of the subjects ranged between 18 to 25 years. For administration feasibility three intact groups were formed, namely group 1, group 2 and group 3 with each group consisting of fifteen students. The treatment (chakra meditation with beej mantra chanting, chakra meditation with chakra colour, and control group) was randomly allotted among groups. The training duration was five days in a week for total eight weeks. The brow chakra was selected for the study. The criterion measure chosen for testing the chakras in this study was Auramed Biopulsar Reflexograph and the energy readings of root chakra was recorded in percentage before the training programme (pretest), after 4 and 8 weeks of training programme. To compare the effects of different chakra meditation training and training duration on selected chakra 3 (Training Durations) X 3 (Training Variations) between within factorial ANOVA was used as the statistical technique and the level of significance was set at 0.05. Partial Eta Square was also calculated to see the effect size of treatment. The SPSS-20 software was used for analysis. The findings indicated that there was a significant main effect of training durations, groups and interaction effect between training durations and groups on brow chakra.

Keywords: chakra meditation, Auramed Biopulsar Reflexograph, effect size, interaction effect.

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INTRODUCTION

Chakra verbally means "Wheels of light". These *chakras* included the centre of electromagnetic energy that are located throughout the body, they provide a way for energy to enter and exit our body and help to regulate all type of energy flow i.e. physical, mental, emotional and spiritual. Our body has 7 major and many minor c*hakras*. (Shiv Samhita, 2012) These 7 *chakras* are situated from base of spine to the top of head. These are psychic centre of the astral body governing a group of functions (The serpent power, 1919).

Consciousness is our awareness and environment. Consciousness has direct correlation with the energy levels of chakras. The measurements of the energy levels corresponding to the different focal points (chakras or centers) of the body, which is related with consciousness clearly showed that the energy level in terms of tissue conductance or current at constant voltage is highest at the eye centre and decreases at lower centre, which represents at the correlation between consciousness's which is highest at eye centre and lower at lower centres. According to David Pond the "Chakras" store and express the divine energy and any blocks and restrictions to the flow of energy create emotional and physical imbalances.

There is a positive impact of mediation on life and increase consciousness through chakra energy (Chaturvedi et.al.2015). Panday et al. (2011) conducted a study to check the effect of yoga sadhana and pranic healing on pranic energy level of female prisoners.and the study has revealed significant results. There are various mudras along with beej mantras of chakras, which are used for chakra meditation to enhance their energy levels (Dr. Indu Arora 2010).

Therefore, in this study we are measuring chakras energy level which also depicts the consciousness by giving two variations of chakra meditation i.e. beej mantra and chakra colour meditation.

MATERIALS AND METHODS

Subjects:

For the purpose of this study forty five (45) athletes from Lakshmibai National Institute of Physical Education, Gwalior (M.P), were considered as subjects. The age of the subjects ranged between 18 to 25 years.

Tools:

Auramed Biopulsar Reflexograph was used to take the energy readings of brow chakra and was recorded in percentage.

Procedure:

The data was collected from the three groups (two experimental and one controlled group) before the training of chakra meditation, after four weeks, and after the 8 weeks training of chakra meditation.

Administration of Training Programme

The details of the training programme are as follows:

- Total training program duration was of eight weeks.

- Five days a week training session.

- Training session was of 30-40 minutes/day.

- Beej mantra (Om) and chakra's colour (Violet) were used as chakra meditation technique.

Data Analysis:

In order to see "A Comparative Effect of Different Variations of Chakra Meditation on Brow Chakra of Athletes", 3X3 mixed (Between-Within) ANOVA was used as the statistical technique and level of significance was set at 0.05. The SPSS-20 software was used for analysis. The results have been depicted in the following table:

RESULTS AND DISCUSSION

Table 1

Descriptive Statistics of Brow Chakra of Different Groups and Training Durations of Chakra Meditation

Training Duration	Groups	Mean	Std. Deviation	N
Pre-test	Beej Mantra	62.47	2.17	15
	Colour Meditation	62.20	3.00	15
	Control Group	62.87	2.39	15
Four Weeks	Beej Mantra	65.33	2.61	15
	Colour Meditation	64.73	2.25	15
	Control Group	62.67	2.72	15
Eight Weeks	Beej Mantra	68.93	2.71	15
	Colour Meditation	68.47	2.56	15
	Control Group	63.47	2.75	15

Table 1 shows the scores of mean and S.D. of brow chakra of different groups and training durations of chakra meditation. The pre-test mean scores and S.D. of brow chakra for the beej mantra meditation group, chakra colour meditation group and control group were 62.47±2.17; 62.20±3.00; 62.87±2.39 respectively.

After four weeks training duration, the mean scores and S.D. of brow chakra for the beej mantra meditation group, chakra colour meditation group and control group were 65.33±2.61; 64.73±2.25; 62.67±2.72 respectively.

The mean scores and S.D. of brow chakra after eight weeks of meditation training the beej mantra meditation group, chakra colour meditation group and control group were 68.93±2.71; 68.47±2.56; 63.47±2.75 respectively.

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Table 2

F-Table for Training Durations (Within-Subject Effect) and Interaction Effect of Brow Chakra

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	451.61	2.00	225.81	78.92	.00	.65
Time * Training_Variation	Sphericity Assumed	166.70	4.00	41.67	14.56	.00	.41
Error (Time)	Sphericity Assumed	240.36	84.00	2.86			

*p-value < 0.05 is significant.

Table 2 shows that there was a significant main effect of training durations on chakra meditation as the p-value was 0.00 which was less than 0.05. It also shows that there was a significant interaction effect between groups and training durations as the p-value was 0.00 which was less than 0.05.

In the mix design there are two independent factors, duration and groups, whose effects needs to be investigated. Here the duration is a within-subjects factor and training groups is a between-subjects factor. In variable of brow chakra, the interaction effect is significant; hence analyzing the main effects becomes meaningless.

Partial eta square in the above table explains 65% of variance of training durations and 41% of variance was explained by the interaction effect, which shows variance of interaction between training durations and groups. Partial eta square of training duration and interaction indicates very large effect size.

Table 3

F- Table for Groups (Between-Subjects Effects) of Brow Chakra

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Training Variation (Groups)	170.90	2.00	85.45	5.97	.01	.22
Error	601.51	42.00	14.32			

*p-value < 0.05 is significant.

Table 3 shows that there was significant main effect of groups (beej mantra meditation, chakra colour meditation and control group) on brow chakra due to chakra meditation practice as the p-value was 0.01 which was less than 0.05. Partial eta squared in the above table explains 22% of variance of groups, which indicates moderate effect size.

Thus it can be concluded that there was a significant effect of training durations, interaction effect and groups on brow chakra.

Table of within subjects effects (Table 2) indicated that there was a significant effect of interaction between training durations and groups on brow chakra. To know in details about how brow chakra in each of the group through the practice of chakra meditation one way ANOVA with repeated measures was employed separately for each group. Further simple ANOVA's were computed separately for each data readings (pre-test, after 4 and 8 weeks).

Table 4

F-Table for Training Durations (Within - Subjects) of Different Variations of Chakra Meditation

Source			Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Groups	Beej Mantra Group	Sphericity Assumed	314.98	2.00	157.49	71.48	.00	.84
	Colour Group	Sphericity Assumed	298.13	2.00	149.07	77.49	.00	.85
	Control Group	Huynh-Feldt	5.20	1.52	3.41	.58	.52	.04
Error	Beej mantra	Sphericity Assumed	61.69	28.00	2.20			
	Colour Group	Sphericity Assumed	53.87	28.00	1.92			
	Control Group	Huynh-Feldt	124.80	21.35	5.85			

*F0.05 > 3.34 (2, 28 df) is significant.

Table 4 evidences that there was a significant effect of training durations on beej mantra and colour meditation groups as the calculated F-values were found to be greater than tabulated f value (F=3.34) with df 2, 28 at 0.05 level of significance (p-values < 0.05). However no significant difference was found in control group as the calculated F-value (0.58) was less than tabulated f value (p-value > 0.05). This means training duration had a significant effect on two experimental groups except one.

To know exactly in which time period (pretest, after 4 weeks and after 8 weeks) of training duration brow chakra has improved significantly, pairwise comparison between data reading after Bonferroni correction for confidence interval were made. The results are shown in table below.

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Table 5

Pairwise Comparison of Training Duration (Within-Group) of Groups

Groups	(I) time		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
						Lower Bound	Upper Bound
Beej Mantra Group	Pretest	4 weeks	-2.87*	.35	.00	-3.82	-1.92
		8 weeks	-6.47*	.61	.00	-8.12	-4.81
	4 weeks	Pretest	2.87*	.35	.00	1.92	3.82
		8 weeks	-3.60*	.62	.00	-5.29	-1.91
Colour Group	Pretest	4 weeks	-2.53*	.49	.00	-3.86	-1.21
		8 weeks	-6.27*	.63	.00	-7.97	-4.56
	4 weeks	Pretest	2.53*	.49	.00	1.21	3.86
		8 weeks	-3.73*	.37	.00	-4.74	-2.72
Control Group	Pretest	4 weeks	.20	.46	1.00	-1.05	1.45
		8 weeks	-.60	.89	1.00	-3.03	1.83
	4 weeks	Pretest	-.20	.46	1.00	-1.45	1.05
		8 weeks	-.80	.88	1.00	-3.19	1.59

*The mean difference is significant at the 0.05 level.

Table 6

F-Table for Effect of Groups (Between Groups) in Each Training Duration

Time		Sum of Squares	df	Mean Square	F	Sig.
Pre data	Between Groups	3.38	2.00	1.69	.26	.77
	Within Groups	271.87	42.00	6.47		
	Total	275.24	44.00			
4 weeks	Between Groups	58.71	2.00	29.36	4.57	.02
	Within Groups	269.60	42.00	6.42		
	Total	328.31	44.00			
8 weeks	Between Groups	275.51	2.00	137.76	19.26	.00
	Within Groups	300.40	42.00	7.15		
	Total	575.91	44.00			

*The mean difference is significant at the 0.05 level.

Table 5 shows that in beej mantra meditation group there was a significant difference found between pretest – after 4 weeks, pretest – after 8 weeks and 4 weeks – after 8 weeks as the p-values were less than 0.05. In colour meditation group there was a significant difference found between pretest – after 4 weeks, pretest – after 8 weeks and 4 weeks – after 8 weeks as the p-values were less than 0.05. In control group there was no significant difference was found between pretest – after 4 weeks, pretest – after 8 weeks and 4 weeks – after 8 weeks as the p-values were more than 0.05.

From table 5 it was found that there was an interaction between training duration and groups. To know if there was a difference between training groups in each of the data reading, one way ANOVA was computed separately for all the data readings. The results are shown below:

The results of One-Way ANOVA indicate that score of brow chakra was not different in pretest of data readings among three groups the p-value was greater than 0.05. There was a significant difference found among three groups after 4 weeks and 8 weeks because p-value was less than 0.05. Since the One-Way ANOVA of brow chakra was found significant among groups at the end of 4 weeks and 8 weeks, Tukey post hoc test was applied to know exactly which group was better. The results are shown in the table below:

Table 7

Pairwise Comparisons of between Groups (after 4 weeks and 8 weeks)

Dependent Variable	(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Four Week	Beej Mantra	Colour Meditation	.60	.93	.79	-1.65	2.85
		Control Group	2.67*	.93	.02	.42	4.91
	Colour Meditation	Beej Mantra	-.60	.93	.79	-2.85	1.65
		Control Group	2.07	.93	.08	-.18	4.31
	Control Group	Beej Mantra	-2.67*	.93	.02	-4.91	-.42
		Colour Meditation	-2.07	.93	.08	-4.31	.18
Eight Week	Beej Mantra	Colour Meditation	.47	.98	.88	-1.91	2.84
		Control Group	5.47*	.98	.00	3.09	7.84
	Colour Meditation	Beej Mantra	-.47	.98	.88	-2.84	1.91
		Control Group	5.00*	.98	.00	2.63	7.37
	Control Group	Beej Mantra	-5.47*	.98	.00	-7.84	-3.09
		Colour Meditation	-5.00*	.98	.00	-7.37	-2.63

*. The mean difference is significant at the 0.05 level.

Table 7 indicates that significant difference was found after 4 weeks and 8 weeks of chakra meditation training between control group – beej mantra group and control group- colour meditation group as the p-values were less than 0.05 (p < 0.017). There was no significant difference found between beej mantra group and colour meditation group as the p-value was greater than 0.017 (p > 0.017).
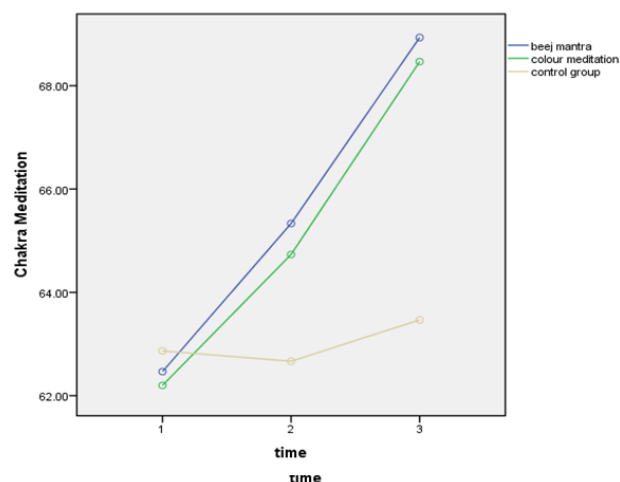

Figure: Graphical Representation of Different Groups with Training Duration of Brow Chakra

On the basis of the finding we conclude that practice of chakra meditation for 4 and 8 weeks is sufficient to bring out significant improvement in brow chakra (main effect of training duration).

In all the three groups the pattern of improvement in brow chakra is different according to the variation of chakra meditation they practice.

CONCLUSIONS

The findings revealed that there was a significant main effect of training durations, groups and interaction effect between training durations and groups on brow chakra. On the basis of the findings of interaction effect we conclude that practice of chakra meditation for 4 and 8 weeks with beej mantra meditation and colour meditation is sufficient to bring out significant improvement in brow chakra. Group performing beej mantra meditation shows significant improvement in brow chakra after 4 weeks while the group performing colour meditation helped to improve brow chakra after 8 weeks as compared to control group which shows no significant improvement in brow chakra at any point of time. Descriptive table reveals that beej mantra meditation practice helps to improve maximum throat chakra as compared to colour meditation practice and control group (Magadhi, V. 2014).

REFERENCES

Chatruvedi D.K. and Lajwanti (2014). Correlation between Energy Distribution profile and Level of Consciousness, International Journal of Education, Vol. 4(1), pp. 1-9.

Dr. Indu Arora (2010). "Chakra Meditation with Mudra and Mantra", International Symposium on Yogism.

Fahrion, S.L., Wirkus, M., & Pooley, P. (1992). EEG amplitude, brain mapping, & synchrony in & between a bioenergy practitioner & client during healing. Subtle Energies, 3(1), pp. 19-52.

Green, E., & Fehmi, L. (1994). Comments—"Cartography of consciousness: A functional re-examination of theta, alpha and beta." by M. A. Tansey, K. H. Tachiki & J. A. Tansey. Subtle Energies, 5, pp. 169-179.

Gueldner, S.H., Michel, Y., Bramlett, M.H., Liu, C., Johnston, L.W., Endo, E., et al. (2005). The well-being picture scale: A revision of the index of field energy. Nursing Science Quarterly, 18, pp. 42-50.

Judith, A. (2002). Wheels of Life: A User's Guide to the Chakra System. Llewellyn Publications, St. Paul, MN.

Kalyani, G., Venkatasubramanian, G., Arasappa R., Rao, N.P., Kalmady, S.V., Behere R.V., Rao, H., Vasudev, M.K. (2011). Neurohemodynamic correlates of 'OM' chanting: A pilot functional magnetic resonance imaging study. International Journal of Yoga, 4 (1), pp. 3-6.

Lo, P., Huang, M., & Chang, K. (2003). EEG alpha blocking correlated with perception of inner light during Zen meditation. The American Journal of Chinese Medicine, 31, pp. 629-642.

Magadhi, V. (2014).The effects of 6 weeks of training of Gayatri Mantra chanting on the aura of female athletes. Unpublished MPEd thesis, LNIPE, Gwalior.

Mandel, P. (1986). Energy emission analysis: new application of Kirlian photography for holistic medicine. Berlin, Synthesis Publishing.

Panday et al. (2011), "The effect of yoga sadhana and pranic healing on pranic energy level of female prisoners".

Retrieved from http:// www. BioField Global Research Inc.html.on 25/02/2015.

Satchidananda, S. (1985). *Integral Yoga: The Yoga Sutras of Patanjali* (Illustrated). Integral Yoga Publications, ISBN 0932040284, 9780932040282.

Corresponding Author

Poonia Sonesh*

Ph.D. Scholar, Lakshmibai National Institute of Physical Education, Gwalior (M.P)

E-Mail –

Poonia Sonesh[1]* Mukherjee S. S.[2]