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Effects of Integrated Yoga Modules of Yogic Practices on Selected Physical and Physiological Variables among Police with Dysmenoria

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Abstract

The present study was designed to find out the effect of Integrated yoga modules of yogic practices on physical and physiological variables among police with dysmenoria. It was hypothesized that there would be significant differences in physical and physiological variables among police with dysmenoria due to the influences of Integrated yoga modules of yogic practices. To achieve the purpose of the study, 45 police with dysmenoria from chennai, their aged between 30 and 40 years were selected subjects were divided into two experimental group and control group with 15 subjects each in a group. Experimental group I – (Bihar school of yogic practices) group and Experimental group II – (B.K.S. Iyengar practices) for the period of 12 weeks of an hour in the morning. The control group was not exposed to any specific training but they participated in the regular activities. The pre-test and post-test were conduct before and after the training for three groups. The psychological variables flexibility was measured by sit and reach test and resting pulse rate was measured by stethoscope and stop watch. The data pertaining to the variables collected from the three groups before and after the training period were statistically analyzed by using Analysis of Covariance (ANCOVA) to determine the significant difference and tested at0.05 level of significance. The results of the study showed that stress decreased significantly as a result of Integrated yoga modules of yogic practices. Hence, the hypothesis was accepted at 0.05 level of confidence. The conclusion is that the Bihar school of yogic practices and B.K.S. Iyengar practices helped to increase and reduce the flexibility and resting pulse rate among the police with dysmenoria.

Keywords: Integrated Yoga Module, Physical, Physiological, Police.

Introduction

Though many call Patanjali 'The Founder of Yoga', Patanjali. He was instead the first codifier of principles which were part and parcel of the spiritual life of his time... those foundations, beliefs and practices which had evolved and were passed down throughout many thousands of years from the very beginning of vedic times. Astanga Yoga is a system of Yoga that was taught by the sage Vamana Rishi in the Yoga Korunta, which is an ancient manuscript "said to contain lists of many different groupings of asanas, as well as highly original teachings on Vinyasa, Drishti, Bandhas, Mudras and Philosophy". This text was imparted to Sri T. Krishnamacharya in the early 1900`s by his Guru Rama Mohan Brahmachari, and was later passed down to Pattabhi Jois during the duration of his studies with Krishnamacharya, beginning in 1927. (Krishnamoorthy, 2007). Yoga is a science and its practice harmonizes the body and mind. Yoga is immensely useful for promoting total health. It also works effectively as a therapy in three ways preventive, curative, rehabilitative. The yoga therapy has proved its excellence in physiological, and psychological disorders like Diabetes. Researchers have established the efficacy of yoga therapy in preventing and even treating psychosomatic disorders/diseases, this has now drawn the attention of many to yogic therapy, all over the world. Now Yoga is no longer only an alternative therapy. World Health Organization (WHO), the highest body of medical practitioners has now recognized the important role of yoga as a supplementary and complementary therapy. Yogic therapy treats patient as a whole, rather than treating only symptoms of diseases or disorders. This therapy goes beyond apparent causes and symptoms and tackles the root cause of the disease or disorder. (A.M.Moorthy 2005).

Yoga can be defined as Samadhi as well as Samgathi. When defined as Samadhi, it means the Integration of Personality and as samgathi it means ‘Harmony. Harmony in this sense refers to the ‘Joy of positive Health’. Joy of positive health depends upon the supreme harmony between all bodily and mental functions. The musical instrument veena gives exquisite heavenly music only when its strings are attuned

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adequately and played upon harmoniously. So too, real health (the Positive health) consists in a balanced dynamic adjustment of forces that are opposing each of this inside and outside the human body. There is a hidden harmony or atonement between the things of forces that are at variance. This existence of the hidden harmony is usually not recognized or strengthened in ordinary life. Yoga tries to find harmony in things that are at variance and helps to cultivate harmonious relationship and atonement to the highest level possible at every stage of human existence. Positive health does not mean a mere freedom from disease. In addition, a jubilant and energetic way of living and feeling that is the peak state of well being at all levels – physical, mental, emotional, social and spiritual.

Dysmenorrhea is the occurrence of painful cramps during menstruation. More than half of all girls and women suffer from dysmenorrhea (cramps), a dull or throbbing pain that usually centers in the lower mid-abdomen, radiating toward the lower back or thighs. Menstruating women of any age can experience cramps. While the pain may be only mild for some women, others experience severe discomfort that can significantly interfere with everyday activities for several days each month.

Review of Related Literature

Marieke Van Puymbroeck, (2006) The object of the study is A phase I Feasibility study of Yoga on the Physical Health and Coping of Informal Caregivers family and friends who provide unpaid care to an individual with a disease or disability (known as informal care givers) experience numerous threats to their physical health as a result of providing care. In spite of evidence that participation in physical and leisure activities can be health promoting, informal caregivers have reported diminished or completely absent leisure participation. Hatha Yoga has documented therapeutic benefits, including reduced anxiety, as well as improved muscle strength and endurance and flexibility. The purpose of this study was to determine the feasibility of conducting an 8 week Yoga program with informal caregivers, and together pilot data on the effects of Yoga on the physical fitness and coping of informal caregivers. Caregivers were randomized into a Yoga intervention (n=8) or control group (n=9). The Yoga sessions were 2.5 hours/week for 8 weeks and consisted of a variety of pranayama (breathing) and asana (postures) activities and were by a certified Yoga Instructor. Four caregivers (two in each group) dropped out of the study. After the conclusion of the 8 week Yoga program, lower body strength increased significantly for those in the Yoga group and of this notable trends occurred in terms of coping. Upper body strength and aerobic endurance. Caregivers in the control group experienced in a Yoga program may receive some benefits. Future studies are encouraged to test the efficacy of yoga as an intervention for caregivers.

Guarracino (2006) Yoga participation is Beneficial to Hypertension control and positive quality of life. The objective of this study was to evaluate the effects of hatha and relaxation yoga on Blood pressure, and quantity of life. Seventy healthy men and men aged 18 years or order completed a survey. A statistically significant body mass index for Hypertension (30.0) was observed (P<001). A significant lower systolic blood pressure was detected in the 1 to 4 year Yoga participant group as compared to less than 1 year Yoga group (P<023). The mean total mood disturbance score was 5.04, indicating the survey participants scored a positive mood state. Hatha and relaxation Yoga had a statistically significant role in, Hypertension and mood.

Methodology

To achieve the purpose of study, 45 police with dysmenoria from chennai, their aged between 30 to 40 years were selected randomly into experimental and control groups of 15 subjects each. The selected subjects were divided into two experimental groups and a control group (CG) with 15 subjects each in a experimental group. I underwent Bihar school of yogic practices and experimental group II underwent B.K.S. Iyengar practices for the period of 12 weeks, five days per week for the maximum of one hour in the morning. The control group (CG) was not exposed to any specific training but they participated in the regular activities.

Training Schedule

Experimental Group I - Bihar school of yogic practices.

Experimental Group II – B.K.S. Iyengar practices.

Group III – Control Group (No Training).

Results and Discussion

The analysis of Covariance on the data obtained for Flexibility of Pre and Post-test of EXPGI, EXPGII and CG have been presented in Table I.

Table I. Analysis of covariance of data on flexibility among EXPGI, EXPGII and control groups

TEST	EXP.GRP I	EXP.GRP II	CONTROL GROUP	SOURCE OF VARIANCE	SUM OF SQUARES	D.F	MEAN SQUARES	F VALUE
PRE TEST MEAN	25.400	24.800	22.867	BETWEEN WITHIN	52.578 6466.27	2 42	26.289 153.959	0.17
POST TEST MEAN	28.333	26.800	22.733	BETWEEN WITHIN	251.244 7435.33	2 42	125.622 177.032	692.45*
ADJUSTED POST TEST MEAN	27.200	26.318	24.349	BETWEEN WITHIN	64.408 181.766	2 41	32.204 4.433	671.34*

*Significant at 0.05 level of confidence the
Table value for significance at 0.05 level of confidence with df 2 and 42 was 3.21 and Table value for df 2and 41 was 3.22.

The obtained F-ratio values were higher than the table value; it indicates that there was significant difference among the post test and adjusted post-test means of the Experimental Group – I (Bihar school of yogic practices), Experimental Group – II (B.K.S. Iyengar practices) and the Control group (No Practices) on Flexibility. Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table II.

Table II. The scheffe's test for the differences between the adjusted post test paired means on flexibility

Control Group	Experimental Group – I	Experimental Group – II	Mean difference	Required C.I
24.349	27.200	-	2.851*	1.76
24.349	-	26.318	1.969*	1.76
-	27.200	26.318	0.88	1.76

*Significant

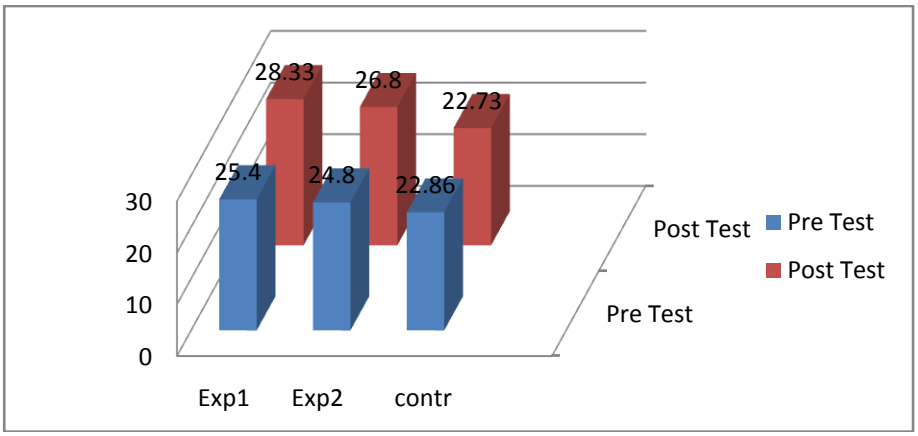

Figure I. The adjusted post test mean value on stress of EXPGI, EXPGII and control groups

The results of the study showed that stress reduced significantly as a result of Bihar school of yogic practices and B.K.S. Iyengar practices. Hence, the hypothesis was accepted at 0.05 level of confidence. Systematic Bihar school of yogic practices and B.K.S. Iyengar practices reduce the stress. The above findings can also be substantiated by observation made by renowned expert. The analysis of Covariance on the data obtained for Resting pulse rate of Pre and Post-test of EXPGI, EXPGII and CG have been presented in Table III.

Table III. Analysis of covariance of data on resting pulse rate among EXPGI, EXPGII and control groups

Test	Experimental Group - I	Experimental Group - II	Control Group	Source of Variance	Sum of Square	DF	Mean Squares	"F" Ratio
Pre Test	80.467	80.267	80.333	B	0.3111	2	0.155556	0.09
				W	7295	42	173.69	
Post Test	71.467	74.000	80.400	B	635.91	2	317.9556	66.32*
				W	201.33	42	4.793651	
Adjusted Post Test	71.47	74.00	80.40	B	635.55	2	317.7757	62.830*
				W	207.3632	41	5.05764	

*Significant at 0.05 level of confidence

Table value for significance at 0.05 level of confidence with df 2 and 42 was 3.21 and Table value for df 2and 41 was 3.22.

The obtained F-ratio values were higher than the table value; it indicates that there was significant difference among the post test and adjusted post-test means of the Experimental Group – I (Bihar school of yogic practices), Experimental Group – II (B.K.S. Iyengar practices) and the Control group (No Practices) on Resting pulse rate. Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table IV.

Table IV. The scheffe's test for the differences between the adjusted post test paired means on resting pulse rate

Control Group	Experimental Group – I	Experimental Group – II	Mean difference	Required C.I
71.47	74.00	-	3.47*	5.76
71.47	-	80.40	9.07*	5.76
-	74.00	80.40	6.40	5.76

*Significant

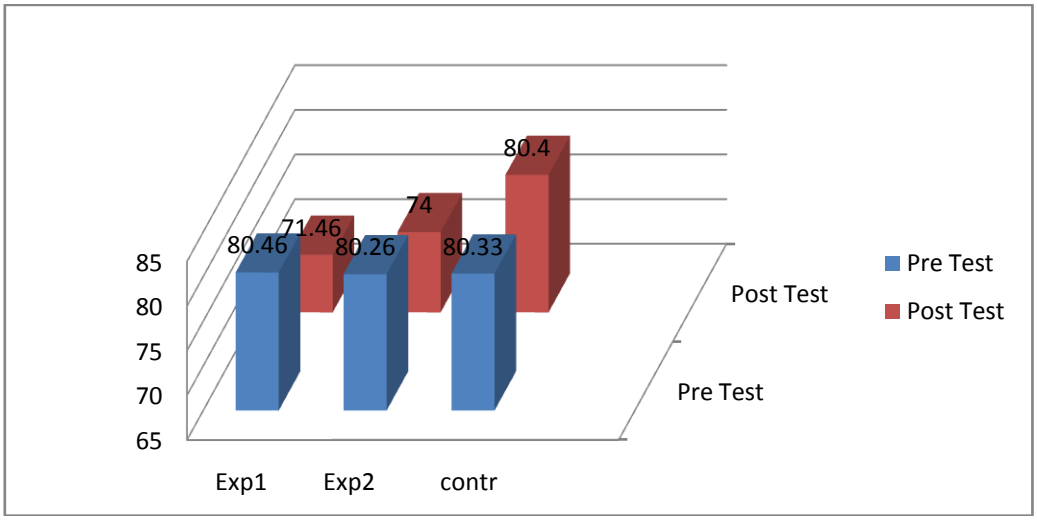

Figure II. The adjusted post test mean value on resting pulse rate of EXPGI, EXPGII and control groups

The results of the study showed that stress reduced significantly as a result of Bihar school of yogic practices and B.K.S. Iyengar practices. Hence, the hypothesis was accepted at 0.05 level of confidence. Systematic Bihar school of yogic practices and B.K.S. Iyengar practices reduce the resting pulse rate. The above findings can also be substantiated by observation made by renowned expert.

Conclusion

The Bihar school of yogic practices and B.K.S. Iyengar practices help to significant changes in the flexibility and resting pulse rate among the police with dysmenoria to compare the control group. And comparing the experimental groups Experimental group – I (Bihar school of yogic practices) effective than the experimental group – II (B.K.S. Iyengar practices).

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