

Combined Effect Of Yogic Practice And Interval Training On Speed And Stress Among Armed Reserved Police Of Cuddalore District

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Abstract

The purpose of the study was to find out the combined effect of yogic practice and interval training on speed and stress among armed reserved police of Cuddalore district. To achieve the purpose of this study 60 armed police men were randomly selected from cuddalore district, Tamil Nadu, India and their age ranged between 30 and 40 years. All the subjects were divided into four equal groups with 15 subjects each. Group-A underwent Yogic Practice, Group-B underwent Interval Training, Group -C underwent combined training for a period of eight weeks and group-D acted as control who did not participate in any special training other than their regular routine. The variables such as speed and stress were selected as dependent variables. Speed was assessed by 50 mts and stress was assessed by Everly and Girdano's Questionnaires. Pre and post-test random group design was used for this study. The data were collected before and after the training period of eight weeks and the data collected were statically analysed by 'ANOVA' test, which was used to find out the significant improvement on selected variables from the base line to post. The result of the study combined effect of yogic practice and interval training produced that there was a significant improvement in the speed and stress among armed reserved police of Cuddalore district.

Keywords: yogic practice, interval training, policeman, ANOVA

Introduction

The process of the police is a very stressful occupation. Several assets of occupational pressure were recognized as contributing to pressure-associated illnesses. A complete variety of cap potential pressure appears on policemen at work (Cooper, 1982). A pivotal function in current society and feature exceptionally excessive pressure because of publicity to cap potential violence and life-threatening activities within the day-by-day workplace.

Yoga is a historical Indian exercise, first defined in Vedic scriptures around 2500 B.C. which makes use of intellectual and bodily sporting activities (Malathi, 2000). Yoga's popularity for pressure discounts and intellectual fitness advantages has strengthened its reputation in the latest years, and information from randomized trials proposes that yoga reduces signs and symptoms of tension and depression (Tran, 2001). Yoga became cap potential intellectual and bodily fitness advantage have highlighted discounts in sympathetic worried machine tone and will increase in vagal pastime each of that could have favourable endocrine and immune consequences, which include decreased inflammation (Kiecolt, 2010). The yoga exercise

that consists of postures, breathing, and meditative sporting activities result in advanced attentional and information-processing abilities (Gothe, 2017). The exercise of yoga will lead you to a feeling of peace and well-being and add a sense of being at one with the surroundings the exercise of yoga makes the frame robust and flexible. It additionally improves the functioning of the respiratory, circulatory, digestive and hormonal systems (Selvam, 2016).

The Interval Training method became tremendous consequences on each cardio and anaerobic fitness. Interval education has been that it doubtlessly represents a greater time-green manner of engaging in the adaptive desires of exercising education (Arazi, 2017). Sprint cap potential has additionally been recommended to be strongly connected to the cap potential to increase the maximal pace (Buchheit, 2010). Peak sprinting pace or maximal cardio pace is typically concept to be education specific, with particularly designed pace and explosive power education applications proven to enhance height strolling pace and leaping peak and excessive-depth strolling sporting activities pronounced to increase each cardio maximal electricity and persistence capacity (Gibala, 2013)

Statement of the problem

The purpose of the present study examines the combined effect of yogic practice and interval training on speed and stress among armed reserved police of Cuddalore district

Material & Methods

For the observation 40 policemen, elderly from 30 to 40 years have been decided on as topics for the research. They are divided into 4 groups YPG group as group A, ITG as group B, CYPITG as group C and group D as a control group. A Pre-check turned into carried out was observed via way of means of a post-check after eight weeks of education, for speed and stress. Before every morning session, all of the topics were done 10 mins of low to mild warming-up workout and

stretching. The researcher or trainer demonstrates the suitable technique of appearing at every YPG, ITG and CYPITG for higher expertise of the topics. Speed was measured by the 50 mts run and Stress was measured by the Everly and Girdano's Questionnaires.

Statistical Analysis

The statistics amassed from each corporation as experimental groups and control group on speed and stress statistically tested evaluation of variance (ANOVA) become used to decide differences if there's any extensive distinction most of the remedy way of variable 0.05 degree of confidence. The evaluation of variance on speed and stress has been analyzed and all of the tables are noted below:

Result of the study

Anova for the pre-test, post-test means values for YPG, ITG and CYPITG groups on speed and stress

Speed								
Tests	YPG	ITG	CYPITG	CNG	SOS	DF	MEAN	F RATIO
Pre-Test	9.45	9.47	9.48	9.50	0.12	3	0.04	2.01
					1.45	56	0.02	
Post-Test	9.21	8.78	8.15	9.52	7.15	3	2.38	59.5*
					2.59	56	0.04	
Stress								
Tests	YPG	ITG	CYPITG	CNG	SOS	DF	MEAN	F RATIO
Pre-Test	13.5	13.16	13.14	12.85	2.78	3	0.92	0.18
					285.4	56	5.09	
Post-Test	10.45	11.14	9.89	12.61	124.5	3	41.5	11.75*
					197.7	56	3.53	

* Significant at 0.05 level of confidence df 3 and 56 were 2.53

The pre-test means on speed of YPG, ITG, CYPITG and CNG were 9.45, 9.47, 9.48 and 9.50 respectively. The obtained 'F' ratio value of 2.01 for a pre – test scores of speed on YPG, ITG, CYPITG and CNG was less than the required table value of 2.53 for insignificance with df 3 and 56 at 0.05 level of confidence. The post-test mean values of speed for YPG, ITG, CYPITG and CNG were 12, 9.45 and 12.6 respectively. The obtained 'F' ratio value of **59.5*** for post-test scores of speed on YPG, ITG, CYPITG and CNG was higher than the required table value of 2.53 for significance with df 3 and 56 at .05 level of confidence.

The pre-test means on stress of YPG, ITG, CYPITG and CNG were 13.5, 13.16, 13.14 and 12.85 respectively. The obtained 'F' ratio value of 0.18 for a pre – test scores of stress on YPG, ITG, CYPITG and CNG was less than the required table value of 2.53 for insignificance with df 3 and 56 at

0.05 level of confidence. The post-test mean values of stress for YPG, ITG, CYPITG and CNG were 12, 9.45 and 12.6 respectively. The obtained 'F' ratio value of **11.75*** for post-test scores of stress on YPG, ITG, CYPITG and CNG was higher than the required table value of 2.53 for significance with df 3 and 56 at 0.05 level of confidence.

Conclusion

In light of the after effect of study the end was drawn. The consequence of the review uncovers that there was huge improvement in the trial bunches on contrast with control group after the combined effect of yogic practice and interval training on speed and stress among armed reserved police of Cuddalore district. The yogic practice, interval training and combined training showed better execution on speed and stress than the

control group. Yogic practice, interval training and comined training will help the armed reserved police of Cuddalore district to further develop her wellness level in an incredible way.

References

- [1]. Cooper, Cary L., Marilyn J. Davidson, and Philip Robinson. "Stress in the police service." *Journal of Occupational Medicine* (1982): 30-36.
- [2]. Malathi, A., et al. "Effect of yogic practices on subjective well being." *Indian journal of physiology and pharmacology* 44.2 (2000): 202-206.
- [3]. Tran, Mark D., et al. "Effects of Hatha yoga practice on the health-related aspects of physical fitness." *Preventive cardiology* 4.4 (2001): 165-170.
- [4]. Kiecolt-Glaser, Janice K., et al. "Stress, inflammation, and yoga practice." *Psychosomatic medicine* 72.2 (2010): 113.
- [5]. Gothe, Neha P., Arthur F. Kramer, and Edward McAuley. "Hatha yoga practice improves attention and processing speed in older adults: results from an 8-week randomized control trial." *The Journal of Alternative and Complementary Medicine* 23.1 (2017): 35-40.
- [6]. Selvam, M. "Influence of silambam practices and yogic practices on speed and flexibility among U-17 female sprinters." *International Journal of Physical Education, Sports and health* 3.2 (2016): 136-139.
- [7]. Buchheit, Martin, et al. "Improving acceleration and repeated sprint ability in well-trained adolescent handball players: speed versus sprint interval training." *International Journal of Sports Physiology & Performance* 5.2 (2010).
- [8]. Arazi, Hamid, et al. "Effects of heart rate vs. speed-based high intensity interval training on aerobic and anaerobic capacity of female soccer players." *Sports* 5.3 (2017): 57.
- [9]. Gibala, Martin J., and Andrew M. Jones. "Physiological and performance adaptations to high-intensity interval training." *Limits of human endurance* 76 (2013): 51-60.
- [10]. Manoranjith, R., T. Arun Prasanna, PDF Scholar, and S. Nagarajan. "Collusion of Different Ground Surface of Plyometric with Aerobic Training on Selected Agility and Explosive Power among School Boys Volleyball Players." (2019).
- [11]. Jayasingh Albert Chandrasekar, S., et al. "Effect of Yogic practice on Resting Pulse Rate among College Men Long Distance Runners." *Indian Journal of Public Health Research & Development* 11.6 (2020).
- [12]. Pounraj, Dr, and R. Jaskar. "Mano Ranjith, Dr. T. Arun Prasanna, Dr. M. Sundar, CM Jerin, Consequence Of Jump Rope Training And Kettle Bell Training On Selected Agility And Muscular Strength Of College Men Badminton Players." *Journal-Xidian University* 14: 664-669.
- [13]. Varalakshmy, Dr S., et al. "Mano Ranjith, Dr. R. Senthil kumaran, Collision of Ballistic and Plyometric Training on Selected Explosive Power and Vital Capacity of College Men Volleyball Players." *Journal-High Technology Letters* 26: 593-601.
- [14]. Pounraj, Dr, and R. Jaskar. "Mano Ranjith, Dr. T. Arun Prasanna, Dr. M. Sundar, CM Jerin, Consequence Of Jump Rope Training And Kettle Bell Training On Selected Agility And Muscular Strength Of College Men Badminton Players." *Journal-Xidian University* 14: 664-669.
- [15]. R. Manoranjith, Dr. S. Nagarajan Impact of Plyometric and Tabata training on Speed Endurance and Vital Capacity among Men Volleyball Players, *Turkish Journal of Physiotherapy and Rehabilitation* 32(3) ISSN 2651-4451 (2021)
- [16]. Dr. Uma Devi R. Manoranjith, Dr. T. Arun Prasanna Consequence of Various Yogic Practices with Sattvic Diet on Selected Vital Capacity and Hemoglobin among Underweight School Boys *Europe's Journal of Psychology*, 2021, Vol. 17(3), 16-20