

Effect of Yogic Training on Selected Physiological and Psychological Variables of Sportspersons

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Abstract

The purpose of the present study was to find out the effect of Yogic training on selected Physiological & Psychological variables of sportspersons. For the purpose of the study, 50 Sportspersons (25 Male and 25 Female) were selected randomly. The age group of the subjects ranged from 18-25 years. To access the effect of yogic training on sportspersons four weeks of yogic training were given. Measurement was taken at the beginning (pre- test) and at the end of the training period, after four weeks (post-test), the data was collected for all the variables. The criterion measures adopted for the study measuring the Physiological variables are given below: Pulse Oximeter was used to measure the Pulse Rate, Sphygmomanometer and Stethoscope were used to measure the Blood Pressure (Systolic and Diastolic). For measuring the psychological variables; Anxiety was measured by questionnaire; & this questionnaire was developed by A. K. P. Sinha. Stress was measured by questionnaire; and this questionnaire was developed by Dr. Shruti Narain. In order to know the efficacious difference of yogic exercises between the pre-test and post-test of sports person's anxiety and stress; the Mean, Standard Deviation & paired 't'-test (0.05 level) was employed as statistical technique. The result of the study has been found that yogic training is significantly efficacious and have undeniable effects on Physiological variables i.e., pulse rate & blood pressure and psychological variables i.e., anxiety and stress in relation to sportspersons.

Keywords: Sportspersons, Yogic Training, Pulse Rate, Systolic Blood Pressure, Diastolic Blood Pressure, Anxiety, Stress

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Introduction

Yoga could be a style of medication which might actually self as a therapy. Therefore, Yoga is that the science of right living and is meant to be incorporated in daily life. It works on all aspects of the sportsperson: the physical, vital, mental, emotional, psychic and spiritual. The science of Hindooism exercises begins to figure on the outer aspects of the temperament and therefore the physical body, that for many sportspersons is a sensible and acquainted beginning point. Hindooism exercises aim at transfer the various bodily functions into excellent coordination so they work for the nice of the total body. When there is no balance between desire, would like and {also the} availableness of cash sportsperson feels dissatisfied. Out of dissatisfaction, frustration and rejection - negative interaction is turn out between the self-projection and the close environment. The self-projection is influenced by our craving, desires, likes, dislikes, altitudes, ambitions, beliefs, negative emotions, hope and failures. Sportsperson's life vogue is having an effect one thanks to these factors. In addition, the environmental conditions, social, political and economic things are perpetually acting on us, that once more affect sportsperson's condition of physical health. With the unbalanced mind sportsperson's responses to the incoming stimuli also go towards the negative direction. Competitive sport is also too trying if sportsperson is formed to feel that self-

esteem depends on however, he or she plays. once the items most vital to sportsperson – love motivation, encouragement and approval – are made dependent on taking part in well, they're possible to expertise nice stress. analysis shows that the worry of failure and athlete's concern regarding not playing well may be the most sources of hysteria and stress in sport. Sportsperson worries that they're going to fail, that they will not be able to live up to the stress of competition. jock will feel competitive stress or anxiety before, throughout and once competitions. fulminant mental irritation or oft dynamic moods, lethargy and mental discontentment are the primary signs of disturbed mind. below such conditions gastrointestinal system is greatly affected. it's identified that the continual trying scenario ends up in sympathetic over activity prompt by the raised levels of Adrenalin or nor adrenaline. This cause spams of the coronary arteries and a rise on Cortef level inflicting formation of blockage within the arteries speedily. Thus, the strain & anxiety that are literally the traditional defensive mechanism of the body to guard sportsperson at risk situations, currently becomes harmful and make physiological imbalances in body.

Material & Methods:

For the purpose of the study, 50 Sportspersons (25 Male and 25 Female) were selected randomly as sample the age group of the subjects ranged from 18-25 years. To access the effect of yogic training on sportspersons four weeks of training were given. Measurement was taken at the beginning (pre-test) and at the end of the training period, after four weeks (post-test), the data was collected for all the variables.

Practice Schedule:

For the above study the following training schedules were given 30 minutes every day in the Morning time are such as Tadasana,Vajraasana,Matsyendraasana,Paschimottanasana, Bhujangasana, Halasana, Anulom-Vilom, Ujjai Pranayama, Sheetli Pranayama, Bhrumri Pranayama, and also Meditation etc.

Criterion Measures:

The criterion measures adopted for the study measuring the Physiological & Psychological variables are given below:

1. Pulse Oximeter was used to measure the Pulse Rate.
2. Sphygmomanometer and Stethoscope were used to measure the Blood Pressure.
3. Anxiety was measured by questionnaire; & this questionnaire was developed by A. K.P. Sinha.
4. Stress was measured by questionnaire; and this questionnaire was developed by Dr. Shruti Narain.

Analysis & Interpretation:

The data collected on 50 sample in order to know the efficacious difference of yogic training between the pre-test and post-test of sports person's pulse rate, systolic blood pressure, diastolic blood pressure; Anxiety, Stress etc. the Mean, Standard Deviation & paired 't'-test (0.05 level) was employed as statistical technique. Therefore, results of the study have been presented for each variable as follows:

Table No. 1
Showing Mean, SD of selected Physiological Variable i.e., Pulse Rate of Sports Persons

Variable	Pre-Test		Post-Test		MD	't' Value
	Mean	SD	Mean	SD		
Pulse Rate	78.10	6.02	62.30	2.34	15.8	2.68*

't' (0.05)=1.98

From table no. 1 results show that pulse rate in pre-test (M=78.10 SD=6.02) and the pulse rate in post-test (M=62.30 SD=2.34). The 't' value is 2.68, which is greater than the tabulated; so, there is significant difference at 0.05 level.

Table No. 2
Showing Mean, SD of selected Physiological Variable i.e., Systolic Blood Pressure of Sports Persons

Variable	Pre-Test		Post-Test		MD	‘t’ Value
	Mean	SD	Mean	SD		
Systolic Blood Pressure	124.2	12.06	110.0	8.06	14.2	2.94*

‘t’ (0.05)=1.98

From table no. 2 results reveals that systolic blood pressure in pre-test (M=124.2 SD=12.06) and the systolic blood pressure in post-test (M=110.0 SD=8.06). The ‘t’ value is 2.94, which is greater than the tabulated; so, there is significant difference at 0.05 level. Therefore, we can say that the change in systolic blood pressure have been shown after the four weeks of yogic training.

Table No. 3
Showing Mean, SD of selected Physiological Variable i.e., Diastolic Blood Pressure of Sports Persons

Variable	Pre-Test		Post-Test		MD	‘t’ Value
	Mean	SD	Mean	SD		
Diastolic Blood Pressure	87.04	9.23	81.02	6.23	6.02	2.24*

From table no. 3 results indicates that diastolic blood pressure in pre-test (M=87.04 SD=9.23) and in diastolic blood pressure post-test (M=81.02 SD=6.23). The ‘t’ value is 2.24, which is greater than the tabulated; so, there is significant difference at 0.05 level. Therefore, we cansay that the change in diastolic blood pressure have been shown after the four weeks of yogic training.

Table No. 4
Showing Mean, SD of selected Psychological Variable i.e., Anxiety of Sports Persons

Variable	Pre-Test		Post-Test		MD	‘t’ Value
	Mean	SD	Mean	SD		
Anxiety	52.01	11.27	32.04	9.23	19.97	2.02*

‘t’ (0.05)=1.98

From table no. 4 results found that anxiety in pre-test (M=52.01 SD=11.27) and the anxiety in post-test (M=32.04 SD=9.23). The ‘t’ value is 2.01, which is greater than the tabulated; so, there is significant difference at 0.05 level. Therefore, we affirm that the change anxiety level has been shown after the four weeks of yogic training.

Table No. 5
Showing Mean, SD of selected Psychological Variable i.e., Stress Level of Sports Persons

Variable	Pre-Test		Post-Test		MD	‘t’ Value
	Mean	SD	Mean	SD		
Stress	18.23	7.23	10.02	5.12	8.21	2.02*

‘t’ (0.05)=1.98

From table no. 5 results reveals that stress in pre-test ($M=18.23$ $SD=7.23$) and the stress in post-test ($M=10.02$ $SD=5.12$). The 't' value is 2.02, which is greater than the tabulated; so, there is significant difference at 0.05 level. Therefore, we can say that the change stress level has been shown after the four weeks of yogic training.

Conclusions

Within the limitations of the present study, the conclusions obtained from different tests to know the effect of yogic training on the selected Physiological & Psychological variables of sportspersons reveals that:

1. There is significant difference has been detected between pre-test and post-test of pulse rate of the sportspersons.
2. There is significant difference has been found in pre-test and post-test of systolic blood pressure of the sportspersons.
3. There is significant difference has been observed between pre-test and post-test of diastolic blood pressure of sportspersons.
4. There is significant difference has been observed between pre-test and post-test of anxiety of sportspersons.
5. There is significant difference has been found in pre-test and post-test of stress level of sportspersons.

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