

Effects of Health –Related Physical Fitness Programme on Psychological Parameters on Sedentary Students

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Abstract

The Primary aim of the study was to determine the effects of Health –related Physical fitness programme on Psychological Parameters with respect to personality and anxiety on Sedentary Students. Seventy five sedentary students from various colleges of Marathwada region of Maharashtra, has been selected for the study. Exclusion criteria were the presence of chronic medical conditions such as asthma, heart disease or any other condition that would put the subjects at risk when performing the experimental tests. The subjects were free of smoking, alcohol and caffeine consumption, antioxidant supplementation and drugs during the programmers. They completed an informed consent document to participate in the study. The age, height, weight, resting heart rate, Psychological tests were also carried out by distributing questionnaires, which measured personality characteristics and anxiety. All 75 acted as experimental group and two times tests were taken namely before and after health related physical fitness, no control group had include in the study. The training programme was planned as 05 days a week and 60 minutes a day. Exercises that use large muscles groups were given to the students. These exercises includes walking, jogging, dancing, stair climbing, jumping rope and cross country. Study shows that the mean scores and standard deviations of sedentary students. Mean Score (S.Ds.) age of sedentary students was 22.43 (7.44) years, mean score (S.Ds.) weight was 67.30 (13.21) Kg., mean score (S.Ds.) height was 169.04 (20.33) cm. result reveals that there was significant effects of health related physical fitness programme was found in Neuroticism . Health related physical fitness programme decrease neuroticism among sedentary students. Result reveals that there was significant effects of health related physical fitness programme was found in extraversion. Health related physical fitness programme decrease Extraversion the among sedentary students. Result reveals that there was insignificant effects of health related physical fitness programme was found in psychoticism. Result reveals that there was significant effects of health related physical fitness programme was found in ($t=,p<.05$) Anxiety . Health related physical fitness programme decrease Anxiety among sedentary students.

Introduction

The concept of personality gives an understanding of the entire human organism, its structure, nature and functioning , however,Anxiety is physiological response to a real or imagined threat. It is a complex emotional state characterized by a general fear or foreboding usually accompanied by tension. It is related to apprehension and fear and is frequently associated with failure, either real or anticipated. It often has to do with inter-personal relations and social situations. Feelings of rejection and insecurity are usually a part of anxiety. According to Frost (1971), Anxiety is “an uneasiness and feeling of foreboding often when a person is about to embark on a hazardous venture; it is often accompanied by a strong desire to excel”. Hence, anxiety state arises from faulty adaptations to the stresses and strains of life and is caused by over actions in an attempt to meet these difficulties. The sedentary life style can affect the anxiety and personality. A sedentary lifestyle can contribute to, many preventable causes of death. A lack of physical activity is one of the leading causes of preventable death worldwide.

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Many studies have proven sedentary lifestyles and lack of physical activity to be the risk factors for anxiety, cardiovascular disease, depression, diabetes, colon cancer, high blood pressure, obesity, osteoporosis, lipid disorders, kidney stones and many more diseases. Health-related physical fitness programme increase is currently under study as a possible prevention strategy for diabetes, obesity, blood pressure and cardiovascular disease.

Methods:

Seventy five sedentary students from various colleges of Marathwada region of Maharashtra , voluntary to participate in this study. Exclusion criteria were the presence of chronic disease such as asthma, heart disease or any other condition that would put the subjects at risk when performing the experimental tests. The subjects were free of smoking, alcohol and caffeine consumption, antioxidant supplementation and drugs during the programmes. The age, height, weight, resting heart rate, respiratory rate, breath holding capacity, of all subjects were measured. All 75 acted as experimental group and two times tests were taken namely before and after health related physical fitness ,no control group had include in the study. The training programme was planned as 05 days a week and 60 minutes a day. Exercises that use large muscles groups were given to the students. These exercises includes walking, jogging, dancing, stair climbing, jumping rope and cross country. The Personality measure through Eysenck Personality Inventory (1985) its provides four dimensions such as extraversion, neuroticism ,Psychoticism, lie-scale of 90 questions and Anxiety was measure through Sports Competitive Anxiety test (1977) by Martan's of 15 questions.

Results and Discussion

Table – 1: Morphological Characteristics of sedentary students

Sr. No.	Components	Means Scores	Standard Deviations
	Age (Year)	22.43	7.44
	Weight (Kg)	67.30	13.21
	Height (cm)	169.04	20.33

Table-1, shows that the mean scores and standard deviations of sedentary students. Mean Score (S.Ds.) age of sedentary students was 22.43 (7.44) years, mean score (S.Ds.) weight was 67.30 (13.21) Kg., mean score (S.Ds.) height was 169.04 (20.33) cm.,

Table 2: Neuroticism of before and After-test of sedentary students

Variable	Test	Number	Mean	S.D.	t-ratio
Neuroticism	Before Test	75	18.23	2.34	2.31*
	After Test	75	17.35	2.46	

Table -2 illustrates the statistical comparison of neuroticism of sedentary students in before and after health related physical fitness programme.

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With regards to neuroticism of before and after health related physical fitness programme sedentary students obtained the mean value of **18.23** and **17.35** respectively which are given in the Table -7 reveals that there was significant effects of health related physical fitness programme was found in ($t=,p<.05$) Neuroticism . Health related physical fitness programme decrease neuroticism the among sedentary students.

Table 3 Extraversion of before and After-test of sedentary students

Variable	Test	Number	Mean	S.D.	t-ratio
Extraversion	Before Test	75	19.56	3.24	2.25*
	After Test	75	20.78	3.41	

Table -3 illustrates the statistical comparison of extraversion of sedentary students in before and after health related physical fitness programme. With regards to extraversion of before and after health related physical fitness programme sedentary students obtained the mean value of **18.23** and **17.45** respectively which are given in the Table – 3 reveals that there was significant effects of health related physical fitness programme was found in ($2.25=,p<.05$) extraversion . Health related physical fitness programme decrease Extraversion the among sedentary students.

Table -4: Psychoticism of before and After-test of sedentary students

Variable	Test	Number	Mean	S.D.	t-ratio
Psychoticism	Before Test	75	18.34	3.09	1.88 NS
	After Test	75	18.40	3.11	

Table -4 illustrates the statistical comparison of psychoticism of sedentary students in before and after health related physical fitness programme. With regards to psychoticism of before and after health related physical fitness programme sedentary students obtained the mean value of **18.23** and **17.45** respectively which are given in the Table – 4 reveals that there was insignificant effects of health related physical fitness programme was found in psychoticism.

Table -5 Lie Scale of before and After-test of sedentary students

Variable	Test	Number	Mean	S.D.	t-ratio
Lie Scale	Before Test	75	17.88	3.12	1.77 NS
	After Test	75	17.21	3.03	

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Table -5 illustrates the statistical comparison of lie Scale of sedentary students in before and after health related physical fitness programme. With regards to Lie Scale of before and after health related physical fitness programme sedentary students obtained the mean value of **17.88** and **17. 21** respectively which are given in the Table – 5 reveals that there was insignificant effects of health related physical fitness programme was found in Lie scale

Table-6 :Anxiety of before and After-test of Experimental group

Variable	Test	Number	Mean	S.D.	t-ratio
Anxiety	Before Test	75	14.11	2.08	3.66*
	After Test	75	12.90	1.98	

Table -6 illustrates the statistical comparison of Anxiety of sedentary students in before and after health related physical fitness programme. With regards to Anxiety of before and after health related physical fitness programme sedentary students obtained the mean value of **14.11** and **12.90** respectively which are given in the Table – 6 reveals that there was significant effects of health related physical fitness programme was found in ($t=,p<.05$) Anxiety . Health related physical fitness programme decrease Anxiety the among sedentary students.

Discussion

The primary aim of the research was to determine the effects of health related physical fitness programme on sedentary students with respect to personality, anxiety. Health related physical fitness programme decrease neuroticism among sedentary students. Thus the hypothesis of the study was accepted. In neuroticism, the individual reacts to some distressing stress situation with more than the usual amount of sadness and dejection. There is high level of anxiety and apprehensiveness, together with diminished activity, lowered self-confidence and a general loss of initiative. Health related physical fitness programme increase Extraversion the among sedentary students. Thus the hypothesis of the study was accepted. Extraversion has been found to be highly related or supportive to dominance and sociability in students by Sperling (1942), Tillman (1964), Ruffer (1965), Whiting & Stembridge (1965), Wernet and Gotheil (1966), Bruner (1969), Kane (1970) and Ikegami (1970). Extraversion, according to Alderman (1974), is a construct evolving out of Jung's (1933) early designation of the two major attitudes of personality: the extraverted attitude, which orients the person to the external, objective world, and the introverted attitude, which orients one towards the inner, subjective world. The result reveals that there was insignificant effects of health related physical fitness programme was found in ($t=,p<.05$) psychoticism . With regards to Lie Scale of before and after health related physical fitness programme on sedentary students result reveals that there was insignificant effects of health related physical fitness programme was found in psychoticism. With regards to Anxiety of before and after health related physical fitness programme sedentary students result reveals that there was significant effects of health related physical fitness programme was found in ($t=,p<.05$) Anxiety. Anxiety is physiological response to a real or imagined threat. It is a complex emotional state characterized by a general fear or foreboding usually accompanied by tension. It is related to apprehension and fear and is frequently

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associated with failure, either real or anticipated. It often has to do with inter-personal relations and social situations. Feelings of rejection and insecurity are usually a part of anxiety.

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