



ASSESSING THE EFFECTS OF LOW INTENSITY TREADMILL WORKOUTS ON LIFE STRESS IN SEDENTARY STUDENTS

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Abstract: The primary aim of the study was to examining the effects of Low Intensity Treadmill Workouts on stress, only one group was targeted as an experimental group, there was no control group. The 15 male participated in the study and their age ranged between 19-28 years. The all students are sedentary and not participation any sporting or physical activities Exclusion criteria were the presence of any chronic disease such as CVD, Hypertension Hypotension, asthma, Diabetes, etc. that would put the subjects at risk when performing the experimental tests. Experimental group participated in Low Intensity Treadmill Workouts Training program which was conducted for four-week, four days in a week and 15 minutes in a day. After the pre-test was over, the entire selected subjects were exposed to four-week Treadmill Workouts. The findings of the study show that severe stress were reduce, The findings of the study will be proposing a new conceptual model that may assist the government in framing new policies and strategies to manage the stress problem

Keywords: Stress, Treadmill, Low Intensity

ORIGIN OF THE PROBLEM

Treadmills is a most popular workout machines on the gym. treadmill workouts can benefit your health, both mentally and physically. The treadmill is a hugely popular **aerobic exercise machine**. Aside from being a versatile cardio machine, a treadmill can also help to manage stress level (<https://www.healthline.com/health/treadmill-weight-loss#other-benefits>). Treadmills are mostly used for cardio training and aerobic in Nature. However, this fitness machine can be used for more boosting your psychological health. Stress is one of the serious Psychological problems that negative impact of student 's life, its effects could be reflected in student social, academically, and Health outcomes (Dunn, Trivedi, & O'Neal,2001). Stress is prevalent among the higher education students and that is also true for the students who have very busy and demanding schedule (Shah 2009). Academic demands and the quality of the study environment may vary in different fields of education and different colleges and consequently result in different student life-styles and Health effects. When stress is perceived negatively or becomes excessive, it can affect both Health and Academic performance (Bhui,2002 Guthrie et al., 1998; Vitaliano et al., 1989).Stress led to higher levels of low-density lipoproteins (LDL), the "bad" cholesterol, and decreasing levels of good cholesterol (Assadi,2017). There is a scarcity of research reports on effects of treadmill running on stress. The effort made by the investigator, can prove very useful for reduce stress,and maintain heart health .

METHODS

In this study, the researcher Follow the ethical guidelines, principles, and standards for studies conduct with human beings. The study was including safeguards for protecting humans, which involve three major ethical principles: beneficence, respect for human dignity, and human justice. Only one group was targeted as an experimental group, there was no control group. The 15 male sedentary students from SRTM University, participated in the study and their age ranged between 19-28 years.

Experimental design for this study involves a cross sectional, comparative pre and post-test single experimental design. For assessment of Life Stress, the Student-life Stress Inventory (SSI) (Gadzella, 2012) was used. The inventory reflected students' life stress experiences, In addition,

**DEMOGRAPHIC INFORMATION:**

The data was collected through respondents in the form of different descriptive tests. The demographic information about, age, height weight, daily smoking etc. was obtained before seeking responses.

Training Intervention program

For this study, the members of Swami Ramanand Treeth Marathwada University's students were selected as the subjects. The age of subjects ranged between 19 to 20 years and they were studying in Academic year 2015-2018. All students are sedentary in nature and not participation in any sporting or physical activities regularly. Experimental group participated in treadmill workout training program which was conducted for 4 weeks and 4 days in a week and 15 minutes in a day at 6.5 km speed. The standard treadmills of Aerofit were used to training program. Before exercise pre-test done by departmental fitness centre.

DATA PROCESSING:

The data was checked for accuracy and completeness and was coded and put up into the SPSS Descriptive statistics for all studied variables, percentage, mean, standard deviation and t-ratio, were considered statistically technique throughout the study and the level of significant was set-up at 0.05 level.

RESULTS AND DISCUSSION

The results concerning of this research are presented in the form of tables and also illustrated with the help of suitable figures wherever necessary. For the sake of convenience and methodical presentation of the results, following order has been adopted.

Table -1 Morphological characteristic of students

Sr.No.	Morphological Characteristics	Student	
		Mean	Standard Deviation
1)	Age (Year)	21.56	3.33
2)	Weight (Kg)	71.45	8.45
3)	Height (Cm)	172.30	16.78

Table- 1 shows the mean ages of Students were 21.56 ± 3.33 , height were 172.31 ± 16.78 Kg.

Table -2, Personal Characteristics of students

Sr.No.	Personal characteristics	Percentage
1	Participation in any curricular or extracurricular activities	51.78 %
2	Use of Internet	90.00%
3	Smoking/Alcohol use	20.71%

Table-2 indicates the percentage of personal characteristics of students. The result revealed that, 51.78% students engaged in Participation in any curricular or extracurricular activities, whereas 90% students used internet. 20.71% reported that they have smoked or use of Alcohol

Table :3,Rate of overall level of stress among students.

Sr.No.	Rate of stress	students	
		Pre test	Post test
1.	Mild	46.66%	53.33%
2.	Moderate	33.33%	40.00%
3.	Severe	20.00%	13.33%



Table-3 shows the pre and post-test of rate of overall level of stress among students. Result reveals that 46.66 % students reported mild stress before treadmill workout, 53.33% students reported mild stress after training program on treadmill running. in addition 33.33% students reported mild stress before treadmill workout, 40.00% students reported mild stress after training program on treadmill running . Furth more , 20.00% students reported mild stress before treadmill workout , 13.33% students reported mild stress after training program on treadmill running or workout

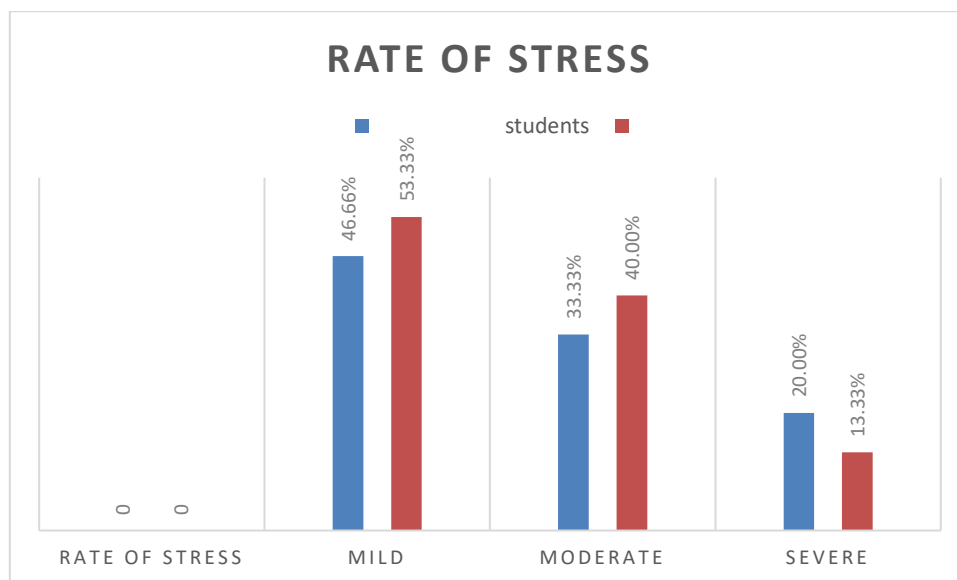


Figure: I illustrate Rate of overall level of stress among students

DISCUSSION

The findings of the study indicate that, the moderate and severe level stress of students were decrease after four weeks of Low Intensity Treadmill Workouts. Preliminary evidence suggests that physically active people have lower rates of stress and anxiety. Economos, Hildebrant, & Hyatt, (2008), investigated that Engaging in more physical activity decreases stress and improve psychological health . The several research has also shown that physical activity is an effective means of reducing stress among adults (Bhui, 2002; Dunn, Trivedi, & O'Neal, 2001). Exercise and other physical activity produce endorphins—chemicals in the brain that act as natural painkillers—and also improve the ability to sleep, which in turn reduces stress (Anxiety and depression association of America) . treadmill workout help to , promote better sleep, increase energy levels, boost your immune system weight loss, improve strength , control blood sugar, increase HDL (good) cholesterol levels, improve memory and cognition, protect against Alzheimer's, promote healthier skin, strengthen muscles, decrease fatigue, decrease joint stiffness, relieve stress and anxiety, and improve sexual arousal.

LIMITATIONS OF THE RESEARCH

A limitation of this study is that it reflects the findings of one institution; the data was collected in one institution, hence, the results may not be generalized to other institutions. Results of this study are limited by a relatively small preliminary experimental group rather than a study of actual behaviour, which would be very difficult to achieve. Future research is warranted on estimating the level of stress by psychometric instruments and large number of sample.

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E - RESOURCES

<https://adaa.org/understanding-anxiety/related-illnesses/other-related-conditions/stress/physical-activity-reduces-st>

<https://www.urmc.rochester.edu/encyclopedia/content.aspx?ContentTypeID=1&ContentID=2151>

Web site: <http://www.mayoclinic.com/health/cholesterol-test/my00500>