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# Effects Of Health Related Physical Fitness Programme On Mental Health Among Students

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**Abstract:** The primary objective of the study was to determine the effects of health related physical fitness programme on mental health in College going students. Physical fitness is recognized as an important component of psychological well being and important for the performance of functional activities and quality of life. Only group was targeted as experimental The 40 male students will be considered as experimental group. A **Health related physical fitness programme** was planned for 6 weeks, 4 days a week and 60 minutes a day. The result reveals that significant differences was found in positive mental health with respect to Been able to enjoy and Been feeling reasonably happy, Been able to face up and Been feeling reasonably happy between pre and post test of students. While considering negative mental health significant differences was found in of (t=P.<05) Lost much sleep and Under strain between pre and post test of students found between Couldn't overcome. However insignificant differences were found in Couldn't overcome, Unhappy & depressed, and Been losing confidence.

Key Words: Physical fitness, Mental health, Students, psychological well

## INTRODUCTION

The importance of physical fitness is linked to a better living and higher quality of life. The regular physical activity in childhood and adolescence improve mental health control weights, reduce anxiety and stress, increases self- esteem and may improve academic achievement. Physical fitness is recognized as an important component of psychological well being and important for the performance of functional activities and quality of life. Low physical fitness may result in high mental and physical pressure to the students. The stress is common in higher education due to academic pressure, and stress can lead to academic decline, poor relationships with peers and family members and overall dissatisfaction with life. Stress due to academic pressure may lead to poor mental health. College students experience poor mental health at predictable times each semester due to academic commitments, financial pressures, and lack of time management skills. nowadays students are living inactive lifestyle due to computerization and playing with the mobile phone . Inactive way of life is a type of lifestyle with no habitual physical activity. A inactive lifestyle is a mode of living in which a students does not engage in sporting activity and physical activity or work out for what is generally considered healthy living (Varo, J.J. et al 2003). inactive lifestyle has its troubles because when someone does not do physical activity, all muscles are weak, leading to poor blood circulation all through the body, bringing along other health troubles like obesity, lack of sleep allthse are lead to declination of mental health. Obesity is a problem that is closely linked to lack of work out and excess weight will result in an inactive lifestyle, creates the risk of serious psychological and physical health health troubles. In the light of the above, the investigator becomes interested in determining the Effects of Health Related Physical Fitness Programme on Mental Health among Elite Level Students.

## **METHODS**

Only one group was targeted as experimental. The 40 male students will be considered as experimental group. The Training will be given to the experimental groups only. The method of sample was purposive –A non-random method of sampling design for students with a specific purpose. The study depends mainly on primary source of data. The data was collected through respondents in the form of Questionnaires and experimental test from 40 students . The Universe of the study was students who have been studying at college level under the jurisdiction of SRTM University . Since experimental group was taken by the investigator so this study will be conducted in an experimental design

## Health related physical fitness programme

A **Health related physical fitness programme** was planned for 6 weeks, 4 days a week and 60 minutes a day. Exercise that use large muscles groups that can be maintained continuously and are aerobic in nature. These exercises include walking, running, jogging, climbing, jumping row and cross country. Warm - up period was approximately 10 min., this was combine callisthenic – type stretching, exercise and progressive aerobic activity. However, cool down period was 5 to 10 min.

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## **Demographic Information**:

The data was collected through respondents in the form of different experimental tests. The demographic information about Gender, age, daily smoking, drug use, etc. was obtained before seeking responses.

## <u>Mental Health</u>

For the present study, Mental health will be measured before & after health related physical fitness programme to the students by the using General Health Questionnaire (GHQ -12). The General Health Questionnaire (GHQ) is a measure of current mental health and since its development by Goldberg in the 1970s it has been extensively used in different settings and different cultures. The 12-item GHQ-12 comprises six 'positive' and six 'negative' items .

## Statistical Technique

The data was checked for accuracy and completeness and was coded and put up into the SPSS Descriptive statistics for all studied variables, with T test was considered statistically technique throughout the study. The significant level will be set up at 0.05 level

## **Results :**

The results and discussion have been presented in concise and comprehensive manner that is easy to comprehend following order has been adopted.

# TABLE – 1 MEAN SCORES, STANDARD DEVIATIONS AND T-RATIOS PRE AND POST TEST OF THE POSITIVE MENTAL HEALTH AMONG ELITE LEVEL STUDENTS

Demission	Students	Number	Mean	S.Ds.	t-ratio
Been able to concentrate	Pre -test	40	4.34	1.06	0.85
	Post- test	40	4.79	0.98	-
Plying A Useful Part	Pre -test	40	3.16	0.80	0.57
	Post- test	40	3.85	0.97	
Capable of making	Pre -test	40	3.12	0.70	-0.71
Decision	Post- test	40	3.45	0.61	
Been able to enjoy	Pre -test	40	2.56	0.40	3.68*
	Post- test 40 3.78 0.54	0.54			
Been able to face up	Pre-test	40	2.67	0.84	3.58*
	Post- test	40	4.13	1.16	
Been feeling reasonably happy	Pre -test	40	3.02	1.14	3.76*
	Post- test	40	4.89	1.32	
Positive mental Health	Pre -test	40	18.85	4.98	7.98*
	Post- test	40	24.65	5.65	

\*= Significant at .05 levels.

Table 3 depicted pre and post test Mean Scores, Standard Deviation and t-ratio of the positive mental health and its six subscales of elite students.

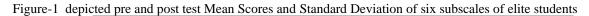
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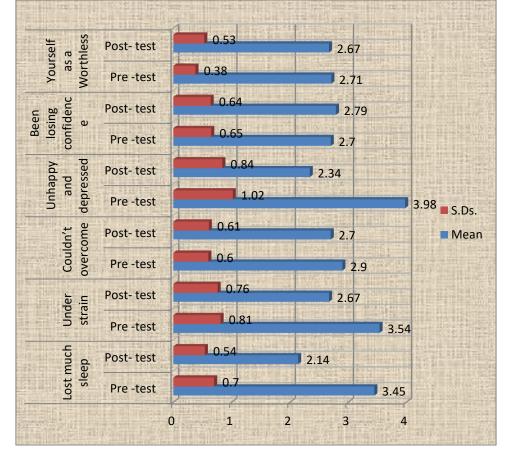


 TABLE – 2

 MEAN SCORES, STANDARD DEVIATIONS AND T-RATIOS PRE AND POST TEST OF THE NEGATIVE

 MENTAL HEALTH AMONG ELITE LEVEL STUDENTS

Demission	Students	Number	Mean	S.Ds.	t-ratio
Lost much sleep	Pre -test	40	3.45	0.70	2.67*
	Post- test	40	2.14	0.54	
Under strain	Pre -test	40	3.54	0.81	2.78*
	Post- test	40	2.67	0.76	
Couldn't overcome	Pre -test	40	2.90	0.60	0.96NS
	Post- test	40	2.70	0.61	
Unhappy and depressed	Pre -test	40	3.98	1.02	1.76NS
	Post- test	40	2.34	0.84	
Been losing confidence	Pre -test	40	2.70	0.65	1.64NS
	Post- test	40	2.79	0.64	
Yourself as a Worthless	Pre -test	40	2.71	0.38	1.22NS
	Post- test	40	2.67	0.53	
Negative Mental Health	Pre -test	40	19.25	4.45	6.56*
	Post- test	40	15.28	4.06	

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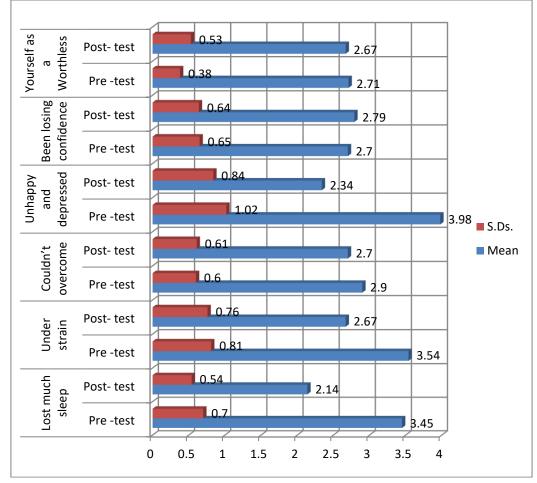
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\*= significant

Table 2 depicted pre and post test Mean Scores, Standard Deviation and t-ratio of the Negative mental health and its six subscales of elite students.

## Figure 2 depicted pre and post test Mean Scores, Standard Deviation of the six subscales of negative mental health of elite students



## DISCUSSION

The common belief is that physical fitness an individual's physical and mental health or his psychological well-being. The meaning of the term "Mental health" is ambiguous and may be used in different ways. The result given in Table 1 reveals that significant difference of positive mental health was found between pre and post test students (t=P.<05). In order to find out the differences of six subscales of positive mental health between pre and post test of students; tratio was computed for each category separately. The result reveals that significant differences was found in of (t=P.<05) Been able to enjoy and Been feeling reasonably happy, Been able to face up and Been feeling reasonably happy between pre and post test of students . However, No significant difference was found between Been able to concentrate, Plying A Useful Part, Capable of making The result given in Table 2 reveals that significant differences of six subscales of negative mental health between pre and post test of students (t=P.<05). In order to find out the differences of six subscales of negative mental health was found between pre and post test of students differences of negative mental health was found between pre and post test students (t=P.<05). In order to find out the differences of six subscales of negative mental health between pre and post test of students; t-ratio was computed for each category separately. The result reveals that significant differences was found in of (t=P.<05). Lost much sleep and Under strain between pre and post test of students found between Couldn't overcome. However insignificant differences were found in Couldn't overcome, Unhappy & depressed, and Been losing confidence.

The word 'Mental' implies something more than the purely cerebral functioning of a person, it also stands for his emotional-affective states and the relationships he established with others. In common usage 'mental health 'often means psychological well being and positive health ( Schwartz & Schwartz, 1968). Health is a state of complete physical, mental and social well being and not merely the absence of disease or infirmity 'defines the Constitution of the World Health Organization. This concept is very close to the definition of health according to Ayurvedic literature.

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Sushrut, a prominent proponent of this traditional system of Indian medicine, defines it is a state characterized by a feeling of spiritual, physical and mental well being (Prasanna atam indriya mana). It is also believed that an individual's satisfaction or happiness with this objective reality depends not only on his access to goods and services that are available to the community but also in engaging in physical fitness and sporting activity. The common belief that sports leads to better physical and mental health is probably based on the assumption that student players/atheletes are different from student non-player in attitudes and **behaviour**.

## REFERENCES

- 1. at Al-Hejrah PHC Center Makkah Al-Mukarramah. Int J Mater Sci. 2014;1:469–488.
- 2. American Psychiatric Association (2013) Diagnostic and statistical manual of mental disorders.
- 3. Chaudhry R, Mishra P, Mishra J, Parminder S, Mishra BP (2011) Psychiatric morbidity among diabetic patients: A hospital-based study. Ind Psychiatry J 19: 47-49.
- 4. Dreber H, Reynisdottir S, Angelin B, Hemmingsson E (2015) Who is the treatment-seeking young adult with severe obesity: A comprehensive characterization with emphasis on mental health. PLoS One e0145273.
- Lloyd CE, Dyer PH, Barnett AH (2000) Prevalence of symptoms of depression and anxiety in a diabetes clinic population. Diabet Med 17: 198-202.
- 6. Naish, Jeannette; Court, Denise Syndercombe (2014). <u>Medical sciences</u> (2 ed.). p. 562. <u>ISBN 9780702052491</u>. <u>Archived</u> from the original on 26 December 2016.
- 7. Neha T, Mrinmoy A, Susmita C, Suresh Kumar K. Prevalence of common mental disorders among patients with diabetes mellitus and hypertension in an urban east Delhi slum A cross sectional study. J Physiol. 2015;1:27–31.
- 8. Shin JK, Poltavskiy E, Kim TN, Hasan A, Bang H (2016) Help-seeking behaviors for serious psychological distress among individuals with diabetes mellitus: The California health interview survey, 2011-2012. Primaire Care Diabetes 11: 63-70.
- 9. Singh S.K (2018) Psychological Distress in Higher education students . Ajanta . vol 8 issue 1 Match 2019.
- 10. Singh S.K (2018) A Pilot Study Examining The Mental Health Of Diabetic And Hypertension Patients Aayushi International Interdisciplinary Research Journal (AIIRJ) Vol V Issue IV APRIL 2018.
- 11. Sinku S.K (2017). A Retrospective study of Mental health: Differences between Student Athletes and non- student athletes International Journal of Physical Education, Health & Sports Sciences Volume: 06, Issue: 02, 67-72.
- 12. Vetere G, Ripaldi L, Ais E, Korob G, Kes M, Villamil A: Prevalence of anxiety disorders in patients with essential hypertension. Vertex. 2007, 18 (71): 20-25
- 13. World Health Organization. Global report on Diabetes. Geneva (SZ): World Health Organization; 2016.

#### E-sources

http://amhocn.org/static/files/assets/8d6994c3/Mental\_Health\_Inventory. http://www.apa.org/helpcenter/exercise-stress.aspx http://www.apa.org/news/press/releases/stress/2011/gender.pdf