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Effect of yogic practices on health status and psychological and physiological parameters of Doctors

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Introduction :-

Health plays important role in the life of human beings. Health states means soundness of body and mind that condition in which creative and intellectually challenging work is executed successfully.

The definition of health according to “World Health organization” (WHO) is “Health as complete physical, mental and social well being and not nearly the absence of disease or infirmity. Health status is essential for everyone to enjoy life. Health is ability to function efficiently and effectively without injury to enjoy leisure, to be healthy to resist diseases and to cope with emergency situation. Health is ability to function efficiently and effectively without injury, to enjoy leisure to be healthy to resist diseases and to cope with emergency situation. Health related components of physical fitness include composition, co-ordination, cardiovascular fitness, flexibility, endurance, balance, rhythm.

The individuals working in different professions like, to have good health to devote to their profession like medicine. If the health of these professional affected then they will not be able to do justly to their profession & society. Hence the health status, psychological fitness and physiological fitness are essential for various professional people.

There are number of exercises to keep fit and healthy. Yoga and pranayama are the best philosophy that aims to achieve total fitness for man, that is mental fitness, spiritual well being and physical fitness as well as thorough conscious relaxation and contemplation.

A psychological, physiological and spiritual discipline that has been an integral part of Indian culture for thousands of years anciently yogi’s developed the yogic system because they believed that by working through the body and breath they could achieve mastery over the nature of mind, their emotions and general wellbeing.

On Dec 11 2014, the 193 members UGNA approved the proposal by consensus with a record 177 Co-Supporting Countries a resolution to establish 21St June as “INTERNATIONAL DAY OF YOGA”. In Its resolution, the UGNA recognized that yoga provides a holistic approach to health and well-being and wider dissemination of information about the benefits of practicing Yoga for the health of the world population. Yoga also brings harmony in all walks of life and thus, is known for disease prevention, health promotion and management of many lifestyle-related disorders.

Statement of the problem :-

Researcher often meet professional like Doctors, and asked the scholar their problems about health, psychological and physiological fitness and they often complained

about their hectic schedules and tensed lifestyle. Most of them suffer tremendous pressure of their profession and due to busy schedule their daily routine is disturbed their timing for lunch, dinner and going to bed is always changing. The disturbed daily routine leads to various health alignments like obesity, high blood pressure, diabetes, considering the above facts researcher decided to undertake the problem for research was as

“Effect of the yogic practices on the health status psychological and physiological parameter of the Doctors.”

Objectives of the study:- The study has thrown light on physical fitness , physiological and psychological status of doctor.

Significance of the study:-

- (i) This study is significant because by this study the Health related fitness status of the doctors are known .
- (ii) This study is significant because the effect of yogic practices on the health related fitness of doctor profession is known.
- (iii) The study was significant because the comparison of effect yogic practices on different professionals are known and Whose health status better is known?

Hypothesis : - Hypothesis is a beam of light that guides the researcher out of the labyrinths of unorganized facts. For this study researcher consider the following hypothesis.
The Yogic practices improve the physical fitness, physiological fitness psychological fitness.

Delimitations :-

- (i) The study was delimited to physical fitness (Balance, flexibility, and agility).
- (ii) The study was delimited to physiological fitness (Cardiovascular endurance) blood pressure, Heart rate, pulse rate WHR. (Waist Hip Ratio) BMI (Body Mass Index).
- (iii) The study was delimited to psychological fitness, (stress, and anxiety).
- (iv) The study was delimited to yoga practice given to subject up to six month duration.
- (v) The program of yoga practice was given under the supervision of the scholar.
- (vi) The scholar has train the assistants for his help to conduct the yogic practice program.
- (vii) In yogic practices only sitting Asana, Standing Asana, lying on abdomen Asana and lying on back Asana & Pranayam were given to professionals.

Limitation :-

In this study the scholar has the following limitations.

- (i) The scholar has no control on the diet and environment of the doctor.
- (ii) The scholar was unknown about the medicines professional take for their health fitness.
- (iii) The socio-economic status of the professional was not known by the scholar.
- (iv) The regularity of professional to participate in the yogic practice program was not under the control of the scholar.

Collection of data :

As the study is related to professions people who are different profession therefore the scholar selected 50 engineers who are doing practice as private engineers, these subjects are selected randomly

The scholar selected physical fitness variables for health status, 5 physical fitness variables were selected speed, agility, flexibility, explosive power, cardiovascular endurance. physiological variables selected by the scholar were body mass index, waist hip ratio, breath holding capacity of lungs, pulse rate and blood pressure.

The psychological parameters selected by the scholar were stress and anxiety.

The other variables were psychological parameters. The scholar selected 2 parameter of psychology one is stress (professional) and another is anxiety.

The stress questionnaires prepared by David Fontana and anxiety questionnaire prepared by guide and experts were distributed to all the subjects and requested to full fill the questionnaire.

All the test of physical fitness (Health status) and physiological parameter were conducted before the start of 6 months yogic training of professional and after the finish of yogic training for 6 months duration.

Yogasanas Training Schedule

The scholar selected 5 Asanas standing, 5 Asanas sitting, 5 Asanas lying on back, 5 Asanas lying on abdomen. In this way 20 Asanas were selected and following pranayamas were selected by the scholar.

- 1) Nadi shodhan (Bhastrika), 2) Chandra nadi shodhan, 3) Suryanadi shodhan
- 4) Bahya tribandha pranayam, 5) Ujjayi pranayam, 6) Chandrang pranayam
- 7) suryang pranayam, 8) Bhrami pranayam,

These 8 pranayams were selected for the yogasana pranayam training of the subjects.

Standing Asanas

- 1) Tadasana 2) Janurirasana 3) Vipritasana 4) Trikonasa 5) Utkatasana.

Sitting Asanas: - 1) Paschitomasana 2) Gomukhasana 3) Vakrasana 4) Ardha Masyendrasana 5) Parvatasana

Lieing on back Aasanas :- 1) Ek pad Uttanasana/Dwi-pad uttanasana

- 2) Pawan Muktasana 3) Naukasana 4) Setu bandhasana 5) Sarvangasana.

Asanas to perform lieing abdomen: - 1) Shalbhasana 2) Dwi-pad shalbhasana 3) Naukasana 4) Bhujangasana 5) Dhanurasana

Statistical Analysis

First of all the tables about the physical fitness parameters of the Doctors. The tables below indicate the physical fitness parameters of Doctors,.

Table:1

Means, standard deviations of Pre-test and post-test scores of Physical fitness parameters of Doctors (Medical practioners) and calculated 't' and tabulated 't'.

No.	Physical fitness parameters	Pre-test		Post- test		cal't'	tab 't'
		mean	sd	mean	sd		
1	Speed 30 mts das Run	8	0.6	7.8	0.8	2	2 at 0.05 level
2	Agility shuttle Run	2.2	1.2	1.9	0.82	1.57 *	
3	Flexibility sit and Reach Test	15.6	2.1	18.8	1.9	8	2.6 at 0.01 level 49 df
4	Explosive power of legs standing broad jump	3.9	1.3	4.3	1.1	2	2 at 0.05 level &df 49
5	Cardio-vascular endurance 600 yds Run/walk test	6.2	1.8	5.9	1.2	1.5 *	

*Insignificant effect.

Discussion :- From the pretest and post test scores of physical fitness above table number reveals that the effect of yogasanas and pranayama on physical fitness parameters is positive significant only on speed, flexibility and explosive power of legs of doctors because the calculated 't' of speed, flexibility and explosive power is 2, 8 and 2 which is equal and greater than tabulated 't' 2 at 0.05 level of significant and 2.6 at 0.01 level of significant and 49 degree of freedom. The means of the physical fitness parameters of pre-test and post-test.

Physiological Parameters of Doctors :- For finding out the effect of yogasanas and pranayama practice on the physiological parameters the scholar calculated 't' values between the pretest and post test means, standard deviations of physiological parameter.

Table:2

Below indicates the means, standard deviations of pretest and post test scores and calculated 't' values and tabulated 't' values of Doctors.

No.	Physical fitness parameters	Pre-test		Post- test		cal't'	tab 't'
		mean	sd	mean	sd		
1	Body mass index BMI	30.2	2.1	28.4	2.2	4.5	2.6 at 0.01 level df 49
2	Waist Hip Ratio WHR	2.1	0.5	1.8	0.7	3	2.0 at 0.05 level df 49
3	Breath holding capacity of lungs	21.5	2.1	25.2	2.6	9.25	2.0 at 0.05 level df 49
4	Pulse Rate	82.7	3.2	79.2	2.7	7	2.0 at 0.05 level df 49
5	Blood Pressure systolic/ Diastolic	130-100			120-90		BP reduce significant effect

Source :- from the pre-test score and post-test scores of physiological parameters

Discussion:- The above table numbers 6 reveals that there is positive significant effect on the Physiological parameters of the yogasanas and pranayama practice of 6 months by Doctors (Medical practitioners) because the calculated 't' values of BMI is 4.5, waist hip ratio is 3, breath holding capacity is 9.25 and pulse rate is 7 where as the tabulated value is 2.6 at 0.01 level of significance and 49 degree of freedom. The blood pressure means of doctors reduce from 130-100 to 120-90. Which is normal hence it is proved that the effect of yogasanas and pranayama practice had a positive significant effect on doctor's physiological parameters?

Psychological Parameters:-

The scholar also tested the stress levels of the professionals before the yogasanas and pranayam practice and also after the 6 months participation in yogasana and pranayam. The comparison between the pretest scores and post-test scores of stress level was made by calculating the 't' value. This is given below in the table number 11.

Table:3

Pretest means, standard deviations and post test means and standard deviation and calculated't' and tabulated 't' values of selected professional of stress level.

No.	Physical fitness parameters	Pre-test		Post -test		cal't'	tab 't'
		mean	sd	mean	sd		
1	Doctors	25.5	2.1	23.2	1.3	7.66	2.6 at 0.01 level of significance and df49

Source: - From the pretest scores and post test scores and calculated of't' value and't' value from the statistical tables.

Discussion:- The above table number 11 reveals that the pretest means and standard deviations of Doctor are 25.5 and 2.1 and 23.2 and 1.3 respectively and the calculated 't' value is 7.66 which is greater than the tabulated value 2.6 at 0.01 level of significance and 49 degree of freedom proved that there is positive significant effect of yogasanas and pranayama on the stress level of doctors their stress reduced.

Table : 4

Pretests and post tests scores means and standard deviation of anxiety test of selected profession.

No.	Physical fitness parameters	Pre-test		Post -test		cal't'	tab 't'
		mean	sd	mean	sd		
1	Doctors	21.5	1.6	18.2	1.1	12.22	2.6 at 0.01 level of significance and df49

Source :- From the pretest scores and post test scores and 't' table from statistical book. 't' value of doctors is 12.22 where as the tabulated 't' value is 2.6 at 0.01

Discussion:-From the above table number 12 reveals that the anxiety level was tested by professional anxiety test of the professionals find out the effect of yogasanas and pranayama practice on the anxiety the 't' value between the pretest scores and post test was calculated for the doctors. The calculated level of significance and 49 degree of freedom that proved that there is positive significant effect on the anxiety level of doctors because the calculated 't' value is greater than the tabulated value.

Conclusions: - The scholar drawn the following conclusions.

- 1) Due to practice of 6 months of yogasanas and pranayama the running speed of all most all the professionals increased.
- 2) The agility of all the professionals increased due to practice of 6 months yogasanas and pranayama.
- 3) The flexibility of all the professionals increased due to 6 months practice of yogasanas and pranayama.
- 4) Explosive power of legs increased of all the selected profession due to 6 months yogasanas and pranayama practices.
- 5) The cardiovascular endurance of all the selected professionals increased due to 6 months practices of yogasanas and pranayama.
- 6) Hence the final conclusion of health related Physical fitness is that all the Physical fitness parameters improved due to 6 months practices of yogasanas and pranayama by professional.
- 7) Physiological parameters scholar selected were BMI, WHR, breath holding capacity of lungs and blood pressure the Body mass index of the selected. Professionals reduced due to 6 months yogasanas and pranayama practices by the selected professionals.
- 8) Waist hip ratio of selected professional reduced due to 6 months practices of yogasanas and pranayama. Their body fat around their waist reduced.
- 9) Breath holding capacity of lungs increased because of yogasanas and pranayama practice for 6 months duration.
- 10) Pulse rate also decreased and reduced to normal because of 6 months practice of yogasanas and pranayama by selected profession.
- 11) Blood pressure of the selected professional decreased and reduced to normal by 6 months yogasanas and pranayama practice by selected profession.

The effect on the professional stress and professional anxiety was also tested by conducting professional stress test and professional anxiety test before the start of yogasanas and pranayama practices and after the finish of 6 months yogasanas and pranayama practice by selected profession.

The pretest and post test scores were collected and statistical analysis were done and following conclusions were drawn. The professional stresses of selected professionals were reduced due to 6 months yogasanas and pranayama practice.

The professional's anxiety was also reduced due to yogasanas and pranayama practice.

All above conclusions were drawn by the scholar of this research study and from the conclusions following recommendations were given by the scholar.

Recommendations:-

- i. All the professional must do some physical fitness exercises like yogasanas, pranayama, walking, swimming, cycling etc. to keep themselves Physically, Physiologically, Psychologically fit and do justice to their professions.
- ii. The same type of study also can be undertaken on female professionals.
- iii. The same type of study can be undertaken on the adult citizens.

In this way the scholar completed this research study.

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