



UNIVERSITY OF PATANJALI, HARIDWAR

CRITERIA V- STUDENT SUPPORT & PROGRSSION

RECORDS WITH MEASURABLE INDICATORS ON SKILL & CAPACITY ENIANCEMENT OF YOGA STUDENTS

Yoga is a skill that involves physical, mental, and spiritual aspects, and its effects are subjective and often difficult to measure. However, some measurable indicators can be used to assess yoga as a skill in action. Here are some possible indicators:

Flexibility: Yoga involves stretching and holding poses that require a certain level of flexibility. Measuring one's range of motion in various joints and muscle groups can be an indicator of progress in this area.

Balance: Yoga poses often require a strong sense of balance and proprioception. Measuring the ability to hold balance poses or to transition smoothly between poses can be an indicator of progress in this area.

Breathing: Yoga emphasizes conscious breathing techniques, such as pranayama, which can improve lung capacity, oxygenation, and relaxation. Measuring one's breathing patterns or lung function can be an indicator of progress in this area.

Attention & Mindfulness: Yoga also involves cultivating a mindful awareness of the present moment, which can lead to improved mental clarity, focus, and emotional regulation. Measuring one's ability to stay present and focused during yoga practice or to apply mindfulness techniques outside of class can be an indicator of progress in this area.

It's worth noting that these indicators may vary depending on the style of yoga practiced and individual goals. Additionally, it's important to remember that yoga is not a competitive sport.

Various studies were conducted on the students of University of Patanjali to evaluate their various levels of capacities and skills as an outcome of Yoga practices. Few of them are shown below for reference;-



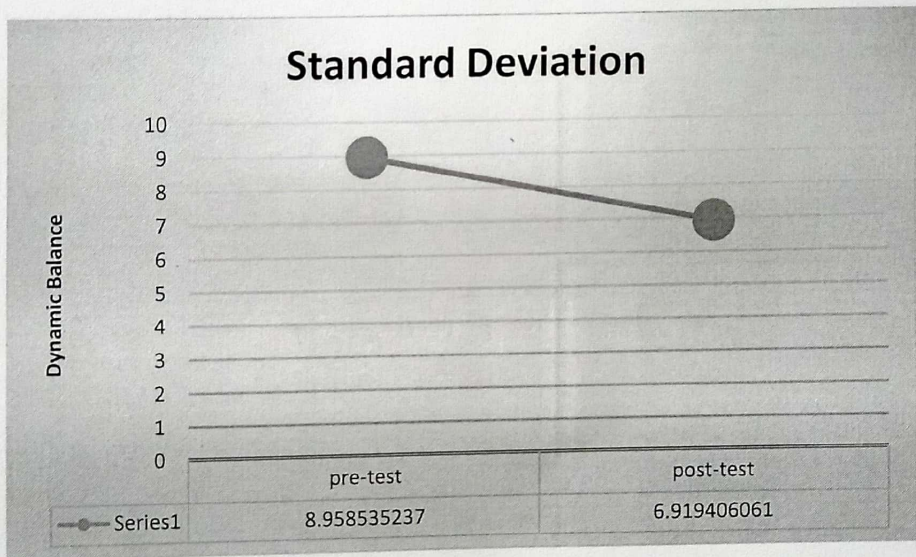
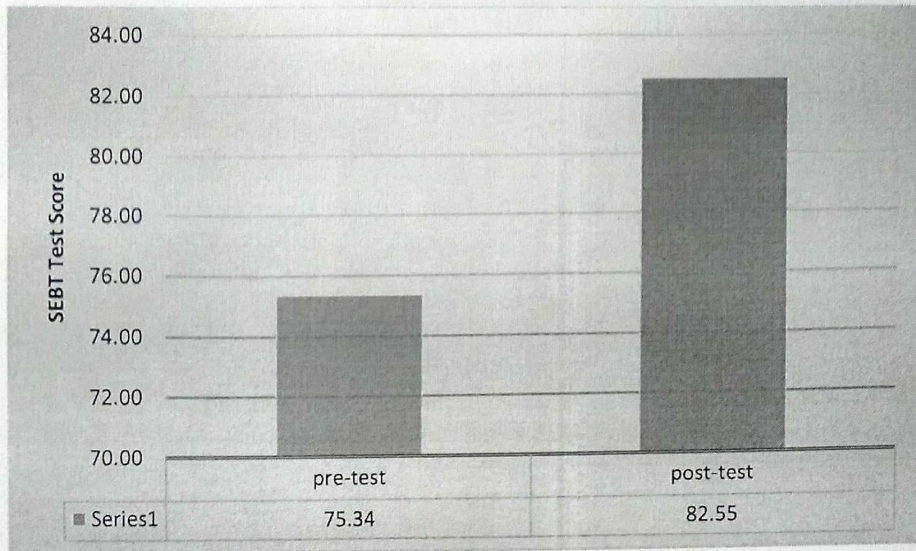
A- REPORT ON "EFFECT OF YOGASANA PRACTICE ON DYNAMIC" BALANCE
OF STUDENTS OF UNIVERSITY OF PATANJALI,

Sh. Avichal Verma Ji, Research Scholar of University of Patanjali, conducted a study to assess the effect of asana on dynamic balance of the students of University of Patanjali. This study was conducted on 10 students randomly selected for the study with the help of **Star Excursion Balance Test (SEBT)**.

Effect of Yogasana Practice on Dynamic Balance (Star Excursion Balance Test)																
S. No	Name	Data before Yogasana Practice							Data after Yogasana Practice						Average	
		SE BT	SE BT	SE BT	SE BT	SE BT	Average	SE BT	SE BT	SE BT	SE BT	SEBT	SE BT			
1	Shashank Gupta	77.96	93.55	84.14	83.60	97.04	91.67	87.99	88.44	95.70	93.82	87.63	100.27	93.55	93.23	
2	Ashish Singh	68.01	82.80	82.53	69.68	84.04	81.91	78.16	84.41	83.87	77.15	78.46	75.27	78.19	79.56	
3	Hemant Saini	73.53	75.94	79.95	73.12	80.38	73.12	76.00	86.63	82.89	81.82	86.02	95.43	97.31	88.35	
4	Ratnesh Singh	70.16	86.02	87.37	74.73	93.01	80.65	81.99	73.92	90.05	94.35	84.95	78.23	88.98	85.08	
5	Faizan	62.63	67.37	58.16	65.79	63.68	58.95	62.76	73.68	75.26	69.74	71.32	70.00	61.58	70.26	
6	Sambit	80.73	88.27	98.88	82.87	87.85	86.19	87.46	82.12	91.34	100.56	86.74	92.27	90.88	90.65	
7	Akshit Kumar	65.91	75.28	75.57	72.80	60.16	57.97	67.95	83.24	72.73	72.73	81.87	80.77	73.90	77.54	
8	Milan	73.60	61.52	59.83	75.28	62.50	49.43	63.69	87.64	84.27	62.36	100.57	71.31	63.64	78.30	
9	Dhanurdhar	66.75	71.91	73.97	75.52	75.77	65.72	71.61	87.37	85.57	81.19	86.60	76.80	79.38	82.82	
10	Chetan Kumar	67.31	79.12	70.05	81.67	73.06	83.61	75.80	90.66	73.63	72.25	93.89	75.00	73.06	79.75	
Mean								75.34							82.55	

Above data, shows mean value of Dynamic Balance in students as 75.34 ± 8.95 before the asana practice and 82.55 ± 6.91 after the asana practice.





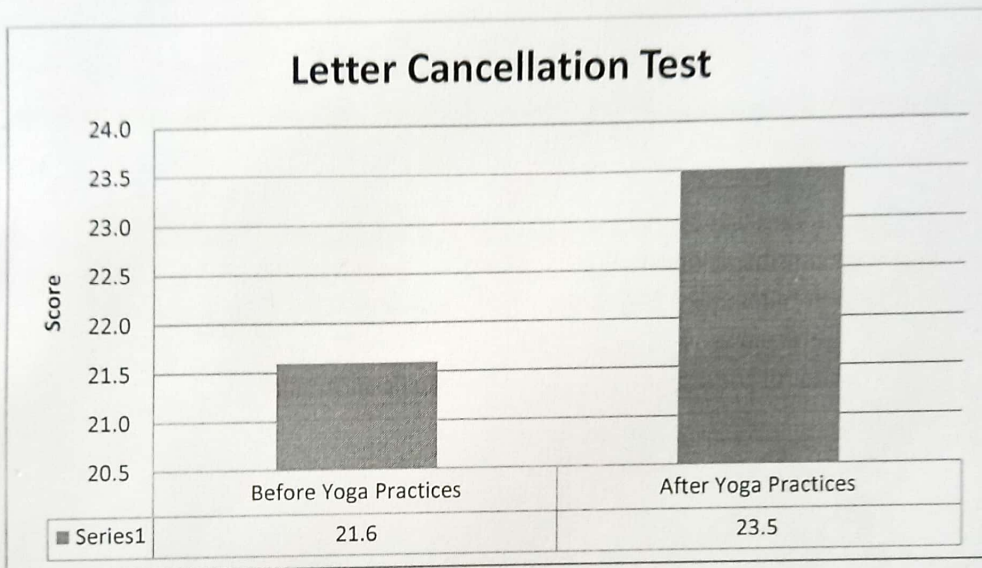
STUDENTS PRACTICING YOGASAN IN THE UNIVERSITY OF PATNAJALI AS PER CURRICULUM ENHANCES THEIR DYNAMIC BALANCE AS A COMPONENT OF THEIR CAPACITY ENHANCEMENT.



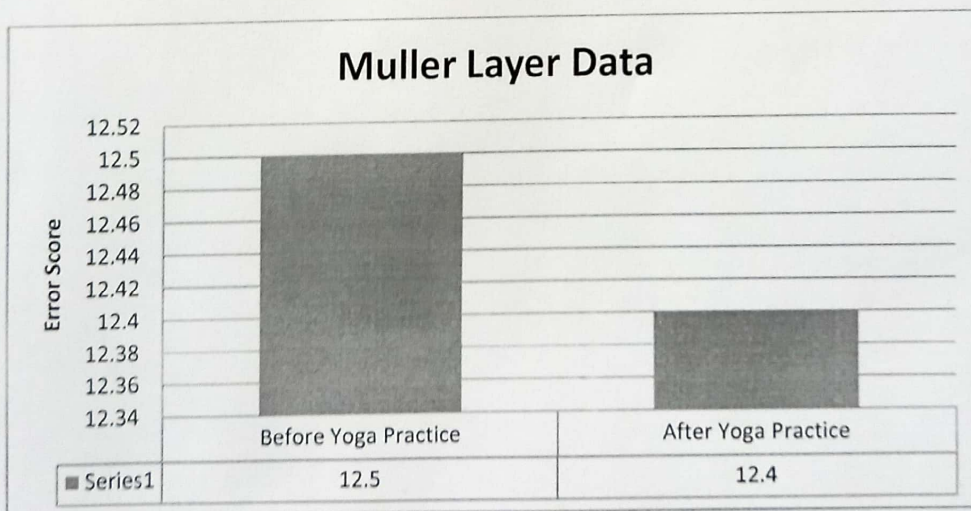
B- REPORT ON ATTENTION LEVEL AS AN INDICATOR OF SKILL ENHANCEMENT OF STUDENTS OF UNIVERSITY OF PATANJALI

Ms. Kanchan Yadav research scholar of University of Patanjali has conducted a study on the students of University of Patanjali to access their level of Attention with practice of Trataka. She randomly selected 05 student's age ranged between 18-25 years practicing trataka in the class and calculated their level of Attention with 03 different Attention measuring tests (Muller Layer Test, Fingure Maze test and Letter Cancellation Test). The students were practicing Trataka as per their curriculum.

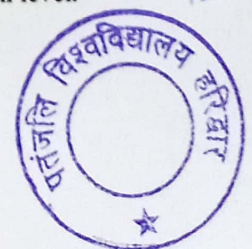
The students level of Attention has been increased in terms of its three following component e.g. (i) Muller Layer Test (ii) Fingure Maze test (iii) Letter Cancellation Test.



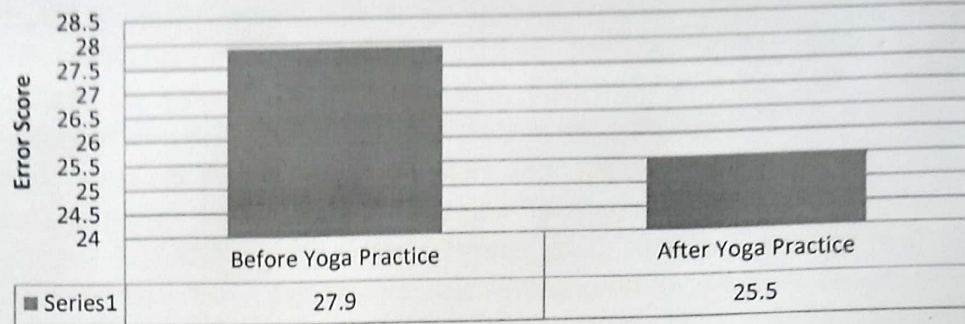
Increase in Score indicates increase in Attention level.



Decrease in the score shows decrease in the errors indicating increase in Attention level.



Errors in Fingure Maze



Decrease in the score shows decrease in the errors indicating increase in Attention level.

ABOVE TREND (FROM UNPUBLISHED DATA) SHOWED ENHANCEMENT OF LEVEL OF ATTENTION AFTER TRATAKA CLASSES AS MEASURE OF CAPACITY & SKILL ENHANCEMENT OF STUDENTS IN UNIVERSITY OF PATANJALI.



C- REPORT ON TOTAL LUNG CAPACITY AND LUNG AGE AS AN INDICATOR OF CAPACITY ENHANCEMENT OF STUDENTS OF UNIVERSITY OF PATANJALI

This study conducted by Sh. Dharam Pratap Singh M.Sc. scholar of University of Patanjali as dissertation for the fulfillment of Award of M.Sc. Degree in Yoga Science. This study was conducted to evaluate the level of **FORCED VITAL CAPACITY AND LUNG AGE** of students of University of Patanjali performing *Yajna* daily as their life style.

Thirty four male students, age between 17 to 30 years were selected from university. Students were divided into two groups (i) experimental group (17 participants, group average age 22.6 Years \pm S.D. 2.87) and (ii) Control group (17 participants, group average age \pm 21.9 years S.D. 1.84). The inclusion criteria were (i) participants were willing to follow the study conditions and (ii) having normal health with no illness and not being on medication. The exclusion criteria were (i) those with a diagnosed illness. Signed consent from the participants were obtained.

Thirty-four participants were randomly selected in two groups, with seventeen participants in each group. Experimental group performs *Yajna* as daily routine in campus while the Control group normally followed daily routine activities of the campus without *Yajna*.

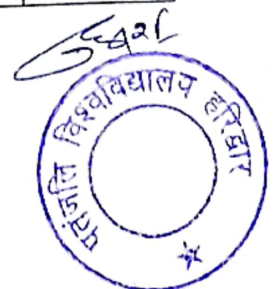
Both force vital capacity and biological lungs age were measured using the ATS/ERS Portable Spirometer (Helions 702, Spirometry System, PFT) before and after of Intervention. A Spirometer was used as an apparatus for measuring the volume of air inspired and expired by the lungs and to measure the vitality of the lungs.

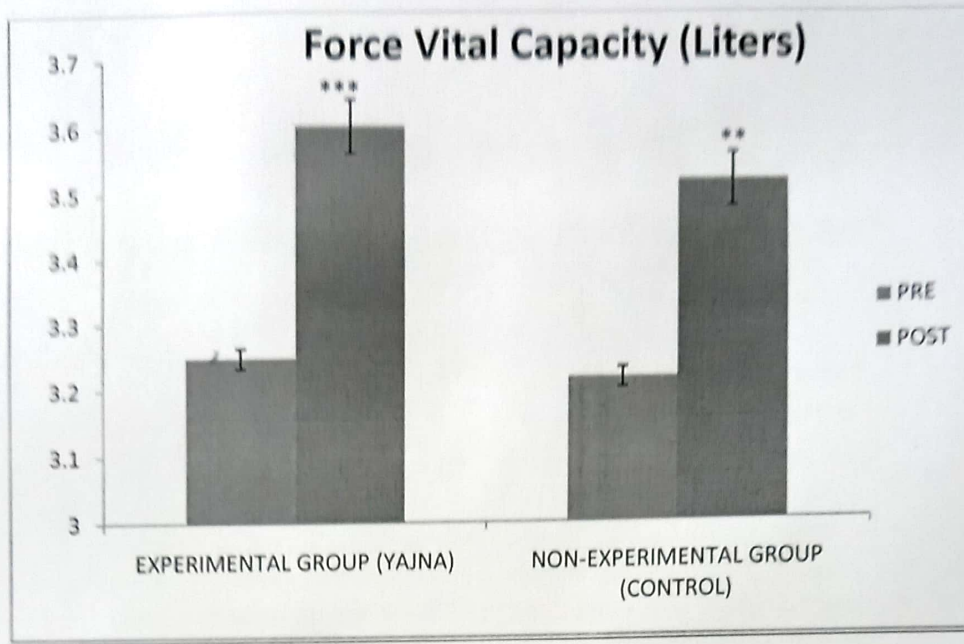
Students were detailed about the spirometer and its uses. Further, they were asked to inhale and exhale deeply as hard as possible into sensor preferably for at least 6 seconds. During the test, soft nose clips was used to prevent air escaping through the nose and filter mouthpieces was used to prevent the spread of microorganisms.

The data obtained before and after experiment. Data for both groups (experimental and control) were compared using t-test (using SPSS Version 25). There were two data within subject factor, i.e., (i) Force vital capacity (pre-post) and (ii) Biological lungs age (pre-post).

RESULTS

Variables	Groups	Pre (M \pm SD)	Post (M \pm SD)	df	t-value	p-value
Force Vital Capacity	Experimental Group	3.25 \pm .58	3.60 \pm .59	16	-5	0.000
	Control Group	3.22 \pm .58	3.52 \pm .54	16	-3	0.004
Lungs Age	Experimental Group	22.94 \pm 4.09	21.12 \pm 3.22	16	3.87	0.001
	Control Group	21.59 \pm 3.45	20.94 \pm 2.68	16	1.89	0.077





THIS SHOWS THAT THE LUNG CAPACITY OF THE STUDENTS ACTIVELY INVOLVED IN DAILY YAJNA HAS REMARKABLY INCREASED HOWEVR THE LUNG AGE OF THESTUDENTS HAS BEEN DECREASED INDICATIVE OF DELAYED AGING OF LUNGS (HEALTHY LUNGS)



EFFECT OF YAJNA ON TOTAL LUNG CAPACITY AND BIOLOGICAL LUNG AGE

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Dr. Arti Yadav²

Mr. Dharam Pratap Singh³

INTRODUCTION

Today's era is suffering from various types of air pollutions leading to various pulmonary disorders and vital incapacities. Main causes of this are higher population rate and excessive industrialization with emission of toxic gasses. Within the last century, almost 25 lakh tons of oxygen has been deprived in our atmosphere. This environmental pollution is not fruitful for living beings in any way. When people like a monkey, destroys and clouds this Mother Nature to avail personal benefits then this nature buckles them. This Mother Nature is not ever fruitful for wicked and misdemeanor people (*Rigveda 10/86/5*). Polluted environment destroys productivity of the Mather nature (*Rigveda 10/85*). Earth could be replenished with Ash (bhasm) of *Yajnakarma (Yajurveda 6/21)* & (*Maitrayani Samhita 3/9/4*). Mother Nature should be purified with Ghee, Honey, Rock Sugar and other herbs during *Yajna (Yajurveda 12/70)*. Fire of Yjna provides vital air (*Rigveda 10/8/1*). Fire of *Yajna* was accepted as a tool to enhance intellect in vedic era (*Samveda 984*). Fire of *Yajna* was accepted as a tool to

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D- REPORT ON OVERALL LEVEL OF SATISFACTION & ANXIETY AS AN INDICATOR OF SKILL ENHANCEMENT OF STUDENTS OF UNIVERSITY OF PATANJALI

Four hundred and thirty students [$M_{age} = 20.80$ years, $SD = 2.41$; 168 males] of University of Patanjali were enrolled for the study from the of University of Patanjali to evaluate the overall level of Satisfaction and level of Anxiety. Participation of the students in the present study were based on the following inclusion criteria (i) age between 18-35 years, (ii) enrolment in graduate or post graduate courses in yoga of a university.

The timing of practicing yoga (minutes per week) was derived using information obtained during the study related to the frequency of practice i.e. (i) practicing yoga (days per week) and (ii) time spent in practicing yoga (minutes per day). Thus we obtained the time spent in practicing yoga (minutes per week) as a product of practicing yoga (days per week) x time spent in practicing yoga (minutes per day).

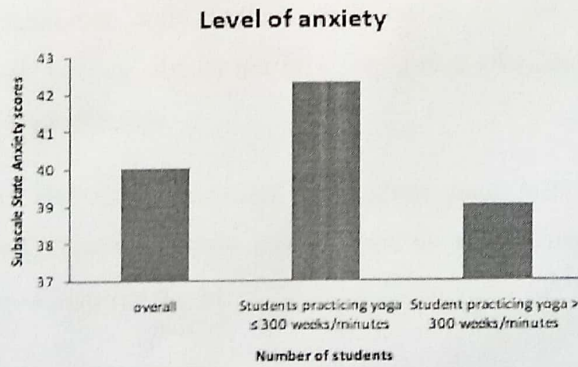
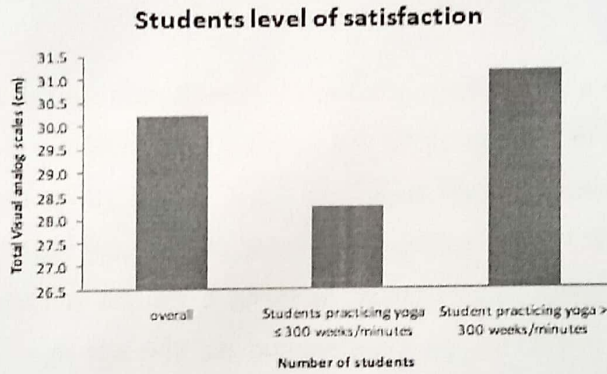
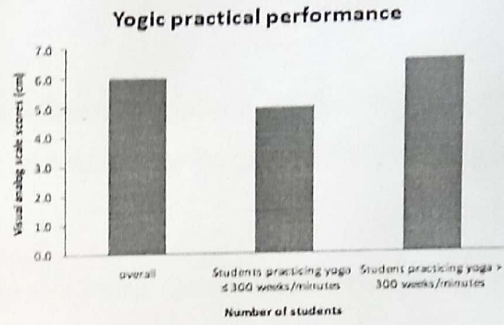
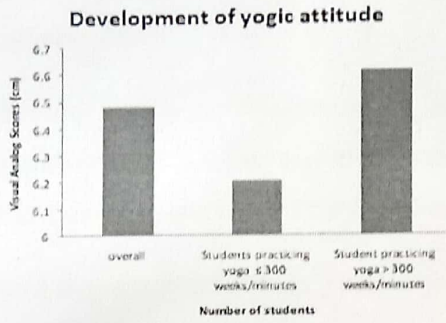
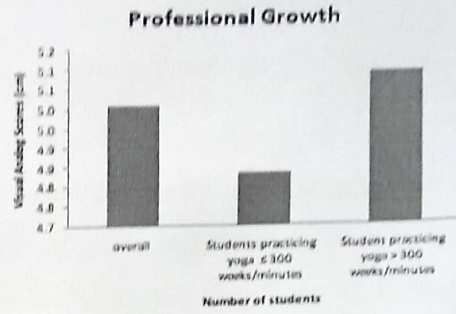
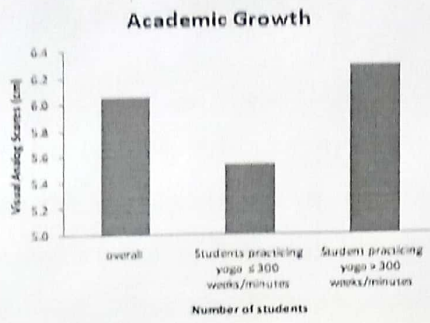
The students grouped into two groups based on time spent in practicing yoga.

- (i) First group (**Group 1**) was of the participants who spend less than equal to 300 minutes per week in practicing yoga.
- (ii) Second group (**Group 2**) consists of the participants who were spending more than 300 minutes per week in practicing yoga. The overall level of satisfaction and its components and level of anxiety as tabulated below.

Sl. No.	Demographic details of the participants	Total number of Students (n = 430) Mean ± SD	Group 1 ≤ 300 (n=135) Mean ± SD	Group 2 >300 (n=295) Mean ± SD
1	Students Satisfaction measured by Visual Analog Scale			
1.1	Academic Growth	6.04±2.39	5.53±2.58	6.27±2.27
1.2	Professional Growth	5.01±2.69	4.83±2.7	5.09±2.69
1.3	Development of yogic attitude	6.48±2.35	6.21±2.37	6.61±2.33
1.4	Yogic practical performance	5.97±2.51	4.94±2.55	6.45±2.35
1.5	Overall Satisfaction	30.22±8.28	28.26±8.98	31.12±7.79
2	Spielberger's State Trait Anxiety Inventory Subscale State (STAI-S)			
2.1	State anxiety	40.02±10.44	42.27±11.3	38.99±9.86

Trends showed a various skill enhancement of students in University of Patanjali. The student's overall level of satisfaction increased by 10.12% and in terms of its five following component e.g. (i) 'Academic Growth, (13.38%), (ii) 'Professional Growth' (5.38%), (iii) 'Development of yogic attitude' (6.44%), (iv) 'Yogic practical performance' (30.57%), and (v) Level of anxiety is reduced by 7.76% as compared to the group of students practicing yoga less than 300 weeks/minutes.





Graphical representation of the overall Level of satisfaction, its components and anxiety levels in the students of University of Patanjali



E- YOGA AS A CAREER

Prof. Paran Gowda, Dr. Nidheesh, Vipin Rathore, University of Patanjali, Haridwar

“YOGA IS A SKILL IN ACTION.” (*yoga karma sukausalam, Chapter 2, verse 50*) - Yoga is the art of doing the work positively or negatively without mental or physical tiredness. For example Sri Krishna’s action in Bhagavad Gita or Duryodhana’s negative action in Mahabharata or Sri Rama’s father, Dasaratha Maharaja’s action in ruling the kingdom in Ramayana or Ravana’s negative action in kidnapping Sita).

Taking modern-day examples of human skills like Mahatma Gandhi’s positive skill in tackling the British empire or USA’s Biden diplomatic war of sanctions or Putin’s Russia’s waging a war on Ukraine are negative examples of skill in action.

*It may be noted that this article limits it self to yoga as a career / job oriented education field.

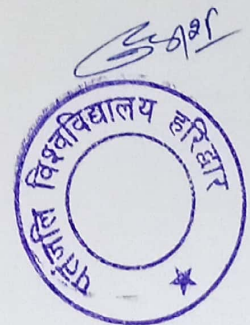
Yoga as a Career

Yoga has been evolving from time immemorial. Rishis have practiced it for the last 4000 years. In the modern days, yoga is a billion dollar industry and offers millions of jobs with abundant career opportunities for modern day youth. After the United Nations declaration of observing yoga as international day every year and the government calling it the “GUARDIAN YOGA RING” and since then yoga has become a career in almost 177 countries, covering roughly around 5-6 billion people. Yoga as a skill has become more popular among the youths seeking job opportunities. Unlike technical and medical professional careers, it doesn’t become dispositional DAS (depression, anxiety, stress) but brings in a state of relaxing career with full of happiness and complete job satisfaction.

Swami Ramdev and Acharya Balkrishna provided the modern youth with yoga and ayurveda careers for thousands of people. There is a great career scope for yoga professionals not only in India but also in 177 countries across the world.

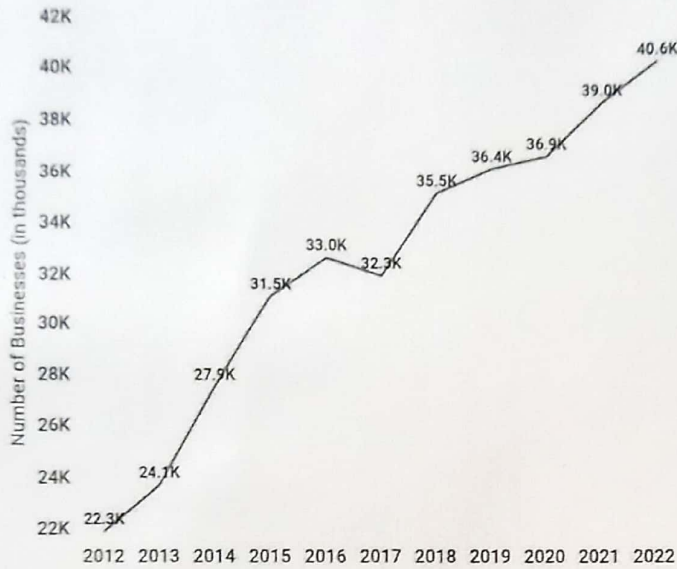
Yoga Industry and Career Statistics

1. Over 1 billion people around the world have made their careers
2. Yoga Industry is worth Rs. 2996.80 billion as of 2019 data.



3. The average yoga practitioner or a degree holder or a Ph.D holder on average earns more than a lakh of Rupees/per month
4. Compound Annual Growth Rate (CAGR) of 9.6% from 2021 to 2027.

NUMBER OF U.S. PILATES & YOGA STUDIOS OVER TIME



(Source: Zippia, Yoga Industry Statistics, 2022).

TO CONCLUDE, INDIA IS A LAND OF YOGA WHICH PROVIDE JOBS AND CAREERS BUT ALSO WITH GOOD HEALTH, PROSPERITY AND HAPPINESS.

