

RESEARCH ARTICLE

A CROSS-SECTIONAL SELF-REPORTED ONLINE SURVEY TO ASSESS THE AWARENESS AND PERCEIVED HEALTH BENEFITS OF YOGA AMONG ADULT POPULATION OF MADHYA PRADESH

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Manuscript Info	Abstract				
Manuscript History Received: 25 May 2021 Final Accepted: 29 June 2021 Published: July 2021	Yoga is derived from the word "YUJ" meaning to bind, attach or union. Yoga is not just a form of exercise but is a tool for overall development in every aspect of life. Several benefits of yoga has been recorded but are the people aware of those is the question of today's time. The aim of the study was to examine various level of perception (awareness, motivation, and obstacles) on yoga among the population of Madhya Pradesh. A online cross sectional survey was conducted across Madhya Pradesh, sample were selected randomly by snowball sampling The total of 408 subjects participated in the study. The data has been collected from June 2021 till July 2021. The study duration was 6 months. A pre-tested questionnaire was used to collect the data. The mean age was 30 ± 11.83 . Majority participants were from 18- 30 years of age (68.63%). The females were 251 and the males were 157. It was found that more number of female participants were practicing yoga compared to male in the study and the difference was significant (p<0.05). Most of the participant perceived yoga as a tool to improve health (42.9%) as compared to exercise (10.1%). The motivation came through different medium such self-motivation (43.2%) and social media (13.9%). The main obstacle for the participants was lack of time (42.7%). The percentage of people aware about yoga was more and their perception of yoga is as a tool to improve one's health and to be free from any kind of disease. Even if there are many mediums of motivation if one does not get any inspiration from self then they will not be able to perform yoga, so self-motivation is very necessary. Participant think that yoga is very time consuming.				
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Introduction:-

According to Maharishi Patanjali Yoga is defined as yogahchittavrittinirodha, means cessation of movements within the consciousness is yoga. It's the art of studying the performance of consciousness. Yoga shows ways of understanding the functioning's of the mind, helps to reduce their movements, leading oneself towards the undisturbed state of silence which reside within the seat of consciousness. The word chittaindicate the mind which is composed of three categories mind(manas),intelligence(buddhi), ego(ahamkar). Yoga is a practice by which the restless mind is calmed and therefore the energy is directed into constructive channels.¹Yoga comes from Sanskrit root yuj meaning bind, join attach and yoke, to direct and concentrate one's attention on to use and apply. It also means union or communion.

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The kathoupanishad describes yoga as the steady control of mind.According to GherandSamhita the sadhaka must attain four stages that are jignasu(seeker), sadhaka(devotee), yogi(one who attains truth and knowledge and understand the inner truth), jivanmukta(liberated soul). Every being wonders about purpose of life, but because of reluctance or aversion, the search is sometimes forgotten.²According to yoga there are six major factors which prevent voga, or union, from occurring. In voga union means uniting the 2 energy forces within the body, i.e. the pranic energy flowing in ida and pingalanadis. Yoga is that the method of harmonizing the flow of those irregular forces to bring perfect physical and mental equilibrium and to awaken thesushumana. The six main factors are overeating, overexertion, talkativeness, adhering to social norms, company of people and unsteadiness, except these obstacles, the Tantraraja Tantra mentions: "The six obstacles to yoga are kama(lust), lobha(greed), moha(infatuation), abhimana(pride), mada(arrogance)."³To reach yoga enthusiasm, perseverance, discrimination, unshakable faith courage, avoiding the corporate of people are the six factors. Yoga is an age old practice and in recent years because of increase in importance of yoga. The International Day of Yoga has been celebrated yearly on 21 June ever since 2015, following its beginning within the world organization General Assembly in 2014. From the point of view of yoga, the solstice marks the change to Dakshinayana. The second phase of the moon after June 21 is thought as Guru Poornima. Shiva, the primary yogi (Adi Yogi), is supposed to begin imparting the knowledge of yoga to the rest of mankind on at the moment, and have become the primary guru (Adi Guru).⁴In a survey conducted in United States for predicting the health through number of years practice of Yoga it was seen that practicing in home was more beneficial compared to a class and different physical pose have unique health benefits⁵. Another nation-wide survey wasconducted in Australia as an online web-based questionnaire, which was intended to determine the reason for practice of yoga of, explore the styles of yoga commonly practiced, the inspiration to practice, perceived effects of practice, injuries related to yoga, as well as nutritional and lifestyle choices. It showed that there was decrease in bad habits post practice of yoga ⁶. In United States and Australia, yoga practitioners were female, educated, and practicing yoga primarily for physical well-being. ^{5,6}In a study conducted in Austin, Texas to know about the perception, motivation, barrier and pattern of use of different yogic practices in which 604 students participated, which showed that voga was perceived as exercise, and the motivation was for health related benefits and lack of time being the main barrier.⁷In India s survey was conducted to know about the characteristic of yoga practice and choice of yoga technique which showed more male practiced yoga around the age of 21 to 44 years and most of them preferred asana compared to pranayama⁸. Another study in India reported about benefits and adverse effect of yoga and 94% responded that yoga was beneficial.⁹A study dealing with the perception of the people about yoga in India showed that 94% practitioner and non practitioner believed that toga is beneficial.¹⁰In a recent Indian survey it wasobserved that out of 112,735 respondent only 4452 people have knowledge about yoga in central India. They believed that yoga improves lifestyle to lesser extent.¹¹ In Madhya Pradesh there are many various initiatives taken to push yoga, are these initiatives reaching the people and what are the varied perceptions for practicing or not practicing yoga are going to be explored through this study.

Methodology:-

A cross-sectional study was conducted in the state of Madhya Pradesh India, where the participants were randomly selected from different areas by means of snow ball sampling. The questionnaire were pretested which were used to collect the data. At first 10 participants were sent the information about the link for the Google Form through E-mail and then they were requested to give information about other participants who would be interested in participating in the study. This way the forms were circulated to different regions of Madhya Pradesh. The subjects were above the age of 18 years. The total of 408 subjects participated in the study. The data has been collected from June 2021 till July 2021. The study duration was 6 months.

The participants had been selected based on the inclusion criteria which consist of

- 1. Participant should be above the age of 18 years.
- 2. The participant should be residing in any district of Madhya Pradesh
- 3. The participant should not be a yoga instructor/teacher or yoga physician

The values were converted as a percentage of whole within each category. The percentage have been used in results. Also Chi square test to detect difference between groups in response to question (i.e. do you practice yoga?), under the categories of gender. The test was analyzed in software epi info. The data was tabulated and analyzed for descriptive statistics. The analysis was done in MS Excel 2016. The p value of <0.05 was considered as significant.

Results:-

The total of 408 subjects participated in the study. The median age was 30 ± 11.83 . Majority of participants were from 18- 30 years of age (68.63%). The distribution of participants performing yoga and not performing yoga is explained in (figure 1). The female were 251 and the male were 157. It was found that more number of female participants were practicing yoga compared to male in the study and the difference was significant (p<0.05). In (Table1) the P-value of different variables is explained.



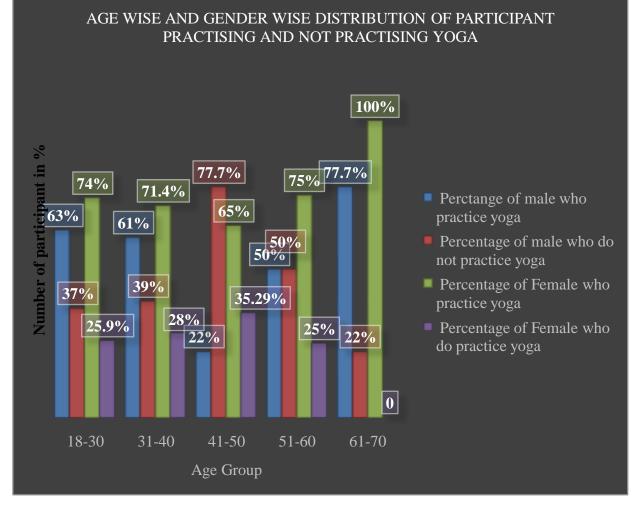
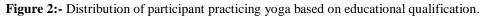


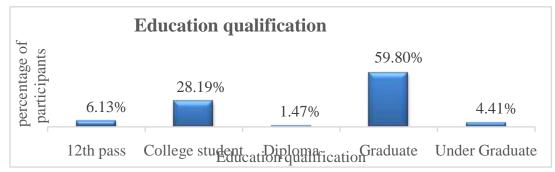
Table 01:-Different variables related to	yoga based on gender.
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Variables	Total	Male(n)(%)	Female(n)	Chi ²	P-value
	sample(n)(%)		(%)		
	408(100)	157(38)	251(62)		
Do you practice yoga?				8.02	0.004
yes	278(68)	94(23)	184(45)		
no	130(31)	63(15)	67(16)		
What is yoga according to you?				1.3	0.7
A set of practice which involves asana and pranayama	123(30)	43(27)	80(31)		
Practice which is helpful to control the physical body and mind	166(41)	69(43)	97(38)		

A set of practice which purifies the outer and the inner body	83(20)	31(19)	52(20)		
Yoga is a path towards liberation (Samadhi).	36(8.8)	14(8)	22(9)		
Since when do you think yoga awareness has been increasing?				1.5	0.6
International yoga day celebration	153(37)	62(15)	91(22)		
After celebrities started performing yoga	66(16)	21(5)	45(11)		
Recent times due to pandemic	141(34)	55(13)	86(21)		
Before international yoga day	49(12)	19(4)	30(7)		
What is the reason behind you doing yoga				30	0.0003
Exercise	66(17.1)	33(8)	33(8)		
Spirituality	29(7.5)	13(3)	16(4)		
Health benefits	155(40.1)	52(13)	103(25)		
Stress relief	64(16.5)	29(7)	35(9)		
Yoga as a Lifestyle	73(18.9)	53(13)	20(5)		
How do you motivate yourself to do yoga or any yoga practice regularly				9.7	0.04
I don't do yoga	112(27)	49(12)	63(15)		
I go to yoga class	45(11)	10(2)	35(8)		
My family members motivate	51(12)	19(4)	32(8)		
I go do yoga to keep my body fit	129(32)	45(11)	84(20)		
I do yoga as a method to reduce stress	71(17)	34(8)	37(9)		

The education qualification of different participants are given in (figure 2). And region wise distribution of participant practicing yoga are explained in (figure 3).





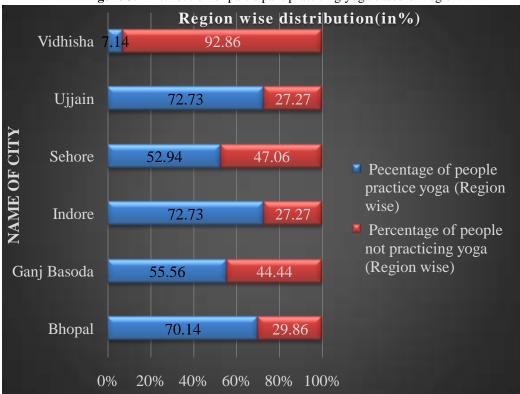


Figure 3:- Distribution of participant practicing yoga based on region.

Most of the participants started practicing yoga from the year 2016-2021 (78.4%). 69.2% of the participants are aware about the international yoga day celebration (69.2%). More than half of the participants were aware about the different practices of yoga (57%) and some think that yoga involves asana (43.3%) and pranayama (44.7%). According to most of the participants think that yoga is a practiceto control the body (40.8%). The perception of most of the participants is that the yoga is performed are explained in the (table 1). The participant's perception was that yoga has many different physical benefits andmost participants agreed that yoga helps for overall health (29.3%), improve flexibility (10.3%), sleep better (8.8%), helpful in weight reduction (9.3%) and all the benefits mentioned above (61.1%). The participants thought that the mental benefits of practicing yoga was reduction of stress (52.6%), improvement in focus (42.8%) and improved self-awareness (35.5%).

S. No.	Reasons	Total Number of	Male(n)	Female	Chi ²	P-value
		participants	(%)	(n)(%)		
		(n)(%)				
1	Self motivation	176(43.2)	72(18)	105(26)	17	0.007
2	Social media	57(13.9)	22(5)	34(8)		
3	Friends and relatives	55(13.4)	28(7)	27(7)		
4	Doctor	45(11)	13(3)	33(8)		
5	Dissatisfaction with	25(6.1)	2(1)	23(6)		
	body image					
6	International yoga	17(4.2)	9(2)	8(2)		
	day					
7	Spiritual motivation	33(8.1)	11(3)	22(5)		

Table 02.	Motivation	For	Dorforming	Voge
Table 02:-	Motivation	FOT	Performing	r oga.

There are some participants who did not perform yoga and the reason behind that was mostly due to lack of time (42.7%), some participant lacked the inspiration to perform yoga (25.9%) and some did not perform yoga due to laziness(26.5%). Some obstacles were in the form of misconceptions that participant had towards yoga which stopped them from performing yoga, which are explained in (Table 03)

S. No.	Response	Total(n)	Percentage	Male	Female	Chi ²	P- value
1	Do you think yoga prac	tice will lead to an	y kind of injury ((such as sprai	ns, fractures	0.4	0.48
	etc.)?						
	Yes	73	17.8%	25(6)	47(11)		
	No	336	82.2%	131(32)	204(50)		
2	Do you think after yoga	practice one feels F	atigue/ Tired?			2.1	0.1
	Yes	70	17.1%	10(2.4)	26(6)		
	No	339	82.9%	121(29)	178(43)		
3	Do you Prefer other activ	vities over yoga?				0.3	0.5
	Yes	223	45.5%	58(14)	79(19)]	
	No	186	54.5%	63(15)	99(24)		
4	performing yoga?					0.9	0.6
	Yes	284	69.4%	87(21)	136(33)		
				07(21)	130(33)		
	No	18	4.4%	6(1.4)	6(1.4)		
	Maybe	107	4.4% 26.2	6(1.4) 28(6.8)	6(1.4) 36(8)	-	
5		107 o you think gender	4.4% 26.2	6(1.4) 28(6.8)	6(1.4) 36(8)	2.6	0.2
5	Maybe As per your perception d	107 o you think gender	4.4% 26.2	6(1.4) 28(6.8)	6(1.4) 36(8)	2.6	0.2
5	Maybe As per your perception d people taking up yoga cla	107 o you think gender asses?	4.4% 26.2 of the participan	6(1.4) 28(6.8) ts have any re	6(1.4) 36(8) ble to play in	2.6	0.2
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5 6 7	Maybe As per your perception d people taking up yoga cla Yes No Maybe Do you think only flexib Yes	107o you think genderasses?48233128le people can practi70339	4.4% 26.2 of the participan 11.7% 57% 31.3% ce yoga? 17.1% 82.9%	6(1.4) 28(6.8) ts have any ro 13(3.1) 76(18) 32(7.8) 15(3) 106(25)	6(1.4) 36(8) ble to play in 17(4) 98(24) 63(15) 16(3.9)	-	
6	Maybe As per your perception d people taking up yoga cla Yes No Maybe Do you think only flexib Yes No	107o you think genderasses?48233128le people can practi70339	4.4% 26.2 of the participan 11.7% 57% 31.3% ce yoga? 17.1% 82.9%	6(1.4) 28(6.8) ts have any ro 13(3.1) 76(18) 32(7.8) 15(3) 106(25)	6(1.4) 36(8) ble to play in 17(4) 98(24) 63(15) 16(3.9)	0.9	0.3

Table 03:-	Misconception And	Obstacles Related To Yoga.
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Discussion:-

The study is based on the awareness, perception, motivation and obstacles in yoga. In the present study the number of participant practicing yoga were female (62%) compare to male which is in contrast with the study conducted in Kolhapur where the participants were male compared to female $(25.6\%)^{12}$, in United States also there female (86%)awareness about yoga was more comparatively.⁷ In present studyMost of the participants started practicing yoga from the year 2016-2021 (78.4%). The participants are aware about the international yoga day celebration (69.2%). More than half of the participants were aware about the different practices of yoga (57%) and some think that yoga involves asana (43.3%) and pranayama (44.7%). According to most of the participants think that yoga is a practice to control the body (40.8%), in contrast to study conducted in India participants were aware about International Yoga day (81%), awareness about pranayama (20.4%) was more compared to that about asana (16.6%).¹⁰ In the present study the motivation came through different medium such self-motivation (43.2%) and social media (13.9%) and spiritual motivation (8.1%) was comparatively less in contrast to study conducted in New Delhi, India most of the participants in the were motivated to perform yoga to gain physical fitness, disease management as there is increase in non communicable disease in India.⁸ Study in United Kingdom was conducted to understand the participant's motivations and behavior. They concluded that participant take up yoga for spiritual benefits (47%). It has been shown that the participants who practice yoga have positive behavior and has less incidence of disease such as obesity.¹³ The perception about Yoga in the present study ismajority of participant perceived yoga as a tool to improve health (40.1%) as compared to exercise (17.1%). Another study in India about perception it showed that yoga helps in sports(92.8%), yoga reduces stress(95.3%).¹⁰, in contrast to study conducted in Texas the participants perceived yoga as an exercise activity (92%), spiritual activity (73%), or a way to manage or treat a health condition $(50\%)^{\prime}$, so this shows that India has different perception as compared to United States. In the present study the main obstacle for the participants is lack of time (42.7%) and lack of inspiration (25.9%) likewise in a study conducted in Kolhapur showed that lack of time and occupational commitments were the barrier.¹²

Limitation

Since we used snow ball sampling; they may not be true representatives of the population. We cannot extrapolate this data to all.

Conclusion:-

The percentage of people aware about yoga is more and their perception of yoga is as a tool to improve one's health and to be free from any kind of disease. Even if there are many mediums of motivation if one does not get any inspiration from self then they will not be able to perform yoga, so self-motivation is very necessary. Participant think that yoga is very time consuming so most people prefer walking but yoga is easier then walking which they need to understand. Yoga is not just exercise but a way of living and if participants understand that then many ore will get benefited from yoga.

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