

"Effect of Yoga on Memory and Problem Solving Ability of University Players"

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Abstract :The purpose of this study is to find out the effects of 4 week interuniversity Yoga Camp on the psychological profile of selected Haryana University Yoga players i.e Chaudhary Devi Lal University, Chaudhary Ranbir Singh University, Kurukshetra UniversityKurukshetra, and Maharishi Dayanand University. The subjects chosen for the study were 100 University Yoga players (male-50,female-50) attending Inter university Yoga camp between the age range of 20-25 years. The single group pre and post design was used for data collection. The memory of the participants was measured by PGI memory scale of players developed by N.N. Wig and problem solving ability of the players was measured by using Problem Solving Ability Test (PSAT- d) developed by L.N.Dubey . The memory and problem solving ability of the player was measured before and after 4 weeks. The result of the study revealed that there is a significant difference found between pre and post yoga camp in University players (p=0.001) on memory and problem solving ability of the all selected University players.

Keywords : Yoga, Memory , Problem solving ability, University players.

1. Introduction :

Yoga, the Indian legacy, is one of the greatest gifts of India to the world.today yoga has been one of the most popular systems of health and healing,all over the world. There is a lot of scope for improvement and development which can be achieved through yoga practice that is the treasure of our glorious land. Yoga today is not just a routine exercise but is a system that co-ordinate's with science and has a positive effect on the body and mind. These days anxiety, mental tension and stress have become imminent companions of players. The negative impact of this leads to lack of attention,concentration,memory and problem solving skills. To have good memory and problem-solving ability one has to be relaxed first, this can be achieved by yoga.the relaxation response of yoga can improve memory and problem solving ability. Yoga is a historic science and way of life which include physical movements,pose, meditation and pranayamas. Yoga practice could improve the players to focus on their mental resources, information processing more quickly and accurately and also learn to update information effectively. Yoga has shown a positive impact on memory and problem solving ability. Players are generally trained to acquire the knowledge of physical fitness,overall development of human beings and gain knowledge about effective work done with less energy. Infact problem solving ability is the core of physical activities. Memory is an ability to recall or remember past events or previously learnt information or skills. Problem solving ability helps us to solve issues

quickly and effectively. It helps us determine why an issue is happening and how to solve that issue. Improvement in memory and problem solving ability has been reported in several yogic studies. Studies have shown that Yogasanas, Pranayama and meditation help in enhancing memory and improving attention. Chanting group showed significant increased scores in both the memory tests and considerable reduction in total error and total time taken for cancellation tests compared to non-chanting practitioners (Ghaligi 2006). Research aimed to determine the effect of problem solving training on decision-making skill and critical thinking in emergency medical personnel. The finding revealed that decision-making and critical thinking score in emergency medical personnel are low and problem solving course positively affected the personnel's decision making skill and critical thinking after the education programme. (Heidari, 2016)

Aim: To investigate the effect of Yoga psychological profile among University players.

1.1. Objectives of the study:

1. To examine the effects of Yoga on Memory among University Players.
2. To examine the effects of Yoga on problem solving ability among University Players.

1.2. Hypothesis of the study:

1. There would be significant effects of Yoga training camp on Memory level of the selected University players i.e. Chaudhary Devi Lal University (CDLU), Chaudhary Ranbir Singh University (CRSU), Kurukshetra University Kurukshetra (KUK), Maharshi Dayanand University (MDU).
2. There would be significant effects of Yoga training camp on problem solving ability of the selected University players i.e. CDLU, CRSU, KUK, MDU.

1.3. Delimitations of the study:

1. The study was delimited to the interuniversity players of only four Universities of Haryana i.e. CDLU, CRSU, KUK, MDU.
2. The study was delimited to the age ranging from 20 to 25 years.
3. The research work was delimited to the 100 players (25 from the respective universities).

Limitations of the study:

1. There was no control on Dietary habits and daily activities of the players
2. The study was conducted for the period of 4 weeks.
3. Further, the socio-economic status of the players is a limitation of the study.

2. Method and procedure

2.1. Selection of the subjects:

The study was carried out on 100 (50 boys and 50 girls of age group 20 to 25 year) at university level, students from 4 universities of Haryana and the data was collected randomly from the

yoga camp of different participants who came there for participating in Inter University yoga camp. The Pre and Post test group design of yoga players was followed.

2.2. Procedure

The tools were administered to each subject of groups individually in pre test and post test. They were tested when they were performing yoga exercises.

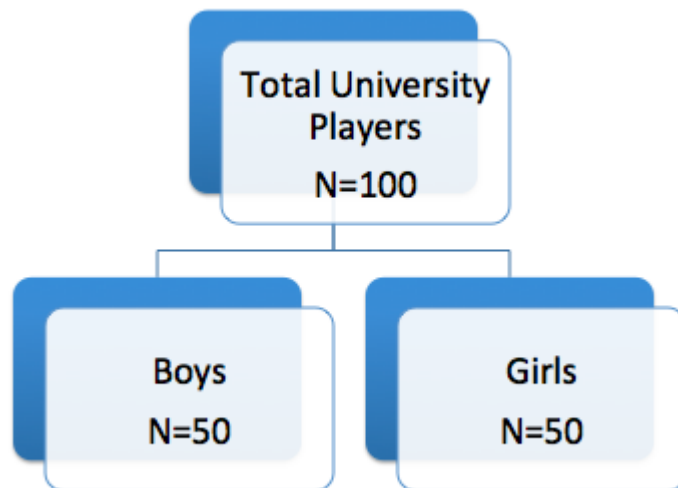


Figure 1 . Flow Chart of Study Design

Selection of the variables

Independent variable

- Yoga

Dependent Variable

- Memory
- Problem solving ability

Criterion measures

- Problem Solving Ability Test (PSAT- d) developed by L.N.Dubey (1971) was used to assess problem solving ability of Players.
- Memory scale from PGI memory scale of players N.N.Wig(1977) was used to assess memory of players.

It contains 10 sub tests,i.e. remote memory, recent memory, mental balance, attention and concentration, delayed recall, immediate recall, verbal retention of similar and dissimilar pairs, visual retention and recognition.

2.3. Statistical Procedure :

To analyze the collected data paired t test was applied on said variable at pre test and after post yoga interventions among University Yoga players. The statistical analysis of data was done by using SPSS software and significance level was set at 0.05.

3. Results

Table 1 :

Pre-Post test mean comparison in selected University Yoga players i.e. CDLU, CRSU, KUK and MDU on PGI memory scale in mean, SD and t- value with p- values.

University	N	Variable (Test Condition)	Mean	SD	t-value	p- value
CDLU	25	PGI (Pre-test)	60.83	5.58	12.72	0.001**
	25	PGI (Post-test)	69.08	4.19		
CRSU	25	PGI (Pre-test)	60.23	6.31	8.64	0.001**
	25	PGI (Post-test)	68.81	5.07		
KUK	25	PGI (Pre-test)	63.35	4.66	11.04	0.001**
	25	PGI (Post-test)	73.54	3.95		
MDU	25	PGI (Pre-test)	61.73	8.32	7.83	0.001**
	25	PGI (Post-test)	71.38	4.62		0.001**

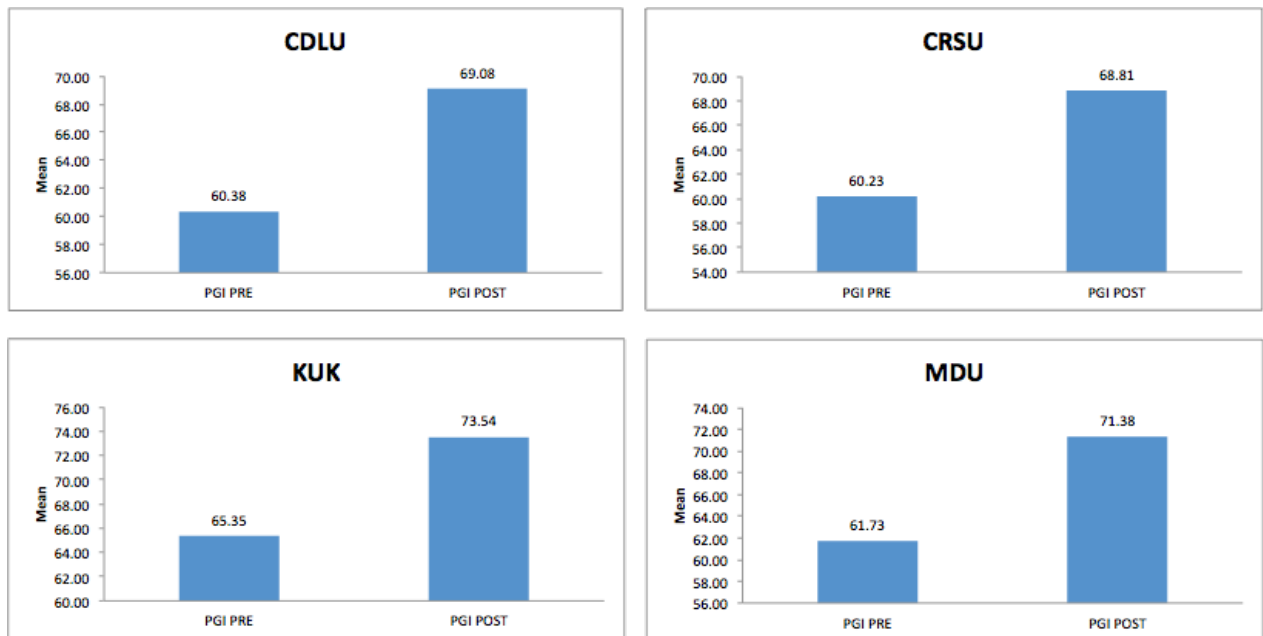


Figure 2 : Effect of Yoga at pre and post participants.

Table 2 :

Pre-Post test mean comparison in selected University Yoga players i.e. CDLU, CRSU, KUK and MDU on PSAT in mean, SD and t- value with p- values.

University	N	Variable (Test Condition)	Mean	SD	t-value	p- value
CDLU	25	PSAT (Pre-test)	7.92	1.94	11.07	0.001**
	25	PSAT (Post-tes)	10.96	2.01		
CRSU	25	PSAT (Pre-test)	10.12	3.41	5.51	0.001**
	25	PSAT(Post-tes)	12.69	2.43		
KUK	25	PSAT (Pre-test)	8.85	2.62	7.51	0.001**
	25	PSAT (Post-tes)	13.50	2.55		

MDU	25	PSAT (Pre-test)	9.04	2.51	10.87	0.001**
	25	PSAT (Post-test)	13.04	1.91		0.001**

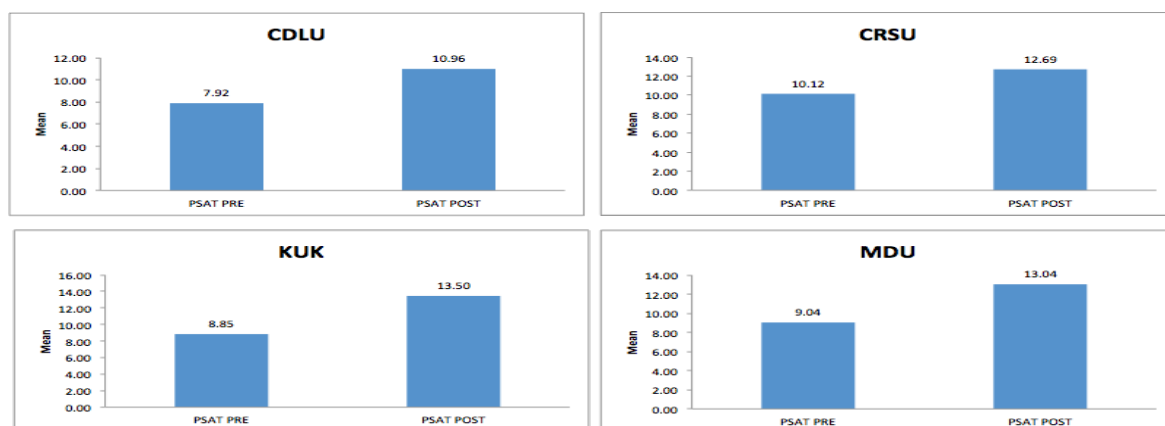


Figure 3 : Effect of Yoga on PSAT on selected University players.

The result of the present study revealed that after 4 weeks of attending Yoga camp selected University players showed statistical significant ($p=0.001$) difference at pre-test and post-test as shown in Table 1 and Figure 2. Interestingly, all the selected university players i.e. CDLU, CRSU, KUK and MDU show significant improvement on the memory level. Similar results were shown on the PSAT level of all the selected university players where a statistically significant ($p=0.001$) difference was found among the University players as shown in Table 2 and Figure 3.

4. Discussion

In our study we collect pre and post data from the University player's of Haryana in yoga camp on Memory and PSAT. Yoga which is a Indian heritage and great gift to the world has multidimensional benefits. Yoga works upon the overall well being of the individual. It facilitates every aspect of the individual. Yoga effectively works upon the physical, mental, emotional and psychological well being. The result of the present study revealed that 4 week yoga camp showed significant improvement on memory and PSAT level of the players. There are various studies which show the improvement on the memory scale and problem solving ability. Motivation is also a consideration, in that information relating to something that you have a keen interest in is more likely to be stored in our long-term memory. That's why someone might be able to recall the stats of a favorite cricket player years after he has retired or where a favorite pair of shoes was purchased Zlonoga, B(1986) and M.hooda studied that Skinner (1984) defined, "problem-solving as the framework or pattern within which creative

thinking and learning takes place”, Moreover, yoga practices also help in inner healing of the individual. Yoga also aids in improving attention, concentration and mental well being of the individual. Therefore, the result of the study supported the fact that Yoga can be effectively used as an effective therapy for improving physical and mental well being of the sportspersons.

Conclusion

Yoga is a great channel for releasing our stress and anxiety. Yoga helps in sharpening our mind and improving our intelligence. We can achieve a higher level of concentration and problem solving ability through Yoga also learn how to study our emotions. Yoga unitidly work on the mind and body and thus help us to achieve the best results and one can give his/her best when the body and mind coordinates with each other.

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