The Effect of Yogic Exercise on Strength and Body Mass Index of Piano and Guitar Players

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Abstract:

The present study aims at finding out the effect of yogic exercise on strength and body mass index of piano and guitar players. The 30 pianos and guitar players of Galaxy music academy were selected as a subject. The researcher has chosen a single design for conducting experiment in the present study for single group.

The criterion measures adopted for experimental were Hand Grip dynamometer strength test and Body Mass Index test.

Pre test were taken of pianos and guitar players. The training was given to the this group for the eight weeks Monday to Saturday everyday in the evening one hour, except Sunday only. And researcher again took the post test. While conducting post test, the criteria measure were taken. The researcher has found the effect of selected Yogasanas training program on strength, Body Mass Index of this group.

The analysis was done of the data collected by the researcher before and after the training. The data was analyzed by using paired sample't' test.

Within the limit of the present study, selected yogic exercise were contributed positively toward the improvement of piano and guitar players on strength and body mass index

Key Words: yoga, asanas, strength, body mass index, piano player and guitar player etc. **Introduction:**

Yoga is a science of complete health and is more than physical. Yogasanas has an important place in everyone's life. Yoga is an ancient philosophy as well as a system of exercise for a physical and mental discipline as an exercise; it combines stylized poses with asnas. Yoga was developed in India some 5000 years ago, and the world itself is derived from Sanskrit term meaning to yoke or joined together, the ultimate aim in yoga is to unite the human soul with the universal spirit.

Need of the Study:

- Yogic exercise makes the body strong and healthy. It minimizes the mental as well as physical stress on the body. Yogic exercise increases the physical fitness of a person due to which a player improve his performance.
- > Yogic exercise increases the physical as well as the mental power of person by increasing his concentration power, mind control due to which a player becomes a fast learner and his body becomes strong.

Statement of the Problem:

"The effect of yogic exercise on strength and body mass index of piano and guitar players"

Significance of the Study:

- Yogic exercise increases the importance, need and interest of physical education not only in piano and guitar players but also in other music players which changes the peoples view to see at physical education.
- ➤ It also increases the amount of strength in the body of piano and guitar player due to which they can give better performances.

Objectives of the Study:

- To prepare the Yogasanas exercise programme for the piano and guitar players.
- ➤ To find out the effect of Yogasanas exercise programme for the piano and guitar players.
- Make the piano and guitar players to play their instruments more effectively by increasing power of their hands.
- > To minimize the physical and mental stress of piano and guitar players.

Hypothesis of the Study:

Ho It was hypothesis that the yogic exercise may not be helpful for improve the performance of piano and guitar players.

Delimitation of the Study:

- The present study was delimited only for piano and guitar players.
- The study was delimited only 30 male players.
- The study was delimited only selected yogic exercises.
- This training was given to 8 weeks and time limit was only one ours.

Limitation of the Study:

It was not possible to control the day activities of the subject selected for the group which include diet, food, habits and rest.

Methodology:

Design of the Study

- There was be one group consist of 30 subject.
- This group was received specific training for period of 8 weeks.
- The experiment method was be conducted by considering three phases.

Selection of Subjects:

- The Subject was selected randomly from Galaxy music academy only.
- The Subject was selected from open age group of 30 players only.

Selection of the Variables:

Independent variables:

Yogic Exercises: Vakrasana, Bhujangasana, Shaladhasana, Lolasana Setu Bandhasana, Konasana, Naukasana, Chakrasana etc

Depended variables:

Strength and Body Mass Index

Selection of the Test:

- **Body mass index Test :- Body Fat measure**
- Hand Grip dynamometer strength Test:-To measure the Hand muscular strength.

Administration of Test:

The following physical fitness was selected and measure with help of standard test mentioned below. The pre and post test were taken by the research scholar to check the performance of the subject.

Variables	Test	Scores		
Body Mass Index	Body Mass Index Test	Kilograms/meter ²		
Strength	Hand Grip Strength Test	Kilograms (Kg)		

Training Programme:

In the beginning of the time schedule, 10 minutes general fitness exercise like Suryanamaskar and 40 minutes yogic exercises like Vakrasana, Bhujangasana,

Shaladhasana, Lolasana, Setu Bandhasana, Konasana, Naukasana, Chakrasana etc and finally 10 minutes cool down exercises were regularly performed by the subjects. After proper warm up exercises the actual training was used to start by the subjects.

ANALYSIS AND INTERPRETATION OF DATA: The analysis was done of the data collected by the researcher before and after the training. The data was analyzed by using 't' test. Within group comparison was done paired sample 't' test.

The comparison piano and guitar player group mean between pre and post test of Strength. Body Mass Index Components.

Strength, Boty Wass Huck Components.									
	Pre T	Γest	Post	Test	Mean	Std •			
Variable	Mean	SD	Mean	SD	Diff	Err Mean	't'		
Muscular Strength Right Hand	30.96	8.82	35.66	9.71	4.70	0.31	15.09		
Muscular Strength Left Hand	30.96	7.92	34.70	7.76	3.73	0.38	-9.58		
Body Mass Index	23.00	2.53	22.76	2.42	0.24	0.04	4.89		

Significance at 0.00 level, where df = 29, t : 2.04

Comparison of mean between Pre and Post test of gains in right hand strength (Grip Dynamometer strength test) piano and guitar player group

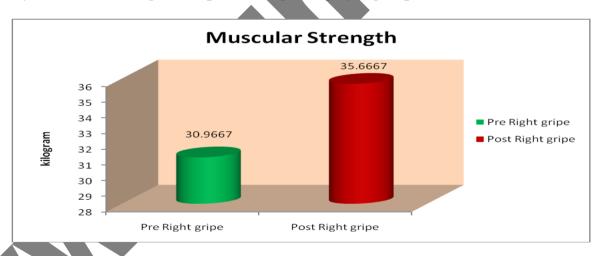


Fig. no.1 Comparison of mean between Pre and Post test of gains in right hand strength

It can be seen from the graph that there was significant improvement in right hand grip strength of piano and guitar player group at pre and post tests which may be due the exercises given to the subjects.

Comparison of mean between Pre and Post test of gains in left hand strength (Grip Dynamometer strength test) piano and guitar player group

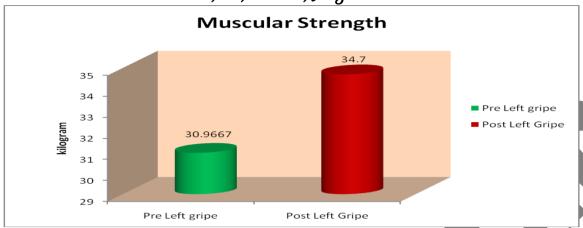


Fig. no. 2 Comparison of mean between Pre and Post test of gains in left hand strength

It can be seen from the graph that there was significant improvement in left hand grip dynamometer strength of piano and guitar player group at pre and post tests which may be due the exercises given to the subjects.

Comparison of mean between Pre and Post test of gains in Body mass index (Body mass index test) piano and guitar player group

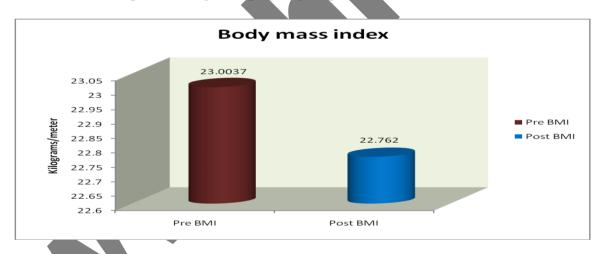


Fig. no. 3 Comparison of mean between Pre and Post test of gains in Body mass index

It can be seen from the graph that there was significant improvement in Body mass index of piano and guitar player group at pre and post tests which may be due the exercises given to the subjects.

Conclusion: While concluding, it may be stated that, within the limit of the present study, yogic exercises were contributed positively toward the improvement in strength and body mass index of piano and guitar player.

References:

Hall Jean and 'Hall Doriel, (2009), *Astanga yoga & Meditation*, London, Hermes house. Hinkle,(1982), *Basic Bahavioral Statastics*, published by *Houghton Mifflin*. John B. W.,(2006), *Research in Education*, published by Arrangement with pearson Education, Inc. and Dorling Kinder sly publishing.

Kaminoff Leslie, (2007), Yoga Anatomy. United states, human kinetics,

Kappmeier Kathy Lee and Diane M. Ambrosini, (2006), *Instructing Hatha yoga*, United states, Human kinetics.

Kansal D.K. (2008), Applied measurement evaluation and sports evaluation and sports selections .s.s.s. publications ,New Delhi.

Kothari C.R., (2004), Research Methodology, New age international publishers.

Madan Pankaj, Paliwal Vageesh and Bhardwaj Rajul, (2010), *Research Methodology*, New Delhi, Global vision Publishing house.

Morrow James et al, (2005), *Measurement and Evaluation in human performance*, United states, human kinetics.

Poonia Virender and Poonia Meenakshi, (2009), *Research methodology and statistical Methods*, New Delhi, Vishvabharti Publications.

