

**STUDY OF EXERCISES AND SPECIFIC YOGI PRACTICE ON  
COORDINATIVE ABILITY ON POST GRADUATE LEVEL STUDENTS: A  
COMPARATIVE ANALYSIS**



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**ABSTRACT**

A total number of Eighty (80) male, aged 19-25 years students were randomly selected from Jaspal Rana Institute of Education and technology Dehradun, Uttarakhand as subjects for the study to compare the Exercises and specific Yogi Practice on post graduate level students. The subjects were divided into four groups. The groups were categorized as by giving the names A, B, C & D. First three groups viz: A, B and C were experimental. Whereas group D was controlled one. Each group comprised of 20 subjects each. For the study Psychomotor Ability: Eye-Hand Coordination was used, the analysis of the data ANCOVA test was used at the significant level of 0.5. The result of the study shown that the four groups which were paired as Yoga and Control, Exercise and Controlled and Combined and Controlled were showing the significant difference and experimental groups are more effective in term of enhancement in the Eye- Hand Co-ordination.

**Keywords:** Eye-Hand Co-ordination, Exercise & Specific Yogi Practice.

**INTRODUCTION**

Post Graduate refers to someone who has been the subject of a graduation, namely, someone who has completed the requirements of an academic degree. A graduate of institution would be an alumnus of that institution. The human body is similar to a machine. If mistreated and not properly maintained, the machines will malfunction and cease to run efficiently. Our bodies are similar, in proper maintenance fosters deterioration of the numerous physiological systems within the body. It is a vital issue now verallto discuss that physiological have expressed that physical exercise improves and promotes the efficiency of the whole organism and is compulsory as to have the nice working and maintenance of all the systems of the body. A balanced programme of physical fitness is of profound importance to the life of an individual. There is scientific evidence that neglect of regular activity mainly during adolescence cannot be fully compensated later on in life. Eye-hand coordination is the

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coordinated control of eye movement with hand movement, and the processing of visual input to guide reaching and grasping along with the use of proprioception of the hands to guide the eyes.

Everybody will admit to the fact that the generation of today is physical hapless or hampered physically. This loss of physical healthy has actually made the people to take up stress and feel mentally ill or tens ionized. People in their young age are suffering with certain physical disorders and illness. They find it extremely difficult to cope up. The good thing is that the world is connected through the magic of web. How the people from are past a no more strangers to other past's people. They have connected globally with one another. They are thankful to the blessing of internet. It is the blessing in the disguise for all those people who are aware now about importance of physical fitness. They have many ways to cope up the mental stress of inadequacy of their physical fitness. They can keep their physical fit by tallingup certain yogic practices. These yogic exercises are extremely useful in removing their mental stress and keeping a sound wealthy.

Yoga is an eternal pragmatic science which has cultivated beyond millions of years, mingling with physical, mental, moral and spiritual human beings or mankind in totality. In present time, man is always thinking of materialistic philosophy of power, prosperity and pleasure. Where, he is trapped in a never ending mad run of fulfilling his unlimited desire and wants. It had been always believed and presumed by the humanity if one had to have the complete comfort of the mind and the body, one must fall into the lap of different yogic practices.

As physical education Emphasizes that the physical fitness of an individual is critical or important, it means to the concept that a healthy body stands for the body free from any kind of disease or element what so ever and make the individual to carry out his /her duties, responsibilities or physical works in a given slot without getting any worse effect. The physical education this declares a person fit physically when it is able to complete into his /her energy. The successful completion of a particular with entire physical vulgarity makes the person healthy it must be learnt in the person healthy. It must be learnt in this regard that the physical fitness and health related to it one those term and condition which go on changing they do not remain the same every time also it is to be lifted that there concept work on use and throw policy . For example if ball pen is being used which does not require a new refill after the will is finished is being thrown away and is changed or replaced with a new one. Similarly the certain activities or practice are being discarded from the use if to be prevent or useless. That is the reason a physical trainer or physical instructor is very much vigilant while recommending a certain physical activity or exercise to an individual as the physical trainer knows better what kind of exercise or activity given physically to the individual is going to help the individual to keep the fitness of his/her body .

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## DESIGN OF THE STUDY

A total number of Eighty (80) male, aged 19-25 years post graduate students were randomly selected from Jaspal Rana Institute of Education and Technology Dehradun Uttarakhand selected as subjects for the study. The subjects were divided into four groups. The group were categorized as by giving the names A,B,C &D. First three groups viz A, B and C were experimental. Whereas group D was controlled one. Each group comprised of 20 subjects each. The subject were randomly assigned to act as controlled group and experimental groups as suggested by Robert and James(1969). The experiment will be conduct for a period of 12 week as excluding the period required for measurement in the criterion measures at beginning and end on experimental period. The experimental group 'A' was done 12 yogic practices. The experimental group 'B' was done exercise programme and the experimental group C was done exercises and yoga programme combined. The control group 'D' consisted daily routine. The researcher has adopted required guidelines and precautions to be followed. The prescriptions suggested by Rikli and Jones for administration of the selected coordination test items were taken into consideration. The detailed procedures for administering Psychomotor Ability: Eye-Hand Coordination. For the purpose of the study physical education teacher and principle helps to serve the student for the research aspects. All subjects were novice and voluntarily agreed to extend full co-operation and efforts for successful completion of investigation. For the analysis of the data ANCOVA test was used at the significant level of 0.5.

## RESULTS & DISCUSSION

For the purpose of the result of the study the comparison between the initial and the final scores obtained after the programme were seen. The subjects of these three groups who were put to the experiments, were not aware about the factors that to be analyze at them. Without the knowledge of these, the simple data before the experiments were collected. After the performing the test, again the data were collected and their after

the data before and after experiments were put to comparison in order to find the difference for significance.

The data obtained from the test was put on the parameter of Co-variance analysis as to see if there is going to be any kind of significant difference between the pre-test and post-test experimental analysis and conduction for the variables of all the four groups which were selected.

**Table No: I**  
**Analysis of covariance of the means of the three experimental groups and the control group in psychomotor ability: Eye –hand coordination**

	Groups				Sum of square	d.f	Mean square	f-ratio
	Yoga	Exercises	Combined	Control				
Pre test	23.70	24.34	25.04	24.90	B 20.84	3	6.98	0.55
					W 891.05	76	11.72	
Post test	20.40	23.40	22.84	24.55	B 183.70	3	61.23	6.65*
					W 679.12	76	8.94	
Adjusted post test means	23.50	23.56	22.76	22.49	B 119.06	3	39.69	22.24*
					W 133.19	75	1.78	

\*significant at 0.05 level.

B:- within the sets

W:-between the sets

When the analysis of the data obtained was made the subject for the significant difference, it was found in the pre-test group that the Co-Variance of Eye-Hand coordination i.e. the psychomotor ability, the resultant ratio of f- ratio was found to be at 0.55 which was not significant in term of the pre-test. It means that the initial mean difference among the groups cannot be termed as the significant. The analysis needed after the completion of the programme showed that the four groups which were involved to take up the programmes were having a ratio of F 6.65 but the significance level of test was kept 0.05 only and the end result was yielded for F-ratio 22.24 and this F-ratio was found to be greater than the tabulated f- ratio which was 2.74.

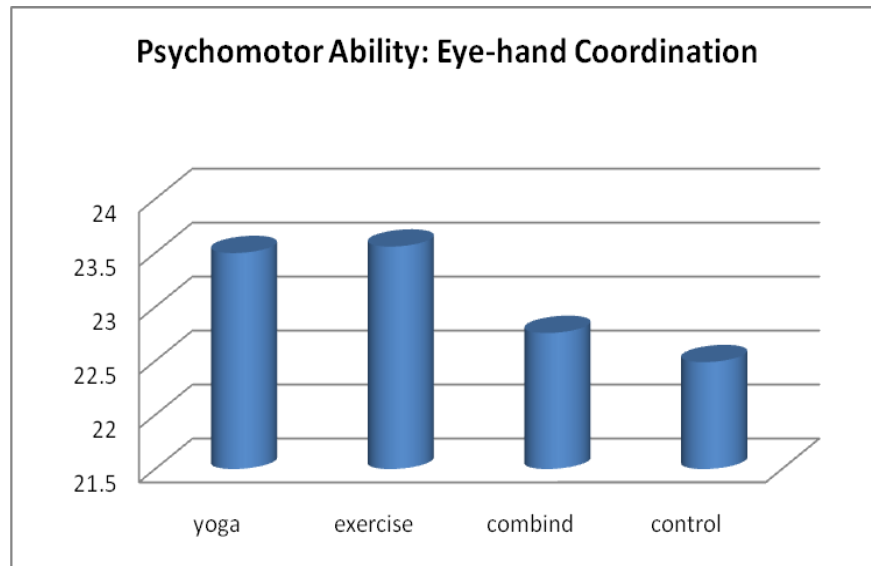
Whereas it was found that the four groups have been showing significant difference after the analysis of difference between the adjusted final means, the LSD test was introduced with the intention of knowing which of the difference was going to be more significant between the paired adjusted final means. Differences between the paired adjusted final means are shown in table-2.

**Table No: II**  
**Paired adjusted final means and differences between means for the three experimental groups and the control group in psychomotor ability: Eye –hand coordination**

Yoga	Exercise	Combined	Control	Difference between groups	Critical difference
23.50	23.56			0.06	0.83
23.50		22.76		0.74	0.83
23.50			22.49	1.01*	0.83
	23.56	22.76		0.80	0.83
	23.56		22.49	1.07*	0.83
		22.76	22.49	0.27*	0.83

\*significant at 0.05 level

**Figure-1:**  
**Comparison of paired adjusted final mean scores and difference between means for the three Experimental groups and the Control Group in Psychomotor Ability: Eye-hand Coordination**



### CONCLUSION

The analysis of the data & graphics for the interpretation of the result from the above table shows that the significant difference was found to be at the level of 0.05 level of confidence where the groups which were paired as Yoga and Control, Exercise and Controlled and Combined and Controlled were showing the significant difference at 0.05 level of confidence. On the contrary when the groups were paired into Yoga and Exercise, Yoga and Combined, and Exercise and Combined were insignificant on same level of significant difference. The minute analysis of the data for the purpose of the final result showed that out of the four groups, the exercise group was the best and second best groups was the Yoga group in the term of significance. Where the last to hold the significance level was the combined group. The data revealed that the groups which were Experimental groups found to be more effective than the Controlled groups. Thus, it was concluded that the Experimental groups are more effective in term of enhancement in the Eye- Hand Co-ordination, Our findings are supported by Sharma VK, Kukreja A, Senthil Kumar S, Kanojia S, Gupta S (2012), Satti, B, Gollinick P.P. (1983), Ganguly S.K. and Gharote M.C. (1988) who all had emphasized the importance of exercise and yogic practices for improving performance in psychomotor ability on Eye hand and Hand Grip Coordination.



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