

Impact of Yogic Practices on Selected Physical and Psychological Variables among Women Students

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Abstract - The evidence linking an active lifestyle with a reduced risk of some diseases is well documented for both adults and children. In the current study, the purpose of the study was to find out the impact of yogic practices on selected physical and psychological variables among women students. To achieve the purpose of the study 24 women students were selected from the women's hostel, Bharathidasan University, Tiruchirappalli. The age of the participants ranged between 23 and 28 years. The investigator relevance of the variable to the present study the following dependent variables were selected Physical Variables namely Balance and flexibility & Psychological Variables namely Resilience and Assertiveness, the collected data from the two groups pre and post test scores were statistically examined by applying dependent 't' test and Analysis of Covariance (ANCOVA) for each and every selected variables separately. There was a significant improvement takes place on physical and psychological variables such as balance, flexibility, resilience and assertiveness due to six weeks yogic practices program, there was a significant difference exists between experimental and control groups on balance, flexibility, resilience and assertiveness.

Keywords: Asana, Yoga, Balance, Flexibility, Resilience and Assertiveness

I. INTRODUCTION

The evidence linking an active lifestyle with a reduced risk of some diseases is well documented for both adults and children. Regular weight-bearing physical activity is known to be essential for the normal growth and development of the skeleton. Most studies of physical activity as a preventative modality have, however, been carried out in relation to health related physical activity. There is no clear understanding of the mechanisms involved, but it is generally agreed that physical activity has positive effects on other coronary risk factors, amid other plausible theories include physical-activity-induced changes in blood coagulability, platelet function, fibrinolysis activity, myocardial vascularity and coronary artery size (Gothi, 2003).

In the current study, the yogic practice during supervised sessions was the various types of asanas and pranayama were practiced. During unsupervised sessions, the yogic practice could have included stretching and rotation exercise. Yoga is an excellent method of enhancing the performance of sports participants. Salient feature of yoga is the combination of both physical conditioning and focused concentration. Physical fitness can be attained excellently

by indulging in yogic routine. Yogic exercises deal with the vital organ of the body on which health depends. The precursor for physical fitness lies in the efficient working of the vital organs of the body and yoga aims at it. The various selected 'asanas' giving different movements to the spine, controlled respiration, relaxation technique and concentration practice as a whole form an excellent routine to take care of the health of vital organs of the body. Although not many scientific researchers have been done, the works of have shown enough evidence about how yoga could be gainfully employed in the promotion of physical factors (Johnson Premkumar & Marriayyah, 2006).

Yoga offers essential psychological benefits to the practitioners. Yoga exerts its effects on both the body and the mind. It affects the tissues locally and centrally. Asana work by flexion and extending the tissues locally so as to stimulate nerves, blood, lymph, endocrine organs and neuroplexes. Local compression of various structures affects the whole body. Pranayama and meditation on the other hand, appear to work centrally and the effects spread to the periphery (Swami Sathyananda Saraswathi, 1984).

II. METHODS OF MATERIALS

The purpose of the study was to find out the impact of yogic practices on selected physical and psychological variables among women students. To achieve the purpose of the study 24 women students were selected from the women's hostel, Bharathidasan University, Tiruchirappalli.

The age of the participants ranged between 23 and 28 years. The selected participants were divided into one experimental group and a control group with twenty four participants (n=24) in each group. Experimental Group I (n=12) underwent yoga asanas with pranayama practices and Group II acted as control group (n=12).

The investigator reviewed the available scientific literature pertaining to the problem under study from books, journals, magazines, and research papers and also taking into consideration of the feasibility criteria of the availability of instrument and relevance of the variable to the present study. The following dependent variables were selected and are presented in table I.

TABLE I SELECTION OF VARIABLES & TESTS

S. No.	Variables	Test	Unit of Measurement
Physical Variables			
1	Balance	Stroke Balance Test	In Seconds
2	Flexibility	Sit and Reach Box Test	In Centimeters
Psychological Variables			
3	Resilience	Questionnaire	In Scores
4	Assertiveness	Questionnaire	In Scores

III. STATISTICAL TECHNIQUE

The collected data from the two groups pre and post test scores were statistically examined by applying analysis of

Covariance (ANCOVA) for each and every selected variables separately. In all the case 0.05 level of confidence was fixed as the level of significance to test ‘ F ’ ratio obtained by the analysis of covariance. This was considered to be appropriate.

IV. RESULTS OF THE STUDY

Table II shows that the adjusted post test means of experimental group and control groups are 295.48 and 181.34 respectively. The obtained F-ratio value is 29.35 which is greater than the table value 4.32 with df 1 and 21 required for significance at 0.05 level. Since the value of F-ratio is greater than the table value, it indicates that there is a significant difference among the adjusted post-test means of experimental group and control groups.

TABLE II ANALYSIS OF COVARIANCE ON BALANCE OF EXPERIMENTAL GROUP AND CONTROL GROUP

Adjusted Post Test Means		Source of Variance	Sum of Square	df	Means Square	F-ratio
Experimental Group	Control Group					
295.48	181.34	Between	4261.95	1	4261.95	29.35*
		With in	3049.41	21	145.21	

*Significant at .05 level. The table value required for significance at 0.05 level with df 1 and 21 is 4.32

TABLE III ANALYSIS OF COVARIANCE ON FLEXIBILITY OF EXPERIMENTAL GROUP AND CONTROL GROUP

Adjusted Post Test Means		Source of Variance	Sum of Square	df	Means Square	F-ratio
Experimental Group	Control Group					
21.54	14.26	Between	35.13	1	35.13	18.20*
		With in	40.53	21	1.93	

*Significant at .05 level. The table value required for significance at 0.05 level with df 1 and 21 is 4.32

Table III shows that the adjusted post test means of experimental group and control groups are 21.54 and 14.26 respectively. The obtained F-ratio value is 18.20 which is greater than the table value 4.32 with df 1 and 21 required

for significance at 0.05 level. Since the value of F-ratio is greater than the table value, it indicates that there is a significant difference among the adjusted post-test means of experimental group and control groups.

TABLE IV ANALYSIS OF COVARIANCE ON RESILIENCE OF EXPERIMENTAL GROUP AND CONTROL GROUP

Adjusted Post Test Means		Source of Variance	Sum of Square	df	Means Square	F-ratio
Experimental Group	Control Group					
198.21	138.37	Between	312.03	1	312.03	28.47*
		With in	230.16	21	10.96	

*Significant at .05 level. The table value required for significance at 0.05 levels with df 1 and 21 is 4.32

Table IV shows that the adjusted post test means of experimental group and control groups are 198.21 and 138.37 respectively. The obtained F-ratio value is 28.47 which is greater than the table value 4.32 with df 1 and 21

required for significance at 0.05 level. Since the value of F-ratio is greater than the table value, it indicates that there is a significant difference among the adjusted post-test means of experimental group and control groups.

TABLE V ANALYSIS OF COVARIANCE ON ASSERTIVENESS OF EXPERIMENTAL GROUP AND CONTROL GROUP

Adjusted Post Test Means		Source of Variance	Sum of Square	df	Means Square	F-ratio
Experimental Group	Control Group					
51.34	33.91	Between	388.62	1	388.62	34.27*
		With in	238.14	21	11.34	

*Significant at .05 level. The table value required for significance at 0.05 level with df 1 and 21 is 4.32

Table V shows that the adjusted post test means of experimental group and control groups are 51.34 and 33.91 respectively. The obtained F-ratio value is 34.27 which is greater than the table value 4.32 with df 1 and 21 required for significance at 0.05 level. Since the value of F-ratio is greater than the table value, it indicates that there is a significant difference among the adjusted post-test means of experimental group and control groups.

V. DISCUSSION ON FINDINGS

The results of the study indicate that the experimental group namely, yogic practices group had significantly improved in the selected dependent variables namely balance, flexibility, resilience and assertiveness. It is also found that the improvement effected on balance, flexibility, resilience and assertiveness by yogic practices group was greater than control group. It is inferred from the literature and from the result of the present study. That systematically designed training develops dependent variables are very importance quilts for better performance in almost all sports and games. Hence it is concluded that systematically designed training may be given due recognition and implemented properly in the training programs of all the discipline in order to achieve maximum performance.

Manikam., V & Peter. P (2016) designed to determine the effects of yoga power yoga and Pilates on selected physical variables of College women students. The results of the study showed that there was a significant difference was found among all the Experimental groups namely Yoga Practice, Power yoga Practice and Pilates Exercise groups had significantly increase in the Flexibility and Muscular Endurance. Further the results of the study showed Pilates Exercises group was found to be better than the Yoga Practice group and Power yoga Practice group in Flexibility and Muscular Endurance.

Chikwe Agbakwuru & UgwuezeStella (2010) investigated the effect of assertive training on early-adolescents improvement of resilience. The summary of the research questions and hypothesis answered showed that there was

positive effect of assertiveness training on improvement of resilience on respondents. The assertiveness training showed more improvement on resilience of the girls than that of the boys. From the statistical analysis, we conclude that the assertive training has been able to improve the level of resilience on the experimental group. This result shows that both the male and female was affected equally by the assertiveness training. There were higher scores from the experimental group and for that we attribute it to the effect of assertive training on them. The observation carried out by the researcher and the teachers has a positive outcome. Recommendation was made for the need of counseling units in schools.

VI. CONCLUSION

On the basis of the interpretation of the data, the following conclusions were drawn.

1. There was a significant improvement takes place on physical and psychological variables such as balance, flexibility, resilience and assertiveness due to six weeks yogic practices program.
2. There was a significant difference exists between experimental and control groups on balance, flexibility, resilience and assertiveness.

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