



EFFECT OF SELECTED YOGIC PRACTICES ON TRAVELLING OF LOW BACK PAIN PATIENTS

A. ANBANANDAN

Assistant Professor, Department of Physical Education and Sports Sciences, Annamalai University, TN.

ABSTRACT

The purpose of the study was to investigate the effect of selected yogic practices on travelling of low back pain patients. Thirty low back pain patients are taken from the Chidambaram, Tamilnadu. The age, height and weight of the subjects ranged from 30 to 40 years, 158 to 169 centimetres and 55 to 70 kilograms respectively. The selected subjects were randomly assigned into two equal groups of 15 subjects each. Group I underwent Yogic practices, group II acted as control. Prior to and after the training the subjects were tested on travelling of low back pain patients through the Oswestry low back pain disability questionnaire. Analysis of covariance was used to determine the significantly difference existing between pre test and post test on sitting of low back pain patients. The result of the study proved that due to twelve weeks of the experimental training was reduced back pain while travelling for the low back pain patients.

Key words: Travelling and Low Back Pain.

INTRODUCTION

Yoga has been studied and is increasingly recommended to promote relaxation, reduce stress and some medical conditions such as premenstrual syndrome. According to Dupler and Frey, Yoga is a low-impact activity that can provide the same benefits as "any well-designed exercise program, increasing general health and stamina, reducing stress, and improving those conditions brought about by sedentary lifestyles". It is particularly suited, add Dupler and Frey, as a physical therapy routine, and as a regimen to strengthen and balance all parts of the body. Yoga has also been used as a complete exercise program and physical therapy routine (Dupler and Frey, 2006).

The effects of yoga on heart disease suggest that yoga may reduce high blood-pressure, improve symptoms of heart failure, enhance cardiac rehabilitation, and lower cardiovascular risk factors. For chronic low back pain, specialist Yoga for Healthy Lower Backs has been found 30% more beneficial than usual care alone in clinical trial (Tilbrook and Helen, *et al.*, 2011).

METHODOLOGY

Subjects and Variables

The purpose of the study was to investigate the effect of selected yogic practices on travelling of low back pain patients. Thirty low back pain patients

are taken from the Chidambaram, Tamilnadu. The age, height and weight of the subjects ranged from 30 to 40 years, 158 to 169 centimetres and 55 to 70 kilograms respectively. The selected subjects were randomly assigned into two equal groups of 15 subjects each. Group I underwent Yogic practices, group II acted as control. Prior to and after the training the subjects were tested on travelling of low back pain patients through the Oswestry low back pain disability questionnaire. Analysis of covariance was used to determine the significantly difference existing between pre test and post test on sitting of low back pain patients. Analysis of covariance was used to determine the significantly difference existing between pre test and post test on travelling of low back pain patients.

Training Protocol

The Group I performed Yogic practices three sessions per week on alternative days for 12 weeks and each session lasted from 20 to 40 minutes. The following yoga was performed Naukasana, Dhanurasana, Bhujangasana, Uttanapadasana, Salabhasana, Janusirasana, Pavanamuktasana and Yog Mudra. The recovery period between asana was fifteen seconds and between sets one minute. The sets and repetition was increased in progress. Group II acted as control.

Experimental Design and Statistical Technique

The experimental design used in this study was random group design involving 30 subjects, who were divided at random in to two groups of 15 each. The data collected from the two groups prior to and post experimentation on travelling was statistically analyzed to find out the significant difference if any, by applying the analysis of covariance (ANCOVA). In

all the cases level of confidence was fixed at 0.05 for significance.

RESULTS

Sitting

The pre and post test data collected from the experimental and control groups on travelling of low back pain patients were statistically analysed by ANCOVA and the results are presented in table-I.

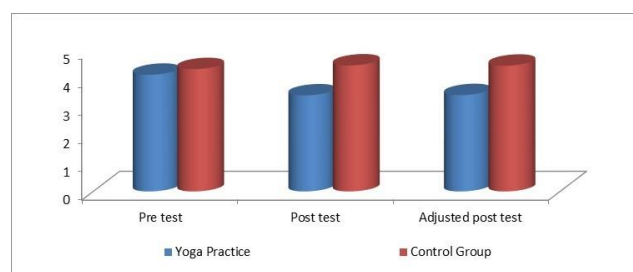
Table-I Analysis of Covariance on Travelling of Experimental and Control Groups

	Yoga Practice	Control Group	S O V	Sum of Squares	df	Mean squares	'F' ratio
Pre test Mean	4.13	4.33	B	0.30	1	0.30	0.44
SD	0.83	0.81	W	19.06	28	0.68	
Post test Mean	3.40	4.46	B	8.53	1	8.53	32.58*
SD	0.50	0.51	W	7.33	28	0.26	
Adjusted Post test Mean	3.41	4.45	B	7.93	1	7.93	31.03*
			W	6.90	27	0.25	

(The required table value for significance at 0.05 level of confidence with degrees of freedom 1 & 28 and 1 & 27 are 4.20 and 4.21 respectively) *Significant at .05 level of confidence

The adjusted post test means on travelling of low back pain patients of yoga practice and control groups are 3.41 and 4.45 respectively. The obtained 'F' ratio value of 31.03 for adjusted post test means on travelling of low back pain patients of yoga practice and control groups were higher than the required table value of 4.21 for the degrees of freedom 1 and 27 at 0.05 level of confidence. It reveals that there is statistically significant difference among the yoga practice and control groups during adjusted post test period on sitting.

Figure – I Cylinder Diagram Showing the Mean Value on Travelling of Experimental and Control Groups



DISCUSSION AND CONCLUSIONS

The result of the study showed that yoga practice and control groups had significant difference on travelling of low back pain patients. The following studies are supporting with my study results.

Masoumeh (2010) analyzed the study of selected yoga practices as a remedy for low back pain. Sherman (2010) examined the comparison of yoga versus stretching for chronic low back pain. This study concluded that the clearest evidence to date about the value of yoga as a therapeutic option for treating chronic back pain, and if the results are positive.

CONCLUSION

The conclusion of the study stated that yoga practice is influenced to reduce the low back pain while travelling of the subjects.

REFERENCES

- [1] Dupler Douglas., Frey Rebecca., (2006). *Gale Encyclopedia of Medicine*. 3rd ed.
- [2] Masoumeh Hassanpour., (2010). Study of selected yoga practices as a remedy for low back pain in Iranian women. *Br J Sports Med*. 44 (1).
- [3] Sherman Karen, J., Cherkin Daniel, C., Cook Andrea, J., Hawkes Rene, J., Deyo Richard, A., Robert Wellman and Khalsa Partap, S., (2010). Comparison of yoga versus stretching for chronic low back pain. *BioMed Central*. 11 (36).
- [4] Tilbrook., Cox., Hewitt., Kang'ombe., Chuang and Jayakody., (2011). Yoga for chronic low back pain. *Ann Intern Med*. 155 (9): 569-578.