

## RELATIONSHIP BETWEEN DEPRESSION AND YOGA AMONG KERALA GOVERNMENT SCHOOL FEMALE TEACHERS

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### Abstract:

*Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behaviour, feelings and physical well-being. Depressed people may feel sad, anxious, empty, hopeless, helpless, worthless, guilty, irritable, or restless. The sample consists of 60 teachers belonging to the age group of 30-40 years working in the Govt. G.V Raja Sports VHSS Mylom, and Govt HSS Anavoor, Thiruvananthapuram, Kerala. The 60 subjects were classified randomly into two groups namely group-A and group-B; group-A, the experimental group which underwent the yoga programme and group-B, the control group. The Beck Depression Inventory was used for data collection. The programme was implemented on the experimental group after every school session for a period of eight weeks excluding the period utilized for initial and final tests one hour for five days per week. The results of this study provide the mean of control group as 4.90 and of experimental group 3.83 and the F value as 187.47 which support the hypotheses. This study is a conformation prior research and shows that yoga programme is an effective method for reducing depression.*

### KEYWORDS:

Yoga, Teacher, Depression.

### INTRODUCTION

Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behavior, feelings and physical well-being. Depending on its severity, depression is classified as major depression (delusions) or minor depression (anxiety symptoms). In the presence of a stressor (e.g., personal loss or failure), insecure attachment styles and self-handicapping behaviors unite and promote depressive thoughts and behaviors. Yoga is a commonly known generic term for physical, mental, and spiritual disciplines which originated in ancient India. Practicing the postures, breathing exercises and meditation makes one healthier in body, mind and spirit.

### Hypotheses

It was hypothesized that “teachers show significant decrease in depression after yoga programme, as compared to participants in the control condition”.

Please cite this Article as : PRADEEP. C. S , RELATIONSHIP BETWEEN DEPRESSION AND YOGA AMONG KERALA GOVERNMENT SCHOOL FEMALE TEACHERS : Academic Sports Scholar (March ; 2014)

### **Definition**

#### **Depression**

Depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities.

#### **Yoga**

Yoga is an ancient art based on a harmonizing system of development for the body, mind, and spirit. The continued practice of yoga will lead you to a sense of peace and well-being, and also a feeling of being close with their environment.

#### **Psychology**

The word Psychology is made of two ancient Greek words – psyche meaning soul and logos meaning word. Thus, Psychology pertains to the study of mind, thought, and behaviour.

#### **Sports psychology**

Sport psychology is “the scientific study of people and their behaviors in sport contexts and the practical application of that knowledge”.

#### **Significance of the study**

The significance of this study is to establish the indispensability of selected yoga programme for Govt. School teachers to reduce depression.

### **METHODS AND MATERIALS**

#### **Selection of the subjects**

The sample consists of 60 teachers belonging to the age group of 30-40 years working in the Govt. G.V Raja Sports VHSS Mylom, and Govt HSS Anavoor, Thiruvananthapuram, Kerala. The 60 subjects were classified randomly into two groups namely group-A and group-B; group-A, the experimental group underwent the yoga programme and group-B, the control group.

#### **Experimental Design**

The Experimental design used for this study was the random group design. The subjects were classified randomly into two groups. Group-A, the experimental group which underwent the yoga programme such as Shavasana, Eka Pada Utthanapadasana – Dwi Pada Utthanapadasana, Tadasana, pavanamuktasana, Naukasana, Shalabhasana and Sukhasana. Group-B acted as control group spent their time doing their daily routine. The pre test was administered before the application of the experimental treatment and the post test was administered after the termination of the experimental period.

#### **Tools of the study**

The Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh 1961; was used to assess depression before and after both experimental conditions. The scale consists of 20 questions, scored on a 4-point scale (0-3), with decreased scores associated with a decrease in depression. A score of 16 or higher on the BDI is regarded as an informal cut-off point for the potential presence of a depressive disorder. The BDI has been found to be valid and reliable, with an average alpha coefficient of 0.81 for non-psychiatric participants, and test-retest reliability ranging from 0.60 to 0.83 for non-psychiatric participants (Beck, Steer, & Garbin, 1988).

**Administration of the programme**

The programme was implemented for a period of eight weeks excluding the period utilized for initial and final tests of the selected criterion variable.

The prescribed yoga programme schedule was applied to the experimental group by the author with the help of two Yoga instructors who strictly followed the instructions of the author. Subsequently the control group spent their time doing their daily routine. The experimental group subjects performed in the yoga programme after school session. The programme was implemented on the experimental group after every school session for a period of one hour for five days per week.

**Programme plan and Procedure**

- (a) Duration : 8 weeks
- (b) Schedules : 8 (5 days/week)
- (c) Programme Units : 40 (8 weeks X 5days)
- (d) Programme Time : 1 hour (per day)

**Table 1 Yoga programme per day**

DAY	PROGRAMME	METHODS
MONDAY	General warming up Shavasana, Eka Pada Utthanapadasana, Pavanamukthasana Warm down	Demonstrations and instructions
TUESDAY	General warming up, Shavasana, Eka Pada Utthanapadasana, Tadasana Warm down	Demonstrations, repetitions, and instructions
WEDNESDAY	General warming up, Shavasana, Dwi Pada Utthanapadasana, Pavanamukthasana , Naukasana, Shalabhasana Warm down	Part method, demonstrations and instructions
THURSDAY	General warming up, Shavasana, Dwi Pada Utthanapadasana, Sukhasana, Warm down	Part method, demonstrations and instructions
FRIDAY	General warming up, Shavasana, Tadasana, Naukasana, Shalabhasana Sukhasana, Warm down	Part method, demonstrations and instructions

**Statistical Technique Employed**

The data pertaining to the depression of yoga programme were tested using Analysis of Covariance (ANCOVA). Testing of hypothesis level of significance was set at .05 levels.

ANACOVA was used because even with random assignment the mean and the standard deviation of the groups were not exactly equal. ANACOVA helps the research scholar to statistically control the differences on the pre-test so that post test differences would not be due to initial differences prior to training.

**ANALYSIS OF DATA AND RESULT OF THE STUDY**

**Table 2**

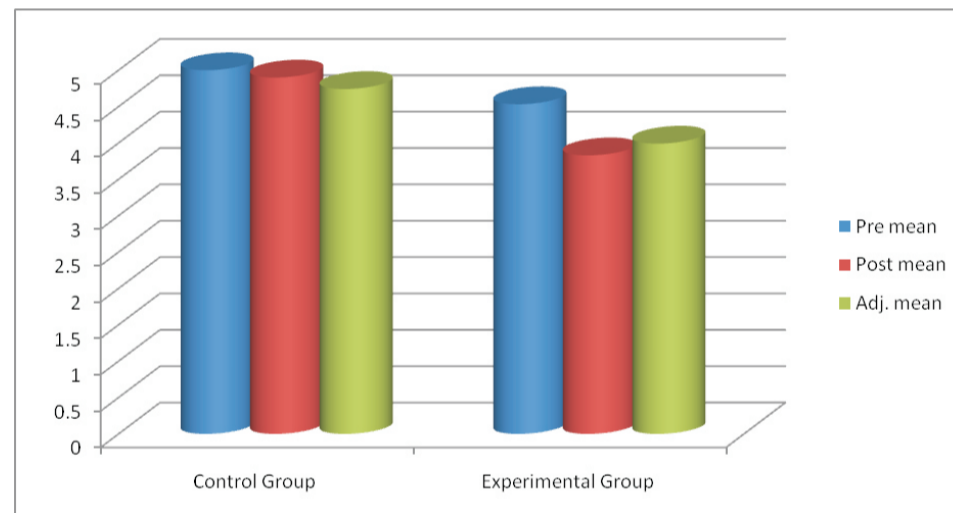
Group	Mean	Std. Deviation	Adjusted mean	N
Control Group	4.90	.712	4.742 <sup>a</sup>	30
Experimental Group	3.83	.531	3.991 <sup>a</sup>	30
Total	4.37	.823		60

Table 1 shows the values of the mean, adjusted mean and standard deviation for the data on depression in experimental and control groups during post-testing; the control group mean: 4.90 (SD = .712) and adjusted mean: 4.742, the experimental group mean: 3.383 (SD = .531) and adjusted mean: 3.991.

**Figure-1**

Mean Scores of Pre test, Post test and Adjusted among Experimental group and Control group on Depression.

Figure 1 shows the graphical representation of the pre-test, post-test and adjusted means for the data on depression score in control and experimental groups. For the control group, the values of pre, post and adjusted means are 5.00, 4.900 and 4.742 respectively. And for the experimental group the values of pre, post and adjusted means are 4.533, 3.83 and 3.991 respectively.



**Table 3**  
ANCOVA table for the data on Depression

Source	Sum of Squares	df	Mean Square	F	Sig. (p-value)
Pre Depression	24.719	1	24.719	187.497	.000
Group	7.699	1	7.699	58.401	.000
Error	7.515	57	.132		
Corrected Total	39.933	59			

An examination of Table 2 indicates the effect of eight weeks yoga programme on depression levels of experimental group p-value for the F statistics is 0.000 which is less than 0.05, it is significant.

Thus the null hypothesis of no difference among the adjusted post-mean for the data on depression in two groups may be rejected at 5% level.

#### FINDINGS AND CONCLUSION

The results of this study provide support for the hypotheses. The results of this study provide the mean of the control group as 4.90, mean of the experimental group as 3.83, the F value as 187.47 and p value 0.000. These results indicate that there exist significant differences among the teachers of the experimental and control groups on the depression of teachers after the eight week yoga programme.

It is well known that exercise and games are sufficient to improve psychological state (Thayer, 1987; Maroulakis & Zervas, 1993; Ekkekakis, P. et.al (1999). Exercise and activities increase positive psychological states (i.e., happiness, vigor, energy, calmness, positive engagement, revitalization) while decreasing negative psychological states (i.e., depression, tension, tiredness, anger, and confusion).

The hypothesis for this study predicted decrease in depression levels after yoga programme, and the results found support for this hypothesis. The change in depression that was seen the teachers of the experimental group compared to the control group is ( $p = 0.000$ ) which is identical to results that were shown, and supports the hypothesis. The reduction in depression that the experimental group experienced had occurred despite of the low average score that the group reported at pre-test.

This study confirms prior research in showing that yoga programme is an effective method for reducing depression.

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