EFFECT OF YOGA NIDRA AND PRANAYAMA ON STRESS AND SOCIAL ADJUSTMENT CAPACITY OF TRIBAL STUDENTS

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Abstract:

Yoga nidra, which is derived from the tantras, is a powerful technique in which you learn to relax consciously. Yoga nidra is a systematic method of inducing complete physical, mental and emotional relaxation. During the practice of yoga nidra, one appears to be asleep, but the consciousness is functioning at a deeper level of awareness. For this reason, yoga nidra is often referred to as psychic sleep or deep relaxation with inner awareness. The purpose of this study was to determine the Effect of Yoga Nidra and Pranayama on Stress and Social Adjustment Capacity of Tribal Students. Ninety tribal students, with age ranging between 17 to 22 years were randomly selected as subjects of the study. The Experimental Group – **A** participated in Yoga Nidra where as Experimental Group – **B** participated in Pranayama. The control group (Group-**C**) did not participate in practice of yogic programmes. The training was conducted for a period of twelve weeks, five days a week. Significant improvement was found in stress performance as a result of the experimental treatments in all the two experimental groups. Significant improvement was found in social adjustment performance as a result of the experimental treatments in all the two experimental groups.

Key Words: Yoga nidra, Pranayama, stress, social adjustment capacity.

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Introduction:

Yoga nidra, which is derived from the tantras, is a powerful technique in which you learn to relax consciously. Yoga nidra is a systematic method of inducing complete physical, mental and emotional relaxation. During the practice of yoga nidra, one appears to be asleep, but the consciousness is functioning at a deeper level of awareness. For this reason, yoga nidra is often referred to as psychic sleep or deep relaxation with inner awareness. In this threshold state between sleep and wakefulness, contact with the subconscious and unconscious dimensions occurs spontaneously **(1).**A yoga module consisting of yoga asanas, pranayama, meditation, and a value orientation program was administered on experimental group for 7 weeks. The experimental and control groups were post-tested for their performance on the three subjects mentioned above. The results show that the students, who practiced yoga performed better in academics. The study further shows that low-stress students performed better than high-stress students, meaning thereby that stress affects the students' performance. There was significant improvement in the subjective well being scores of the 77 subjects within a period of 10 days as compared to controls. These observations suggest that a short lifestyle modification and stress management educational program leads to remarkable improvement in the subjective well being scores of the subjects and can therefore make an appreciable contribution to primary prevention as well as management of lifestyle diseases**.** Yoga is defined as a practice consisting of three components: gentle stretching; exercises for breath control; and meditation as a mind-body intervention **(4).**The version used mainly in the West is hatha yoga, which consists of an integration of asana (postures), pranayama (breathing exercise), and meditation **(5).** Although yoga has its origins in Indian culture and religion, it can be practiced secularly **(4).** No systematic reviews have been published on the benefits of yoga in anxiety or anxiety disorders. This is despite the fact that a recent analysis of publication trends has shown an increase in publication frequency and growing use of randomized controlled trials to study yoga as a therapeutic intervention (**6**). The only systematic review that looks specifically at yoga as an intervention for any condition is that on yoga in epilepsy, which was inconclusive because of a lack of studies (**7**). The effect of exercise on anxiety has, however, been reviewed. There is some evidence of an anxiolytic effect (**8**) with aerobic exercise possibly more beneficial than non-aerobic exercise **(9, 10**). There is also some evidence that exercise may be particularly beneficial in people with more severe anxiety (**10, 11**). None of these reviews, however, appear to have included yoga as a form

of exercise. There are a number of studies that look at the effects of yoga on anxiety levels in non-clinical samples. Berger and Owen (**12**) compared the effects of swimming, fencing, body conditioning, and yoga classes and found that only the yoga treatment group recorded a significant short term reduction in state anxiety. Ray et al (**13)** reported that yoga reduced anxiety but only among male students. Netz and Lidor(**14**) showed that participants in yoga as well as swimming and the Feldenkrais method recorded lower anxiety levels than a control group. However, in a study of elderly people, Blumenthal et al (**15, 16)** found that yoga participants fared worse than those in an aerobic exercise group and no better than the other treatment regimens on anxiety measures. It is difficult to predict on the basis of the findings of these studies the effect of yoga on people with anxiety or a specific anxiety disorder, and therefore it is important to identify the evidence that is currently available. The purpose of this study was to determine the Effect of Yoga Nidra and Pranayama on Stress and Social Adjustment Capacity of Tribal Students.

Method:

Ninety tribal students, with age ranging between 17 to 22 years were randomly selected as subjects from B.A/B.Sc students of Vidyasagar University, West Bengal. Three groups were formed each comprising of 30 subjects. Thirty subjects (N=30) were selected for experimental group –A, Thirty subjects (N=30) were selected for experimental group –B, and Thirty (N=30) acted as control group.

Experimental Treatments:

The Experimental Group – **A** participated in Yoga Nidra where as Experimental Group – **B** participated in Pranayama. The control group (Group-**C**) did not participate in practice of yogic programms. The training was conducted for a period of twelve weeks, five days a week. The scholar explains and demonstrated the Yoga Nidra and Pranayama to experimental group A & B respectively, all the subjects of the experimental groups participated in training programmes.

The details of the training programme are as follow:

1. Five days a week training session.
2. Each session of training was 20 to 40 minutes duration.
3. Total training programme was for twelve week.

In Pranayama the following items were practiced,

Kapalbhati, Bhramari and Nadi Sodhan

Results and Discussions:

TABLE-1 : ANCOVA TABLE FOR THE POST-TEST DATA ON STRESS

SOURCE	TYPE I SUM OF SQUARES	DF	MEAN SQUARE	F	SIG. (p-value)
Pre stress	1147.973	1	1147.973	155.386	.000
Treatment	553.792	2	276.896	37.480	.000
Error	635.357	86	7.388		
Corrected Total	2337.122	89			

Table no. 1 indicates the values test of difference between the subject effects, which shows that there was a significant difference in pre test values of psychological variable of stress for the three selected groups, as the value was found to be 155.38, which proves to be the base of Analysis of Co-Variance and the pre test was kept covariant. Also, a significant difference was found between the post test values of the experimental and control group as the value was found to be 37.48, which was significant at 0.05 level.

TABLE-2

POST HOC COMPARISON FOR THE GROUP MEANS IN POST-MEASUREMENT ADJUSTED WITH THE INITIAL DIFFERENCES STRESS

(I) TREATMENT GROUP	(J) TREATMENT GROUP	MEAN DIFFERENCE (I-J)	SIG.[A](p-value)
Pranayama Group Stress	Yoga Nidra Group Stress	.214	.761
	Control Group Stress	-5.158*	.000
Yoga Nidra Group Stress	Pranayama Group Stress	-.214	.761
	Control Group Stress	-5.372*	.000
Control Group Stress	Pranayama Group Stress	5.158*	.000
	Yoga Nidra Group Stress	5.372*	.000

Based on estimated marginal means

Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

*. The mean difference is significant at the .05 level.

Table no. 2 indicates the values of post hoc test for the selected groups for psychological variable of stress, which shows that a significant difference was found between the post test values of pranayama group and the control group as the value was found to be 5.15 which was significant at 0.05 level, also a significant difference was found between the post test values of yoga nidra group and the control group as the value was found to be 5.37, which was significant at 0.05 level.

Table 31 shows the F –value for comparing the adjusted means of the three treatment groups (pranayama, yoga nidra, control) during post-testing. Since p-value for the F- statistic is 0.000 which is less than 0.05, it is significant. Thus, the null hypothesis of no difference among the

adjusted post-means for the data on stress in three treatment groups may be rejected at 5%level. Hence, it may be inferred that pranayama and yoga nidra are equally effective in decreasing the stress among the subjects in comparison to that of the control group.

TABLE-3

ANCOVA TABLE FOR THE POST-TEST DATA ON SOCIAL ADJUSTMENT

SOURCE	TYPE I SUM OF SQUARES	DF	MEAN SQUARE	F	SIG. (p-value)
Pre Social Adjustment	1787.803	1	1787.803	128.627	.000
Treatment	606.031	2	303.015	21.801	.000
Error	1195.322	86	13.899		
Corrected Total	3589.156	89			

Table no. 3indicates the values test of difference between the subject effects, which shows that there was a significant difference in pre test values of psychological variable of social adjustment for the three selected groups, as the value was found to be 128.62, which proves to be the base of Analysis of Co-Variance and the pre test was kept covariant. Also, a significant difference was found between the post test values of the experimental and control group as the value was found to be 21.80, which was significant at 0.05 level.

TABLE-4

POST HOC COMPARISON FOR THE GROUP MEANS IN POST-MEASUREMENT ADJUSTED WITH THE INITIAL DIFFERENCES

SOCIAL ADJUSTMENT

(I) TREATMENT GROUP	(J) TREATMENT GROUP	MEAN DIFFERENCE (I-J)	SIG.[A](p-value)
Pranayama Group Social Adjustment	Yoga Nidra Group Social Adjustment	-2.738*	.006
	Control Group Social Adjustment	3.622*	.000
Yoga Nidra Group Social Adjustment	Pranayama Group Social Adjustment	2.738*	.006
	Control Group Social Adjustment	6.360*	.000
Control Group Social Adjustment	Pranayama Group Social Adjustment	-3.622*	.000
	Yoga Nidra Group Social Adjustment	-6.360*	.000

Based on estimated marginal means

Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

*. The mean difference is significant at the .05 level.

Table no. 4 indicates the values of post hoc test for the selected groups for psychological variable of social adjustment, which shows that a significant difference was found between the post test values of pranayama group and the control group as the value was found to be 3.62 which was significant at 0.05 level, also a significant difference was found between the post test values of yoga nidra group and the control group as the value was found to be 6.360, which was significant at 0.05 level.

Since F-statistic is significant, post hoc comparison has been made for the adjusted means of the three treatment groups which is shown in table 36. It may be noted here that p-value for the mean difference between pranayama and control is 0.000 and yoga nidra and control is 0.000. Both these p-values are less than 0.05 and hence they are significant at 5% level. Thus, the following conclusions can be drawn:

1. There is a significant difference between the adjusted means of the pranayama and control groups on the data of social adjustment during post-testing.
2. There is a significant difference between the adjusted means of the yoga nidra and control groups on the data of social adjustment during post-testing.
3. There is no significant difference between the adjusted means of pranayama and yoga nidra on the data of social adjustment during post –testing.

The values were found significant and it was found that pranayama and yoga nidra are equally effective in increasing the social adjustment among the subjects in comparison to the control group.

Hence there was a significant improvement on the selected variables of selected psychological variables. Thus, it may be concluded that yoga nidra and pranayama effect the psychological variables of tribal students.

Conclusion:

- Significant improvement was found in stress performance as a result of the experimental treatments in all the two experimental groups.
- Significant improvement was found in social adjustment performance as a result of the experimental treatments in all the two experimental groups.

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