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Effects of Yoganidra and wellness training programme on selected habitual variables among paramilitary professionals

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Abstract

Aim: The purpose of this study was to find out the effects of Yoganidra and wellness training programme on selected habitual variables among paramilitary professionals.

Methodology: For the purpose of the study 320 Police Professionals were selected from Special Police Training College, Coimbatore, Tamil nadu were randomly selected as subjects and divided in four equal groups. Their age ranged from 30 to 45 years.

Statistical Tool: The collected data were statistically analyzed with One Way Repeated ANOVA to find out the significant improvement between four groups. The groups during the analysis period between Experimental group I (n=80) underwent Wellness training programme training (YNTG), Experimental group II (n=80) underwent Wellness training programme (WTPG), Experimental group III (n=80) underwent Combination of Yoganidra with Wellness training programme (CYNWTPG) for six days a week and for a duration of 24 weeks. Group IV acted as control group (CG) the criterion measure were tested for significance by applying One Way Repeated ANOVA test at 0.05 level it was considered as sufficient for the present study.

Procedures: The selected habitual variables were determined for the study.

Discussion: Selected Habitual variables were found to be significant.

Conclusion: These data indicate that the effects of Yoganidra and wellness training programme on selected habitual variables among paramilitary professionals as a program executed under stable conditions for analysis Selected Habitual variables. The subjects were free to withdraw their consent in case of feeling any discomfort during the period of their participation but there were no drop outs during the study.

Keywords: Yoganidra, wellness training programme and habitual variables

Introduction

In the modern scenario, human life has become very fast, hectic and demanding. The present lifestyle demands adjustment on the part of the individual. Each of us, as per our coping resources, tries to adjust in this changing world. Some adjust by becoming overactive and others by withdrawing from the situation. When we fail to make a proper adjustment according to the demands of the situation, a state of negative stress or distress develops in our personality, which gives rise to mental or psychological problems. In most people the mind always remains in a state of arousal and tension. Yoga nidra, as a technique of pratyahara, not only provides relaxation to the body and mind but also has a number of benefits. Yoga nidra is one of the practices of *pratyahara* where the awareness is internalized. Literally, yoga nidra means 'psychic sleep' i.e. sleep with full awareness. In the practice of yoga nidra the body sleeps but the mind remains awake listening to the instructions. In psychology, the state achieved in yoga nidra is termed the hypnogogic state, a state between sleep and wakefulness. Yoga nidra has its origin in the ancient tantric practice called *nyasa*. It was Swami Satyananda Saraswati (1998) who adapted and presented the practice of yoga nidra in a systematic and scientific way in the 1960s.

Methodology

To achieve this purpose of the study 320 Police Professionals from Special Police Training College, Coimbatore, Tamil Nadu were randomly selected as subjects.

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Their age ranged from 30 to 45 years. Only the Police Professionals who were willing to participate in the experimental study were included in this study. The selected subjects were segregated into four equal groups consisting of 80 each by adopting random procedure. Experimental group I (n=80) underwent Wellness training programme training (YNTG), Experimental group II (n=80) underwent Wellness training programme (WTPG), Experimental group III (n=80) underwent Combination of Wellness training programme with Wellness training programme (CYNWTPG) for six days a week and for a duration of 24 weeks. Group IV acted as

control group (CG), the subjects in control group were not engaged in any training programme other than their regular work. A qualified physician examined the subjects and declared that they were medically and physically fit to participate in the training programme. The subjects were free to withdraw their consent in case of feeling any discomfort during the period of their participation but there was no dropout during the study.

Selection of Test Items

Table 1

S.no	Variables	Test items	Unit of measures
1.	Smoking Score	HONC Questionnaire	In Points
2.	Alcohol Score	Brief Michigan Alcoholism Screening Test	In Points

Results and Discussion

The data collected on effects of Yoganidra and wellness training programme on selected habitual variables among paramilitary professionals were statistically processed and discussed.

Table 2: Mean and Standard Deviation of Smoking Score Among Yoganidra Training (Yntg), Wellness Training Programme (Wtpg), Combination of Yoganidra with Wellness Training Programme (Cynwtpg) and Control Group (Cg)

Descriptive Statistics				
	Group	Mean	Std. Deviation	N
Pretest	Yoganidra	3.4500	1.64509	80
	Wellness	2.7750	1.28255	80
	Combination	5.1375	2.49427	80
	Control	2.4500	1.55816	80
	Total	3.4531	2.07334	320
Midtest	Yoganidra	2.7375	1.65157	80
	Wellness	2.1250	1.26666	80
	Combination	2.5500	1.33027	80
	Control	1.1625	.94726	80
	Total	2.1437	1.45075	320
Posttest	Yoganidra	1.8500	1.47640	80
	Wellness	1.1875	1.04450	80
	Combination	2.0500	1.34917	80
	Control	1.1500	.92913	80
	Total	1.5594	1.27782	320

Table-2 shows the mean values of Yoganidra training (YNTG), Wellness training programme (WTPG), Combination of Yoganidra with Wellness training programme (CYNWTPG) and Control Group (CG) pretest mean values of smoking score are 3.4500, 2.7750, 5.1375 and 2.4500.

The Yoganidra training (YNTG), Wellness training programme (WTPG), Combination of Yoganidra with Wellness training programme (CYNWTPG) and Control Group (CG) mid test mean values of smoking score are 2.7375, 2.1250, 2.5500 and 1.1625.

The Yoganidra training (YNTG), Wellness training programme (WTPG), Combination of Yoganidra with Wellness training programme (CYNWTPG) and Control Group (CG) posttest mean values of smoking score are 1.8500, 1.1875, 2.0500 and 1.1500.

Midtest mean values of smoking score are gradually increased among Yoganidra training (YNTG), Wellness training programme (WTPG) and Combination of Yoganidra with Wellness training programme (CYNWTPG) when compared with pretest mean values.

The posttest mean values of smoking score are gradually increased among Yoganidra training (YNTG), Wellness training programme (WTPG) and Combination of Yoganidra with Wellness training programme (CYNWTPG) when compared with pretest and midtest mean values.

The Control Group there is no overall significant changes among Pre, Mid and Posttest mean values of smoking score.

Table 3: Tests of Within-Subjects Effects of Smoking Score

Tests of Within-Subjects Effects						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
factor1	Sphericity Assumed	601.840	2	300.920	336.049	.000
	Greenhouse-Geisser	601.840	1.485	405.342	336.049	.000
	Huynh-Feldt	601.840	1.504	400.078	336.049	.000
	Lower-bound	601.840	1.000	601.840	336.049	.000
factor1 * Group	Sphericity Assumed	131.560	6	21.927	24.486	.000
	Greenhouse-Geisser	131.560	4.454	29.536	24.486	.000
	Huynh-Feldt	131.560	4.513	29.152	24.486	.000
	Lower-bound	131.560	3.000	43.853	24.486	.000
Error(factor1)	Sphericity Assumed	565.933	632	.895		
	Greenhouse-Geisser	565.933	469.188	1.206		
	Huynh-Feldt	565.933	475.360	1.191		
	Lower-bound	565.933	316.000	1.791		

Table 3 Shows the Factors (MRE) obtained F-ratio by dividing the mean squares for the experimental effects (300.920) by the error mean squares (0895). The value of F=336.049 is higher than the required critical value of 3.01 respectively.

Factor (Smoking Score) X group obtained F ratio by dividing the mean squares for the experimental effects (21.927) by the error mean square (0.895). The value of F= 24.486 is higher than the required critical value of 2.11 respectively.

Table 4: Repeated Measures ANOVA of Smoking Score Among Pre, Mid and Post

Tests of Within-Subjects Contrasts						
Source	factor1	Type III Sum of Squares	Df	Mean Square	F	Sig.
factor1	Level 1 vs. Level 2	548.628	1	548.628	219.907	.000
	Level 2 vs. Level 3	109.278	1	109.278	144.085	.000
factor1 * Group	Level 1 vs. Level 2	194.009	3	64.670	25.922	.000
	Level 2 vs. Level 3	44.059	3	14.686	19.364	.000
Error (factor1)	Level 1 vs. Level 2	788.363	316	2.495		
	Level 2 vs. Level 3	239.662	316	.758		

Table- 4 Shows the first combined factor (F-ratio) between Pretest and Midtest were F=219.907. It is higher than the required table value of 3.84 significant at 0.05 levels. The second combined factorial* group, test F-ratio between Midtest and Posttest were 144.085 respectively. It is higher than required table value of 3.84, significant at 0.05 level. The third factors factorial* group test, F-ratio between Pretest and Midtest were 25.922 respectively. It was higher than

required table value of 3.87, significant at 0.05 level. The fourth factors factorial* group test, F-ratio between Midtest and Posttest were 19.364 respectively. It was higher than required table value of 3.87, significant at 0.05 level. Therefore, the Smoking Score and groups had 'F' ratios significant improvement between pretest and midtest, Midtest and posttest respectively. The three training groups slightly improve in pretest to midtest to posttest.

Table 5

Univariate Tests					
	Sum of Squares	df	Mean Square	F	Sig.
Contrast	127.215	3	42.405	27.081	.000
Error	494.806	316	1.566		

The first combined test of sum of squares F- ratios between Pretest, Midtest and Posttest is F= 27.081 respectively. It was higher than the required table value of 3.87 significant at 0.05 level.

The F test the effect of group. This table shows on the linearly independent pairwise comparison among the estimated marginal mean values.

Table 6: Bonferroni Post Hoc Values of Observed Mean Differences among Experimental Groups and Control Group on Smoking Score

Yoganidra Training Group (YTG)	Wellness Training Programme Group (WTPG)	Combination of Yoganidra and Wellness Training Programme Group (CYWTPG)	Control Group (CG)	Mean difference	Std. Error	Sig. ^b
2.679	2.029			0.650*	.198	.007
2.679		3.246		0.567*	.198	.027
2.679			1.587	1.092*	.198	.000
	2.029	3.246		0.442	.198	.158
	2.029		1.587	0.442	.198	.158
		3.246	1.587	1.658*	.198	.000

*. The mean difference is significant at the .05 level.
 b. Adjustment for multiple comparisons: Bonferroni.

Table-6 Shows the observed mean differences of Yoganidra training (YNTG), Wellness training programme (WTPG), Combination of Yoganidra with Wellness training programme (CYNWTPG) and Control Group (CG) on Smoking Score. The obtained observed mean differences between Yoganidra training (YNTG) and Wellness training programme (WTPG), Yoganidra training (YNTG) and Combination of Yoganidra with Wellness training programme (CYNWTPG), Yoganidra training (YNTG) and Control Group (CG), Wellness training programme (WTPG) and Combination of Yoganidra with Wellness training programme (CYNWTPG), Wellness training programme (WTPG) and Control Group (CG), Combination of Yoganidra with Wellness training programme (CYNWTPG) and Control Group (CG) were 0.650, 0.567, 1.092, 0.442, 0.442 and 1.658 respectively. The values of observed mean difference were higher than the required than

the significant at the 0.05 level and it was found to be significant. Since the observed mean differences between control group and experimental groups were greater than the significant level on Smoking Score, it was concluded that Yoganidra training (YNTG), Wellness training programme (WTPG) and Combination of Yoganidra with Wellness training programme (CYNWTPG) increased the Smoking Score better than the Control Group (CG). Further it was concluded that the Combination of Yoganidra with Wellness training programme (CYNWTPG) was better than Yoganidra training (YNTG) and Wellness training programme (WTPG). The observed mean differences values of experimental groups and control group on Smoking Score are given in graphical representation in figure 1.

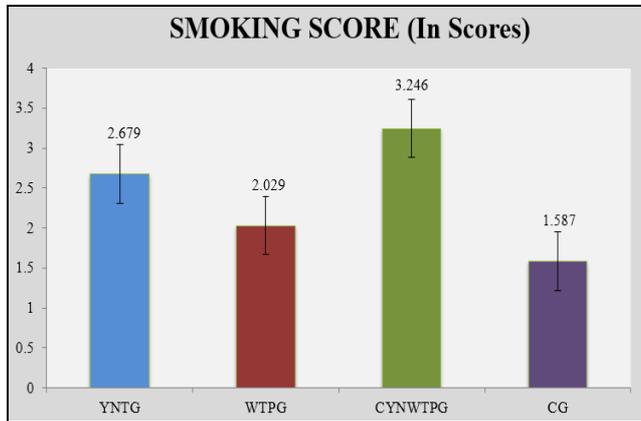


Fig 1: Graphical Representation Showing the Observed Mean Differences Values Of Experimental Groups and Control Group on Smoking Score

Discussion on the Findings of Smoking Score Variables

In this study, the One Way Repeated Measures (ANOVA) of Habitual variable namely Smoking Score was carried in three different experimental groups with the inclusion of different training packages. The same analysis was carried out in control group without inclusion of training programme. From these analyses, it was found that the results obtained from experimental groups had significant improvement on the selected Habitual Variable namely Smoking Score when compared with control group. This was due to influence of different training packages in the analysis of experimental groups. It was interesting to note that the results concluded that the Combination of Yoganidra with Wellness training programme (CYNWTPG) was better than Yoganidra training (YNTG), Wellness training programme (WTPG) and Control Group (CG) on Smoking Score. This in turns helps to lead healthy life style changing to the Para Military Personnel.

Table 7: Mean and Standard Deviation of Alcohol Score among Yoganidra training (YNTG), Wellness training programme (WTPG), Combination of Yoganidra with Wellness training programme (CYNWTPG) and Control Group (CG)

Descriptive Statistics				
	Group	Mean	Std. Deviation	N
Pretest	Yoganidra	3.7250	1.86218	80
	Wellness	3.4125	1.65884	80
	Combination	5.0375	1.26735	80
	Control	3.1500	1.54346	80
	Total	3.8313	1.74816	320
Midtest	Yoganidra	2.6875	1.43724	80
	Wellness	2.1000	1.32741	80
	Combination	2.2000	.84793	80
	Control	2.1375	1.42086	80
	Total	2.2813	1.29708	320
Posttest	Yoganidra	1.9625	1.24721	80
	Wellness	.8750	1.07179	80
	Combination	1.7625	1.37098	80
	Control	2.0125	1.31682	80
	Total	1.6531	1.33261	320

Table-7 shows the mean of Yoganidra training (YNTG), Wellness training programme (WTPG), Combination of Yoganidra with Wellness training programme (CYNWTPG) and Control Group (CG) pretest mean values of alcohol score are 3.7250, 3.4125, 5.0375 and 3.1500.

The Yoganidra training (YNTG), Wellness training programme (WTPG), Combination of Yoganidra with Wellness training programme (CYNWTPG) and Control Group (CG) mid test mean values of alcohol score are 2.6875, 2.1000, 2.2000 and 2.1375.

The Yoganidra training (YNTG), Wellness training programme (WTPG), Combination of Yoganidra with Wellness training programme (CYNWTPG) and Control Group (CG) posttest mean values of alcohol score are 1.9625,

8750, 1.7625 and 2.0125.

Midtest mean values of alcohol score are gradually increased among Yoganidra training (YNTG), Wellness training programme (WTPG) and Combination of Yoganidra with Wellness training programme (CYNWTPG) when compared with pretest mean values.

The posttest mean values of alcohol score are gradually increased among Yoganidra training (YNTG), Wellness training programme (WTPG) and Combination of Yoganidra with Wellness training programme (CYNWTPG) when compared with pretest and midtest mean values.

The Control Group there is no overall significant changes among Pre, Mid and Posttest mean values of alcohol score.

Table 8: Tests of Within-Subjects Effects of Alcohol Score

Tests of Within-Subjects Effects						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
factor1	Sphericity Assumed	804.402	2	402.201	518.017	.000
	Greenhouse-Geisser	804.402	1.748	460.094	518.017	.000
	Huynh-Feldt	804.402	1.774	453.450	518.017	.000
	Lower-bound	804.402	1.000	804.402	518.017	.000
factor1 * Group	Sphericity Assumed	146.898	6	24.483	31.533	.000
	Greenhouse-Geisser	146.898	5.245	28.007	31.533	.000
	Huynh-Feldt	146.898	5.322	27.603	31.533	.000
	Lower-bound	146.898	3.000	48.966	31.533	.000
Error(factor1)	Sphericity Assumed	490.700	632	.776		
	Greenhouse-Geisser	490.700	552.476	.888		
	Huynh-Feldt	490.700	560.571	.875		
	Lower-bound	490.700	316.000	1.553		

Table 8 Shows the Factors (MRE) obtained F- ratio by dividing the mean squares for the experimental effects (402.201) by the error mean squares (0.776). The value of F=518.017 is higher than the required critical value of 3.01 respectively.

Factor (Alcohol Score) X group obtained F ratio by dividing the mean squares for the experimental effects (24.483) by the error mean square (0.776). The value of F= 31.533 is higher than the required critical value of 2.11 respectively.

Table 9: Repeated Measures ANOVA of Alcohol Score Among Pre, Mid and Post

Tests of Within-Subjects Contrasts						
Source	factor1	Type III Sum of Squares	Df	Mean Square	F	Sig.
factor1	Level 1 vs. Level 2	768.800	1	768.800	470.861	.000
	Level 2 vs. Level 3	126.253	1	126.253	125.326	.000
factor1 * Group	Level 1 vs. Level 2	181.250	3	60.417	37.003	.000
	Level 2 vs. Level 3	52.409	3	17.470	17.342	.000
Error (factor1)	Level 1 vs. Level 2	515.950	316	1.633		
	Level 2 vs. Level 3	318.338	316	1.007		

Table- 9 Shows the first combined factor (F-ratio) between Pretest and Midtest were F=470.861. It is higher than the required table value of 3.84 significant at 0.05 levels. The second combined factorial* group, test F-ratio between Midtest and Posttest were 125.326 respectively. It is higher than required table value of 3.84, significant at 0.05 level. The third factors factorial* group test, F-ratio between Pretest and Midtest were 37.003 respectively. It was higher than

required table value of 3.87, significant at 0.05 level. The fourth factors factorial* group test, F-ratio between Midtest and Posttest were 17.342 respectively. It was higher than required table value of 3.87, significant at 0.05 level. Therefore, the Alcohol Score and groups had ‘F’ ratios significant improvement between pretest and midtest, Midtest and posttest respectively. The three training groups slightly improve in pretest to midtest to posttest.

Table 10

Univariate Tests					
	Sum of Squares	Df	Mean Square	F	Sig.
Contrast	35.654	3	11.885	8.449	.000
Error	444.504	316	1.407		

The first combined test of sum of squares F-ratios between Pretest, Midtest and Posttest is F= 8.449 respectively. It was higher than the required table value of 3.87significant at 0.05 level.

The F test the effect of group. This table shows on the linearly independent pairwise comparison among the estimated marginal mean values.

Table 11: bonferroni post hoc values of observed mean differences among experimental groups and control Group on alcohol score

Yoganidra Training Group (YTG)	Wellness Training Programme Group (WTPG)	Combination of Yoganidra and Wellness Training Programme Group (CYWTPG)	Control Group (CG)	Mean difference	Std. Error	Sig. ^b
2.792	2.129			0.663*	.188	.003
2.792		3.000		0.208	.188	1.000
2.792			2.433	0.358	.188	.342
	2.129	3.000		0.871*	.188	.000
	2.129		2.433	0.304	.188	.635
		3.000	2.433	0.567*	.188	.016

*. The mean difference is significant at the .05 level.
 b. Adjustment for multiple comparisons: Bonferroni.

Table-11 Shows the observed mean differences of Yoganidra training (YNTG), Wellness training programme (WTPG), Combination of Yoganidra with Wellness training programme (CYNWTPG) and Control Group (CG) on Alcohol Score. The obtained significant^b between groups of Yoganidra training (YNTG) and Combination of Yoganidra with Wellness training programme (CYNWTPG), Yoganidra training (YNTG) Control Group (CG), Wellness training programme (WTPG) and Control Group (CG) were 1.000, 0.342 and 0.635 respectively. The obtained significant^b values higher than the required Bonferroni significant^b at the 0.05 level and it was found to be insignificant. The obtained significant^b between groups of Yoganidra training (YNTG) and Wellness training programme (WTPG),

Wellness training programme (WTPG) and Combination of Yoganidra with Wellness training programme (CYNWTPG), Combination of Yoganidra with Wellness training programme (CYNWTPG) and Control Group (CG) were 0.003, 0.000 and 0.016 respectively. The obtained significant^b values better than the required Bonferroni significant^b at the 0.05 level and it was found to be significant. Further it was concluded that the Wellness training programme (WTPG) was better than Yoganidra training (YNTG) and Combination of Yoganidra with Wellness training programme (CYNWTPG). The observed mean differences values of experimental groups and control group on Alcohol Score are given in graphical representation in figure 2.

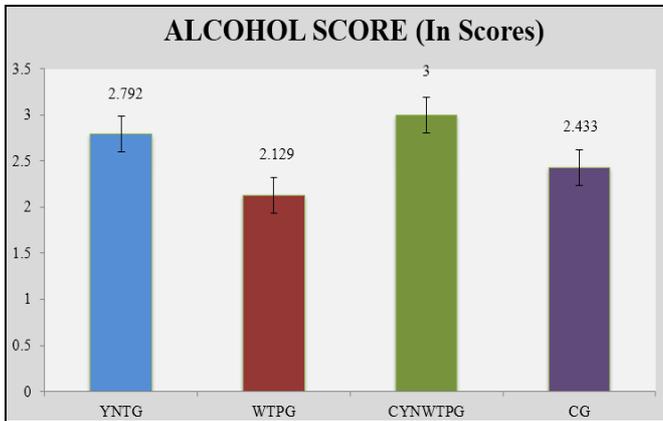


Fig 2: Graphical Representation Showing the Observed Mean Differences Values Of Experimental Groups and Control Group on Alcohol Score

Discussion on the Findings of Alcohol Score

In this study, the One Way Repeated Measures ANOVA of Habitual variable namely Alcohol Score was carried in three different experimental groups with the inclusion of different training packages. The same analysis was carried out in control group without inclusion of training programme. From these analyses, it was found that the results obtained from experimental groups had significant improvement on the selected Habitual Variable namely Alcohol Score when compared with control group. This was due to influence of different training packages in the analysis of experimental groups. It was interesting to note that the results concluded that the Wellness training programme (WTPG) was better than Yoganidra training (YNTG), Combination of Yoganidra with Wellness training programme (CYNWTPG) and Control Group (CG) on Alcohol Score. This in turns helps to lead healthy life style changing to the Para Military Personnel.

Results

Findings of the study

The results on selected habitual variables of Smoking Score and Alcohol Score of paramilitary personnel produced significant changes.

Conclusion

From the results of this study, the following conclusions were drawn

- It was concluded that the wellness training programme has produced a significant improvement on selected habitual variable namely Alcohol Score among paramilitary personnel.
- It was concluded that the Combination of Yoganidra with Wellness training programme has produced a significant improvement on selected habitual variable namely Smoking Score among paramilitary personnel.
- It was concluded that the wellness training programme group was more effective than the yoganidra training group, Combination of Yoganidra with Wellness training programme group and Control group in improving the selected habitual variable namely Alcohol Score among paramilitary personnel.
- It was concluded that the combination of yoganidra with wellness training programme group was more effective than the yoganidra training group, wellness training programme group and control group in improving the selected habitual variable namely smoking score among paramilitary personnel.

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