Analysis of Psychological Variables of Selected Yogasana and Pranayama on Elderly Residing in Old Age Home of Delhi

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ABSTRACT

The sensation of loneliness, along with the inherent age-related deterioration in physical and physiological capabilities, renders individuals susceptible to psychological problems. This study looks to analyse the psychological variables of selected yogasana and pranayama on elderly residing in old age home of Delhi. Methodology includes 2 groups both control group (CG) and experimental group (EG). EG undergoes a training programme which includes pranayama, meditations and yogaasanas. Mental health (MH) is assessed by the questionnaire given to the two groups. All participants were incentivized to provide pertinent personal information and to collaborate in completing the psychological assessment. The results indicated a considerable change in MH due to the trial period. The corrected post-test means (post-TMs) for the CG and EG's MH are 61.650 and then 68.450, correspondingly. The experimental training has resulted in a considerable shift in MH.

Keywords: Mental health, Yogasana, Pranayama, Elderly, Psychology, Old age

INTRODUCTION

The essential need of yoga practice is sincerity of intent and open-mindedness to foster integration in the spiritual domain. Yoga has global relevance; nonetheless, it should be emphasized that it is not only a compilation of theories and dogmas (Sharma et al., 2024).

Yoga is intricately linked to the field of psychology. Psychology is a constructive and empirical study of the mind, since the mind may be perceived via observation, experimentation, and analysis (Dhikov et al., 2024). Yoga is the science of human personality concerning its inner development and creative realization as an art (Malini and Saravanan, 2021). It is a trajectory of dynamic development towards complete self-actualization. The essence of yoga encompasses notions such as psychological, metaphysical, and supraconscious (Arya, 2018). Yoga culminates in a supreme state known as 'Samadhi' or 'Nirvana' (Wirawan et al., 2020). It is erroneous to see yogic notions as mere creative hypotheses or philosophical speculations of religious belief (Sharma et al., 2022). Yoga represents the whole integration of human individuality. The self-evident nature of yoga transcends empirical psychology by revealing profound levels (lvl.) of introspection, external observation, and objective psychoanalysis (Gangadharan and Venkatesan, 2021). Yoga is a unique discipline that leads to self-realization, necessitating a metaphysical lifestyle grounded on ethical principles and, most importantly, profound self-awareness (Dhyani and Kapruwan, 2023). In some instances, elderly individuals from affluent families or those without caregivers seek refuge in nursing institutions (Panda et al., 2019). The elderly reside in these places just to fulfill the latter stage of their life (Nagarathna et al., 2021). This research looks to examine psychological characteristics associated with certain yogasana and pranayama practices among elderly individuals staying in a Delhi old age home.

MATERIAL AND METHOD

The psychological questionnaire, the investigator briefly explained study's purpose and their role in data collection to all the subjects.

Throughout training, EG partook in designated training program five days weekly for 12 weeks, alongside their standard physical education activities. On the training days, practices lasted in the morning from 6.30 to 7.30 A.M. approximately. The CG did not engage in any specialized training. Nonetheless, they engaged in routine physical education exercises.

The pre-test data (pre-TD) on psychological characteristics from both the CG and EG were obtained according to the aforementioned technique. Twelve weeks of select yogasanas, pranayama along with meditation training programme were given in a systematic way only for the EG.

Psychological data were collected by using the psychological questionnaire. Pre TD were collected one day before the training curriculum and the post TD one day after the training programme in two batches for two days in the evening.

RESULT AND DISCUSSION

Table 1. Covariance Analysis for Pre along with Post TD on MH of CG and EG

	Control Group	Experimental Group	Source of Variance	Sum of Squares	df	Mean Squares	'F' Ratio
Pre Test Mean	60.55	60.55	Between	0.00	1	0.00	0.00
SD	6.946	5.906	Within	1579.90	38	41.57	
Post Test Mean	61.65	68.45	Between	462.40	1	1 462.40	9.583*
SD	6.95	6.93	Within	1833.50	38	48.25	
Adjusted Post Test Mean	61.65	68.45	Between	462.40	1	462.40	35.45*
			Within	482.63	37	13.04	

* Noteworthy at 0.05 lvl.
Necessary table value (val.) occurs at 0.05 significance lvl. for 1 along with 37 degrees of freedom (DoF) = 4.104
1 & 38 DoF = 4.096

Table – 1 demonstrates pre TMs on MH of CG and EG are 60.55 and then 60.55 correspondingly. Consequently, it is insignificant, indicating that there is no statistically noteworthy variance in MH across the CG and EG before experimental training's initiation. The random assortment of participants for groups is deemed successful.

Post-TM MH scores for CG and EG are 61.65 and then 68.45, correspondingly. The results indicate a statistically noteworthy variance in MH across the CG and EG after the experimental training.

The results indicate a considerable variance, hence hypothesis - accepted.
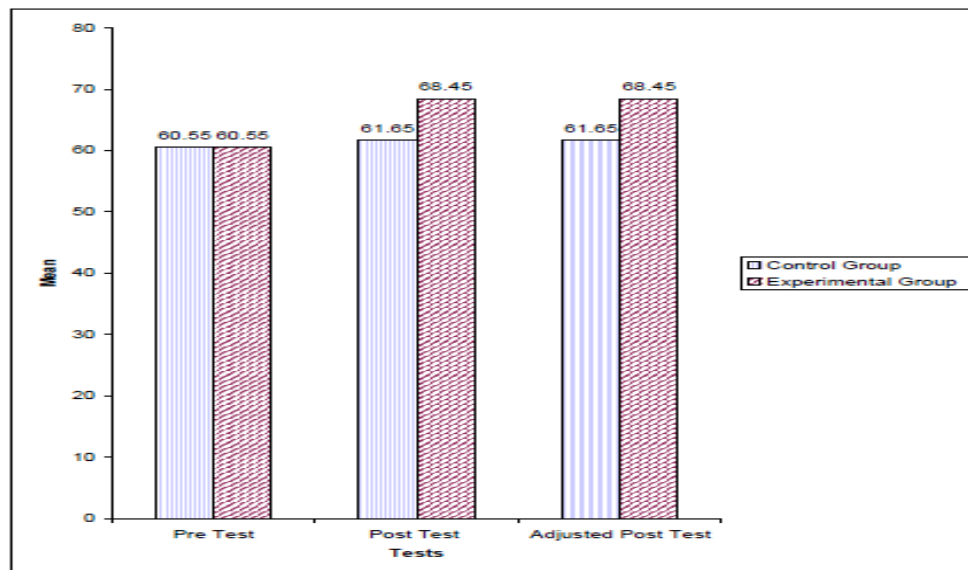Results mostly consistent with the findings of Dhikav et al., 2024.

Figure 1. Graphical Depiction on Pre-Test, and Post-Test along with Adjusted Post -TD on MH of CG and EG

Table 2. Covariance Analysis for Pre along with Post TD on Self-Concept (SC) of CG and EG

	Control Group	Experimental Group	Source of Variance	Sum of Squares	df	Mean Squares	'F' Ratio
Pre Test Mean	170.40	169.85	Between	3.025	1	3.025	0.027
SD	9.41	11.51	Within	4205.35	38	110.66	
Post Test Mean	173.45	178.10	Between	216.225	1	216.225	2.100
SD	7.95	11.94	Within	3912.75	38	102.96	
Adjusted Post Test Mean	173.25	178.29	Between	253.303	1	253.303	5.052*
			Within	1854.99	37	50.135	

* Noteworthy at 0.05 lvl.

The necessary table val. at a 0.05 significance lvl. for 1 and 37 DoF is 4.104. 1 and 38 DoF equals 4.096

Table 2 indicates pre-TMs for the SC of the CG and EG are 170.40 and then 169.85, correspondingly. The calculated 'F' ratio of 0.027 for pre-TM is lower than the critical table val. of 4.096 for noteworthiness at 0.05 lvl. It is noteworthy and designates that there is no statistically noteworthy variance across the CG and EG for SC prior to the beginning of the experimental period. The random assortment of participants for groups is deemed successful. Also, post-TM for the SC of the CG and EG was 173.45 and then 178.10, correspondingly. The calculated 'F' ratio of 2.100 for post-TD is inferior than the critical table val. of 4.096 for

1 and 38 DoF at the 0.05 noteworthy lvl. The results indicate that there is no statistically noteworthychange in SC across the CG and EG after experimental.

The corrected post-TMs for SC in the CG and EG are 173.258 and then 178.292, correspondingly. The calculated 'F' ratio of 5.052 for the modified post-TD exceeds critical table val. - 4.104 for 1 and 37 DoF at the 0.05 noteworthy lvl. The experimental period has resulted in a major alteration in SC. Given that the results indicate a substantial variance, the hypothesis is accepted.
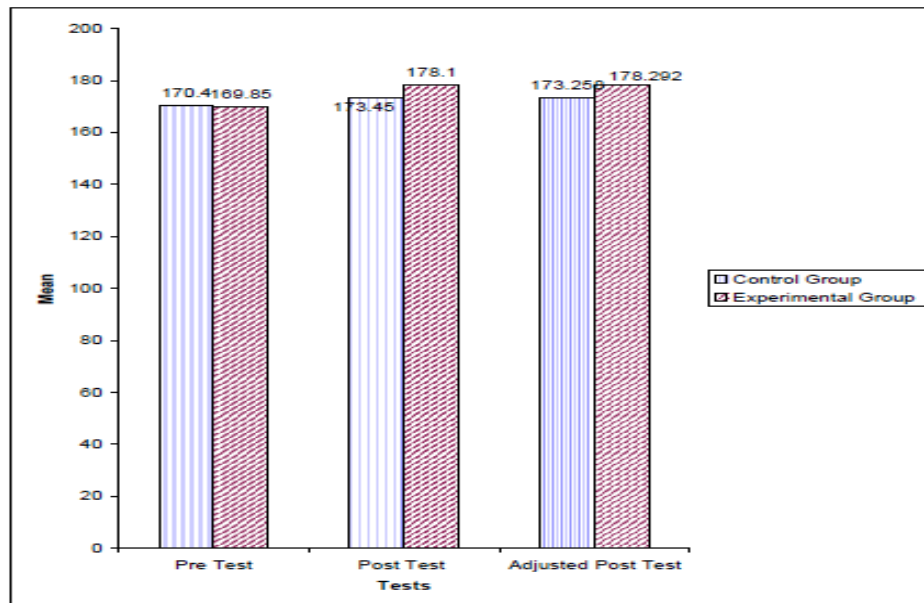

Figure 2. Graphical Depiction on Pre-Test, and Post -Test along with Adjusted Post -TD on SC of CG and EG

Table 3. Covariance Analysis for Pre along with Post TD on Personality- Neurosis of CG and EG

	Control Group	Experimental Group	Source of Variance	Sum of Squares	df	Mean Squares	'F' Ratio
Pre Test Mean	12.75	12.60	Between	0.225	1	0.225	0.016
SD	3.61	3.91	Within	538.55	38	14.17	
Post Test Mean	12.50	10.85	Between	27.225	1	27.225	1.366
SD	4.44	4.48	Within	757.550	38	19.936	
Adjusted Post Test Mean	12.42	10.92	Between	22.677	1	22.677	3.195
			Within	262.58	37	37 7.09	

* Noteworthy at 0.05 lvl.
The necessary table val. at a 0.05 significance lvl. for 1 and 37 DoF is 4.104.
1 and 38 DoF equals 4.096

Table 3-A indicates that pre-TM for Personality - Neurosis in the CG and EG is 12.75 and then 12.60, correspondingly. The calculated 'F' ratio of 0.016 for the pre-TM is inferior than necessary table val. of 4.096 at the 0.05 significance lvl. The results indicate no statistically noteworthy variance exists in pre-test scores for Personality - Neurosis across the CG and EG prior to the beginning of the experimental period. The random assortment of participants for the two groups is deemed successful. Also, post-TM for Personality - Neurosis in the CG and EG was 12.50 and then 10.85, correspondingly. The calculated 'F' ratio of 1.366 for post-TD is lower than the critical table val. of 4.096 for 1 and 38 DoF at the 0.05 noteworthy lvl. The findings indicate no statistically noteworthychange in Personality - Neurosis across the CG and EG after experimental period.

The corrected post-TMs for Personality - Neurosis in the CG and EG are 12.428 and then 10.922, correspondingly. The calculated 'F' ratio of 3.195 for the modified post-TD is lower than critical table val. of 4.104 for 1 and 37 DoF at a 0.05 significance lvl. The results indicate no substantial change in Personality - Neurosis after trial period. So, hypothesis has been rejected due to the absence of a substantial variance.

CONCLUSION

The results of the psychological variables like Mental Health, Personality in Neurosis and Extrovert, there is no noteworthy variance across the pre test control and pre test experimental group. Where as there is noteworthy change is found in the Mental Health of the post experimental and the Adjusted post TM.

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