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"A True Experimental Study To Assess The Effectiveness Of Raj Yoga Meditation On Psychological Well-Being Among Old Age People In Selected Areas Of Maharashtra."

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ABSTRACT

Background of the study:
Yoga is a science which has been practised in India from over thousands of years. Besides its spiritual achievements, the practice of yoga is accompanied by a number of beneficial physiological effects in the body. Aim of the study to assess the effectiveness of Raj Yoga Meditation on psychological well-being among old age peoples.

Methods: The quantitative, true experimental research design was used to conduct this study, data were conducted from demographic variables and B Ryff's Psychologicla wellbeing scale. The data was analyzed by descriptive and inferential statistics.

Results: In experimental group pre-test level of Psychological wellbeing range was 111 to 218, Mean and SD of level of Psychological wellbeing was 172.50 ± 35.27. In control group pre-test level of Psychological wellbeing range was 108 to 218 Mean and SD of level of Psychological wellbeing was 168.06 ± 43.91. The post-test psychological wellbeing scores, In experimental group 14 (46.67%) old age population were having high psychological wellbeing, 10(33.33%) old age population were having average psychological wellbeing, 06(20%) were having very high psychological wellbeing. Similarly in control group 14(46.67%) old age population were having average psychological wellbeing, 08(26.67%) old age population were having high psychological wellbeing and 04(13.33%) old age population were having very high psychological wellbeing. In experimental group post-test level of Psychological wellbeing range was 187 to 223 Mean and SD level of Psychological wellbeing was 201.96± 28.57 and in control group, post-test level of Psychological wellbeing range was 126 to 218 Mean and SD level of Psychological wellbeing was 172.33±41.26. To evaluate the effectiveness of Raj Yoga on level of Psychological wellbeing among old age population in a selected areas of Maharashtra and to find the significant mean difference between pre-test and post-test level of Psychological wellbeing in experimental and control group, The findings shown that in the experimental group, the mean difference with SD was 29.46±8.64 and paired t test value was 14.69, df=29, and p value was 0.001 found significant. In the control group the mean difference with SD was 4.26±5.34, paired t test value was 2.12 df=29, and p value was 0.03. which shows that there was no significant difference between the before and after. The calculated Chi square **(χ^2)** value for the educational status ((χ^2 = **11.26, df-=3, p<0.05, S*)** and previous occupation **(χ^2 = 8.69, df=3, p<0.05, S*)** this indicate that the educational status and previous occupation were found association with the pre-test psychological wellbeing scores in experimental group. For the control group there was no association found.

Conclusion: The study concludes that the Raj yoga mediation was effective in enhancing the psychological wellbeing among old people.

Key Words: Raj Yoga meditation, psychological well-being, old age people

Introduction:
"Older adults" means those who belong to age group of above 60 years. It describes gradual biological impairment of normal function, probably as a result of changes made to cell and structural components.[1] Many older adults when grows older lose their ability to live independently because of limited mobility, chronic pain, frailty and other mental or physical problems and require some form of long-term care. Moreover, older people are more likely to experience

events such as bereavement, a drop in socioeconomic status with retirement or a disability and isolation from the families.[1]

For thousands of years, meditation has been used as a tool to train the mind and achieve harmony between the physical, mental, intellectual, and spiritual personalities of humans. Learning meditation or meditation intervention has been associated with morphometric changes in the brain. The various studies provide evidence that short- and long-term meditation practice brings about changes in Grey Matter of the brain, specifically increasing density in the right inferior frontal region, with larger volumes in the orbitofrontal cortex and right hippocampus which are important for emotional regulation and response control.[2]

In recent years, the various health benefits of meditation have become more and more acknowledged by the scientific community as well as the public. While initially, research concentrated more on the physiological benefits of meditation, there have recently been an increasing number of studies on the various psychological benefits, too.[3]

Need for study:

The ageing is an irreparable biological process and beyond the control of humans. Due to the ageing, the productivity of the aged people will be reduced. Various problems faced by the elderly are dependency on others, the decline in health conditions, loneliness and financial problems. Due to the reorganization of the family system in India, the traditional joint family system which usually takes care of the elderly is diminishing very rapidly.

As per the United Nations Population Fund and Help Age International, the population of elderly is around 100 million in 2012 and expected to raise even more constituting the 20% of the total population.

India is considered to be an ageing country as it's old aged population will cross 12.6 % of the population by 2025 as per the UN. In India, the aged population of 60 or above has increased to from 7.5% in 2001 to 8.2% in 2011 and is expected to increase to 10.7% by the year 2021. The population over the age of 60 years has tripled in the last 50 years in India. Old age or elderly consists of age near or above the average lifespan of human beings. In many developing countries a person is considered as old age when he can't support with physical labour.

They face severe health problems, according to WHO health defined as state of complete physical, mental and social wellbeing. In the developing world, India has the fastest-aging population (those aged 60 and up). This is due to a combination of lower birth rates and longer life expectancies. According to the 2011 census, India's old population accounted for 8.60 % of the population, and this figure is expected to increase upto 11.10 % by 2025.[4]

Statement of the problem:

"A true experimental study to assess the effectiveness of Raj Yoga meditation on psychological well-being among old age people in selected areas of Maharashtra".

OBJECTIVES

1. To assess the pre-test levels of psychological wellbeing among old age peoples.
2. To assess the effectiveness of Raj Yoga Meditation on psychological well-being among old age peoples.
3. To find out the association between the pre-test levels of psychological wellbeing with selected demographic variables of old age peoples.

Hypothesis:

H_{01}: There will be no significant difference between the pre-test and post- test levels of Psychological wellbeing among older peoples.

H_{02}: There will be no significant association between the pre-test levels of psychological Wellbeing with selected demographic variables.

Review of Literature

A descriptive study was conducted on Psycho-Social Problems Among Elderly in Urban Population of Mysore City, Karnataka, India. In this study 526 samples aged above 60 years were selected. The data was collected by structured schedules. The results shown that 162 out of 207 elderly men (78.3%) were more functional than 240 out of 319 aged women (75.2%). Severe functional impairment was almost same in both gender (4%) while moderate impairment was noted slightly more among aged women. The functional score was significantly higher for young old, for literates, for middle class and for employed. Anxiety and insomnia were found in 3.4% of the aged (males 2.4% and females 4.1%) followed by somatic symptoms 2.9%, social dysfunction 1.5% and severe Psychological wellbeing1.1%. All psychological distress were found more among elderly women. The prevalence of mental illnesses were found to be significantly higher for age more than 75 years[5]

An experimental study to assess the effectiveness of meditation on psychological well-being among the elderly persons residing in selected old age homes from Pune city. The tool consisted of section I (demographic data), and section II Subjective Psychological well-being Inventory. The results shown that out of 60 subjects, 41.80 % of them belonged to age above 70 years and 78.40% were female. 20 % of subjects had been practising some form of meditation before. Paired t-test for comparison of pre-test and post-test scores showed significant effectiveness of meditation in improving psychological well-being of elderly persons, as average score in pre-test was 62.2, which increased

to 63.85 in posttest, t-value was 5.373 with 59 degrees of freedom. Corresponding p-value was 0.000. In Fisher's Exact Test for association p value was >0.05. Hence psychological well-being was found not significantly associated with selected demographic variables.[6]

RESEARCH METHODOLOGY

Research Approach: Quantitative research approach was used for the present study.

Research Design: True experimental with control group research design

Research Setting: Selected old age home

Target Population: Old age population are residing in selected areas, Maharashtra.

Accessible Population: old age population those who are living in a selected areas, Maharashtra.

Sample: Old age population those who are living in a selected areas, Maharashtra.

Sampling Technique: Simple random sampling technique

Sample Size: 30 experimental group and 30 control group

ELIGIBILITY CRITERIA

a. Inclusion criteria:

1. Old age peoples having mild to moderate impaired psychological well-being as assessed through psychological wellbeing scale.

2. Old age peoples who can read and write the Marathi or English.

b. Exclusion criteria

1. Old age people suffering from severe mental illness and impaired cognitive function.
2. Bed ridden due to chronic illness.
3. Having hearing and visual disturbance

VARIABLES

Variables are the characteristics that vary among the subjects being studied. It is the focus of the study and reflects the empirical aspects of the concepts being studied.

a. Dependent variables: Level of psychological Wellbeing among old age population.

b. Independent variables: Raj Yoga Meditation.

c. Socio-Demographic Variables:

Demographic forma includes age, Gender, educational status, previous occupation, Present Occupation, marital status and religion

Description of the tools

It is divided into 2 sections.

1. Section A:

Demographic forma includes age, Gender, educational status, previous occupation, Present Occupation, marital status and religion.

2. Section B:

Ryaff's Psychological wellbeing scale. The score was evaluated as:

Score	Psychological well-being Level
42 -84	Very Low Psychological wellbeing
85-126	Low Psychological Wellbeing
127-168	Average Psychological Wellbeing
168-210	High Psychological Wellbeing
210-252	Very High Psychological Wellbeing

Results:

Table 1: Frequency & percentage distribution of old age population in selected areas in terms of frequency and percentage
n=60 [Experimental group=30 and Control group=30]

Sr. No	Demographic Variables	Options	EXPERIMENTAL GROUP		CONTROL GROUP	
			Frequency	Percentage	Frequency	Percentage
1	Age in years	60-65 Years	08	26.67%	15	50%
		66-70Years	16	53.33%	07	23.33%
		71 -75 Years	06	20.00%	08	26.67%
		76-80 Years	00	00	00	00
2	Gender	Male	18	76.67%	19	63%
		Female	12	23.33%	11	36.67
3	Education	Primary & Secondary	11	36.67%	13	43.33%
		Higher Secondary	8	26.67%	9	30.00%
		Diploma / Graduate	8	26.67%	7	23.33%
		Post Graduate & above	3	10%	1	3.33%
4	Previous Occupation	Employee	15	50.00	14	46.67
		Business	4	13.33	7	23.33
		Agriculture	5	16.67	4	13.33
		Housewife	6	20.00	5	16.67

		Any other	0	0.00	0	0.00
5	**Present Occupation**	Working	19	63.33%	18	60%
		Not working	11	36.67%	12	40%
6	**Marital Status**	Married	18	60.00	17	56.67
		Unmarried	3	10.00	3	10.00
		Divorced	2	6.67	1	3.33
		Widow	5	16.67	5	16.67
		Widower	2	6.67	4	13.33
7	**Religion**	Hindu	12	40.00%	13	43.33%
		Muslim	8	26.67%	7	23.33%
		Christian	7	23.33%	6	20.00%
		Others	3	10.00%	4	13.33%

Table 09: Frequency and percentages distribution of the old age population in selected areas according to pre-test level of Psychological wellbeing.

Sr.no	**Pre-test**	**Experimental Group**		**Control Group**	
	Level of Psychological wellbeing	**Frequency**	**Percentage**	**Frequency**	**Percentage**
1	Very Low Psychological Wellbeing	0	0.00	0	0.00
2	Low psychological wellbeing	08	26.67	10	33.33
3	Average Psychological Wellbeing	16	53.33	11	36.67
4	High Psychological ell being	4	13.33	6	20.00
5	Very High Psychological Wellbeing	02	6.67	03	10.00
	Total	**30**	**100%**	**30**	**100%**

Above table and figure depicts that, present in the distribution of old age population by their pre-test level of psychological wellbeing. The current study discloses that in experimental group 16(53.33%) old age population were having average psychological wellbeing, 08(26.67%) old age population were having low psychological wellbeing, 4(13.33%) old age population were having high psychological wellbeing and 02(6.67%) were had very high psychological wellbeing. Similarly in control group 10 (33.33%) old age population were having Low psychological well-being, 11 (36.66%) old age population were having average psychological wellbeing, 6 (20%) old age population were having high psychological wellbeing and 03(10%) were had very had psychological wellbeing.

Table 10: Frequency and percentages distribution of the old age population in selected areas according to post-test level of psychological Wellbeing.

Sr.no	**Post-test**	**Experimental Group**		**Control Group**	
	Level of Psychological wellbeing	**Frequency**	**Percentage**	**Frequency**	**Percentage**
1	Very Low Psychological Wellbeing	0	0.00	0	0
2	Low psychological wellbeing	0	0.00	4	13.33
3	Average Psychological Wellbeing	10	33.33	14	46.67
4	High Psychological well being	14	46.67	8	26.67
5	Very High Psychological Wellbeing	6	20.00	4	13.33
	Total	**30**	**100%**	**30**	**100%**

Above table and figure depicts that, present in the distribution of old age population by their post-test level of psychological wellbeing. The current study discloses that in experimental group 14 (46.67%) old age population were having high psychological wellbeing, 10(33.33%) old age population were having average psychological wellbeing, 06(20%) were having very high psychological well-being. Similarly in control group 14(46.67%) old age population were having average psychological wellbeing, 08(26.67%) old age population were having high psychological wellbeing and 04(13.33%) old age population were having very high psychological wellbeing.

Table 11: Comparision between pre-test and post-test level of Psychological wellbeing in experimental group
n-30

Sr. No	Level of Psychological Wellbeing	Max Score	Experimental Group		
			Range	Mean	SD
1	Pre-test	252	111-218	172.50	35.27
2	Post-test	252	187-223	201.96	28.57

Above table depicts that, in experimental group pre-test level of Psychological well-being range was 111 to 218, Mean and SD of level of Psychological wellbeing was 172.50 ± 35.27. Similarly in experimental group post-test level of Psychological wellbeing range was 187 to 223 Mean and SD level of Psychological wellbeing was 201.96± 28.57.

Table 12: Comparision between pre-test and post-test level of Psychological wellbeingin control group
n-30 [Control group=30]

Sr. No	Level of Psychological Wellbeing	Max Score	Control Group		
			Range	Mean	SD
1	Pre-test	252	108 to 218	168.06	43.91
2	Post-test	252	126 to 218	172.33	41.26

RESULT:
Above table depicts that, in control group pre-test level of Psychological wellbeing range was 108 to 218 Mean and SD of level of Psychological wellbeing was 168.06 ± 43.91. Similarly in control group post-test level of Psychological wellbeing range was 126 to 218 Mean and SD level of Psychological wellbeing was 172.33±41.26.

Table: Effectiveness of Rajyoga of the level of Psychological wellbeing among old age population in a selected areas, Maharashtra in terms of average pre-test and post-test of experimental group and control group.
n-60 [experimental group:30 and Control group:30]

Sr. No	Group	Pre-test		Post-test		Difference		Paired 't' test
		Mean	SD	Mean	SD	Mean	SD	
1	Experimental Group	172.50	35.27	201.96	28.57	29.46	8.64	14.69, df=29, p=0.001, S*
2	Control Group	168.06	43.91	172.33	41.26	4.26	5.34	2.12, df=29, p=0.03, NS

T(tab)=29, 0.05 significance= 2.045

To evaluate the effectiveness of Raj Yoga on level of Psychological wellbeing among old age population in a selected areas of Maharashtra and to find the significant mean difference between pre-test and post-test level of Psychological wellbeing in experimental and control group, The findings shown that in the experimental group, the mean difference with SD was 29.46±8.64 and paired t test value was 14.69, df=29, and p value was 0.001 found significant. In the control group the mean difference with SD was 4.26±5.34, paired t test value was 2.12 df=29, and p value was 0.03. Which shows that there was no significant difference between the before and after.
This indicates that the experimental group had significance difference in pre-test and post-test level of Psychological wellbeing among old age population which suggest the intervention, Raj Yoga was significantly effective on the level of Psychological wellbeing on the old age population, hence hypothesis **H_{01}**- There will be no significant difference between the pre-test and post- test levels of psychological wellbeing among older peoples is rejected for experimental group.

Table 14: The association between of level of Psychological well-being on experimental group in selected demographic characteristics of old age population in a selected areas, Maharashtra.

Analysis results depicts that, the association between the pre-test score of psychological well-being of experimental group with their selected socio-demographic variables. The calculated Chi square **(χ^2)** value for the educational status ((χ^2 = **11.26, df-=3, p<0.05, S*)** and previous occupation **(χ^2 = 8.69, df=3, p<0.05, S*)** this indicate that the educational status and previous occupation were found association with the pre-test psychological wellbeing scores in experimental group.

Testing of hypothesis;
H_{02}: There will be no significant association between the pre-test levels of psychological well being with selected demographic variables.
The ststed hypothesis is rejected for experiemntal group for educational status and previous occupation as these two variables wwere found associated with pretest psychological wellbeing scores.

Table 15: The association of level of Psychological well-being on control group in selected demographic characteristics of old age population in a selected areas, Maharashtra.

Analysis results depicts that, the association between the pre-test score of psychological well-being of experimental group with their selected socio-demographic variables. The calculated Chi square **(χ^2)** value for various demographic variables were less than the table values at 0.05 levels, hence there was no demographic variables found significant association pre-test psychological well- being scores in control group.

Testing of hypothesis:
H_{02}: There will be no significant association between the pre-test levels of psychological well-being with selected demographic variables. Hence the stated hypothesis is accepted for control group as the demographic variables did not found associated.

CONCLUSION
The present study assessed the A true experimental study to assess the effectiveness of Raj Yoga meditation on psychological well-being among old age people in selected areas of Maharashtra. The true experimental research design was used and the 60 samples (30 in experimental and 30 in control group) were selected by using simple random sampling method. The findings shown that the old people were had average psychological well-being and after intervention in the experimental group it was found that there was increased mean score of the psychological well-being. In the experimental group education and previous occupation were found significant. The study concludes that the Raj yoga Meditation was effective in enhancing the psychological wellbeing.

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