

**EFFECTS OF DIFFERENT PACKAGES OF YOGIC PRACTICES ON  
SELECTED PSYCHOLOGICAL VARIABLES AMONG  
MIDDLE AGED OBESE WOMEN****N.Prem Kumar<sup>1</sup>, Dr.R.Elangovan<sup>2</sup>**

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**Abstract:**

The study was designed to investigate the effects of different packages of yogic practices on selected Psychological variables among middle age women. For these purpose 90 middle aged obese women from Tamilnadu were selected as subjects. Their age was ranged from 46 and 55 years only. The study was formulated as a true random group experimental design. Consisting of a pre test and post test the subjects (n=90) were randomly assigned to three equal groups of thirty middle aged obese women each. The groups were assigned as experimental group I underwent B.K.S Iyengar yogic techniques, experimental group II underwent Brown Christiana yogic techniques and control group was not given any specific training respectively. Pretest was conducted for all the subjects on selected Psychological variables such as Self Concept, Self esteem and Anxiety. The experimental groups participated for a period of 12 weeks. The post test was conducted on the above said dependent variables after a period of 12 weeks in the respective treatments. The training Program was scheduled at 6 am to 7 am from Monday to Saturday in progression. The analysis of covariance was used to analyze data. The study revealed that the Yogic packages increase the self concept and self esteem at the same time anxiety level was decreased among the 46-55 aged obese women

**Key words:** yoga, self concept, self esteem, anxiety**Introduction:**

Yoga is a psychological, physiological and spiritual discipline that has been an integral part of our Indian culture for centuries. Yoga is a complete science of life that originated about thousands of years ago in India and still been practiced in India for centuries. India's current National Family Health Survey shows that more than twenty percent

of Indians living in cities are overweight or obese. And in the northwestern state of Punjab, that is true for almost forty percent of women. Yoga is a process or system that maintains not only the health but also generates a sense of happiness and fulfillment. It also encourages personal growth and development. Obesity is a complex condition associated with a host of medical disorders. One common assumption is that obesity is also related to psychological and emotional complications.

However, some studies have shown that obesity itself does not appear to be systematically associated with psychopathological outcomes. Papelbaum M. et al. (2012).

### Methodology:

The study was formulated as a true random group design. Consisting of a pre test and post test the subjects (n=90) were randomly assigned to three equal groups of thirty middle aged obese women each. The groups were assigned as experimental group I underwent B.K.S Iyengar yogic techniques, experimental group II underwent Brown Christina yogic techniques and control group was not given any specific training respectively. Pretest was conducted for all the subjects on selected psychological variables such as Self Concept, Self esteem and Anxiety. The experimental groups participated for a period of 12 weeks. The post test was conducted on the above said dependent variables after a period of 12 weeks in the respective treatments. The training Program was scheduled at 6 am to 7 am from Monday to Saturday.

### Experimental design:

#### Package (1) B.K.S. Iyengar yogic practices

Loosening Exercises, Tadasana, Utthita Parsva konasana, Ardha Chandrasana, Adhomukha Svanasana, Parsvavirasana, Bharadvajasana, Marichyasana, Paschimottanasana, Janusirasana, Ustrasana, Sarvangasana, Halasana, Savasana, Ujjayi Pranayama.

#### Package (2) brown Christina yogic practices

Pawanmuktasana, Suryanamaskar, Utkatasana, Virabhadrasana, Trikonasana, Prasarita Padottanasana, Salabhasana, Bhujangasana, Marichyasana, Setubandhasana, Chakrasana, Viparitakarani, Halasana, Savasana, Nadisudhi

### Statistical technique:

The data collected from the three groups before and after the experimental period were statistically examined for significant improvement by using analysis of covariance. The data collected from the three groups before and after the experimental period were statistically examined for significant improvement by using analysis of covariance. (Clarke and Clarke, 1972) Whenever the 'F' ratio was found to be significant, Scheffe's test was used as post-hoc test to determine which of the paired means differed significantly. In all cases the criterion for statistical significance was set at 0.05 level of confidence ( $P < 0.05$ ).

### Results of Self-concept:

Table shows that the pre-test means in self-concept of the BKSG, BCG and CG were 165.27, 164.03, and 164.43 respectively, resulted in an "F" ratio of 0.22, which indicates statistically no significant difference between the pre test means at 0.05 level of confidence. The post test means of BKSG, BCG and CG were 171.73, 168.03 and 164.1 respectively, resulted in an "F" ratio of 5.83, which indicates statistically significant difference between the post test means at 0.05 level of confidence. The adjusted post-test means of BKSG, BCG and CG were 171, 168.18, and 164.68 respectively. The obtained F-ratio value was 18.42, which was higher than the table value of 3.11 for df 2 and 86 required for significance at 0.05 level. It indicates that there was a significant difference among the adjusted posttest means of self-concept of the BKSG, BCG and CG.

### Results of Scheffe's Test on Self-concept:

Table shows that the adjusted post-test mean difference in self-concept between BKSG

and BCG, BKSG and CG and between BCG and CG are 2.82, 6.32 and 3.5 respectively, which were statistically significant at 0.05 level of confidence. However, BKSG was to be found better in reduce the self-concept than the BCG.

#### **Discussion on Findings on Self-Concept:**

The findings of the study on self-concept reveal that the experimental group namely BKSG and BCG had significantly improved after the training. Besides, the results of the study indicated that there was a significant difference between the BKSG and BCG. BKSG training showed better results in self-concept than the BCG.

#### **Results of Self-esteem:**

Table shows that the pre-test means in self-esteem of the BKSG, BCG and CG were 17.77, 17.1, and 16.73 respectively, resulted in an "F" ratio of 1.35, which indicates statistically no significant difference between the pre test means at 0.05 level of confidence. The post test means of BKSG, BCG and CG were 20.47, 19.07 and 17.07 respectively, resulted in an "F" ratio of 29.86, which indicates statistically significant difference between the post test means at 0.05 level of confidence. The adjusted post-test means of BKSG, BCG and CG were 20.19, 19.11, and 17.29 respectively. The obtained F-ratio value was 41.01, which was higher than the table value of 3.11 for df 2 and 86 required for significance at 0.05 level. It indicates that there was a significant difference among the adjusted posttest means of self-esteem of the BKSG, BCG and CG.

#### **Results of Scheffe's Test on Self-esteem:**

Table shows that the adjusted post-test mean difference in self-esteem between BKSG and BCG, BKSG and CG and between BCG and CG are 1.08, 2.9 and 1.82 respectively,

which were statistically significant at 0.05 level of confidence. However, BKSG was to be found better in reduce the self-esteem than the BCG.

#### **Discussion on findings on self-esteem:**

The findings of the study on self-esteem reveal that the experimental group namely BKSG and BCG had significantly improved after the training. Besides, the results of the study indicated that there was a significant difference between the BKSG and BCG. BKSG training showed better results in self-esteem than the BCG.

#### **Results of Anxiety:**

Table shows that the pre-test means in anxiety of the BKSG, BCG and CG were 22.7, 23.43, and 25.03 respectively, resulted in an "F" ratio of 2.76, which indicates statistically no significant difference between the pre test means at 0.05 level of confidence. The post test means of BKSG, BCG and CG were 18.73, 24.43 and 25.73 respectively, resulted in an "F" ratio of 42.19, which indicates statistically significant difference between the post test means at 0.05 level of confidence. The adjusted post-test means of BKSG, BCG and CG were 19.33, 21.6, and 24.97 respectively. The obtained F-ratio value was 61.19, which was higher than the table value of 3.11 for df 2 and 86 required for significance at 0.05 level. It indicates that there was a significant difference among the adjusted posttest means of anxiety of the BKSG, BCG and CG. To find out which of the paired means had a significant difference, the Scheffe's post-hoc test is applied and the results are presented in table

#### **Results of Scheffe's Test on Anxiety:**

Table shows that the adjusted post-test mean difference in anxiety between BKSG and BCG, BKSG and CG and between BCG and

CG are 2.27, 5.64 and 3.37 respectively, which were statistically significant at 0.05 level of confidence. However, BKSG was to be found better in reduce the anxiety than the BCG.

#### Discussion on findings on anxiety:

The findings of the study on anxiety reveal that the experimental group namely BKSG and BCG had significantly improved after the training. Besides, the results of the study indicated that there was a significant difference between the BKSG and BCG. BKSG training showed better results in anxiety than the BCG.

#### Analysis of covariance of data on self-concept among bksg BCG and cg

Tests/ Groups		BKSG	BCG	CG	S O V	Sum of Squares	df	Mean Squares	"F" Ratio
Pre Test	$\bar{X}$	165.27	164.03	163.43	B	52.42222	2	26.21111	0.22
	$\square$	11.39	9.73	11.24	W	10176.2	87	116.9678	
Post Test	$\bar{X}$	171.73	168.03	164.1	B	874.2889	2	437.1444	5.83*
	$\square$	9.04	6.82	9.83	W	6519.533	87	74.93716	
Adjusted Post Test	$\bar{X}$	171	168.18	164.68	B	601.1044	2	300.5522	18.42*
					W	1402.911	86	16.31292	

\* Significant at .05 level of confidence (Self-concept in Points)  
(The table value required for 0.05 level of significance with f 2, 87 and 2, 86 are 3.11)

#### Scheffe's test for differences of the adjusted post-test paired means of self-concept

Adjusted Post-test means	Mean	Confidence
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BKSG	BCG	CG	Differences	Interval
171	168.18		2.82*	2.6
171		164.68	6.32*	2.6
	168.18	164.68	3.5*	2.6

\* Significant at .05 level of confidence

#### Analysis of covariance of data on self-esteem among bksg, BCG and cg

Tests/ Groups		BKSG	BCG	CG	S O V	Sum Squares	of df	Mean Squares	"F" Ratio
Pre Test	$\bar{X}$	17.77	17.1	16.73	B	16.46667	2	8.233333	1.35
	$\square$	2.92	1.92	2.45	W	527.9333	87	6.068199	
Post Test	$\bar{X}$	20.47	19.07	17.07	B	175.2	2	87.6	29.86*
	$\square$	1.74	1.57	1.82	W	255.2	87	2.933333	
Adjusted Post Test	$\bar{X}$	20.19	19.12	17.29	B	125.3733	2	62.68664	41.01*
					W	131.4507	86	1.528497	

\* Significant at .05 level of confidence (Self-esteem in Points)  
(The table value required for 0.05 level of significance with f 2, 87 and 2, 86 are 3.11)

#### Scheffe's test for differences of the adjusted post-test paired means of self-esteem

Adjusted Post-test means			Mean Differences	Confidence Interval
BKSG	BCG	CG		
20.19	19.11		1.08*	0.796
20.19		17.29	2.9*	0.796
	19.11	17.29	1.82*	0.796

\* Significant at .05 level of confidence

Analysis of covariance of data on anxiety among bksg BCG and cg

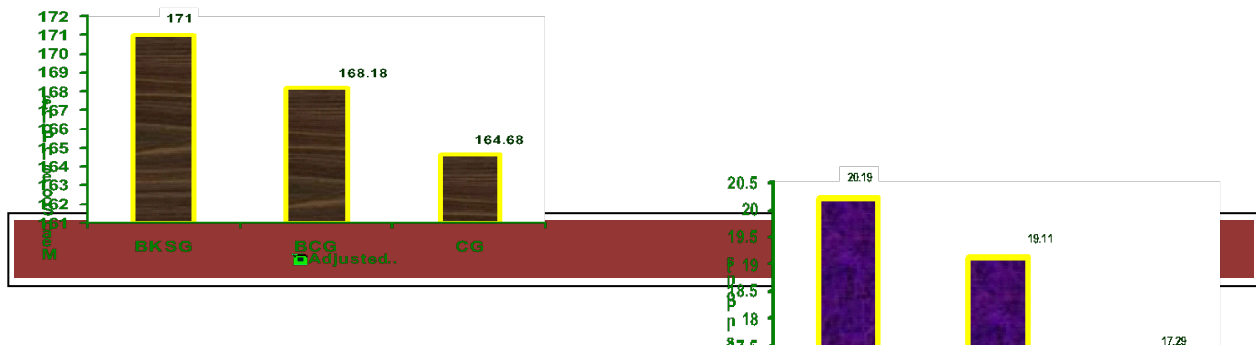
Tests/ Groups		BKSG	BCG	CG	S O V	Sum Squares	of df	Mean Squares	“F” Ratio
Pre Test	$\bar{X}$	22.7	23.43	25.03	B	85.42222	2	42.71111	2.76
	$\square$	3.97	3.54	4.25	W	1344.633	87	15.45556	
Post Test	$\bar{X}$	18.73	21.43	25.73	B	747.8	2	373.9	42.19*
	$\square$	1.79	2.36	4.22	W	771.1	87	8.863218	
Adjusted Post Test	$\bar{X}$	19.33	21.6	24.97	B	454.9866	2	227.4933	61.91*
					W	316.0399	86	3.674882	

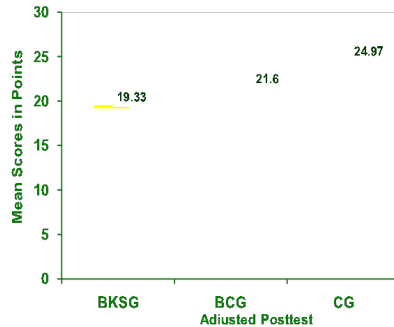
\* Significant at .05 level of confidence (Anxiety in Beats/minute)  
 (The table value required for 0.05 level of significance with f 2, 87 and 2, 86 are 3.11)

Scheffe’s test for differences of the adjusted post-test paired means of anxiety

Adjusted Post-test means			Mean Differences	Confidence Interval
BKSG	BCG	CG		
19.33	21.6		2.27*	1.23
19.33		24.97	5.64*	1.23
	21.6	24.97	3.37*	1.23

\* Significant at .05 level of confidence





### Conclusions:

Yogic practices increase the self concept and self esteem at the same time anxiety level was decreased among the 46-55 aged obese women. BKS Iyengar yogic practices (package I) was identified as slightly effective training method when compared to the brown christina yogic practices (package II). But both were suitable under systematic training on all the selected criterion variables of the study.

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