

# INFLUENCE OF YOGA AND PILATES EXERCISES PROGRAM ON SPORTS COMPETITION ANXIETY LEVEL AMONG WOMEN BASKETBALL PLAYERS

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## ABSTRACT

*The study was to examine the influence of yoga and pilates exercises program on sports competition anxiety level among women basketball players. Total N=48 women college level basketball players age ranging from 19-23 years selected from A.S.N Women's Engineering College, Tenali, Guntur (DT), Andhra Pradesh. The recruited women a basketball player was randomly assigned into four groups each group n=12 women basketball players i.e. empirical groups I basketball players underwent: Yoga practice [YPB], empirical group II basketball players underwent: pilates exercise [PEB], empirical group III underwent: combined yoga and pilates exercises [CYPB], and control basketball players group [CBP]. CBP was practiced only basketball. The training period was for 12-week's duration. The measurement was done by conducting sports competition anxiety test in number before and after the completion of training. The collected score's were analyzed by ANCOVA and level of significant was restricted at 0.05 levels. The study found that isolated, combined yoga and pilates exercises program had positive significant impact to reduce the level of sports competition anxiety level of empirical group's basketball players comparative to control group.*

**Keywords:** – Yoga, pilates, anxiety and basketball

## Introduction:

Pilates is a mind-body workout based on six principles: centering, concentration, control, precision, breath, and flow. Each exercise and movement sequence embodies these six principles. Pilates is a low-impact exercise and can be easily modified through use of springs and various apparatus. The method was designed by Joseph Hubertus Pilates from Germany whose father was a Greek ancestry Gymnast and mother was a Neuropath. The health benefits of pilates include increased muscle strength and tone, particularly of abdominal muscles, lower back, hips and buttocks.

Yoga is a practice that connects the body, breath, and mind. It uses physical postures, breathing exercises, and meditation to improve overall health. Yoga was developed as a spiritual practice thousands of years ago. Today, most Westerners who do yoga do it for exercise or to reduce stress. Though Yoga was being practiced in the pre-Vedic period, the great Sage Maharshi Patanjali systematized and codified the then existing practices of Yoga, its meaning and its related knowledge through his Yoga Sutras.

## Statement of the Research Problem:

To analyze the “influence of yoga and pilates exercises program on sports competition anxiety level among women basketball players”.

**Research Hypothesis:**

- There will be a significant decrease in level of sports competition anxiety level of empirical group's basketball players after the twelve weeks impact of isolated, combined yoga and pilates exercises when compared with control group women basketball players.
- The combined yoga and pilates exercises will be superior to the isolated training.

**Methodology:**

The study was to examine the influence of yoga and pilates exercises program on sports anxiety among women basketball players. Total N=48 women college level basketball players age ranging from 19-23 years selected from A.S.N Women's Engineering College, Tenali, Guntur (DT), Andhra Pradesh. The recruited women a basketball player was randomly assigned into four groups each group n=12 women basketball players i.e. empirical groups I basketball players underwent: Yoga practice [YPB], empirical group II basketball players underwent: pilates exercise [PEB], empirical group III underwent: combined yoga and pilates exercises [CYPB], and control basketball players group [CBP]. CBP was practiced only basketball. The training period was for 12-week's duration. The measurement was done by conducting sports competition anxiety level test in number before and after the completion of training. The collected score's were analyzed by ANCOVA and level of significant was restricted at 0.05 levels.

**Table - I**

**Analysis of Covariance for Sports Competition Anxiety Level on Pre Test and Post Test Data of YPB, PEB, CYPB and CBP Groups Basket ball Players (In numbers)**

GROUPS	YPB	PEB	CYPB	CBP	SOURCE OF VARIANCE	SUM OF SQUARES	df	MEAN SQUARES	OBTAINED 'F'
Pre Test Mean SD	21.66 1.49	21.75 1.13	21.91 1.08	21.25 1.35	Between	2.89	3	0.96	0.589
					Within	72.08	44	1.63	
Post Test Mean SD	17.66 1.23	17.75 0.75	17.16 1.11	22.58 2.27	Between	2.32	3	77.47	36.45*
					Within	93.500	44	2.12	
Adjusted Post Test Mean	17.65	17.69	17.02	22.79	Between	250.38	3	83.46	49.08*
					Within	73.11	43	1.700	
Mean Diff	-4.00	-4.00	-4.75	+1.33	-	-	-	-	-

Table F-ratio at 0.05 level of confidence for 3 and 44 (df) =2.83, 3 and 43 (df) =2.83 \*Significant

\*Significant

**YPB** : Yoga practice women basketball players group  
**PEB** : Pilates exercises women basketball players group  
**CYPB** : Combined yoga and Pilates exercises women volleyball players group  
**CBP** : Control women basketball players group.

The above table-I shows that there is a significant difference on sports competition anxiety level among the four groups such Yoga practice [YPB], Pilates exercises [PEB], combined yoga and Pilates exercises [CYPB], and control women basketball players group [CBP]. Since the 'F' value required being significant at 0.05 level for 3, 44 d/f and 3, 43 are 2.83, but the computation values of sports competition anxiety post and adjusted posttest 'F' values are 36.45 and 49.08 respectively. Which are greater than the tabulated value. Since the obtained 'F' ratio is found significant.

**Table – II**

**SCHEFFE'S CONFIDENCE INTERVAL TEST FOR PAIRED ADJUSTED FINAL MEAN DIFFERENCES YPB, PEB, CYPB and CVP GROUPS WOMEN BASKETBALL PLAYERS ON SPORTS COMPETITION ANEXITY LEVEL**

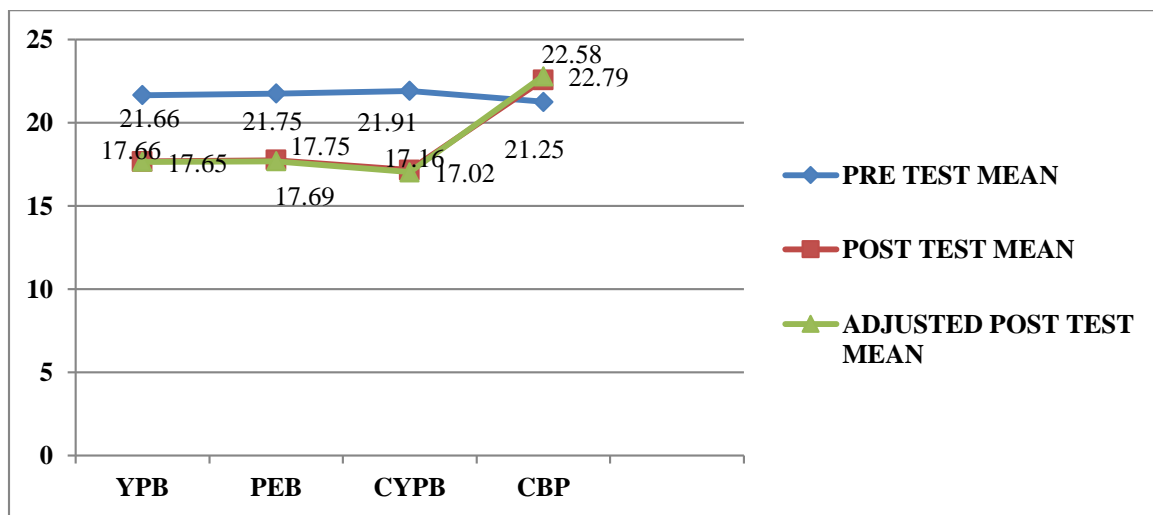
YPB	PEB	CYPB	CBP	MD	CI
17.65	17.69	-	-	0.04	1.54
17.65	-	17.02	-	0.63	
17.65	-	-	22.79	5.14*	
-	17.69	17.02	-	0.67	
-	17.69	-	22.79	5.10*	
-	-	17.02	22.79	5.77*	

\*Significant

**YPB** : Yoga practice women basketball players group  
**PEB** : Pilates exercises women basketball players group  
**CYPB** : Combined yoga and pilates exercises women volleyball players group  
**CBP** : Control women basketball players group.

The above table II shows that significant differences present in between YPB and CBP, PEB and CBP & CYPB and CBP are 5.14, 5.10 and 5.77 values is higher than 1.54. There is no significant differences exist between YPB and PEB, YPB and CYPB & PEB and CYPB values are 0.04, 0.63 and 0.67 value is lower than CI value 1.54.

The initial, final and adjusted final mean values of sports competition anxiety level score for the four group's basketball players namely YPB, PEB, CYPB and CBP present in line graph for clear understand purpose in figure: 1



### Discussion on Hypothesis:

- The first hypotheses stated that there will be a significant decrease in level of sports competition anxiety level of empirical group's basketball players after the twelve weeks impact of isolated, combined yoga and pilates exercises when compared with control group women basketball players. The statistical analysis proved that isolated, combined yoga and pilates exercises significantly decrease in level of sports competition anxiety level. Hence research hypothesis accepted.
- The second hypotheses stated that combined yoga and pilates exercises will be superior to the isolated training. The statistical analysis proved combined yoga and pilates exercises is not superior to isolated training. Hence research hypotheses rejected.

### Discussion and Findings:

The study reported, on the bases of analysis table 1 &2 that isolated and combined twelve weeks training impact of yoga and pilates exercises significantly decreased level of sports competition anxiety level of women basketball players. The experimental studies on above finding were Shenbagavalli and Divya (2010) job anxiety level of college men students significantly reduce with the impact of specific yogic exercises and combination of specific yogic exercises with autogenic training. Mevhibe and Ali (2008) proved that daily practices of physical exercises play a vital role in minimizing the anxiety level of students. Marina et al., (2016) stud for systematic literature review proved physical activity had significant positive impact to reduce the anxiety level of population. Chris et al., (2010) study reveals that 12-week yoga intervention was associated with greater improvements in mood and decreased anxiety level.

**Conclusions:**

On the bases of analysis report table I and II, the study concluded that 12-weeks of yoga and Pilates exercises had significant impact to decrease the sports competition anxiety level of basketball players. Further study proved that isolated and combined yoga and pilates are equally effective to decrease the level of sports competition anxiety level of basketball player.

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