# IMPACT OF RESISTANCE TRAINING AND YOGIC TRAINING ON SPORTS COMPETITION ANXIETY

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### Abstract

**Background:** The aim of this study was to determine the psychological effects of an high-intensity Resistance training, Yogic training Sports Competition Anxiety disease risk factors in healthy, overweight middle-aged subjects, and to compare the effects of Sports Competition Anxiety Resistance training (RT).

**Methods:** forty five - participants (ages  $16\pm2$ ,  $22\pm2$  yrs,) were randomly assigned to one of the three exercise treatment groups:. The experimental group exercised five days per week, 50 min per session for 12 weeks. Rainer Martens, Questionnaire were measured Sports Competition Anxiety of players.

**Results:** when Comparetively with Control groups, RT, and YT showed significantly Lower reductions in Sports Competition Anxiety,

**Conclusions:** Our findings indicate that Resistance training is more effective in improving Sports Competition Anxiety,

Keywords: Sports Competition Anxiety, Resistance training,

### INTRODUCTION

Taken together, early studies provide a modicum of support that low- or moderate-intensity resistance training may decrease or have little effect on Sports Competition anxiety. Affective processes in determining physical activity behavior, such as compliance and adherence, have received less consideration compared with environmental and social mechanisms. The hedonic theory provides the basis as the theoretical underpinnings by which affective responses to exercise may relate to adherence. Simply put, individuals are governed by pleasure and pain. Several recent studies have applied this theory toward exercise behavior and have proposed a causal chain connecting exercise intensity, affective responses, and adherence Evidence supports exercise as an intervention for many mental health concerns. Regular exercise is known to have a positive effect on many cardiovascular disease risk factors

# **Objectives of the Study:**

- 1. To determine whether Sports Competition Anxiety can be improved with the help of control, Resistance training and Yogic training Groups.
- 2. To find whether the selected Sports Competition Anxiety can be improved with the help of control, Resistance training and Yogic training Groups .

## **Hypotheses:**

**H1:** Resistance Training may improve the Sports Competition Anxiety of boys between 16 to 22 years.

**H2:** Yogic training Groups may improve Sports Competition Anxiety in of male players between 16 to 22 years.

## **Design of the Study:**

Forty five male players age ranging from 16 to 22 years were randomly selected from polytechnic college players, chennai as subjects for this study. The selected forty five subjects were divided into three equal groups, each consisting of 15 subjects. Two group was treated as the Experimental groups and the other as the Control group. All the subjects were found clinically normal. The experimental group under went 12 weeks of Resistance training, yogic training program for fifty minutes, five days in a weak, where as the control group was kept sedentary. The Pre test and Post test were conducted for both the groups on Sports Competition Anxiety by Rainer Martens, Questionnaire were measured

## EXPERIMENTAL DESIGN AND STATISTICAL TECHNIQUE

The experimental design used in this study was randomly, selected data's were formed into three groups fifteen each of totally forty five. In this research such as Control group, Resistance training and the Yogic training Programme group subjects were examined before and after the experimentation of Sports Competition Anxiety. data were statistically analyzed by using analysis of co-variance (ANACOVA) was used, to find out the significant differences among the Control, Resistance Training and Yogic training, groups on Sports Competition Anxiety. Among athletes. The obtained "F" ratio for interaction effect Whenever was found to be significant, to follow up test the simple effect test was used. For an appropriate one which was considered In all cases, .05 level was fixed as level of confidence to test the significance level. Whenever 'F' ratio for adjusted Post test means was found to be significant, to confirm the paired mean's differences post hoc test - the Scheffe's test was applied.

Table - I ANALYSIS OF COVARIANCE OF DATA ON SPORTS COMPETITION ANXIETY BETWEEN PRE AND POST TEST OF CG, RTG AND YTG

Test	CG	YTG	FTG	Sov	Sos	Df	MS	Obtained 'F' ratio
Pre test Mean	68.82	68.95	68.87	В	0.73	2	0.36	0.17
SD	1.47	1.43	1.54	W	59.18	42	2.192	0.17
Posttest Mean	68.83	65.81	64.91	В	84.50	2	42.25	20.01
SD	1.48	1.24	0.79	W	39.32	42	1.46	29.01
Adjusted post mean	8.85	65.81	64.91	В	85.01	2	42.51	29.36
				W	37.64	41	1.45	

\*significant at 0.05 level of confidence. The table value required for significance at 0.05 levels with df 2 and 41 are 3.23 and 2 and 42 are 3.22 respectively.

The table – shows that the pre test mean value on Sports Competition Anxiety for CG, YTG and FTG, were 68.82,68.95 and 68.87 respectively. The obtained 'F' ratio value 0.17 for pre test scores on Sports Competition Anxiety which lesser than the table value 3.22 for significance with df 2 and 42 at 0.05 level of confidence. The post test mean values on Sports Competition Anxiety for CG, YTG and FTG, were 68.83,65.81 and 64.91 respectively. The obtained 'F' ratio value 29.01 for post test scores on Sports Competition Anxiety, which was greater than the table value 3.22 for significance with df 2 and 42 at 0.05 level of confidence. The adjusted post test mean values on Sports Competition Anxiety CG, YTG and FTG, were 68.85,65.81 and 64.91 respectively. The obtained 'F' ratio value 29.36 for adjusted post test scores on Sports Competition Anxiety, which was greater than the table for significance with df 2 and 41 at 0.05 level of confidence.

The results of the study showed that there was a significance difference among CG, YTG and FTG, on Sports Competition Anxiety. However the improvement was in favor of YTG.

Since three groups were involved the Scheffe's post hoc test was applied to find out the paired mean difference if any, and it is presented in the table - II

POST HOC TEST FOR THE DIFFERENCE BETWEEN THREE PAIRED **SCHEFEE'S** ADJUSTED POST TEST MEANS OF SPORTS COMPETITION ANXIETY

Aduste	d post Me	Mean Difference	Confidence Interval	
CG	YTG	FTG	M. A.	
			1.16	1.60
67.67	66.51			
67.67		66.78	0.89	1.60
	66.51	66.78	0.27	1.60

### **RESULTS AND DISCUSSION**

Bibeau, 2010 determined on The affective benefits associated with aerobic exercise are well documented. However, literature concerning resistance exercise has suggested a more variable response (i.e., a short duration increase in state anxiety, which eventually is reduced below baseline) and thus may play an important role in the adoption and maintenance of a resistance training program. The purpose of the current study was to examine the effects of different intensities and rest period during resistance exercise on anxiety, positive affect, and negative affect while holding volume constant and controlling for self-efficacy. Using an experimental design, individuals enrolled in a weight training class (n = 104) were randomly assigned 1 of 5 exercise conditions (control, low-long, low-short, high-long, and high-short), varying intensities, and rest time. Anxiety and positive and negative affect measurements were collected immediately following the exercise workouts. Data from separate analyses of covariance revealed a significant main effect for condition on positive affect (p = 0.026), in which the low-long group reported significantly higher positive affect than the control group, at 5-minute postexercise. Similar analysis indicated a significant main effect for time on anxiety (p = 0.003), with the highest anxiety detected at 5minute postexercise, and significant reductions in anxiety at both 20-minute and 40-minute postexercise. In conclusion, these results suggest that the variation of intensity and rest time had a modest short-term effect on psychological states, following an acute bout of resistance exercise. Personal trainers and health professionals may want to emphasize light-intensity resistance programs for novice clients to maximize psychological benefits, which in turn, may positively affect compliance and adherence.

Daniel and others 2017 Evidence supports exercise as an intervention for many mental health concerns; however, randomized controlled investigations of the efficacy of different exercise modalities and predictors of change are lacking. The purposes of the current trial were to: (1) quantify the effects of aerobic exercise and resistance training on anxiety-related disorder (including anxiety disorders, obsessivecompulsive disorder, and posttraumatic stress disorder) status, symptoms, and constructs, (2) evaluate whether both modalities of exercise were equivalent, and (3) to determine whether exercise enjoyment and physical fitness are associated with symptom reduction. A total of 48 individuals with anxiety-related disorders were randomized to aerobic exercise, resistance training, or a waitlist. Symptoms of anxietyrelated disorders, related constructs, and exercise enjoyment were assessed at pre-intervention and weekly during the 4-week intervention. Participants were further assessed 1-week and 1-month post-intervention. Both exercise modalities were efficacious in improving disorder status. As well, aerobic exercise improved general psychological distress and anxiety, while resistance training improved disorder-specific symptoms, anxiety sensitivity, distress tolerance, and intolerance of uncertainty. Physical fitness predicted reductions in general psychological distress for both types of exercise and reductions in stress for aerobic exercise. Results highlight the efficacy of different exercise modalities in uniquely addressing anxiety-related disorder symptoms and constructs.

Atezaz SY Saeed 2010 Anxiety and depression are among the most common conditions cited by those seeking treatment with complementary and alternative therapies, such as exercise, meditation, tai chi, qigong, and yoga. The use of these therapies is increasing. Several studies of exercise and yoga have demonstrated therapeutic effectiveness superior to no-activity controls and comparable with established depression and anxiety treatments (e.g., cognitive behavior therapy, sertraline, imipramine). High-energy exercise (i.e., weekly expenditure of at least 17.5 kcal per kg) and frequent aerobic exercise (i.e., at least three to five times per week) reduce symptoms of depression more than less frequent or lower-energy exercise. Mindful meditation and exercise have positive effects as adjunctive treatments for depressive disorders, although some studies show multiple methodological weaknesses. For anxiety disorders, exercise and yoga have also shown positive effects, but there are far less data on the effects of exercise on anxiety than for exercise on depression. Tai chi, qigong, and meditation have not shown effectiveness as alternative treatments for depression and anxiety.

### **CONCLUSION**

This study concludes that resistance training groups of twelve weeks brought a significant change in the Sports Competition Anxiety trained to athletes from club, Chennai. Developed and good improvement in to controlling of Sports Competition Anxiety. Their level of Sports Competition Anxiety increased their accuracy during in their performance showed significant decrease in Sports Competition Anxiety.

### References

"Bibeau, WS, Moore, JB, Mitchell, NG, Vargas-Tonsing, T, and Bartholomew, JB. **Effects of acute resistance training of different intensities and rest periods on anxiety and affect** "*J Strength Cond Res* 24(8): 2184-2191, 2010.

SY Atezaz saeed, MD; Diana J. Antonacci, MD; and Richard M. Bloch "Exercise, Yoga, and Meditation for Depressive and Anxiety Disorders" *Am Fam Physician*. 2010 Apr 15;81(8):981-986.

Daniel M.LeBouthillierGordon J.G.Asmundson"The efficacy of aerobic exercise and resistance training as transdiagnostic interventions for anxiety-related disorders and constructs: A randomized controlled trial" Journal of Anxiety Disorders Volume 52, Pages 43-52

awlor DA, Hopker SW. The effectiveness of exercise as an intervention in the management of depression: systematic review and meta-regression analysis of randomised controlled trials. *BMJ*. 2001;322(7289):763–767....

- **2.** Mead GE, Morley W, Campbell P, Greig CA, McMurdo M, Lawlor DA. Exercise for depression. *Cochrane Database Syst Rev.* 2008;(4):CD004366.
- **3.** Stathopoulou G, Powers MB, Berry AC, Smits JA, Otto MW. Exercise interventions for mental health: a quantitative and qualitative review. *Clin Psychol Sci Pract*. 2006;13(2):179–193.
- **4.** Daley A. Exercise and depression: a review of reviews. *J Clin Psychol Med Settings*. 2008;15(2):140–147.
- **5.** Sjösten N, Kivelä SL. The effects of physical exercise on depressive symptoms among the aged: a systematic review. *Int J Geriatr Psychiatry*. 2006;21(5):410–418.
- **6.** Babyak M, Blumenthal JA, Herman S, et al. Exercise treatment for major depression: maintenance of therapeutic benefit at 10 months. *Psychosom Med*. 2000;62(5):633–638.
- **7.** Blumenthal JA, Babyak MA, Doraiswamy PM, et al. Exercise and pharmacotherapy in the treatment of major depressive disorder. *Psychosom Med*. 2007;69(7):587–596.
- **8.** Dunn AL, Trivedi MH, Kampert JB, Clark CG, Chambliss HO. Exercise treatment for depression: efficacy and dose response. *Am J Prev Med.* 2005;28(1):1–8.
- **9.** Legrand F, Heuze JP. Antidepressant effects associated with different exercise conditions in participants with depression: a pilot study. *J Sport Exerc Psychol*. 2007;29(3):348–364.
- **10.** Craft LL, Freund KM, Culpepper L, Perna FM. Intervention study of exercise for depressive symptoms in women. *J Womens Health (Larchmt)*. 2007;16(10):1499–1509.