

# Chanting: A Therapeutic Treatment for Sports Competitive Anxiety

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**Abstract-** Researches have shown that the sound generated through chanting has enormous positive effects on the human cognitive abilities. Therefore this study was taken to understand whether chanting (with/ without music) has any therapeutic effect on sports competitive anxiety (SCA). 84 NSO students of Kamala Nehru College (DU) were selected on the basis of homogeneity on Sports Competitive Anxiety Test (SCAT) developed by Martens et al 1990. The selected subjects were then divided into 3 groups namely Group-A (N= 32), Group-B (N=32) and Group-C (N= 20). All the 3 groups did 40 minutes of NSO activity, twice a week, for 8 weeks. While group-A did an extra session of chanting with light music for 20 minutes; group-B did an extra session of chanting with no music for 20 minutes and group-C did not perform any chanting activity over that period. The result of the study showed that all the three groups had significantly reduced their SCA after doing the chanting practices/ NSO activity. But when Scheffe Post Hoc multiple comparisons were done it was found that SCA of Group-C was significantly higher than the group-A and group-B, while there was no significant difference found between group-A and group-B. Therefore it was concluded that chanting significantly reduces the sports competitive anxiety and hence can be used as a therapeutic treatment to control it but which way of chanting is more beneficial, is still not clear. Hence this indicates a further need for research to know the most effective way of chanting practice to reduce the sports competitive anxiety.

**Index Terms-** Sports Competition Anxiety (SCA), Chanting, National Sports Organization (NSO)

## I. INTRODUCTION

Sports and performance anxiety often go hand-in-hand. When a competitor 'freezes' in the big moment or commits an inexplicable error, anxiety, in one of its many guises, is very often the root cause. Anxiety is a natural reaction to threats in the environment and part of the preparation for the 'fight or flight' response. This is our body's primitive and automatic response that prepares it to 'fight' or 'flee' from perceived harm or attack. It is a 'hardwired' response that ensures survival of the human species. Sporting competition promotes similar psychological and bodily responses because there is often a threat posed towards the ego; your sense of self-esteem. Essentially, when the demands of training or competition exceed one's perceived ability, anxiety is the inevitable outcome.

Sport places a wide variety of stressors upon participants; it can be physically exhausting, it pitches you against superior

opponents, hostile fans might verbally abuse you, the elements may need to be overcome and your emotional frailties are constantly laid bare for all to see. Many athletes become "pumped up" during competition, when the rush of adrenaline is interpreted as anxiety, and negative thoughts begin to swirl, it can have devastating effects on your ability to perform. Despite this, sport offers participants an opportunity for growth, a chance to push back personal boundaries, and a means by which to liberate the body and the mind.

Ostensibly, there is nothing damaging about the stress associated with a sporting contest, and in fact stress can be a very positive influence that leads us to tackle the challenges that make life far more rewarding. However, when we perceive stress to be negative, it causes anxiety and therefore, much depends upon how we view the demands placed upon us.

In this era of anxiety and materialism that there is intensive competition for achieving materialistic goals, there is more need for moral supplements. Chanting is the need of the hour especially during these modern times of stressful lifestyles. Chanting simply means singing (rhythmic speaking) certain sounds or words. Chanting calms our emotions and helps meditate better. Chanting has enormous positive effects on our body and mind. Chanting practices helps in tolerating hardships and removes many of agitation and anxiety that many people are affected by.

A research done by Alfred Tomatis of the French Academy of Science and Medicine found that chanting sounds have a therapeutic effect on the body. It soothes all our bodily systems and activates the body's natural healing process. It also plays a part in reversing heart disease.

According to a research done at the Cleveland University, USA, the rhythmic tones involved in chanting create a melodious effect in the body called the Neuro-linguistic effect [NLE]. When we know the meaning of the mantra we are reciting, it creates a Psycholinguistic effect [PLE] on the body. The NLE and the PLE effects are by-products of the production and spreading of curative chemicals in the brain. The research concludes that this is the real reason why chanting provokes curative effects in us. A study by Dr Alan Watkins revealed that while chanting, our heart rate and blood pressure dip to its lowest in the day. Doctors say that even listening to chants normalizes adrenalin levels, brain wave pattern and lowers cholesterol levels. Using chants as part of our exercise regimen, helps facilitate movement and flow of the body during exercise. Studies prove that making chants a part of our daily yoga can help achieve greater weight loss in a shorter span of time. Neuroscientist Marian Diamond from the University of California found that chanting helps block the release of stress hormones and increases immune function. It also

keeps our muscles and joints flexible for a long time. The body's energy and vitality are augmented by regular chanting. Dr Alan Watkins says when we chant, the vibration of the sound calms the nervous system and a profound sense of peace is obtained. It also de-stresses and facilitates better concentration and memory power. According to Dr Watkins, chanting promotes a sense of well-being and helps us bond better with people around us, especially when practiced in a group. It enhances our good virtues, by eliminating negative thoughts. We can thus enjoy whatever we do and achieve success easily. It helps control our mind and emotions.

As the previous researches have revealed that chanting therapies have physical, physiological and mental benefits but in regards to sports competitive anxiety, hardly any studies had been conducted. Therefore this study was taken to understand the therapeutic effects of chanting therapy on the sports competitive anxiety and also to study which way of chanting therapy i.e. with music or without music is more beneficial in regards to reduction of sports competitive anxiety.

## II. OBJECTIVES AND HYPOTHESIS

The objectives of the study were to determine the therapeutic effect of chanting therapy on sports competitive anxiety of NSO students, Kamala Nehru College, University of Delhi and to understand which way of chanting therapy i.e. with music or without music is better to reduce the sports competitive anxiety of NSO students. Based on the literature reviewed, it was hypothesized that chanting therapy would have a significant effect on the reduction of sports competitive anxiety while there would be no significant difference in sports competitive anxiety

between chanting therapy with music group and without music group.

## III. PROCEDURE AND METHODOLOGY

For the purpose of the study 84 NSO students of Kamala Nehru College, University of Delhi, were selected on the basis of homogeneity on Sports Competitive Anxiety Test (SCAT) developed by Martens et al 1990. The selected subjects were then randomly divided into 3 groups namely Group-A (Chanting with Music Group, N= 32), Group-B (Chanting without Music Group, N=32) and Group-C (Control Group, N= 20). All the 3 groups did 40 minutes of NSO activity (Aerobics, Yoga or Kick Boxing), twice a week, for 8 weeks. While group-A did an extra session of 'OM' chanting with light music for 20 minutes; group-B did an extra session of 'OM' chanting with no music for 20 minutes and group-C did not perform any chanting activity over that period. After 8 weeks the Sports Competitive Anxiety Test (SCAT) was again administered to determine the therapeutic effect of chanting therapy. The administered questionnaire was quantified for obtaining the score of sports competition anxiety.

## IV. STATISTICAL ANALYSIS

To determine the therapeutic effect of chanting therapy on sports competitive anxiety paired sample 't' test was employed. While analysis of variance (ANOVA) and Scheffe post hoc tests were employed to compare the different ways of chanting therapies i.e. with music and without music. The hypothesis was tested at 0.05 level of significance.

## V. ANALYSIS OF DATA AND FINDINGS OF THE STUDY

**Table- 1: Therapeutic Effect of Chanting Therapy on Sports Competitive Anxiety**

GROUP	N	Mean± Std. Deviation	Percentage Reduction in SCA	Paired Differences		
				t	df	Sig. (2-tailed)
Group- A (Chanting with Music Group)	Pre- SCA	32	21.91± 2.68	13.855*	31	0.001
	Post- SCA	32	19.09± 2.02			
Group- B (Chanting without Music Group)	Pre- SCA	32	21.88± 1.95	13.475*	31	0.001
	Post- SCA	32	19.31± 1.80			
Group- C (Control Group)	Pre- SCA	20	21.90± 1.80	2.268*	19	0.035
	Post- SCA	20	21.20± 1.06			

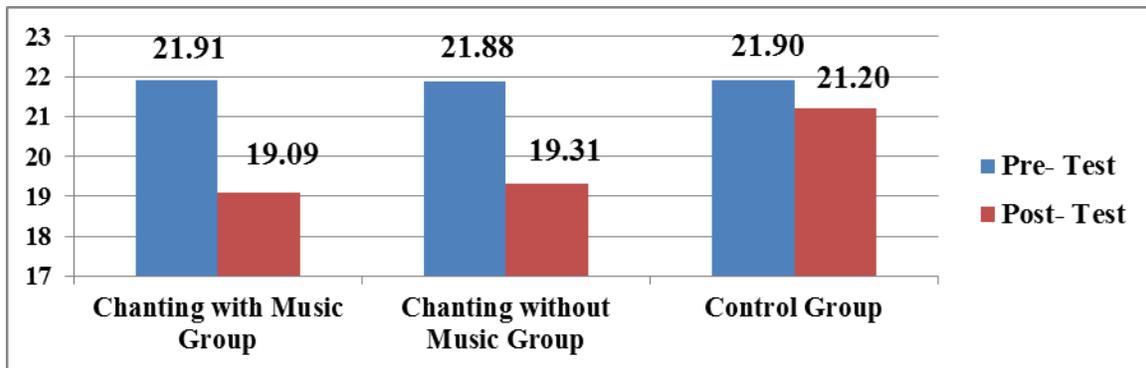
\* Significant at 0.05 level. SCA: Sports Competitive Anxiety, N: Sample Size

As indicated in table-1, all the three groups i.e. Chanting with Music Group, Chanting without Music Group and Control Group had reduced their sports competitive anxiety from the pre-test mean scores of 21.91± 2.68, 21.88± 1.95 and 21.90± 1.80 to the post-test mean scores to 19.09± 2.02, 19.31± 1.80 and 21.20±

1.06 respectively. These reduction were found to be significant as the paired sample 't' values obtained were 13.855, 13.475 and 2.268 significant at 0.001, 0.001 and 0.035 level of significance. The above table clearly shows that all the three groups had significantly reduced their sports competitive anxiety but the

highest reduction was found in Chanting with Music Group as they had reduced their sports competitive anxiety by 12.87%, followed by Chanting without Music Group with reduction of 11.74% and the minimal reduction was found in the Control Group with 3.20%.

**Fig- 1: Therapeutic Effect of Chanting Therapy on Sports Competitive Anxiety**



**Table -2: Analysis of Variance for Pre and Post- Sports Competitive Anxiety between Chanting with Music Group, Chanting without Music Group and Control Group**

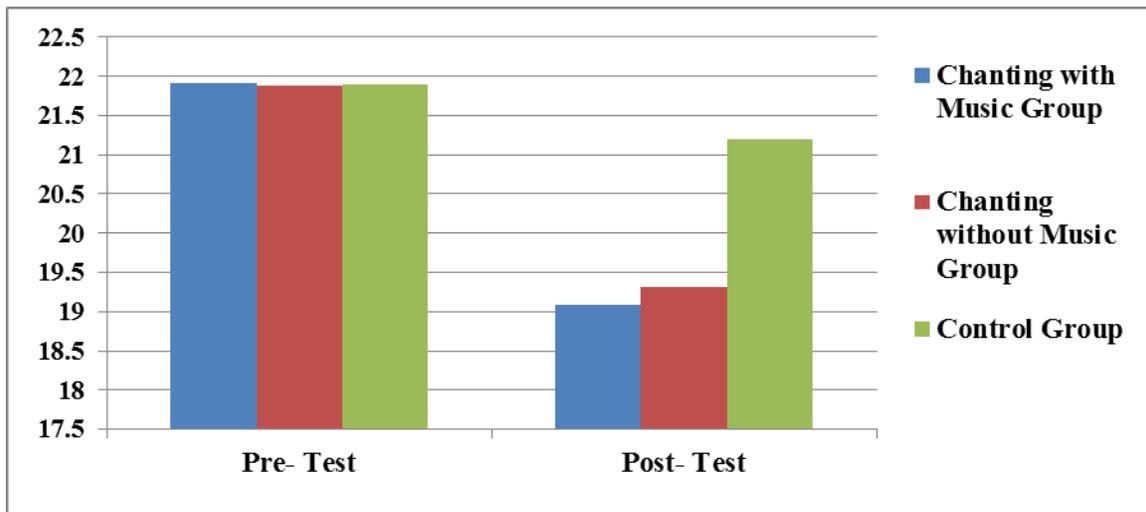
			Sum of Squares	df	Mean Square	F	Sig.
<b>Pre- Competitive Anxiety</b>	<b>Sports</b>	<b>Between Groups</b>	0.017	2	0.008	<b>0.002</b>	<b>0.998</b>
		<b>Within Groups</b>	402.019	81	4.963		
		<b>Total</b>	402.036	83			
<b>Post- Competitive Anxiety</b>	<b>Sports</b>	<b>Between Groups</b>	61.528	2	30.764	<b>10.016*</b>	<b>0.001</b>
		<b>Within Groups</b>	248.794	81	3.072		
		<b>Total</b>	310.321	83			

\* Significant at 0.05 level.

Table-2 clearly reveals that there was no significant difference between Chanting with Music Group, Chanting without Music Group and Control Group at pre-test sports competitive anxiety score as the 'F' value obtained was 0.002 at  $p > 0.05$ . But a significant difference was found between the groups at the post-test sports competitive anxiety score as the 'F'

value obtained was 10.016 at  $p < 0.05$ . Hence it indicates that the chanting therapy had significantly reduced the sports competitive anxiety of the NSO students. But which way of chanting is a better way to reduce sports competitive anxiety is discussed in table- 3.

**Fig- 2: Analysis of Variance for Pre and Post- Sports Competitive Anxiety between Chanting with Music Group, Chanting without Music Group and Control Group**



**Table- 3: Scheffe Post Hoc Test of Sports Competitive Anxiety for Chanting with Music Group, Chanting without Music Group and Control Group**

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.
Post- SCA	Chanting with Music Group	Chanting without Music Group	-0.219	0.438	0.883
		Control Group	-2.106*	0.500	0.001
	Chanting without Music Group	Control Group	-1.887*	0.500	0.001

\* The mean difference is significant at the 0.05 level

The Scheffe Post-hoc analysis in table-3 indicates that Post-test sports competitive anxiety scores of Chanting with Music Group as well as Chanting without Music Group significantly differs with the Control Group as the mean difference obtained were 2.106 and 1.887 at  $p < 0.001$  respectively, while there was no significant difference obtained in the Post- test sports competitive anxiety scores of Chanting with Music Group and Chanting without Music Group as the mean difference obtained was 0.219 at  $p > 0.05$ . Hence this table clearly indicates that statistically it is hard to tell that Chanting with Music is a better therapy than Chanting without Music, for the reduction of sports competitive anxiety though the sports competitive anxiety was found to be reduced a little higher in Chanting with Music Group when compared to Chanting without Music Group and Control Group.

## VI. DISCUSSION

The findings of the present study indicates that the sports competitive anxiety had been reduced by both the groups i.e. chanting with Music Group and Chanting without Music Group and hence the hypothesis stated that chanting therapy would have a significant therapeutic effect on the reduction of sports competitive anxiety was accepted. But as there was no statistical

significant difference was found between chanting with Music Group and Chanting without Music Group the other hypothesis stated as there would be no significant difference in sports competitive anxiety between chanting therapies with music group and without music group was also being accepted. The study also revealed that the sports competitive anxiety of the control group was also got reduced it may be due to the physical exercise the group had done during their NSO activity (Aerobics, Yoga or Kick Boxing). The result of the study supports previous researches that chanting therapy has enormous positive effects on the human cognitive abilities and hence it helps in the reduction of stress, anxiety, depression and improves the self-confidence, self esteem etc. Hence further it is recommended that sports psychologists, counsellors, and coaches use the findings of the present study to design appropriate training programmes to help athletes acquire suitable chanting therapies/ coping strategies, to reduce the anxiety level of their students and athletes so as to enhance their academic performance as well as the performance on the field.

## VII. CONCLUSION

Based on the findings of the present study it is concluded that both ways of chanting therapies i.e. with music and without music have significant therapeutic effect on the reduction of sports competitive anxiety. Though statistically both ways of chanting therapies did not significantly differ but based on the higher percentage reduction of sports competitive anxiety through chanting with music therapy it can be said that chanting with music has better therapeutic effect on sports competitive anxiety.

This study supports the therapeutic effect of chanting on the reduction of sports competitive anxiety and thus, such therapy may be recommended to reduce the anxiety of athletes in order to improve their competition performance.

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