

EFFECT OF YOGIC PRACTICE ON MENTAL TOUGHNESS AND ANXIETY OF PHYSICAL EDUCATION STUDENTS

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Abstract

Context: The physical and psychological advantages of yoga are well-known. Yogic practice is gaining popularity these days due to the fact that it trains and disciplines the mind. Yogic philosophy claims the ability to transport an individual into a state of perfect psychological and physical peace. This present study was focused on evaluating the effect of Yogic Practice on Mental Toughness and Anxiety.

Aim: The study was conducted to investigate the Effect of Yogic Practice on Mental Toughness and Anxiety of Physical Education Students.

Methods and Material: Forty (40) male students from Manipur University's Department of Physical Education and Sports Science were randomly selected as study participants in order to fulfill the purpose of the research. They were further divided into two groups, the Experiment Group (EG) and Control Group (CG), each with 20 participants. The subjects ranged in age from 18 to 23 years old. The eight-week Yogic practice consists of five days a week, with one hour of sessions in the morning (6:00am to 7:00 am). The yoga practice was performed by the experiment group, while no particular yoga practice was performed by the control group. The pre- and post -tests were conducted before and after the eight weeks yogic practice by using mental toughness questionnaire (MTQ) by Alan Goldberg and sports competition anxiety test (SCAT) by Rainer Martens.

Results: The data was examined statistically using a paired sample t-test, and the level of significance was fixed at 0.05. The results of the present study revealed that the eight weeks of yogic practice had a significant influence on the mental toughness and sports competition anxiety of the experiment group (EG) compared to the control group (CG).

Conclusion: The study concluded that the yogic practice, when practiced regularly for eight weeks, improves mental toughness and reduces sports competition anxiety in male physical education students.

Keywords: Anxiety, mental toughness, physical education, yogic practice, yoga

INTRODUCTION

The word "Yoga" derives its origin from the Sanskrit root "Yuj" meaning to yoke or bind" (Ramaswami,1989). Generally, this Sanskrit name is interpreted as the bringing together of "the powers of body, mind and soul" (Ramaswami,1989. Yogic philosophy claims the ability to transport an individual into a state of perfect psychological and physical peace (Shestopal,1998).

An athlete's capacity for success or failure is determined by their physical capabilities, conditioning, training regimen, mental toughness, and resilience under duress(Pinto,2015).Sports that involve competition require players to constantly "think" in order to focus. Mental preparation is crucial. It is said that mental preparation can make the difference between winning and losing in games (Akhtar,2021). Since athletes must overcome numerous obstacles on and off the field, developing mental toughness is crucial to their success. Gucciardi et al. (2015) stated Mental Toughness is a personal capacity to produce consistently high levels of subjective or objective performance despite everyday challenges, stressors, and adversity. Goldberg (1998) stated mental toughness is the ability to cope with or handle pressure. Regular practice of Yoga promotes mental peace and clarity, increases bodily awareness, releases chronic stress patterns, calms the mind, and enhances focus and concentration. Yoga has a tremendous positive effect on mental health (Singh,2018).Psychological factors are the most evident factors that greatly influence the efficiency of an athlete. Anxiety is one factor that influences an athlete's performance during a game (Kusuma et al. 2017). Anxiety reported when athletes are not confident in dealing with the situation may be causing stress (Hardy, Jones& Gould 1996). Anxiety that usually occurs in athletes is competitive anxiety. Competitive Anxiety is a specific negative emotional response to competitive stressors (Fletcher et al., 2009). Yoga effectively manages and resolves anxiety by regulating the stress response system in an individual (Gopinathan,2016).

Yoga offers many advantages, such as reducing the risk of injury and improving performance, as well as improving mental focus, anxiety alleviation, recovery speed, body awareness, balance, core strength, and body awareness (LaMeaux,2011). As there are many benefits of yoga, it is essential for physical education students to practice yoga.

Purpose of the study

The study was conducted to investigate the Effect of Yogic Practice on Mental Toughness and Anxiety of Physical Education Students.

MATERIALS AND METHODS

Forty (40) male students from Manipur University's Department of Physical Education and Sports Science were randomly selected as study participants in order to fulfill the purpose of the research. They were further divided into two groups, the Experiment Group(EG) and Control Group(CG), each with 20 participants. The subjects ranged in age from 18 to 23 years old.

Psychological tool used

Every test was administered via a standardized process. The psychological variables were evaluated using a standardized psychological questionnaire. Alan Goldberg’s (1998) Mental toughness Questionnaire (MTQ) was implemented to evaluate mental toughness.. To evaluate anxiety, use the Rainer Martens-prepared Sports Competition Anxiety test (SCAT).

Yogic Practice Protocol

The eight-week Yogic practice consists of five days (Mon-Fri) per week, with one hour of sessions in the morning (6:00 am to 7:00 am). The yoga practice was performed by the experiment group, while no particular yoga practice was performed by the control group. Throughout the experiment, the subjects engage in regular physical activity.

The following yogic practice were chosen as treatment:

- a. Surya Namaskar
- b. Asanas: Padmasana, Vajrasana, Sarvangasana, Halasana, Bhujangasana, Dhanurasana, Chakrasana, Vrksasana, Padahastana, Savasana
- c. Pranayama: Anuloma-Viloma, Kapalabhati, Sitali, Sitakari
- d. Meditation- Observing the breath (Swami Satyananda Saraswati,1993)

Statistical Analysis

The statistical method employed to determine whether there was a significant difference between the CG and EG in the pre-and post-test means for mental toughness and anxiety was a Paired sample t-test. The level of significance was fixed at 0.05 level.SPSS was utilized for all statistical computations

RESULT

Variable	Group	Mean	SD	Std. Error Mean
Mental Toughness	CG-Pre MT	20.65	2.83	0.63
	CG-Post MT	20.20	2.72	0.60
	EG-Pre MT	20.90	2.73	0.61
	EG-Post MT	22.35	2.66	0.59

Anxiety	CG-Pre SCAT	20.70	3.36	0.75
	CG-Post SCAT	21.10	3.09	0.69
	EG-Pre SCAT	19.85	4.09	0.91
	EG-Post SCAT	18.70	3.59	0.80

Table 1: Results of the paired sample t-test for Mental Toughness and Anxiety in SPSS

From Table 1, the results of the paired sample t-test reveal the Mental toughness mean score, control group (CG) Pre-test (M=20.65, SD=2.83), (CG) Post-test (M=20.20, SD=2.72) and Experiment Group (EG) Pre-test (M=20.90, SD= 2.73), (EG) Post-test (M=22.35, SD=2.66) at 0.05 level of significance. In addition, the findings of the paired sample t-test display the mean score of Anxiety, control group (CG) Pre-test (M=20.70, SD=3.36), (CG) Post test (M=21.10, SD=3.09) and Experiment Group (EG) Pre- test (M=19.85, SD=4.09), (EG) Post-test (M=18.70, SD=3.59) at 0.05 level of significance.

Vari ables	Group	Paired Differences					df	sig
		Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference			
					Lower	Upper		
Ment al Toug hness	CGPre MT CGPost MT	0.45	1.19	0.26	-0.10	1.00	1.690	0.107
	EGPre MT EGPost MT	1.45	1.23	0.27	2.02	0.87	5.253	0.000
Anxi ety	CGPre SCAT CGPost SCAT	0.40	1.46	0.32	1.08	0.28	1.221	0.237
	EGPre SCAT EGPostSCAT	1.15	1.34	0.30	0.51	1.78	3.814	0.001

Table-2 Paired Samples Test

**Significant at 0.05 level of confidence, Tabulated $t_{0.05(19)} = 2.093$*

From Table 2, it was revealed that the computed t value of CG in Mental Toughness, $t_{(19)} = 1.690$, which is less than the tabulated t-value, $t_{(19)} = 2.093$, and p-value=0.107, greater than 0.05. As a result, there was no difference

found between the Pre- and Post-test of the control group (CG) in Mental toughness. Additionally, it was revealed that the computed t value of EG in Mental Toughness, $t_{(19)} = 5.253$, which is higher than the tabulated t-value, $t_{(19)} = 2.093$, and p-value = 0.00, which is less than 0.05. Hence, there was a significant difference found between the Pre- and Post-test of the experiment group (EG) in Mental toughness. Further, it was presented that the computed/calculated t-value of CG in anxiety, $t_{(19)} = 1.221$ less than tabulated t-value, $t_{(19)} = 2.093$ and p-value = 0.237, which is greater than 0.05. So, there was no difference found between the Pre- and Post-test of the control group (CG) in Anxiety. Again, it was found that the calculated t-value of EG in Anxiety, $t_{(19)} = 3.814$, which is greater than the tabulated t-value, $t_{(19)} = 2.093$, and p-value = 0.001, which is less than 0.05. Thus, there was a significant difference found between the Pre- and Post-test of the experiment group (EG) in Anxiety.

Discussion

The reason for the conduct of this study was to look into the effect of yoga practice on the mental toughness and anxiety levels of male physical education students aged 18 to 23. The experimental group attended yogic practice five days a week for eight weeks. Eight weeks of yoga practice significantly improves mental toughness, as per the study's findings. Furthermore, the study's findings showed that male physical education students' anxiety levels had significantly decreased after eight weeks of yoga practice. However, there is an insignificant difference between the control group in mental toughness and anxiety.

Numerous research studies supported the results of the current investigation. Smith et al. (2007) concluded that practicing yoga once a week helps enhance mood, lower stress levels, and reduce anxiety. Premkumar et al. (2013) stated that a package of yoga practice could be an excellent short course to sustain and cultivate pleasant State of Anxiety. Another study reported that inter-collegiate athletes' levels of stress and Sports competition anxiety were significantly lower after six weeks of yoga training (Gopinathan, 2016).

Conclusion

The current study's findings led to the following conclusions: -

1. Due to yoga practice, a significant difference was seen between the experiment group's pre-test and post-test scores regarding the mental toughness and Sports competition anxiety of male physical education students.
2. Pre-test and Post-test results for the control group's mental toughness and Sports competition anxiety levels among male physical education students showed insignificant differences.
3. It was determined that 8 weeks of yoga practice, the experiment group had improved in comparison to the control group.

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