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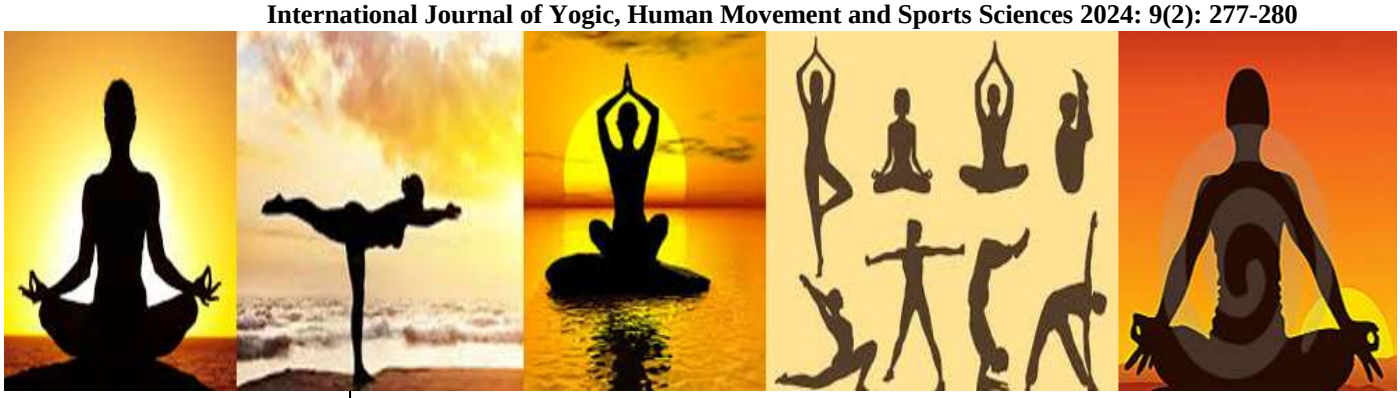

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A study of pranayama on aggression among college level male footballers

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Abstract
This study investigated the efficacy of pranayama in reducing aggression, building upon existing research that has demonstrated a positive correlation between yogic breathing techniques and decreased aggressive behaviour. The findings of this investigation revealed a significant reduction in aggression among participants who engaged in regular pranayama practice. The greatest help to spiritual life is pranayama. Pranayama (Sanskrit: **प्राणायाम**) is a fundamental aspect of yoga, focusing on breath control and regulation. It involves various techniques to manipulate the breath, calm the mind, and balance the body's energy. Individual may remove irritation through pranayama practice. Pranayama helps an individual overcome these emotions to facilitate a calm peaceful mind and healthy and stress free body. Pranayama promotes relaxation, calm and peaceful mind, positive attitude and sociability and reduces aggression.
Purpose: The purpose of the present study intended to find out the effects of pranayama on aggression among college male footballers.
Methodology: Sample: Total sixty college male footballers (N=60) of District Purba Medinipur, West Bengal State were selected at randomly as subjects for the present study. The age limit of the subjects was 19-23 years. All the subjects Studied on government aided colleges. They were divided into two equal groups such as Gr. ME (n=30) and MC (n=30). Gr. ME was experimental group and Gr. MC served as control group. Sports Aggression Inventory (SAI) developed by Shrivastava and Shukla (1988) was employed to all the subjects of Gr. ME and Gr. MC and thereafter specific meditation as a treatment was given to Gr. ME for four days in a week and 60 minutes per day-session and continued three months and finally the subjects were retested on criterion measures. The data were analysed by paired t-test to find out the effects of the treatment.
Results and Discussion: Aggression scores for Gr. ME and Gr. MC were analyzed by paired t-test and level of significance was set up at .05 level of confidence. The mean values of post-test of aggression were improved then mean values of pre-test among experimental groups.
Conclusion: Significantly reduced of aggression were observed by administering three months treatment of meditation among Experimental groups of College Male Footballers.

Keywords: Pranayama, aggression, yoga

Introduction
Aggression refers to any behaviour that is holistic, destructive or violent. Generally, aggressive behaviour has the potential to inflict injury or damage to the target person or object. Example of aggressive behaviour includes physical assault, throwing objects, property destruction, self-harming behaviours and verbal threats. Aggression can have mental aspects as well. The frustration Aggression theory (Dollard, Doob, Millar, Mowrer, & Sears, 1939) [3] states that aggression occurs because frustration arises due to a goal blokage. However, this theory states that every time a player becomes frustrated this will always cause aggression. This theory does not take other intrinsic or extrinsic factors. On the other hand the general aggression model (Anderson & Bushman, 2002) [1] argues that situational and personal factors play a role in causing a person to behave aggressively. Therefore, a player's personality will play a large role in determining whether they are aggressive or not in certain situations. This model also takes into account socially learnt cues and therefore then he will not use aggression.

It can be seen that aggression comes from a variety of sources and it is important to understand where these sources stem from. Therefore, sport stressors allow us to understand what causes an athlete to become frustrated which can lead to aggression and decline in performance. In player's career they will come across a number of high pressured situations where they will have to deal with many stressors. Fletcher and Hanton (2003) [5] conducted a study looking at organisational stress and they found that the couch athlete tension was a large contributing factor. In modern time, college football competition is one of the most popular competitions in India. It is well known that pranayama keeps cool in nature of the athletes and reduces stress, anxiety and aggression. But in the time of competition these psychological components may be increase and affected performance. Investigator tried to control on aggression through pranayama practice. The purpose of this study was to find out that the effects of pranayama on aggression among college level male footballers. Pranayama can reduce aggressive nature of performers in different sports and it may control over their aggressive nature during sports competition.

Methodology

Sample: Total sixty college male footballers (N=60) of District Purba Medinipur, West Bengal State were selected at randomly as subjects for the present study. The age limit of the subjects was 19-23 years. All the subjects Studied on government aided colleges. They were divided into two equal groups such as Gr. ME (n=30) and MC (n=30). Gr. ME was experimental group and Gr. MC served as control group.

Tools: Aggression was assessed by Sports Aggression Inventory (SAI) constructed and standardized by Prof. Anand Kumar Shrivastava and Prem Shankar Shukla (1988) [10]. Sports Aggression Inventory consists of 25 questions in which 13 items of keyed are 'Yes' that are 1, 4, 5, 6, 9, 12, 14, 16, 18, 21, 22, 24 & 25 and the statements which are keyed 'No' that are 2, 3, 7, 8, 10, 11, 13, 15, 17, 19, 20, 23. Score of 12-13 as average on aggression and those score higher than 12-13 will be considered as high on aggression and those score lower than 12-13 will be considered as low on aggression. For each item score was either '1' or '0'. The maximum score may be '25' and minimum score may be '0'.

Statistics: In the present study for the sake of analysis of data; mean and standard deviation of the raw scores of aggression were calculated separately from pre & post test for both groups and statistical paired t-test was used to compare the mean. The level of significance was set at $P>0.05$ level of confidence. For statistical calculations Excel Spread Sheet of windows version 7 was used.

The greatest help to spiritual life is pranayama. Pranayama, is a part of astanga yoga. It is a path of higher preparing state of mind. According to yogic scriptures, early seers (spiritual masters or yogis or prophets) of India devised and used yoga as a means to explore the external and internal realms; and to attain ultimate knowledge described in sacred Indian texts (Setty, A.G., Pailoor, S and Mahadevan, B., 2016) [7].

Individual may remove irritation through pranayama practice. Pranayama helps to individual to reach the spiritual goal. It is a gift given to mankind to access the infinite sprite not limited by any identity. It is the only tool that can aid a person to return to innocence. In modern life style has high exposure to anger, hate, fear and other negative emotion. Pranayama helps an individual overcome these emotions to facilitate a calm peaceful mind and healthy and stress free body. Pranayama promotes relaxation, develops self-concept, self-confidence and positive attitude and reduces stress as well as aggression.

Most of college students can manage varying amounts of pressure without feeling stressed and carrying anxiety. However too much or excessive pressure, often created by their own thinking patterns and life experiences, can overstretch their ability to cope and then stress is experienced and chronic stress may develop anxiety.

Deshpande, Nagendra and Raghuram (2009) [2] studied the practice of integrated yoga module consisted of asanas, pranayama, meditation, notional correction and devotional session on personality and self-esteem in normal adult, compared with the mild moderate physical exercise group.

Purpose

The purpose of the present study intended to find out the effects of pranayama on aggression among college male students.

Treatment consists of following meditation

Prayer is the best to begin all session of pranayam. It helps to concentrate our mind, so investigator used to start all the session of pranayama with prayer. Then the subjects of Gr. ME practised slow breathing exercise for three minutes. During the practiced of pranayama, practitioners consentrate their mind on breathing activities. After breathing exercise they practised following pranayamas:

- **Phase-1:** 1st to 15th days: Gr. ME practiced 'AAA' 'UUU' and 'MMM' chanting with proper yogic breathing, sectional breathing guided by expert and sited in sukhasana or padmasana as comfortable.
- **Phase-2:** 16th to 45th days: Gr. ME was practiced Surya Bhedan pranayama, Chandra Bhedan pranayama and Nadi Sodhana pranayama and sited in sukhasana or padmasana as comfortable.
- **Phase-3:** 46th to 75th days: Gr. ME was practiced Surya Bhedan pranayama, Chandra Bhedan pranayama, Nadi Sodhana pranayama, Sheetali and Shitkari pranayama and sited in sukhasana or padmasana as comfortable.
- **Phase-4:** 76th to 90th days: Gr. ME practiced all above pranayamas and focused with inner self and tried to achieved the knowledge regarding nadis. Keep their mind focused and energy internalized, continued for at least seven to eight minutes, finished with a prayer to the Divine, offering themselves into the light of God.

Investigators took help from yoga experts for preparing the design of programme.

Results and Discussions

Aggression scores for college male students were analyzed by paired t-test and level of significance was set up at .05 level of confidence.

Table 1: Group means increase Aggression among Gr. ME and Gr. MC after three months treatment

Variable	Type of test	Gr. ME (n=40)			Gr. MC (n=40)		
		Mean	S.D	t	Mean	S.D	T
Aggression	Pre-test	12.37	1.65	5.59	12.83	1.72	0.5
	Post-test	7.13	1.14		12.83	1.23	

Significant at .05 level of confidence

Table-1, represents the mean values of pre and post test for aggression of Gr. ME and Gr. MC. The mean values of pre-

test and post-test of Gr. ME were 12.37 and 7.13 respectively in aggression. On the other hand, mean values of pre-test and post-test of Gr. MC were 12.83 and 12.83 respectively in aggression. The t-value of aggression of Gr. ME was 5.59 and the t value of Gr. ME in relation to improvement of aggression was significant at .05 level of confidence after three months treatment. The t-value of aggression of Gr. MC was 0.5. To be significant at .05 level of confidence the t-value should be greater than 2.04. The t-value of Gr. MC in aggression was not improved significantly at .05 level of confidence after three months treatment.

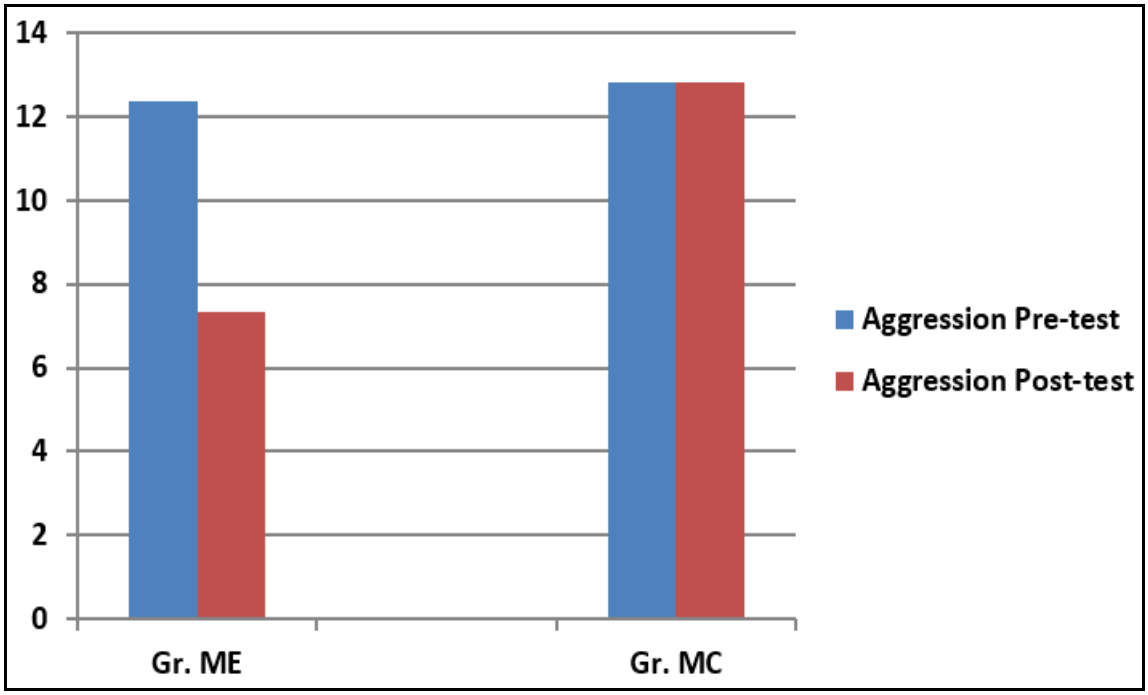

Fig 1: A comparison of means of pre and post test data on Aggression among Gr. ME and Gr. MC

In this study, Pranayama helped to reduce aggression significantly after three months treatment. Pranayama, a part of astanga yoga, play great role to reduced aggression which has been reported by Dwivedi, U., Kumari, S. and Nagendra, H. R. (2016) [4]. Pranayama have a greater impact on the mind and the senses than other exercises with the result that meditation help to develop one's physical and mental powers to make the mind clam and control the irritability and aggression. Yoga involves and includes eight paths (i.e. astanga yoga - yama, niyama, asana, pranayama, pratyahara, dharana, dhyana and Samadhi.). Prana flows in the body through Pranayama and it connects the body with the mind. Through pranayama practices, mind prepares to reach from consciousness to super-consciousness. It relieves the human beings from all the negative emotions and feelings such as aggression, depression, anxiety and stress.

Deshpande, S., Nagendra, H.R. and Raghuram, N. (2008) [2] demonstrated that an eight week intervention of an integrated yoga module decreased verbal aggression in the yoga group in males and those below 25 years of age. Stefan et al. (2010) [11] suggested that mindfulness-based therapy is a promising intervention for treating anxiety and mood problems in clinical populations. Sunita *et al*. (2022) [9] revealed that the pranayama group was decreased in anxiety, depression and anger after twelve week treatment session. Joshi, N. and Paul, B.B. (2022) [6] reviewed that the various studies emphasized that yoga is a complete holistic therapy for adolescents' mental health and emotional wellbeing.

Pranayama is the fourth stage of astanga yoga. The astanga yoga based on idealistic approach, a real road to attain god consciousness, self-consciousness. Pranayama helps an individual overcome these emotions to facilitate a calm peaceful mind and healthy and stress free body. Pranayama promotes relaxation, develops inner calmness, positive attitude and reduces stress as well as aggression.

Conclusion

Under the conditions of the present study the results seem to be concluding that the following

1. Significantly reduced of aggression was observed by administering three months treatment of meditation among Experimental groups of College Male Students.
2. Control group of College Male Students were not changed aggression significantly after three months period.

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