Comparative Study of Sports Imagery Ability between Throwers and Yoga Practitioners

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Abstract

Present study was conducted to compare the imagery abilities of players of different sports. For conducting this study, total fifty male state level players from different district of West Bengal, India of 20 to 25 years were selected as subject. Among them twenty five players were thrower and other twenty five players were Yoga practitioners. Selected variable was sports Imagery ability that includes six imagery abilities like: skill imagery ability, Strategy imagery ability, Goal imagery ability, Affect imagery ability, Mastery imagery ability and Global imagery ability. For collecting data a standard questionnaire (The Sport Imagery Ability Questionnaire Manual, S. Williams and J. Cumming, 2014) was used. Difference between two means was done to find out the significant differences on test items. The level of significance was set at 0.05 level of confidence. From this study it was found that state level Yoga practitioners were better in sports imagery ability. There were significant differences on skill imagery ability (**t=4.39***), strategy imagery ability (**t=4.61***), Goal imagery ability (**t=2.86***), and Global imagery ability (**t=3.35***) between thrower and Yoga practitioners. From this study it may be concluded that the state level Yoga practitioners may have better sports imagery ability than state level throwers.

Key Words: Skill imagery ability, Strategy imagery ability, Goal imagery ability, Global imagery ability, Thrower, Yoga practitioners.

Introduction

Mental imagery is a quality of creating images in mind of performing sports or a sporting context, such as in competition. Imagery is a connecting link between body and mind during

performance [1]. It triggers or installs a viscero-motor program that helps in action preparation. Moreover, mental rehearsal enables the subject to build up a better cognitive picture of the action. Numerous studies have revealed that imagery ability has a functional significance as a mediator of behavior [2]. It is a very effective system of communication between mental desires and physical performance [1]. Mental imagery is most widely researched cognitive techniques used in athletics [3]. It has been used successfully with a wide variety of sports. It is very effective method for some tasks like skill acquisition, anxiety management, self-confidence enhancement, and pain control. It may be effective when it is used alone or in combination with other cognitive strategies [4]. From systematic reviews of various research article it have been shown that mental imagery improves performance of motor tasks in competitive situations. It also facilitates motor acquisition and learning. But many times its advantages depend on the individual ability to create vivid motor images [**5**]. Mental imagery may also be used in athletic rehabilitation as a replacement for the physical practice lost during injury recuperation time [**6**]. C. Deschaumes-Molinaro (1991) et al. found that, shooting imagery induces a specific ANS pattern of responses [7]. Voluntary movement is mediated by the image which becomes the subject of this movement by inner representation. Accuracy could thus be enhanced with the accuracy of mental representation prior to the action. In most cases, individual differences, which are the result of the subjects' ability to imagine and make images vivid and accurate, are evidenced [7]. Imagery ability is the representation and the accompanying experience of any sensory information without a direct external stimulus. In sports, a successful and better performance is associated with strong imagery ability. Di Corrado D et al. (2019) found significant differences in imagery ability across sports [5]. Jansen and Lehmann (2013) conducted a study to compare three groups (soccer players, gymnasts, and non-athletes) in an object-based mental rotation task consisting of human postures and cube figures [8]. So, the purpose of the present study was to find out the sports imagery ability of the state level throwers and Yoga practitioners.

Materials and Methods

Total fifty male state level players from different district of West Bengal, India were selected as subject. Their age ranged from 20 to 25 years. Among them twenty five players were state level thrower and other twenty five players were Yoga practitioners. Selected variable was sports

Imagery ability that includes six imagery abilities like: skill imagery ability, Strategy imagery ability, Goal imagery ability, Affect imagery ability, Mastery imagery ability and Global imagery ability. For collecting data a standard questionnaire (The Sport Imagery Ability Questionnaire Manual, S. Williams and J. Cumming, 2014 [9]) was used. Difference between two means was done to find out the significant differences on test items. The level of significance was set at 0.05 level of confidence.

Results and Discussion

TABLE-1: Mean, standard deviation & ‘’t” values of the variables of sports imagery ability of selected groups:

Groups	SKILL IMAGERY		STRATEGY IMAGERY		GOAL IMAGERY		AFFECT IMAGERY		MASTERY IMAGERY		GLOBAL IMAGERY	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Throwers	3.97	±1.25	3.45	±0.85	4.36	±1.31	5.23	±0.98	3.54	±1.31	4.14	±0.85
Yoga Practitioners	5.30	±0.86	4.68	±1.02	5.30	±0.99	5.24	±1.00	4.01	±1.12	4.89	±0.73
“t” values	t=4.39*		t=4.61*		t=2.86*		t=0.01		t=1.35		t=3.35*	

*= Significant at 0.05 level of confidence (table value=2.01, df48) (9), ns= Not significant. [10]

Fig-1:Graphical representation of mean and SEM skill imagery ability of two selected groups

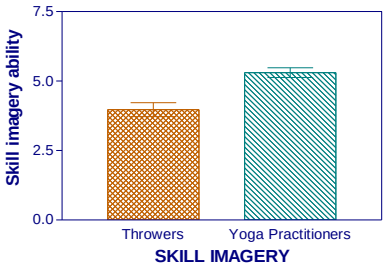

Fig-2: Graphical representation of mean and SEM of strategy imagery of selected two groups

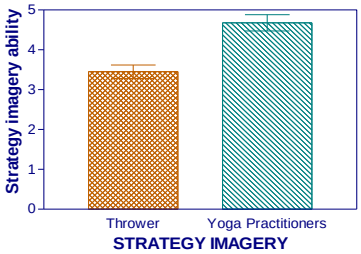

Fig-3: Graphical representation of mean and SEM of goal imagery ability of selected groups

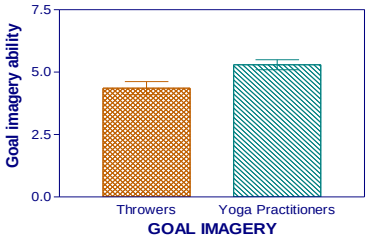

Fig-4: Graphical representation of mean and SEM of affect imagery ability of selected groups

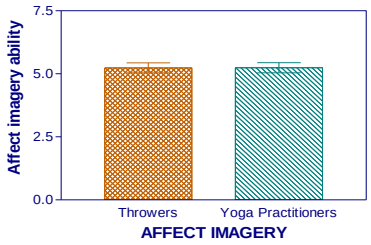

Fig-5: Graphical representation of mean & SEM of mastery imagery ability of selected groups

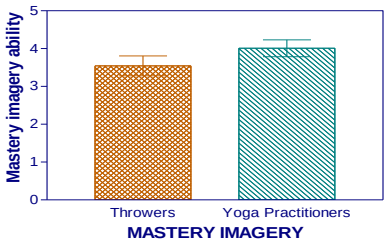

Fig-6: Graphical representation of mean and SEM of global imagery ability of selected groups

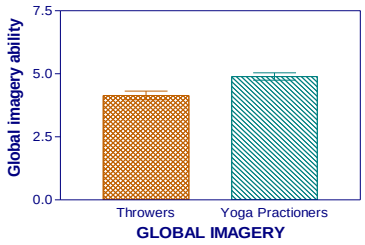

Table-1 showed that the mean and Standard Deviation of skill imagery ability were 3.97± 1.25 and 5.30±0.86 for throwers and Yoga Practitioners. For Strategy Imagery ability, the mean and Standard Deviation was 3.45±0.85 for throwers and 4.68±1.02 for Yoga practitioners. Mean and Standard Deviation of Goal Imagery ability of state level throwers was 4.36±1.31 and for Yoga Practitioners it was 5.30±0.99.This study also revealed the mean and Standard Deviation of Affect imagery ability of Throwers & Yoga practitioners these were 5.23±0.98 and 5.24±1.00 respectively. From this study it was found that the mean and Standard Deviation of Mastery Imagery ability were 3.54±1.31 for throwers and 4.01±1.12 for Yoga Practitioners. From this study it was observed that, the mean and Standard Deviation of Global Imagery ability of throwers and Yoga Practitioners were 4.14 ±0.85 and 4.89 ±0.73 respectively. From this table it was observed that yoga practitioners were better in every part of sports imagery ability. From this study it was found that there were significant differences between throwers and Yoga practitioners on Skill imagery ability ("**t"=4.39**), strategy imagery ability **("t"=4.61**), goal imagery ability (**t=2.86**) and global imagery ability (**t=3.35**).

L. Jones & G. Stuth (1997) found that there was a positive relationship between imagery ability and skill acquisition, anxiety management, self-confidence enhancement, and pain control. It may be effective when used alone or in combination with other cognitive strategies [4]. According to Fiona McCarthy, there are some conditions that influence the power of mental imagery ability like: When people in a quiet condition, non-distracting environment, when body is relaxed, when one sets aside feelings, thoughts and desires that are unrelated to what he/she wants to imagine, and when one can utilizes all the senses [1]. Yoga is a process of connecting body and mind. Different parts of yoga are practiced in a quite calm and non-disturbing environment continuously. Regular practice of different path of yoga helps the practitioners to become calm and quite in nature and non-distracting. Pranayama and meditation and also some

asanas provide physical and mental relaxation. This physical and mental relaxed condition is very helpful to images the skill in great detail. Regular practice of yoga improves concentration power also. Regular practice of all the parts of Yoga may help to utilize all the senses which are essential to rehearsal the skills in different situations like competition, practice etc. It May be the reason for which yoga practitioners were in better condition in case of imagery abilities.

Conclusion

With limitations, from this study it may be concluded that the state level Yogic practice significantly help to improve sports imagery ability than the practice of throwing.

Acknowledgement

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