Journal of Advances and Scholarly Researches in Allied Education

Vol. VI, Issue XII, October-2013, ISSN 2230-7540

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Journal of Advances and Scholarly Researches in Allied Education
Vol. VI, Issue XII, October-2013, ISSN 2230-7540

Gender Differences on Visual Imagery among Table Tennis and Cricket Players

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Abstract – The purpose of the present study was to analyse the visual imagery among men and women of table tennis, tennis and cricket players. To achieve the purpose of the study, a total of 90 subjects (men (n=45) and women (n=45)) were selected randomly as subjects. The present study consists of two categories of independent variables namely, gender (factor A) and different games (factor B). The first independent variable is related to men and women and the second independent variable consists of three games such as table tennis, tennis and cricket. The dependent variable selected for the study is mental imagery. The mental imagery was measured MIQ questionnaire which was developed by Rajamanickam in the year 1995. The two-way factorial (2 X 3) analysis of variance (ANOVA) was used to evaluate the influence of the two categories of variables on the dependent variable. The result of the study shows that there was no significant difference among the paired means of interaction factor A X B on visual imagery.

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INTRODUCTION

Many of the sports not only require physical skills, but a strong mental game as well. Most coaches preach the line that sports are 90% mental and only 10% physical. Especially in sports where hundredths of a second or tenths of an inch separate the champions from the mediocre athletes, an extra edge can be extremely crucial. Hence, numerous athletes are turning towards mental imagery to take their game to the next level. Different of imagery in sport include: mental practice of specific performance skills, improving confidence and positive thinking, problem solving, controlling arousal and anxiety, performance review and analysis, preparation for performance, and maintaining mental freshness during injury (Martin & Hall, 1995).

Mental images may be thought of as pictures in the mind. The incorporation of mental imagery eliciting strategies into professionally produced persuasive communications is ubiquitous, in part because the evocation of mental imagery (via pictures, vivid text or spoken word, or imagery instructions) is assumed to increase the effectiveness of persuasive communications by both researchers and laypersons (Murphy, 1990).

Whenever we imagine ourselves performing an action in the absence of physical practice, we are said to be using imagery. While most discussions of imagery focus on the visual mode, there exists other modes of experience such as auditory and kinesthetic those are just as important. However, for the purposes of this paper, only visual imagery will be discussed for it is the most relevant mode concerning athletic performance (Pavio, 1985).

METHODOLOGY

The purpose of the present study was to analyse the visual imagery among men and women of table tennis, tennis and cricket players. To achieve this purpose, a total of 90 subjects (men (n=45) and women (n=45)) were selected randomly as subjects. The present study consists of two categories of independent variables namely, gender and different games. The first independent variable is related to men and women and the second independent variable consists of three games such as table tennis, tennis and cricket. The dependent variable selected for the study is visual imagery. The visual imagery were measured Mental Imagery Questionnaire (MIQ) and it was developed by M. Rajamanickam in the year, 1995.

The two-way factorial (2 x 3) analysis of variance (ANOVA) was used to evaluate the influence of the two categories of variables on the dependent variables. If the obtained 'F' ratio for interaction was significant, then the simple effect test was used to find out which of the mean performance scores for gender and levels were significant. Further, individual comparisons were made for interpretations using the Scheffe's test. In all conditions, the significant level was fixed at .05 level, which was considered to be appropriate.

ANALYSIS AND INTERPRETATIONS OF DATA

The collected data were analysed and the obtained results are presented in Table.

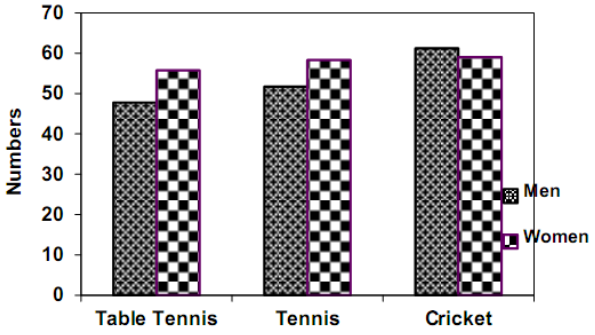
Table I

The mean and standard deviation on visual imagery of men and women in three different games

Groups		Table Tennis	Tennis	Cricket
Men	Mean	47.80	51.73	61.20
	SD	8.41	8.97	7.11
Women	Mean	55.73	58.33	59.07
	SD	5.20	8.20	13.47

(Visual Imagery scores are expressed in numbers)

The mean values of men and women in different levels on visual imagery are graphically represented in the figure I.



Mean scores of men and women of different games on visual imagery

Table II

Two-factor ANOVA on visual imagery of men and women in different games

Source of Variance	Sum of Squares	df	Mean Squares	Obtained F-ratio
A factor (Gender)	384.40	1	384.40	4.83*
B factor (Games)	1066.82	2	533.41	6.70*
AB factor (Interaction) (Gender and Games)	448.47	2	224.23	2.82
Error I	6688.93	84	79.630	

*Significant at .05 level (Table values required for significance at .05 level with df 1 and 84 & 2 and 84 are 3.95 and 3.11 respectively.)

RESULTS AND DISCUSSION

The result of the study shows that, there was no significant difference between gender (factor A) irrespective of the players of three different games and there was no significant difference in the interaction effect (A X B) and significant difference was found among the players of different games (factor B) irrespective of the gender on mental imagery. Also men cricket players show better performance when compared to other players on visual imagery. Because, cricket is a game where the players (while batting, fielding and also fielding) getting more time to practice themselves the visual imagery when compared to other two games.

The benefits of mental imagery have proved successful at any level. Not only can mental imagery improve specific motor skills but it also seems to enhance motivation, mental toughness and confidence, all which will help elevate your level of play. Virtually all of the studies show that mental training on visual imagery improves the performance in sports. More recently a lot of studies go even further and prove that visual imagery can improve various skills related to sports in actual field contexts. Visual imagery seems to be beneficial to anyone who wants to improve at their sport.

Feltz and Landers (1983) examined that, the cognitive rehearsal conditions showed a better performance. Anne Isaac (1992) concluded that, there existed a significant difference in the improvement of the high and low imagers. In both novice and experimental groups where the initial skill ability was similar, the high imagery groups showed significantly more improvement than the low imagery group. Roure (1998) suggested that metal imagery may help in the construction of schema which can be reproduced, without thinking, in actual practice.

The reason visual imagery works lies in the fact that when you imagine yourself perform to perfection and doing precisely what you want, you are in turn physiologically creating neural patterns in your brain, just as if you had physical performed the action. These patterns are similar to small tracks engraved in the brain cells which can ultimately enable an athlete to perform physical feats by simply mentally practicing the move. Hence, mental imagery is intended to train our minds and create the neural patterns in our brain to teach our muscles to do exactly what we want them to do (Porter, 1990).

After reading through numerous studies and from the result of this study visual imagery seems somewhat promising and beneficial. Hence I concluded that incorporated mental imagery along with physical practice is needed to improve the performance. So as a coach or a physical education teacher when you train up your players' mental training should also one of your training schedules to enhance the performance.

CONCLUSIONS

1. There was a significant difference between genders (factor A) irrespective of the players of different games on visual imagery.

2. Significant difference was also found among the players of three different games (factor B) such

as table tennis, tennis and cricket irrespective of the gender on visual imagery.

3. There was no significant difference in the interaction effect (A X B) on visual imagery.

4. Significant difference was found among the players of three different games such as table tennis, tennis and cricket irrespective of the gender on visual imagery.

5. Cricket players showed better performance in visual imagery when compared to other players.

REFERENCES

Feltz, D. L., & Landers, D. M. (1983). The Effects of Mental Practice on Motor Skill Learning and Performance: A Meta-analysis. *Journal of Sport Psychology,* 5, 25-57.

Isaac, A. R. (1992). Mental Practice- Does it Work in the Field? The Sport Psychologist, 6, 192-198.

Martin, K.A., Hall, C. R. (1995). Using Mental Imagery to Enhance Intrinsic Motivation. *Journal of Sport and Exercise Psychology,* 17(1), 54-69.

Murphy, S. (1990). Models of Imagery in Sport Psychology: A Review. *Journal of Mental Imagery,* 14 (3&4), 153-172.

Pavio, A. (1985). Cognitive and Motivational Functions of Imagery in Human Performance. *Journal of Applied Sports Science*, 10, 22-28.

Porter, K., Foster, J. Visual Athletics. Dubuque, Iowa: Wm. C. Publishers, 1990.

Roure, R., et al. (1998). Autonomic Nervous System Responses Correlate with Mental Rehearsal in Volleyball Training. *Journal of Applied Physiology*, 78(2), 99-108.