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Relationship between psychological skills and badminton skills performance

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Abstract

The purpose of the study was to observe the relation between psychological skills and badminton skills performance. By applying random sampling initially males and females who were pursuing Bachelor of Physical Education and Sports Sciences for the year 2011-12, aged ranged from 18-21 were selected as subjects. The subjects were divided into two treatment groups using systematic random method and one control group. Group A was allotted repeated measure treatment group (RMTG) consisted of 36 subjects, Group B was allotted Latin square treatment group (LSTG) consisted of 37 subjects and Group C control group consisted of 26 subjects. The study was confined to the psychological skills i.e relaxation, anxiety (Somatic Anxiety, Cognitive Anxiety), mental imagery, self-confidence. The study was further confined to the selected badminton skills i.e long service, short service and clear shot. Before and after administration of mental training programme data was collected by using Competitive State Anxiety Inventory-2 (CSAI-2, Sports Imagery Questionnaire (SIQ), French Short Serve test, Scott and Fox Long Serve Test, French Clear Test. Mental and badminton training lasted for 8 weeks. The statistical techniques employed were descriptive statistics and Pearson product moment correlation. The result revealed that a significant relationship is obtained following mental training programme between psychological skills and learning of badminton skills.

Keywords: Mental training, psychological skills, badminton skills.

1. Introduction

Sports psychology is a scientific study of the people and their behaviors in sports and exercise contexts and the practical application of that knowledge (Gill, 2000) [2]. The development of sports and exercise psychology dates back to about the turn of the 20th century. The history of sports psychology continued with Coleman Griffith's work in the 1920s and 1930s on the psychology of coaching (Gardner & Moore, 2005) [3]. Furthermore, during the 1950s and 1960s, sports psychology as a discipline was primarily found in departments of physical education and exercise science, and issues relating to motor learning and development dominated sport psychology research.

Sport Psychologists are interested in including, but are not limited to, what motivates an athlete, how athletes regulate their thoughts, feelings and emotions, and how they manage anxiety and arousal states in order to maximize performance (Parker, 2000) [4]. The principals involved in Sport Psychology are usually applied to enhance performance. The field embraces many concerns and concepts, such as motivation, arousal, reinforcement, psychological preparation, attitudes, attention, emotional health, and stress management (Davies, 1989) [1].

Although literature on mental training programmes has been published only since mid-1980's sufficient evidence exists to support the conclusion that they are very effective and impact positively on performance in a large variety of sports (Wann, 1997) [5], but very less literature is available on positive effect of mental training programme on learning of badminton skills hence study has been undertaken.

1.1. Objective and Hypothesis

The objective of the study was to find out the relationship between psychological skills and badminton skills performance. After gone through the literature it has been hypothesized that psychological skills would significantly correlate with an improvement in badminton skills performance.

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2. Materials and Method

By using the inclusive exclusive selection criteria subjects were chosen from IGIPSS, University of Delhi who were pursuing Bachelor of Physical Education and Sports Sciences for the year 2011-12 The chronological age of the subjects was confined to 18 to 22 years further. Both male and female subjects had participated in this study. The study was confined to the psychological skills i.e relaxation, anxiety (Somatic Anxiety, Cognitive Anxiety), mental imagery, self-confidence. The study was further confined to the selected badminton skills i.e long service, short service and clear shot. The subjects were divided into two treatment groups using systematic random method and one control group. Group A was allotted repeated measure treatment group (RMTG) consisted of 36 subjects, Group B was allotted Latin square treatment group (LSTG) consisted of 37 subjects and Group C control group consisted of 26 subjects. Pre-test post-test random group design was used for the present study. There were three groups namely RMTG, LSTG and control group. RMTG and LSTG groups underwent 8 weeks of mental

training programme along with badminton skill practice where as control indulged in badminton skill practice only.

2.1. Criterion Measures for Data Collection

To measure the somatic anxiety, cognitive anxiety, mental imagery, self-confidence following measures were used:-

S.No	Psychological Skills	Criterion Measures
1.	Somatic Anxiety Cognitive Anxiety	Competitive State Anxiety Inventory-2(CSAI-2)
2.	Self Confidence	Competitive State Anxiety Inventory-2 (CSAI-2)
3.	Mental Imagery	Sports Imagery Questionnaire(SIQ)

2.2. Description of Criterion Measures related to Badminton Skills

To measure the performance of short service, long service and clear shot following measures were used:-

S.No	Badminton Skills	Criterion Measures
1.	Short Service	French Short Serve test
2.	Long Service	Scott and Fox Long Serve Test
3.	Clear Shot	French Clear Test

2.3. Collection of the Data

The data was collected from all the samples of the study m(i.e. from experimental groups as well as control group) by administering the Badminton Skills Tests before treatment (mental training programme). Thereafter the mental training programme was administered on the experimental groups for 8 weeks and after completion of mental training programme again badminton skills were administered for the post training

data collection.

For the collection of data on psychological skills i.e. anxiety (somatic, cognitive) and self-confidence competitive state anxiety inventory (CSAI-2) was used before the mental training programme administration and after 8 weeks again questionnaire was administered for the post data collection by all the three groups. The obtained data was analyzed by computing pearson product moment co-relation.

3. Result

Table no 1: Relationship of Badminton Skills with Cognitive Anxiety, Somatic Anxiety and Self Confidence

Psychological Skills	Short Service pre	Short Service post	Long Service pre	Long Service post	Clear Shot pre	Clear Shot post
Cognitive Anxiety pre	-.074	-.063	.066	-.024	-.016	.019
Cognitive Anxiety post	-.080	-.518**	.011	-.489**	.025	-.539**
Somatic Anxiety pre	-.159	.139	-.144	.045	.004	.065
Somatic Anxiety post	-.033	-.509**	-.025	-.531**	-.037	-.545**
Self Confidence pre	.031	.143	.029	.100	.089	.199
Self Confidence post	.117	.569**	-.090	.496**	-.044	.561**

*P<.001

Table no 1 indicates that pre cognitive anxiety scores is not significantly related with the pre badminton skills i.e. short service, long service and clear shot. Whereas post cognitive anxiety scores is significantly related with the post badminton skills i.e. short service, long service and clear shot as calculated values -.518, -.489, -.539 found significant, P<.001.

Table further reveals that pre somatic anxiety scores is not significantly related with the pre badminton skills i.e. short service, long service and clear shot. Whereas somatic cognitive anxiety scores is significantly related with the post badminton skills i.e. short service, long service and clear shot as calculated values -.509, -.531, -.545 found significant, P<.001.

Table indicates that pre self-confidence scores is not significantly related with the pre badminton skills i.e. short service, long service and clear shot. Whereas post self-confidence scores is significantly related with the post badminton skills i.e. short service, long service and clear shot

as calculated values .569, .496, .561 found significant at P<.001.

Overall it is observed that significant relationship is obtained following training programme between psychological skills training and learning of badminton skills.

4. Discussion

Analysis of pearson product moment correlation reveals that pre cognitive anxiety scores, pre somatic anxiety scores, pre self-confidence scores is not significantly related with the pre badminton skills performance i.e. short service, long service and clear shot. Whereas post cognitive anxiety scores, post somatic anxiety scores and post self-confidence scores is significantly related with the post badminton skills performance i.e. short service, long service and clear shot

5. Conclusion

Significant relationship is obtained following mental training programme between psychological skills and learning of

badminton skills.

Hence it was concluded that mental train in programme is the effective and beneficial intervention for the learning of sports skills and also useful in the enhancement of the sports performance.

6. References

1. Davies D. Psychological Factors in Competitive Sport. London: The Falmer Press, 1989.
2. Gill D. Psychological dynamics of Sport and Exercise (2nd ed). Champaign, IL Kinetics Publishers, Inc, 2000.
3. Moore A, Gardner FL. The Psychology of Concentration in Sports Performance: A cognitive approach. East Sussex England: Psychology press, 2005.
4. Parker R. Health Moves 2 nd Ed. Heinemann, Australia: Human Kinetics, 2000.
5. Wann DL. Sport Psychology. NJ: Prentice Hal, 1997.