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Psychological skill training effect on selected mental skills among inter-collegiate gymnasts

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Abstract
The purpose of the study was to assess the effect of psychological skill training effect on selected mental skills among inter-collegiate gymnasts. The subjects from different sports academies of NCR (National Capital Region), who had represented their respective colleges in inter-collegiate competitions, were selected. The age of subjects ranged between 17-25 years. For assessing the psychological skills of inter-collegiate gymnast players (N=24) were divided into two groups, one of the group getting psychological skills training was labeled as experimental group (n=12) and other group was not getting treatment was labeled as control group (n=12). For each group both pre and post data was collected. The **"**Ottawa Mental Skill Assessment Tool-3" questionnaire developed by Natalie Durand-Bush (1995) was used. The study resulted that there was significant difference in goal setting, stress control, self-confidence, relaxation and mental imagery between pre and post data in control group while there was a significant difference in goal setting, stress control, self-confidence, relaxation and mental imagery between pre and post data in experimental group. The study concluded that psychological skill training has a positive effect of goal setting, stress control, self-confidence, relaxation and mental imagery.

Keywords: Goal setting, stress control, self-confidence, relaxation, mental imagery and PST

Introduction
In this modern era of competition, the psychological preparation of a team is as much important as teaching the different skills of a game on the scientific lines. The teams are prepared not only to play the game but to win. It is not only the proficiency in the skills, which bring victory, but more important is the spirit of the players with which they play and perform at their optimum level in the competition. The starting point for psychological preparation is based on the psychological demands of the particular sport, personality structure and competitive experience of the sportspersons.

A systematic Psychological Skill Training (PST) is planned to develop various psychological skills for selected sportspersons of different sports. Regular monitoring and constant assessment will be done on the basis of self-evaluation by the sportsperson and observation by the coach and sport psychologist during training as well as in competition.

Goal setting is important for sportspersons for development of both physical and psychological skills. Setting goals improves motivation and commitment of sportsperson toward training and performance. Goal is defined as an objective, a standard, and an aim of some level of performance or proficiency. An unbiased goal is the wish to attain a specific average of performance on the assignment, typically with in a specific period. Three forms of goals are set namely outcome goals, performance goals and process goals.

Self-confidence is a belief of a sportsperson that he can magnificently achieve a preferred act or comportment. Further, a confident sportsperson believes in his abilities to be able to handle any difficult situation to a satisfactory conclusion under any circumstances.

Imagery is a powerful skill to be used for mental preparation. Imagery can be described as the process of mentally forming or re-forming an understanding in the mind by using images and a variety of senses. The progression involves eliciting from memory parts of information put in storage from experiences too making meaningful images.

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Objective
To assessed the psychological skill training effect on selected mental skills among inter-collegiate gymnasts

Hypothesis
It was hypothesized that there is significant difference between goal setting, self-confidence, Stress control and Relaxation.

Methodology
The subjects were selected from different sports academies of NCR (National Capital Region) were those who had represented their respective colleges in inter-collegiate competitions and their ages ranged between 17-25 years. For assessing the psychological skills of inter-collegiate gymnast players (N=24) were divided into two groups, one of the group getting psychological skills training was labeled as experimental group (n=12) and other group was not getting treatment was labeled as control group (n=12). For each group both pre and post data was collected. Researcher use "Ottawa Mental Skill Assessment Tool-3" questionnaire by Natalie Durand-Bush (1995) was used. The "Ottawa Mental Skill Assessment Tool-3'' has total 48 questions of seven Likert scale such as strongly disagree, disagree, somewhat disagree, neither disagree nor agree, somewhat agree, agree, strongly agree. Before collection of data the research scholar had a meeting with the subjects in the presence of their coaches in order to explain to them the purpose of the study and help required from them for filling up the questionnaire.

For investigating the composed raw numerical data examination was completed by using IBM SPSS and the result consecutively tabularized in order. For describing the training effect in case of all selected groups, descriptive statistics such as mean and standard deviation was employed and as the study was experimental where PST training was given on experimental groups so to see the real effect of PST training on each group as well as the combined effect of that training, the dependent-'t' test was applied at 0.05 level of significance. As there was no significant difference in the control group hence only experimental group results are displayed.

Result and Analysis
There was significant difference in goal setting, stress control, self-confidence, relaxation and mental practice between pre and post data in control group. The result and analysis are displayed in table 1.

Table 1: Descriptive & dependent- 't' test (Experimental group)

Variables	Data	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Goal Setting	Pre	12	16.08	2.31	0.668	13.868	11	.001
	Post	12	22.58	1.67	0.483			
Stress Control	Pre	12	15.16	2.69	0.776	16.303	11	.001
	Post	12	22.25	2.05	0.591			
Self-Confidence	Pre	12	15.75	2.13	0.616	28.760	11	.001
	Post	12	22.33	1.87	0.541			
Relaxation	Pre	12	16.00	2.21	0.639	24.051	11	.001
	Post	12	22.91	1.56	0.451			
Mental Imagery	Pre	12	16.33	2.42	0.699	29.665	11	.001
	Post	12	23.00	2.04	0.590			

The results indicate that there was significant difference in goal setting between pre and post data of experiment group, t (28) = 13.868, P = 0.001, which is less than 0.05. That is the average score of pre-data (M=16.08, SD=2.31) was statistically different from that of post data (M=22.58, SD=1.67). Thus, it could be concluded that there was a significant difference in goal setting between pre and post data of experiment group.
The results indicate that there was significant difference in stress control between pre and post data of experiment group, t (28) = 16.303, P = 0.001, which is less than 0.05. That is the average score of pre-data (M=15.16, SD=2.69) was statistically different from that of post data (M=22.25, SD=2.05). Thus, it could be concluded that there was a significant difference in stress control between pre and post data of experiment group.
The results indicate that there was significant difference in self-confidence between pre and post data of experiment group, t (28) = 28.760, P = 0.001, which is less than 0.05. That is the average score of pre-data (M=15.75, SD=2.13) was statistically different from that of post data (M=22.33, SD=1.87). Thus, it could be concluded that there was a significant difference in self-confidence between pre and post data of experiment group.
The results indicate that there was significant difference in relaxation between pre and post data of experiment group, t (28) = 24.051, P = 0.001, which is less than 0.05. That is the average score of pre-data (M=16.00, SD=2.21) was statistically different from that of post data (M=22.91, SD=1.56). Thus, it could be concluded that there was a significant difference in relaxation between pre and post data of experiment group.
The results indicate that there was significant difference in mental imagery between pre and post data of experiment group, t (28) = 29.665, P = 0.001, which is less than 0.05. That is the average score of pre-data (M=16.33, SD=2.42) was statistically different from that of post data (M=23.00, SD=2.04). Thus, it could be concluded that there was a significant difference in mental imagery between pre and post data of experiment group.
The graphical representation of mean scores of goal setting, stress control, self-confidence, relaxation and mental imagery between pre and post data among experimental group are displayed in fig. I.
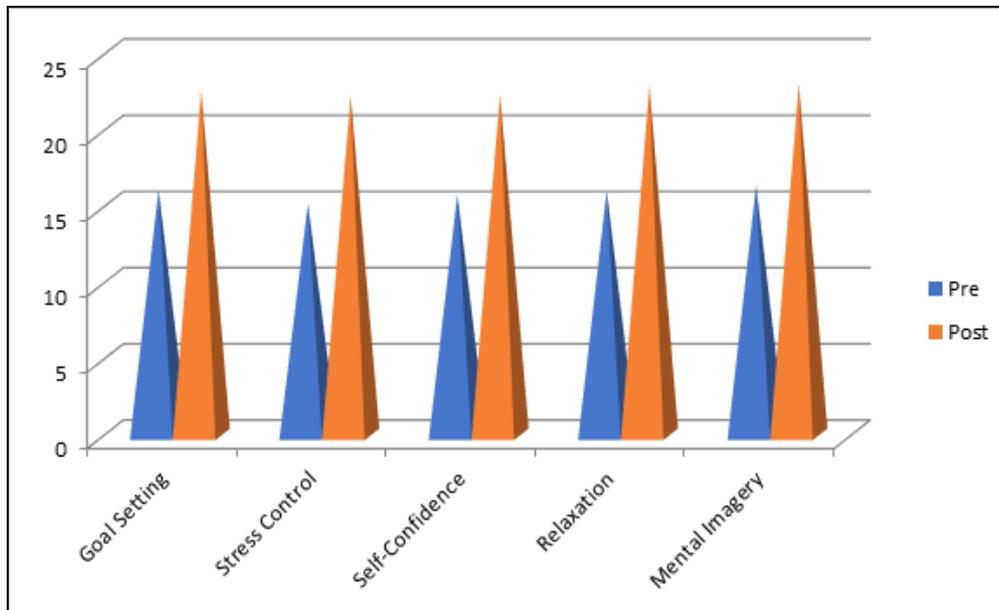
Discussion
There was significant difference in goal setting, stress control, self-confidence, relaxation and mental imagery between pre and post data in control group while there was a significant difference in goal setting, stress control, self-confidence, relaxation and mental imagery between pre and post data in experimental group. The results of Calmels *et al.*, (2003) [1] directed that the tactics developed over and done with natural experiences in excess of time via the international gymnasts existed wider and further elaborate then those of their national colleagues, but analogous to those used through the national gymnasts who ensured benefits from a PST. The precise magnitudes of the characteristics of the international perspective besides psychological skills training going on the tactics gymnasts expanded were likewise highlighted. The results of Mamassis & Doganis (2004) [2] study directed an escalation in the direction measurement of the Somatic Anxiety, Cognitive Anxiety Also Self-Confidence for the intercession group at the post-test. Furthermore, the intensity of Self-Confidence, in addition to the over-all tennis performance, was greater instead of all the contestants of the intercession group after the Mental Training Practice. Results on double selected cases are stated which clearly determine the effectiveness of the Mental Training Practice in eradicating specific performance difficulties.

Conclusion
The following conclusions are drawn from the current study:
1. There was significant difference in goal setting, stress control, self-confidence, relaxation and mental imagery between pre and post data in control group.
2. There was significant difference in goal setting between pre and post data in experimental group. Thus, it can be concluded that psychological skill training has a positive effect of goal setting.
3. There was significant difference in stress control between pre and post data in experimental group. Thus, it can be concluded that psychological skill training has a positive effect of stress control.
4. There was significant difference in self-confidence between pre and post data in experimental group. Thus, it can be concluded that psychological skill training has a positive effect of self-confidence.
5. There was significant difference in relaxation between

pre and post data in experimental group. Thus, it can be concluded that psychological skill training has a positive effect of relaxation.
6. There was significant difference in mental imagery between pre and post data in experimental group. Thus, it can be concluded that psychological skill training has a positive effect of mental imagery.

References
1. Calmels C, d'Arripe-Longueville F, Fournier JF, Soulard A. Competitive strategies among elite female gymnasts: An exploration of the relative influence of psychological skills training and natural learning experiences. International Journal of Sport and Exercise Psychology. 2003; 1(4):327-352.
2. Mamassis G, Doganis G. The effects of a mental training program on juniors pre-competitive anxiety, self-confidence, and tennis performance. Journal of Applied Sport Psychology. 2004; 16(2):118-137.
3. Brobst B, Ward P. Effects of public posting, goal setting, and oral feedback on the skills of female soccer players. Journal of Applied Behavior Analysis. 2002; 35(3):247-257.
4. Callow N, Hardy L. Types of imagery associated with sport confidence in netball players of varying skill levels. Journal of Applied Sport Psychology. 2001; 13(1):1-17.
5. Fournier JF, Calmels C, Durand-Bush N, Salmela JH. Effects of a season-long PST program on gymnastic performance and on psychological skill development. International Journal of Sport and Exercise Psychology. 2005; 3(1):59-78.
6. Holmes PS, Collins DJ. The PETTLEP approach to motor imagery: A functional equivalence model for sport psychologists. Journal of Applied Sport Psychology. 2001; 13(1):60-83.
7. Morin L, Latham G. The Effect of Mental Practice and Goal Setting as a Transfer of Training Intervention on Supervisors' Self-efficacy and Communication Skills: An Exploratory Study. Applied Psychology. 2000; 49(3):566-578.