

# Impact of Motivation on the Table Tennis Performance of Male Physical Education Students

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**Abstract – This study was conducted to find out the impact of motivation on the table tennis performance of male physical education students learning table tennis in the activity classes at L.N.I.P.E., Gwalior. Motivational techniques used were extrinsic reward, social reinforcement by the coach, goal setting and competition. Fifty (50) male students of L.N.I.P.E attending regular activity classes of table tennis, belonging to the 18 to 23 years age, were selected as subjects for this study.**

**The subjects were distributed into two equal groups in experimental and control groups and performance was taken in initial testing. Along with regular table tennis training, the experimental group was also given motivation where as the control group only received table tennis training. Table Tennis Skill Test developed by Pushpendra Purashwani was chosen as criterion measures to assess the table tennis performance. For the purpose of comparing the performance means of motivational group with non motivational group in this study t-ratio was made as an overall test of significance. The t-test was employed for testing the significance at .05 level of confidence.**

**Analysis of data revealed that there was significant difference at .05 levels between the pre and post –test scores of experimental group (8.14) and control group (4.79). Further it also showed that the post test score of experimental group and control group differ significantly.**

**Key words: Motivation, Performance, Skill Test, T-Test.**

## INTRODUCTION

Motivation is the word derived from the word 'motive' which means needs, desires, wants or drives within the individuals. It is the process of stimulating people to actions to accomplish the goals.

Motivation is a psychological phenomenon which means needs and wants of the individuals have to be tackled by framing an incentive plan.

Motivation is related to the intensity and direction of behaviour. That is, the level of arousal and the way in which we behave affect our motivation and enhance performance.

Motivation is the foundation all athletic effort and accomplishment. Without your desire and determination to improve your sports performances, all of the other mental factors, confidence, intensity, focus, and emotions, are meaningless. To become the best athlete you can be, you must be motivated to do what it takes to maximize your ability and achieve your goals.

In the field of physical education and sports, no athlete can win or even show better performance without motivation. Hence, researcher felt necessary to attempt to investigate the impact of motivation on the table tennis performance of male physical education students.

## MATERIALS & METHODS:

For the purpose of the study fifty male physical education students belonging to the age level of 18 to 23 years underwent one semester (approximately 5 months) training classes in Lakshmbai National Institute of Physical Education, Gwalior served as subject for this study. Performance in both initial and final test was taken in term of Table Tennis Skill Test. Table Tennis Skill Test developed by Pushpendra Purashwani was chosen as criterion measures to assess the table tennis performance of male physical education students of L.N.I.P.E., Gwalior.

The study was delimited to the following motivational methods-

1. Extrinsic rewards
2. Social reinforcement by the coaches
3. Competition
4. Goal setting.

The data was collected by administering the tests. The test was administered in the Table Tennis Hall of the Institute. The necessary data was collected by the investigator by administering a pre-test on the performance of Table Tennis Skill Test developed by Dr. Pushpendra Purashwani at the beginning of the study and final data was collected at the end of the four week training program in the same manner as the initial testing. The training for motivational methods was designed keeping in view the criterion of extrinsic reward, social reinforcement, competition and short term goal setting, along with the help from supervisor.

**Statistical Procedure**

For the purpose to measure the impact of motivation on the table tennis performance of male physical education students, performance means of motivational group with non motivational group were compared. To compare the mean t-ratio was made as an overall test of significance. The t-test was employed for testing the significance at .05 level.

**RESULTS:**

To determine the impact of motivation, the pre-test and post-test scores for each experimental and control group were compared with each other by using t-ratio. The significance of difference between the pre-test and post-test means has been presented in table 1. (8.14) and control group (4.79)

**TABLE- 1**

**SIGNIFICANCE OF DIFFERENCE BETWEEN THE MEANS OF EXPERIMENTAL GROUP AND CONTROL GROUP**

Groups	Mean of pre-test	Mean of post-test	Mean Diff.	Standard Error	't' value
Experimental Group	54.91	59.93	5.02	0.60	8.14*
Control Group	54.87	57.62	2.75	0.54	4.79*

\*Significant at 0.05 level

$t(0.05) (48) = 2.021$

An analysis of table 1 showed that, the experimental group exhibited significant improvement on the table

tennis performance of physical education students. Control group also improved performance on the same task significantly but it was less comparatively at 0.05 level of confidence.

The significance of difference between the post-test of experimental and control group means has been presented in table 2

**TABLE- 2**

**SIGNIFICANCE OF DIFFERENCE BETWEEN POST TEST MEANS OF EXPERIMENTAL GROUP AND CONTROL GROUP**

Groups	Mean	Mean diff.	Standard Error	't' value
Experimental Group	59.93			
Control Group	57.62	2.31	1.11	3.32*

\*Significant at 0.05 level

$t(0.05) (48) = 2.021$

An analysis of table 2 showed that the post-test performance of the experimental group improved significantly than the control group at 0.05 level. Therefore, it may be determined that the subjects training with motivational methods (extrinsic rewards, social reinforcement by the coach, competition and goal setting) showed significantly better performance as compared to the control group.

**DISCUSSION:**

The analysis of data using t-ratio showed that there was significant difference in performance between initial and final test scores. Both the groups i.e. experimental and the control group improved their performance in Table Tennis Skill Test. In the first place it is apparent that the final performance of the experimental group was found to have improved significantly which may be attributed to the fact that the application of the motivation (extrinsic reward, social reinforcement by the coach, goal setting and competition) in addition to the training, might have improved their performance.

Secondly, the performance of the control group showed improvement in the final testing than that of their initial test. This may be due to the reason that a very systematic training programme was followed while training them, moreover the control group subject's performance also improved significantly. Finally, the performance of experimental group was comparatively better in the final testing than the control group. This difference in the final test scores

may be due to the fact that, the various motivation methods with which the experimental group was trained in addition to the general training have caused so, as all the motivational methods substantially contributed to the enhancement in the performance. The result of the present study pertaining to the improvement in the table tennis performance of physical education students was due to the application of the motivation.

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