

EFFECT OF EXTRINSIC MOTIVATION ON PERFORMANCE OF PHYSICAL FITNESS COMPONENTS OF KASHMIR REGION STUDENTS

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ABSTRACT

The purpose of the study was to determine the effect of extrinsic motivation on performance of physical fitness components of Kashmir region students. Sixty male students of adolescent age group with age ranging between 13 to 19 years and studying in boys secondary school, Peth Makhama, were randomly selected as subjects. All subjects were randomly assigned to two experimental group (A. & B.) and one control group (C), each were consisting of 20 subjects. The experimental treatment was also assigned to the group at random. The group A and B were treated as experimental group and were given motivation i.e. Reward and punishment respectively. The group C served as a control group and was not given any motivation. "AAPHER" youth physical fitness test consisted of six test items i.e. 600 Meter Run/walk, Sit-ups, Pull-ups, 50 m dash, 4x10 M. shuttle run, and Standing broad jump was chosen for the purpose of data collection. Reward can be in varied ways such as recognition, prizes, certificates, honors etc. Punishment on the other hand is an unpleasant stimulus: a stimulus that hurts threatens, annoys bothers etc. It is a negative motive and is based on fear of failure, fear of losing prestige, fear of insult etc., Mean SD, t-test F-test was applied to get the final results for the present investigation. Significant difference was found between initial test mean and final test mean of reward group, whereas the results of initial test and final test of punishment group and control group did not differ significantly. There was no significant difference between the performance of reward group - punishment group and between the punishment and control groups.

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INTRODUCTION

Motivation is a reality but the most difficult problem at hand is how to deal with it, how to instill it, how it is necessary to do so in the interest of life itself.

Motivation is a tool in the hands of the Physical Education teachers and the coaches to bring about effective and desirable changes in the behaviour of the learner at any stage. How should the Horse/be made to drink, how should the adult made to drink from the cup of life, how should a child be made to enter the school and how should the athlete be made to put in his best in a competitive situation are some of the problems which parents, Teachers and coaches have to encounter. Motivation then is challenging task for the Teacher and the coaches.

Motivation is concerned with the intensity and the direction of behaviour. Athletes may be intrinsically motivated to be competent or extrinsically motivated. Coaches can motivate Athletes through such direct method as compliance, identification and inter analysis and through indirect method. Athletes differ in the responsibility they perceive for the reward and the punishment they receive (Martin, 1980).

Internal motivation is rooted in the biological and psychological processes of man, external motivation also known as secondary reinforcement has social orientation; in other words, it has its genesis in the interplay of social forces. In psychological literature, it is termed as external pull the incentives and attractions the environment offers to the individual to induce him to engage in certain kind of behaviour. For example, we do great things to draw people's attention towards us, to get recognition from the society for what we do, and receive (or expect to receive) some material benefit such as awards, rewards, money etc. The higher and stronger these incentives are, the greater is the effort an individual puts in to perform better and climb on to the higher rungs of success in his/her specialized field of activity arts, crafts, sports, literature, science, architecture etc. The expectation to get higher grade in academic work makes the school boy study hard. The promise of a higher status in society makes a philanthropist engage in activities considered beneficial to the society at large. The idea of earning more profit and building up a big business empire motivates a trader to adopt ingenious techniques of running his establishments (Kamlesh, 2006).

Extrinsic motivation is more of a reinforce than a natural stimulus to activity. However recent activities have conformed that extrinsic motivation, when used deftly in a limited way, proves very helpful in skill learning during childhood because children would not realize the worth of the activity and its real goals, we may motivate the child to play by giving him some sort of rewards but we lean not teach him on the worth of play. In case, play is made so interesting that it attracts everyone's attention, the child would not hesitate taking to it without any coaxing and cajoling by either mother or the teacher.

Award and reward may help in eliciting natural response from students but emphasis on these devices proves unrewarding in the long run. Extrinsic motivation has ambivalent implications in physical education and sports.

Reward and punishment is a part of motivation. These two are the two ends of motivation which could be used effectively. The reward as a positive motive seeks to influence conduct favorably by associating a pleasant feeling with desire act. It serves as a powerful motivation for them to continue and to try to live up to the expectations. Reward can be in varied ways such as recognition, prizes, certificates, honors etc. Punishment on the other hand is an unpleasant stimulus: a stimulus that hurts threatens, annoys bothers etc. It is a negative motive and is based on fear of failure, fear of losing prestige, fear of insult etc.

Psychologist has found that a reward such as smile or a small gift for good behaviour is more effective as a motivator of self control than punishment. Whether punishment is administered by Parent, a Teacher or any adult, his attitude should be objective and calm

(Grow and Crow, 1953).

So both reward and punishment' should be used by the Coach or teacher to motivate the Children for improvement of performance. He must judiciously and appropriately analyze the environmental condition to see which method is appropriate for the child because of the individual difference the effect may be in a positive or in a negative way for enhancement of performance. So while rewarding for an effort or punishing, a balance is needed otherwise the extreme approach may become ineffective.

Motivation is a process by which an individual is inspired guided as coaxed to do something. It is one of the important conditions rather than the central core of life. In other words it is that psychophysical condition of the organism which causes an individual to work as strive to fulfill his needs. In to work as strive fulfill his needs. In absence of proper motivation not only learning process but also life style itself becomes an uninteresting uphill task. Motivation than is considered as that process by which a child may be prepared to respond to situation which are directed towards the achievement of certain predetermined goals or objectives. In this field of physical education and sports, no athlete can win or even show better performance without motivation (Kamlesh, 1988).

Thus the present investigation enquires into the phenomenon of establishing the effect of extrinsic motivation on performance of physical fitness components of Kashmir region students. This knowledge will be of profound use in training, guiding and coaching the athletes for various sports and games.

Chamblee studied the influence of reward in the form if verbal argument feed back condition on the acquisition of closed irons physical skill by beginners. Rushall and Fatteringer studied the effect of various reinforces used as motivators in swimming . Perrystudied sixty-nine females to determine the effect of individualized extrinsic motivational techniques on the performance of vertical jump and handgrip. School ward Ryan experimented to determine the effects of four types of motive incentive conditions on grip strength. Lee examined the performance and attitudinal effect of two levels of absolute feed back with and without payment and followed by one of two levels of normative feed back (success or failure). Ghenn stated the differences between the basketball wall volley test and the chining test in the basketball wall volley test the best of three are resulted in the greatest statistical difference and the use of scale scores with encouragement for the chining test yielded the greatest significant difference. Noble concluded that the incentive motive condition did not effect performance. Kamlesh concluded that excellence, affiliation success and sensation are the major reasons for the athletes to participate in competitive sports, and male and female athletes to do not differ on the level of their incentive motivation. He also found that Indian athletes are average in their motivational profile.

The purpose of the study was to determine the effect of extrinsic motivation on performance of physical fitness components of Kashmir region students. It was also hypothesized that the reward method would be better in comparison to punishment method in improving the physical fitness performance.

METHODOLOGY

Selection of Subjects

60 male students of adolescent age group with age ranging between 13 to 19 years and studying in boys secondary school, Peth Makhama, were randomly selected as subjects. All subjects were randomly assigned to two experimental group (A. & B.) and one control group (C), each were consisting of 20 subjects. The experimental treatment was also assigned to the group at random. The group A and B were treated as experimental group and were given motivation i.e. Reward and punishment respectively. The group C served as a control group and was not given any motivation. All subjects were participating in the normal

programme of the school. Random group design was adopted for this study

Criterion Measures

"AAPHER" youth physical fitness test was selected and their scores from following test were considered as criterion measures for this study.

1. 600 m run/walk
2. Sit-up s
3. Pull-ups
4. 50 m dash
5. 4x10 m shuttle run
6. Standing broad jump

Instrumentation

Physical fitness: All the Physical Fitness test were explained to the subject prior to its administration .the subject were given chance to practice the prescribed tests, whenever necessary to become familiar with the test and know exactly what was done. See Appendix-1

Rewards : To prepare the students psychological for test, scholar explained in detail about reward techniques. The reward was consisted of different prizes for the first to six positions. For all motor components out of 20 students the best six positions were selected on the basis of their performance. Research scholar distributed the prizes to the position holders accordingly.

Punishment: This technique was introduced in the form of threat and punishment to the student before talking the test. The entire students were assembled and introduced that they must improve their performance otherwise they would be made to run around the track. The technique was applied on all physical fitness components. Conversion of Raw scores into standard scores.

The obtained raw scores were converted into standard scores by using the formula - $Z = (X - m) / \alpha$. The negative values obtained were converted into positive values by using Table No. 'A' of normal probability curve(Garrett, 1969).

RESULTS AND DISCUSSION

To find out the significance of differences between pretest and post-test means of three groups i.e. Reward & Punishment (experimental groups) and one control group on composite scores of "AAPHER" youth physical fitness test performance, t-test was applied and data pertaining to this have been presented in Table 1 and depicted in Figure 1-3.

TABLE -1
SIGNIFICANCE OF DIFFERENCE BETWEEN T PRE-TEST AND POST-TEST MEANS
OF THE EXPERIMENTAL AND ONE CONTROL GROUP ON COMPOSITE SCORES
OF "AAPHER" YOUTH PHYSICAL FITNESS TEST PERFORMANCE.

Groups	Pre- Test	Post-Test	MD	σ DM.	t-ratio
Reward	299.48	332.22	32.74	9.58	3.40*
Punishment	325.08	329.80	04.72	9.05	0.52
Control	293.72	278.68	15.04	12.08	1.24

*Significant at .05 level, $t_{0.05}(38) = 2.02$

It is evident from Table-1 that the significant difference was found between the pre-test and post-test of reward group, as the obtained t-value of 3.40 was higher than the required value to be significant. Insignificant differences were found among the punishment and control groups, obtained t- values of 0.52 and 1.24 respectively were lesser than the

required value $t_{.05(38)} = 2.02$

Fig. 1: Paired Means of Reward Group in composite Score of "AAHPER" Physical Youth Fitness test performance

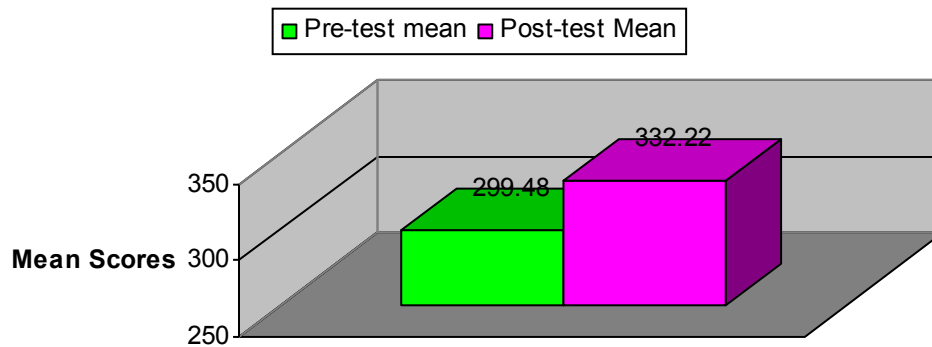


Fig. 2: Paired Means of Punishment Group in composite Score of "AAHPER" Physical Youth Fitness test performance

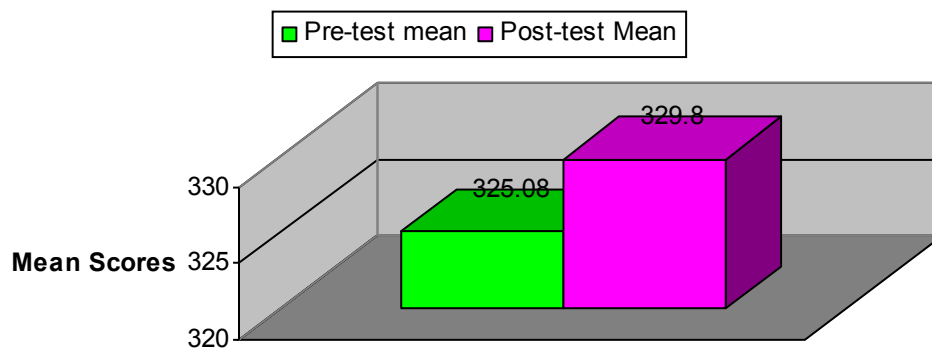
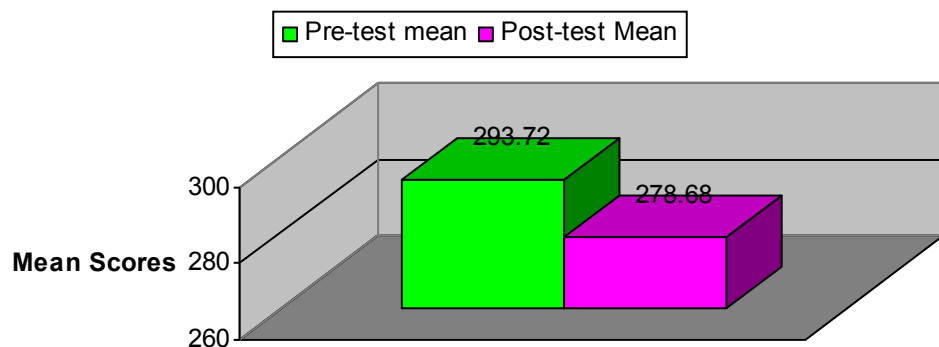


Fig. 3: Paired Means of Control Group in composite Score of "AAHPER" Physical Youth Fitness test performance



To find out the significance of difference among the three groups on composite scores of "AAPHER" youth fitness test performance, F-ratio was computed and data pertaining to this have been presented in Table 2.

TABLE 2
ANALYSIS OF COVARIANCE OF THE MEANS OF TWO EXPERIMENTAL AND ONE CONTROL GROUP ON COMPOSITE SCORES OF "AAPHER" YOUTH FITNESS TEST PERFORMANCE

Test	Source of Variance	df	Sum of Square	Mean Squares	F-ratio
Pre-test mean	Between Groups	2, 57	10076.98	5038.49 12741.75	0.39
Post-test mean	Between Groups	2, 57	36477.00	238.00 11052.98	1.65
Adjusted mean	Between Groups	2, 57	22804.64	402.32 1760.81	6.47*

* Significant at .05 level

F .05 (2, 57) = 3.15

It is evident from table-2 that the statistically significance difference was not found between pre-test and post-test mean, as the obtained F-values of 0.39 and 1.65 were lesser than the required value to be significant. where as significant difference was found between the adjusted post means, as the obtained F-values of 6.47 was higher than the required value F .05 (2, 57) = 3.15

As the difference between the adjusted post-test means was found significant Scheffe's Test of Post-hoc Comparison was applied and data pertaining to this have been presented in Table 3.

TABLE 3
PAIRED ADJUSTED FINAL MEANS AND DIFFERENCE BETWEEN MEANS FOR TWO EXPERIMENTAL AND ONE CONTROL GROUP ON COMPOSITE OF "AAPHER" YOUTH FITNESS TEST PERFORMANCE

Reward Group	Punishment Group	Control Group	Mean Difference	C.I.
335.27	313.28	-	21.99	27.72
335.27	-	288.18	47.09*	27.72
-	313.28	288.18	25.10	27.72

*Significant at .05 level

It is evident from the Table 3 that the significant difference was found between the reward group- control group, as the obtained mean difference of 47.09. was higher than the confidence interval (CI) of 27.72. Insignificant differences were found between reward group-punishment group and between punishment group- control group. as the obtained mean differences of 21.99 and 25.10 respectively were lesser than the confidence interval (CI) of 27.72.

DISCUSSION

It is evident from the findings that motivational techniques namely reward proved to be significantly effective techniques to improve the performance on

composite scores of "AAPHER" youth fitness test in comparison to punishment and control group performance. Punishment group and control group could not prove to be significantly effective in improving the performance of the subjects.

This may be attributed to the fact that every person has a strong desire that he should be recognized and wishes that others should praise him for his work or performance and people should accept him as a superior person. Every child wants that every one should praise that entire he does. There are many honours hi society and all wish to get them and want to be mentioned in the honour list of the school, selecting for various competition etc. give great pleasure and increase the expected quality hi the performance.

It is evident from the findings that there is significant difference between the rewards group and control group. Where as there is no significant difference between the reward group and punishment group also no significant difference between the punishment and control group.

This may be attributed to the fact that the performance of an individual in any field need some amount of motivation in order to quality one self in terms of excellence. This is not only applicable I the routine social interaction but also in that field of sports where lot of competition is involved.

CONCLUSION

On the basis of the results of the study the following conclusion are drawn: It is evident that the 't' values obtained for the two experimental groups (Reward and Punishment) and one control group, significant difference was found between the initial test mean and final test mean of reward group. No significant difference was found between the initial test and final test of punishment group. No significant difference was found between the initial test and final test mean of control group. It is evident that the mean difference between the reward group and control group is found to be significant at .05 level. There was no significant between the reward group and punishment group. There was no significant difference between the punishment group and control group performance.

RECOMMENDATION

On the basis of results of this study it is very strongly recommended that physical Education teachers, coaches and administrators of teaching dealing with adolescent age group must apply the reward method as the positive motivation technique to improve the performance of the students of this age group.

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