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**INFLUENCE OF PHYSICAL EXERCISE ON IMPULSE CONTROL AND FRUSTRATION
TOLERANCE AMONG ADOLESCENT GIRLS**

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Abstract

The purpose of the study was to find out the influence of physical exercise on impulse control and frustration tolerance among adolescent girls. To achieve the purpose of the study, sixty (60) girls in the age group of 14 to 16 years were selected randomly as subjects from the different schools in Karaikudi, Sivagangai District, Tamilnadu, India. The selected participants were randomly (simple random sample) assigned into two groups of thirty (n=30) each, such as experimental (group I) and control (group II). The group I (n=30) underwent Physical exercises for a duration of twelve weeks with three alternative days per week, in addition to their routine, group II (n=30) acted as control, who were refrained from any special training except their leisure time pursuit. Impulse control and frustration tolerance were selected as dependent variables for this study and measured using Impulse control scale and tolerance for frustration scale (Goldberg, et.al., 2006). All the participants were tested before and immediately after the experimental period on the selected dependent variables. The collected data were analyzed by using dependent 't' test and ANCOVA. The level of significance was fixed at 0.05 level. It was concluded that Physical exercise group enabled better improvement in managing impulse control and frustration tolerance among adolescent girls.

Keywords: Impulse control, frustration, tolerance, physical exercise

INTRODUCTION

Adolescent development is the process through which adolescents, alternately called youth or young adults acquire the cognitive, social and emotional skills and abilities required to navigate life. Frustration refers to the situations or the event that creates obstacle in the way to goal. Frustration refers to the situations or the event that creates obstacle in the way to goal. In other words the sense of disappointment that result from the obstacles is frustration. The process of blocking or thwarting of needs causes frustration in human beings Impulse control is the ability to resist or delay an impulse, drive, or temptation to act. Impulse control entails avoiding rash behaviors and decision making, being composed, and able to put the brakes on angry, aggressive, hostile, and irresponsible behavior. Problems in impulse control are manifested by low frustration tolerance, impulsiveness, anger-control problems, abusiveness, loss of self-control, and explosive and unpredictable behavior. Impulsive people are often described as tempestuous, hot-headed, and "leap-before-they-look" people. Impulse control and frustration tolerance help us with the third skill delay of gratification. This is the ability to postpone pleasure, comfort or relief until a later time. We choose to forgo



the immediate gratification and wait for the right time. This involves some trust and faith that things will work out, or we will make them work out later. A large factor in becoming easily frustrated is having lots of energy in body that is practically seeking an opportunity to be released. If frustration is much greater than whatever triggered it, a person may want to adopt an exercise routine. Regular exercise is helpful for boosting mood and for regulating body's energy so that a person can broach situations appropriately rather than with too much "charge" from all pent-up fervor for activity. Cardiovascular exercise, like running, calisthenics will be of great useful in frustration tolerance.

STATEMENT OF THE PROBLEM

The purpose of the study was to find out the influence of physical exercise on impulse control and frustration tolerance among adolescent girls

HYPOTHESIS

It was hypothesized that there would be significant improvement (in managing) on the selected dependent variable Impulse control and Frustration Tolerance due to physical exercise among adolescent girls

DELIMITATIONS

1. The study was mainly delimited with 60 adolescent girls who were selected from different schools in Karaikudi, Sivagangai District, TamilNadu.
2. The age groups of the subjects were between 14 and 16 years.
3. Criterion Variables: Frustration Tolerance Dimensions – Impulse control and Tolerance for frustration would be measured using Impulse control scale and tolerance for frustration scale (Goldberg, et.al., 2006)
4. Independent Variable - 12 weeks of Physical exercises

LIMITATIONS

1. Regular activities pertaining to their day to day affairs were not controlled.
2. The subjects' diet and nutrition were not taken into consideration



3. The parental influence and support towards participation in the study were not considered.
4. The growth and maturity factors were not controlled
5. The influence of academic work on the performance variables and training could not be controlled.

METHODOLOGY

The purpose of the study was to find out the influence of physical exercise on impulse control and frustration tolerance among adolescent girls. To achieve the purpose of the study, sixty (60) girls in the age group of 14 to 16 years were selected randomly as subjects from the different schools in Karaikudi, Sivagangai District Tamilnadu, India. The selected participants were randomly (simple random sample) assigned into two groups of thirty (n=30) each, such as experimental (group I) and control (group II). The group I (n=30) underwent Physical exercises for a duration of twelve weeks with three alternative days per week, in addition to their routine, group II (n=30) acted as control, who were refrained from any special training except their leisure time pursuit.

Impulse control and frustration tolerance were selected as dependent variables for this study and measured using Impulse control scale and tolerance for frustration scale (Goldberg, et.al., 2006). All the participants were tested before and immediately after the experimental period on the selected dependent variables. The collected data were analyzed by using dependent 't' test and ANCOVA. The level of significance was fixed at 0.05 level.

TABLE I

PHYSICAL EXERCISES TRAINING SCHEDULE- 3 Days / Week

Physical Exercises	Repetition & Sets	Duration
Warming up & Stretching	-	10 minutes
Calisthenics	4 count, 8 count 16 count, (Different Variations)	15 minutes
Push up	10 Rep × 3 sets (Variations)	15 minutes
Squat	10 Rep × 3 sets (Variations)	15 minutes
Cool down	-	5 minutes



RESULTS AND DISCUSSIONS

The analysis of dependent 't'-test on the data obtained for Impulse control and Frustration tolerance of the pre-test and post-test means of physical exercise group and control group have been analyzed and presented in Table II.

TABLE II

MEAN AND DEPENDENT 't' TEST FOR THE PRE AND POST TESTS ON IMPULSE CONTROL AND TOLERANCE OF PHYSICAL EXERCISE AND CONTROL GROUP

Mean (Seconds)	N	Physical Exercise Group		Control Groups	
		Mean	SD	Mean	SD
Pretest Mean	30	18.37	1.43	18.65	1.22
Posttest Mean	30	17.08	1.02	18.67	1.27
't' test		5.80*		0.42	

*Significant at 0.05 level with 29 df (2.045)

From the table II, the dependent 't'-test values between the pre and posttest means of physical exercise and control group on Impulse control and Frustration Tolerance were 5.80 and 0.42 respectively. Since, the obtained 't'-test value of physical exercise group was greater than the table value 2.045 with df 29 at 0.05 level of confidence. It was concluded that physical exercise group had significant improvement on Impulse control and Frustration Tolerance. However, control group has no significant improvement on the Impulse control and Frustration Tolerance as because they were not subjected to any specific training such as physical exercise.

The pre and posttest mean values of physical exercise and control group among adolescent girls on Impulse control and Frustration Tolerance was graphically represented in the figure 1.

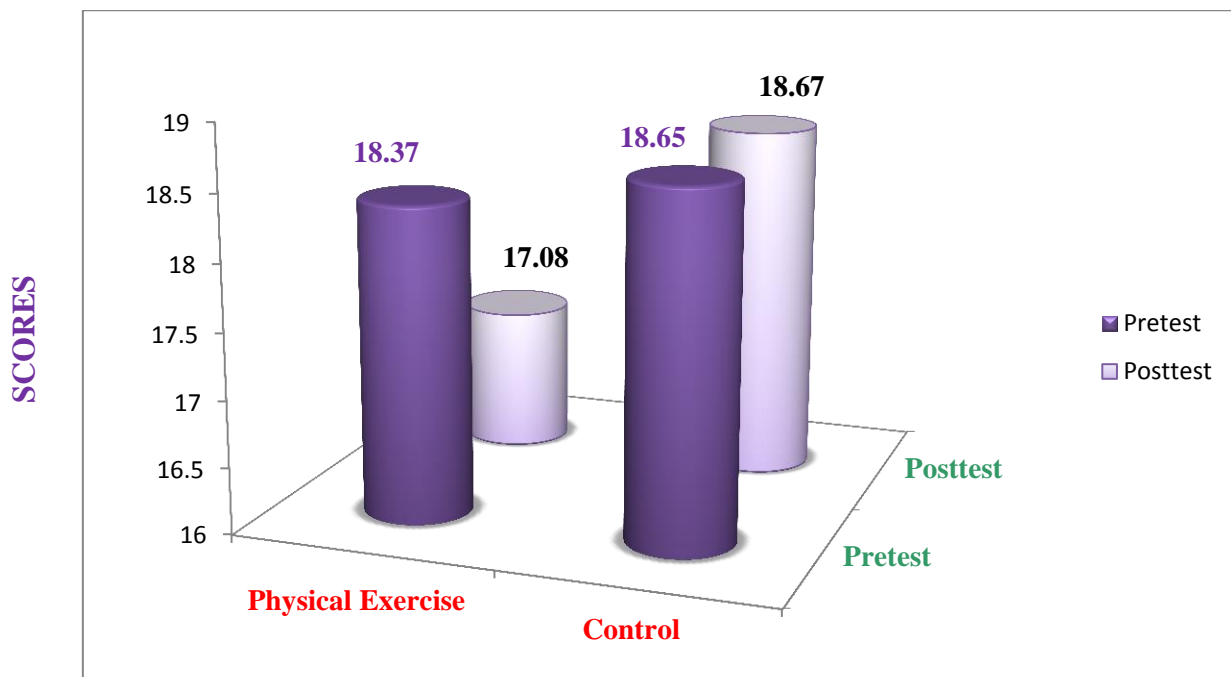


FIGURE 1: PRE AND POST TEST MEAN VALUES OF PHYSICAL EXERCISE AND CONTROL GROUP ON IMPULSE CONTROL AND FRUSTRATION TOLERANCE AMONG ADOLESCENT GIRLS

The analysis of covariance (ANCOVA) on Impulse control and Frustration Tolerance of physical exercise and control groups have been analyzed and presented in Table III.

TABLE III

ANALYSIS OF COVARIANCE ON IMPULSE CONTROL AND TOLERANCE OF PHYSICAL EXERCISE and control groups

Source of Variance	Sum of Squares	Df	Mean Squares	'F'-Ratio
Between	40.44	1	40.44	29.53*
Within	79.43	57	1.37	

*Significant at 0.05 level with 1,57df (4.010)

The table III showed that the obtained F-ratio value of 29.53 on impulse control



and Frustration tolerance was greater than the table value of 4.010 at 1,57 df at 0.05 level of confidence.

The ANCOVA results of comparing the physical exercise and control group on Impulse control and Frustration Tolerance indicated that there was statistically significant difference among the control and experimental group. Hence null hypothesis was rejected. Experimental group showed better impulse control and frustration tolerance than the control group due to the influence of physical exercises.

RESULTS AND DISCUSSION

Impulse control and frustration tolerance help us with the third skill delay of gratification. This is the ability to postpone pleasure, comfort or relief until a later time. Individuals choose to forgo the immediate gratification and wait for the right time. This involves some trust and faith that things will work out, or will make it work out later.

The least square comparisons of the post test scores of Impulse control and Frustration Tolerance were significant between control and experimental group. Hence, the formulated research hypothesis of the investigator was accepted and null hypothesis was rejected at .05 level of significance.

The result of the present study is in accordance with the study conducted by Archana Kumari and Sandhya Gupta (2015) which states that emotional intelligence and frustration tolerance among adolescent whether it is education, academic or personal, adolescents face lots of obstacles on the way of goals in life. Sometimes adolescents are able to deal with them rationally but sometimes they deal with it emotionally. In case if they are incapable to deal with these obstacles they get frustrated. To cope up with frustration the adolescents need to be emotionally intelligent and skilled to control impulses. 120 adolescents were selected from Jaipur city in the age group of 12- 19 years of age. Out of 120 adolescents, 60 were girls and 60 were boys. A positive correlation was found between emotional intelligence and frustration tolerance of adolescents. Girls were found to have high emotional intelligence as well as frustration tolerance as compared to boys. A significant difference was found in emotional intelligence and frustration tolerance at different age. Adolescents of 12-15 years have high emotional intelligence and frustration tolerance than adolescents of 16-19 years.



CONCLUSIONS

It was concluded that Physical exercise group enabled better improvement in managing impulse control and frustration tolerance among adolescent girls.

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