INFLUENCE OF EXERCISE AND MUSIC ON SELECTED PERSONALITY DIMENSIONS OF ADOLESCENT GIRLS

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Abstract:
The purpose of the study was to find out the influence of exercise and music on selected personality dimensions of adolescent girls. Forty fiveadolescent girls aged between 14 and 16 years were selected randomly. They were divided into three groups namely experimental group I (Exercise) experimental group II (Music) and control group – III (No training). The two experimental groups were given training for twelve weeks and control group were not allowed to participate in any training programme. The subjects were tested on personality dimensions such as Emotional adjustment, Self- confidence and Inter personal relationship. Post test was conducted after twelve weeks of training .Pre and Post test data were analyzed by applying dependent 't' test and ANCOVA. The results revealed that the exercise and musichad significantly improved the Emotional adjustment, Self- confidence and Inter personal relationship.
Key Words: Exercise, Music, Emotional Adjustment, Self- Confidence & Inter Personal Relationship

Introduction:
Exercise:
Exercise is physical activity that is planned, structured, and repetitive for the purpose of conditioning any part of the body. Exercise is used to improve physical and mental health, maintain fitness and is important as a means of physical rehabilitation. Physical exercise has established efficacy as an antidepressant in individuals with depression and current medical evidence supports the use of exercise as both a preventive measure against and an adjunct therapy with antidepressant medication for depressive disorders.

Music:
Most teens spend a significant amount of time listening to music in their day-to-day lives. In fact, most teens have a few favorite singers or bands, and they often have a similar taste in music as their friends. Social acceptance is always important with teens, and peers can influence the type of music teens listen to regularly. Music is often an outlet for teens and a way for them to express and explore emotions they are uncomfortable talking about. Teens may choose music by an artist they identify with or one who seems to embody their generation's trials and tribulations. In some cases, teens use music as a safe way to rebel against their parents and develop their own separate identity. While this can sometimes lead to generational conflicts, it can also be a healthy part of growing up.

Emotional Adjustment:
Emotional adjustment is the maintenance of emotional equilibrium in the face of internal and external stressors. This is facilitated by cognitive processes of acceptance and adaptation. An example would be maintaining emotional control and coping behavior in the face of an identity crisis. (Carvon A V 1980)

Inter Personal Relationship:
An interpersonal relationship is a relatively long-term association between two or more people. (Alderman, R.B. 1974)

Self Confidence:
A "belief in one's ability to succeed in specific situations or accomplish a task (Albert Bandura, 1987)

Hypothesis:
✓ There would be significant improvement on the selected dependent variables such as Emotional adjustment, Self-confidence and Inter personal relationship due to the effects of exercise.
✓ There would be significant improvement on the selected dependent variables such as Emotional adjustment, Self-confidence and Inter personal relationship due to the effects of music.

Limitations:
The study was limited in the following aspects:
✓ Regular activities pertaining to their day to day affairs were not controlled.
✓ The factors such as climate, study hours and motivation of the subjects were not taken into consideration.
✓ The subjects' diet and nutrition were not taken into consideration
✓ The parental influence and support towards participation in the study were not considered.
✓ The growth and maturity factors were not controlled

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✓ The influence of academic work on the performance variables and training could not be controlled.
✓ Participation in various tournaments could not be controlled

Delimitations:

The study was delimited as follows:

✓ The study is mainly delimited with 45 adolescent girls would be selected from different schools in Chennai.
✓ The age groups of the subjects were between 14 and 16 years.

In this study, the following variables were selected:

Criterion Variables:

Emotional adjustment, Self- confidence, Inter personal relationship

Independent Variables:

✓ 12 weeks of physical exercises
✓ 12 weeks of music

Methodology:

Selection of the Subjects:

The purpose of the study was to find out the influence of exercise and music on selected personality dimensions among adolescent girls. To achieve the purpose of the study 45 adolescent girls in the age group of 14 to 16 years were divided in to three groups of fifteen each such as experimental and control groups from different schools in Chennai.

Tool and Technique:

Table 1

Variable	Tests/ Equipment	Unit of Measurement
Emotional Adjustment	Personality Development Index (Kaliappan, 1996)	Score
Self- Confidence	Personality Development Index (Kaliappan, 1996)	Score
Inter Personal Relationship	Personality Development Index (Kaliappan, 1996)	Score

Results and Discussions:

The data pertaining to the variables in this study were examined by using dependent 't' test to find out the significant improvement and analysis of covariance (ANCOVA) for each variables separately in order to determine the difference and test at 0.05 level of significance. The analysis of dependent 't' test on data obtained for Emotional adjustment, Self- confidence and Inter personal relationship of the pretest and posttest means of experimental and control group have been analyzed and presented in Table 2.

Table 2: Mean and Dependent 'T' Test of Experimental and Control Groups on Selected Variables

Variables	Mean	Exercise	Music	Control Group
Emotional Adjustment	Pre Test	30.40	37.00	35.73
	Post Test	45.87	43.00	36.27
	't' test	13.40*	7.25*	1.52
Self- Confidence	Pre Test	19.40	19.67	18.73
	Post Test	21.87	21.00	18.60
	't' test	7.05*	7.14*	0.52
Inter Personal Relationship	Pre Test	23.27	22.73	20.47
	Post Test	25.27	24.33	20.20
	't' test	6.83*	8.41*	0.70

* Significant at 0.05 level of confidence (14) is 1.761

The obtained 't' ratio value of 13.40 , 7.25 on Emotional adjustment, 7.05 , 7.14 on Self- confidence and 6.83 , 8.14 on Inter personal relationship of experimental groups were higher than the table value, it is understood that the exercise and music had made significant improvement on Emotional adjustment, Self- confidence and Inter personal relationship. However, the control group showed no significant changes as the obtained 't' value was lesser than the table value, because it was not subjected to any specific training. The analysis of covariance on the data obtained on Emotional adjustment, Self- confidence and Inter personal relationship due to the effect of exercise, music and control groups have been analyzed and presented in Table 3.

Table 3: Analysis of Covariance of Experimental and Control Groups on Personality Dimensions

		Sum of Square	df	Mean Square	F
Emotional Adjustment	Between Group	368.044	2	184.022	34.12*
	Within Group	226.533	41	5.394	
Self- Confidence	Between Group	85.911	2	42.956	17.46*
	Within Group	103.333	41	2.460	

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Inter Personal	Between Group	218.133	2	109.067	28.87*
Relationship	Within Group	158.667	41	3.778	

* Significant: Table F-ratio at 0.05 level of confidence for 2 and 41 (df) =3.22

    Table 3 showed that the obtained 'F' ratio value of 34.12, 17.46 and 28.87 were higher than the table value of 3.22 with df 2 and 41 required to be significant at 0.05 level. Since the obtained value of 'F' ratio was higher than the table value, it indicated that there was significant difference among exercise, music and control group on Emotional adjustment, Self- confidence and Inter personal relationship. Since significant differences were obtained, as suggested by Thirumalaisamy (1997), the Scheffe's post hoc test was used to find out the paired means significant difference. The obtained results are presented in Table 4.

Table 4: Scheffe's Post Hoc Test Influence on Emotional Adjustment, Self- Confidence and Inter Personal Relationship among Adolescent Girls

Mean Difference of Emotional adjustment				**Reqd C.I**
Groups	Exercise	Music	Control	
Exercise	-	2.866*	-	1.55
Music	-	-	6.733*	
Control	9.600*	-	-	
Mean Difference of Self- confidence				
Groups	Exercise	Music	Control	Reqd. C.I
Exercise	-	0.866		1.04
Music	-	-	2.400*	
Control	3.266*	-	-	
Mean Difference Inter personal relationship				
Groups	Exercise	Music	Control	Reqd. C.I
Exercise	-	0.933		1.30
Music	-	-	4.133*	
Control	5.066*	-	-	

    Table 4 showed that the paired means significant difference of Emotional adjustment between Exercise and Music were 2.866, Exercise and Control group were 9.600, Music and Control group were 6.733. The mean difference of Self – Confidence between Exercise and Control group were 3.266, Music and Control group were 2.400. The mean difference of Inter personal relationship between Exercise and Control group were 5.066, Music and Control group were 4.133 which were higher than required Scheffe's confidence interval value of 1.55 (Emotional Adjustment), 1.04 (Self-Confidence) and 1.30 (Inter Personal Relationship).

    The mean values of Emotional adjustment, Self-confidence and Inter personal relationship are presented in fig.1 with the bar diagram for better understanding of the results of this study.
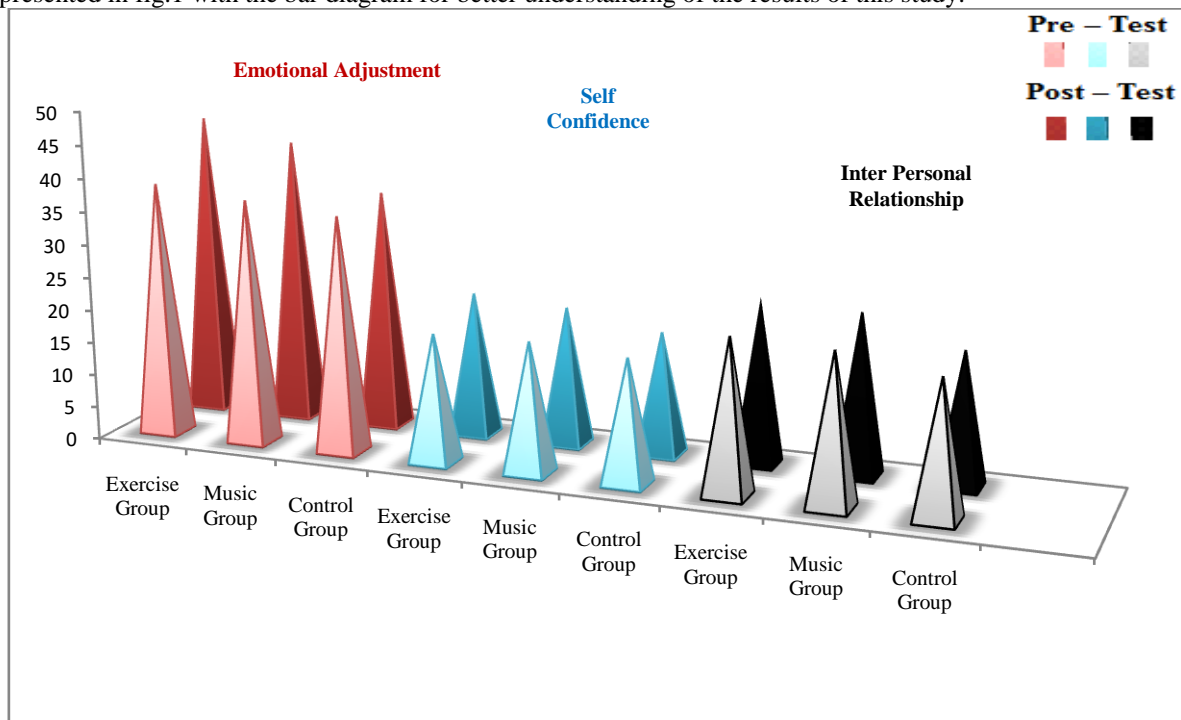

Figure 1: Showing the mean values of Emotional adjustment, Self-confidence and Inter personal relationship among Adolescent Girls

Conclusions:

- ✓ The exercise and music had significantly improved the Emotional adjustment, Self- confidence and Inter personal relationship among adolescent girls.
- ✓ There was no significant difference on control group on personality dimensions among adolescent girls.
- ✓ Physical exercise group had better Emotional adjustment, Self-confidence and Inter personal relationshipthan music and control group.

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