



# A PRE-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF AEROBIC DANCE MOVEMENT THERAPY ON ANXIETY LEVEL AMONG ADOLESCENT GIRLS IN SELECTED GOVT. SCHOOL OF GURUGRAM, HARYANA.

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## ABSTRACT

Adolescent period is not an age of problems and frustrations, in most of them it is golden age of adventure, romance and creativity. It is the period in life when an individual is having time, energy, creativity and a spirit of trying new things. Adolescents form above nearly one fifth of the total population of India and are significant proportion of the world's adolescent population. It is understandable that the occurrence of various psychosocial stressors during the transition from the adolescent to childhood is inevitable. Anxiety is among the most common mental, emotional and behavioural problems that occur during childhood and adolescent. Adolescent girls who suffer from excessive anxiety regularly experience a range of physical symptoms like muscle tension and cramps, Stomach Aches, headaches, pain in the limbs & back, fatigue or discomfort associated with pubertal changes. Anxiety in adolescent of great importance because anxiety in adolescent are associated with negative outcomes including peer relationship difficulties, academic failure and later onset of co morbid disorders including major depression and alcohol abuse. Aerobic dance is known to have powerful effect of the mind, body, and emotions. Aerobic dance movement is a type of therapy that uses movement to further the social, cognitive, emotional and physical development of the individual. Aerobic movement Dance therapy is often an easy way for a person to express emotions, even when his/her experience is so traumatic he or she can't talk about

**Key words:** Aerobic dance movement therapy; Anxiety; adolescent girls.

## INTRODUCTION

- Adolescent is an age of creativity, Idealism, and adventure, if nurtured properly they can contribute eventually to themselves to become good individual or citizen for development of nation. Adolescence is a period of many critical transitions - physical, Psychological, economic, and social. Adolescents are full of energy, have significant drive and new ideas. They are a positive force for a nation and are responsible for its future productivity provided they develop in a healthy manner. Many mental health problems emerge in late childhood and early adolescence. Enhancing social skills, problem solving skills and self-confidence can help prevent mental health problems such as conduct disorders, anxiety, depression, and eating disorders as well as other risk behavior. WHO (2003)<sub>1</sub>
- Anxiety is among the most common mental, emotional and behavioral problems that occur during childhood and adolescent. Adolescent girls who suffer from excessive anxiety regularly experience a range of physical symptoms like muscle tension and cramps, stomach Aches, headaches pain in the limbs & back fatigue or discomfort associated with pubertal changes Collins(2010)<sub>2</sub>
- Anxiety in adolescent of great importance because anxiety in adolescent are associated with negative outcomes including peer relationship difficulties, academic failure and later onset of co morbid disorders including major depression and alcohol abuse Gail and Bernstein(2011)Therapy Association)<sub>3</sub>
- Aerobic dance is known to have powerful effect of the mind, body, and emotions. Aerobic dance movement is a type of therapy that uses movement to further the social, cognitive, emotional, and physical development of the individual Aerobic therapy is often an easy way for a person to express emotions, even when, his/her experience is so traumatic he or she can't talk about it(American dance therapy Association)<sub>4</sub>

## MATERIAL AND METHODS

### Research Design

A pre experimental research design with the Quantitative Research evaluation, research approach was adopted for this study. A review of literature was done related to anxiety among adolescent girls and literature related to effectiveness of aerobic dance movement therapy on anxiety level.

### Statement of problem

A Pre-Experimental Study to Assess the Effectiveness of Aerobic dance movement Therapy on Anxiety level Among Adolescents girls at selected school, Gurugram Haryana

### Aim of the study

To assess the effectiveness of aerobic dance movement therapy on anxiety level among adolescent girls at selected school Gurugram Haryana.

### Research Question

How much level of anxiety among adolescent girls

## Objectives of the Study

1. To assess the level of anxiety among adolescent girl
2. To evaluate the effectiveness of Aerobic dance movement therapy on anxiety level among adolescent girls
3. To find out the Association of post-interventional anxiety level among adolescent girls at selected school with their selected demographic variable.

## Operational Definitions

- **Effectiveness:** In this study effectiveness refers to the extent to which the Aerobic Dance Movement Therapy has impact on the reduction of anxiety among adolescent girls as measured by Zung self- rating anxiety scale {SAS}
- **Aerobic Dance Movement Therapy:** Aerobic Dance movement is a therapy in which can use to improve social skill, problem solving skill, and self- confidence. In this study Aerobic dance movement therapy is given by the investigator for 30 minutes, once a day.

**Aerobic dance movement therapy will be implemented through four phases.**

- Preparation Phase
- Incubation Phase
- Illumination Phase
- Evaluation Phase
- **Anxiety:** It refers to natural and important emotion experienced by adolescent girls, signalling through sense of worry, apprehension, fear, shy, & distress which alarm that a danger or a sudden Threatening change.
- **Adolescent Girls:** It refers to girls who were in the age group of 16-18 years studying in selected Schools of Gurugram Haryana and would be able to perform Aerobic Dance Movement Therapy.

## Variables under Study

Age, Religion, Type of family, Mothers education, Fathers education, income, Occupation, residence, Standard of education, Weight, Height.

## Assumptions

In the present study it is assumed that:

1. The study adolescent girls have some level of anxiety.
2. Aerobic dance movement therapy will be effective in reducing the level of anxiety among Adolescent girls

## Delimitations

1. The Present study was delimited to adolescent girls in age group of 16 to 18 years selected school of Gurugram Haryana

## Conceptual Framework

Conceptual framework for the research study was based upon helping art of clinical nursing Theory given by Wiedenbach's (1964)

## Setting

The physical location and conditions in which data collection has taken place in a study is setting of the study. The present study was conducted in selected School of Gurugram Haryana

## Sample and Sampling Technique

### Population

The population of the study was the adolescent girls in the age Group of 16 to 18 years studying in selected schools of Gurugram Haryana

### Sample

Sample consists of a subset of the unit that composes the Population. The Sample for this study consisted of 60 adolescent girls in the age group of 16 to 18 years, who fit into the inclusion criteria.

### Sampling Technique

The purposive sampling technique was used for the present study

### Inclusion Criteria

1. Adolescent girls in the age group of 16 to 18 years.
2. Adolescent girls who can read Hindi / English.
3. Adolescent girls who scored in mild to severe level of anxiety.

### Exclusion Criteria

1. Adolescent girls who are not available during the data collection period.
2. Adolescent girls who are not willing to participate in the study.
3. Adolescent girls with physical illness and physical disabilities
4. Adolescent girls who scored in normal anxiety level

### Sampling Size

In present research study the sample size was 60 adolescent girls. Government Senior Secondary School Gurugram Haryana

## Ethical Consideration

The proposed study was conducted after the approval of the ethics committee of government girl's senior secondary Gurugram, Haryana, and Permission was obtained from the Principals of Government senior secondary girl's schools at guru gram, Haryana Verbal assurance was given to the adolescent girls and written consent was obtained.

- Government high school gurugram Haryana
- Government girls Senior Secondary School Gurugram Haryana

## Data collection Tools and Technique

In the present study, based on the objectives the tools were divided into 2 sections:-

1. Personal variables of participants {demographic data}
2. Structured Zung Self-Rating Anxiety Scale {SAS}

## Validity of the Tools

The validity of the tools was obtained by submitting the tools 9 experts and it was valid. All the rectification was as suggested by the experts.

## Reliability of the tools

Reliability of an instrument is the degree of consistency with which it measures the attribute it is supposed to be measuring. The reliability of the tool was found ( $r=0.86$ ) by Split-half method and the tool was considered as fit for proceeding with pilot study

## Procedure for Final data collection

Formal permission was obtained from the concerned authorities to conduct the final study by using purposive sampling technique according to research design.

After obtaining formal administrative permission, final study was conducted in the \_\_\_\_\_ month of December 2019 at government Sr. Sec. girls School Guru-gram Haryana

Consent for participation from the subject the students of age group 16-18 years were selected. Pre-test was conducted using Zung Self-Rating Anxiety Scale (SAS) to access the level anxiety among 120 adolescent girls, in that it was found 60 adolescent girls had mild to severe anxiety. The intervention was given from the next day to the subject in government girls Sr. Sec. School. The intervention had four phases (1) Preparation phase, (2) incubation phase, (3) illumination phase, (4) evaluation phase Investigator assured the subjects about the confidentiality of the data The intervention was given for a period of 15 days for 30 min per day. After 15 days post-test was given to the group

**RESULTS AND DISCUSSION****Section: 1 Description of selected demographic variables of Adolescent girls****Table: 1 Frequency Percentage Distribution of Demographic Variables among Adolescent Girls****N= 120**

S. No.	Demographic characteristics	Frequency (f)	Percentage (%)	
1	AGE	<15 Years	19	32%
		15- 16 Years	31	52%
		16 - 17 Years	9	15%
		>17 Years	1	2%
2	RELIGION	Hindu	57	95%
		Muslim	2	3%
		Christian	1	2%
		Sikh	0	0%
		Any other	0	0%
3	TYPE OF FAMILY	Nuclear Family	53	88%
		Joint Family	5	8%
		Extended Family	1	2%
		Single Parent family	1	2%
4	MOTHER'S EDUCATION	No Formal Education	14	23%
		Primary Education	26	43%
		Secondary Education	18	30%
		Diploma	1	2%
		Degree and Above	1	2%
5	FATHER'S EDUCATION	No Formal Education	7	12%
		Primary Education	22	37%
		Secondary Education	31	52%
		Diploma	0	0%
		Degree and Above	0	0%
6	INCOME	Below than 10,000	36	60%
		Rs 10001 -20000	20	33%
		Rs. 20001-30000	4	7%
		More than 30000	0	0%
7	OCCUPATION	Farmer	6	10%
		Daily wage earner	5	8%
		Private Employee	41	68%
		Government Employee	4	7%
		Others	4	7%
8	RESIDENCE	Urban	32	53%

		Rural	28	47%
9	STANDARD OF EDUCATION	9th Class	37	62%
		10th Class	23	38%
10	WEIGHT	Below than 40 kg	13	22%
		40-50 kg.	29	48%
		51-60 kg.	18	30%
		60 Above	0	0%
11	HEIGHT	Below then 140 cm	5	8%
		140 - 145 Cm	38	63%
		146 - 150 Cm	15	25%
		150 Cm Above	2	3%

**Table-1** depicts that majority of Adolescent girls with anxiety in group 31(52%) were in age group of 15-16 years. (95%) belonged to Hindu religion, 88% were belongs to nuclear family, (43%)were from primary education, (52%) were belongs to secondary education, (60%) were belongs in below than 10,000 monthly income of the family, (68%) were belongs to private employee,(53%) were belongs to urban area,(62%) adolescent girls were belongs to 9<sup>th</sup> class, (48%) were belongs to 40-50 kg weight of adolescent girls,(63%) were belongs to 140-145cm height status.

## SECTION-2: FINDINGS RELATED TO PRETEST AND POST TEST ANXIETY SCORE AMONG GIRLS

Table No: 2 Findings Related to Pre-test Anxiety Score among Adolescent Girls

N=120

S. No.	Level of Anxiety	Range	PRETEST	
			Frequency (f)	Percentage (%)
1	Normal Range	(20-44)	42	41.1
2	Mild to moderate anxiety level	(45-59)	35	34.3
3	Marked to severe anxiety levels	(60-74)	24	23.5
4	Extreme anxiety level	(75-80)	1	0.9

Maximum score=80 minimum score=20

**Table-2** Represented that findings related to anxiety score among adolescent girls , in that Pre-test was conducted using Zung Self-Rating Anxiety Scale (SAS) to access the level anxiety among 120 adolescent girls, in that it was found 60 adolescent girls had mild to severe anxiety, this table represented that before the administration of aerobic dance movement therapy 42(41.1%) of adolescent girls have normal range of anxiety and 35(34.3%) of adolescent girls have mild to moderate anxiety level and 24(23.5%) of adolescent girls have marked to severe anxiety level and 1(0.9%) of adolescent girls extreme anxiety levels.



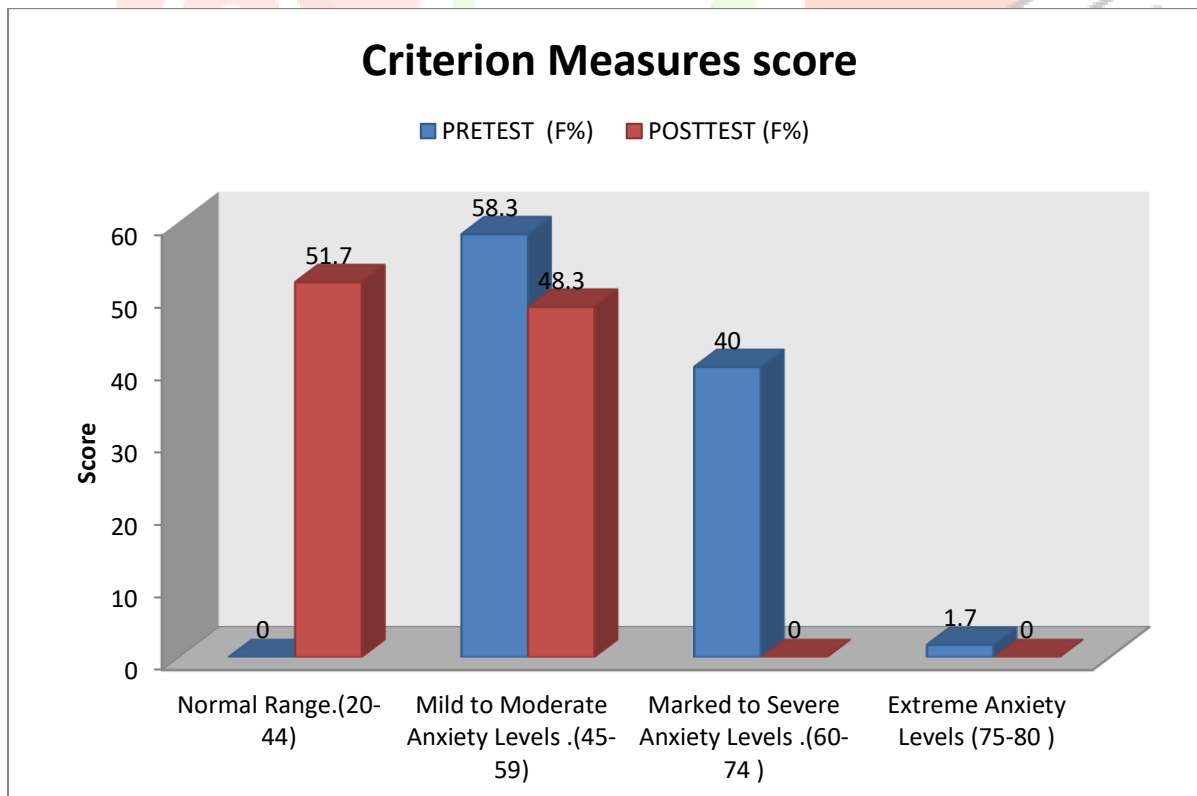
**Table No: 3 Findings Related To Pre-test and Post-test Anxiety Score among Adolescent Girl**

N=60

S. No.	Level of Anxiety	Range	PRETEST		POSTTEST	
			Frequency (F)	Percentage (%)	Frequency (F)	Percentage (%)
1	Normal Range	(20-44)	0	0	31	51.7
2	Mild to moderate anxiety levels	(45-59)	35	58.3	29	48.3
3	Marked to severe anxiety levels	(60-74)	24	40	0	0
4	Extreme anxiety levels	(75-80)	1	1.7	0	0

Maximum score=80 minimum score=20

**Table-3** Represent that findings related to pre-test and post test anxiety score among adolescent girl, before the administration of Aerobic dance movement therapy 35(58.3%) of adolescent girls have mild to moderate of anxiety level and 24(40%) of adolescent girls have marked to severe anxiety level, and 1 (1.7%) extreme anxiety level, where after administration of 'aerobic dance movement therapy' 31(51.7%) of adolescent girls have normal level of anxiety level and 29(48.3) mild to moderate anxiety level, and none of adolescent girls had marked to severe and extreme level of anxiety.



**FIGURE-1 FINDINGS RELATED TO PRETEST AND POST TEST ANXIETY SCORE AMONG ADOLESCENT GIRL**



Figure Represent that findings related to pre-test and post-test anxiety score among adolescent girl before the intervention, the pre-test score of anxiety level among adolescent girls 35(58.3%) had mild to moderate anxiety had severe anxiety 24(40%) had extreme anxiety 1(1.7%) and none of them had no anxiety. After the intervention the post-test in group none of them had marked to severe and extreme anxiety, had normal anxiety 31(51.7%) had mild to moderate anxiety 29 (48.3%)

### SECTION: 3 FINDINGS RELATED TO PAIRED ‘T’ VALUE OF COMPUTED BETWEEN PRETEST AND POST TEST ANXIETY SCORES AMONG ADOLESCENT GIRLS

Table: 4: Mean, Mean Percentage, Standard Deviation Range Mean Differentiate and T Test of the Pre-test and Post Test Anxiety Score of Adolescent Girls

N=60

S. No	Paired t test	Mean ± S.D.	Mean %	Range	Mean difference	Paired t test	P value	Table Value at 0.05	Result
1	Pre-test anxiety scale	57.9±5.8 94	72.40	45-75	13.050	22.131	<0.001	2.00	significant
2	Post-test anxiety scale	4.85±5.5 57	56.10	28-56					
** significance level 0.05 maximum=80 minimum=20, t=2.00									

**Table-4** represented that mean, mean percentage, standard deviation range mean differentiate Paired “t” value of computed between pre-test and post-test Practice scores of anxiety among adolescent girls after intervention in group, the mean score level of anxiety was 72.40 in protest and 56.10 in post-test. Calculated paired t test value was 22.131 was found to be more than table value. This data had indicated that there was significant reduction of anxiety level, hence research hypothesis was accepted.

**SECTION: 4****FINDINGS RELATED TO ASSOCIATION OF POST INTERVENTIONAL ANXIETY WITH SELECTED DEMOGRAPHIC VARIABLES**

This section deals with the findings related to the association between post-test anxiety scale and selected demographic variables. The chi-square test was used to determine the association between the scores levels and selected demographic variables in group

**Table No: 5 Associations of Post-test Anxiety Scale Scores with Selected Socio-Demographic Variables**

N=60

S. No	Variables	Category	Normal Range	Mild to Moderate Anxiety Levels	Marked to Severe Anxiety Levels	Extreme Anxiety Levels	Chi Test	P Value	df	Table Value	Result
1	AGE	<15 Years	11	8			2.700	0.440	3	7.815	Not Significant
		15- 16 Years	14	17							
		16 - 17 Years	6	3							
		>17 Years	0	1							
2	RELIGION	Hindu	30	27			1.092	0.579	2	5.991	Not Significant
		Muslim	1	1							
		Christian	0	1							
		Sikh	0	0							
		Any other	0	0							
3	TYPE OF FAMILY	Nuclear Family	26	27			2.155	0.541	3	7.815	Not Significant
		Joint Family	3	2							
		Extended Family	1	0							
		Single Parent family	1	0							
4	MOTHER'S EDUCATION	No Formal Education	8	6			4.498	0.343	4	9.488	Not Significant
		Primary Education	10	16							
		Secondary Education	11	7							
		Diploma	1	0							
		Degree and Above	1	0							
5	FATHER'S EDUCATION	No Formal Education	6	1			3.723	0.155	2	5.991	Not Significant
		Primary Education	10	12							
		Secondary Education	15	16							
		Diploma	0	0							
		Degree and Above	0	0							
6	INCOME	Below than 10,000	21	15			3.737	0.154	2	5.991	Not Significant
		Rs 10001 -20000	7	13							
		Rs. 20001-30000	3	1							
		More than 30000	0	0							

7	OCCUPATION	Farmer	4	2		4.429	0.351	4	9.488	Not Significant
		Daily wage earner	1	4						
		Private Employee	20	21						
		Government Employee	3	1						
		Others	3	1						
8	RESIDENCE	Urban	21	11		5.350	0.021	1	3.841	Significant
		Rural	10	18						
9	STANDARD OF EDUCATION	9th Class	23	14		4.258	0.039	1	3.841	Significant
		10th Class	8	15						
10	WEIGHT	Below than 40 kg	7	6		0.045	0.978	2	5.991	Not Significant
		40-50 kg.	15	14						
		51-60 kg.	9	9						
		60 Above	0	0						
11	HEIGHT	Below then 140 cm	3	2		0.840	0.840	3	7.815	Not Significant
		140 - 145 Cm	18	20						
		146 - 150 Cm	9	6						
		150 Cm Above	1	1						

**Table-5** represented that with the findings related to the association between post test anxiety scale and selected demographic variables it is noted from the table 9 that chi-square value shows that there is significance association between the score level and demographic variables. There is no significance association between the level of scores and other demographic variables. The calculated chi-square values were less than the table value at the 0.05 level of significance and hence the result is not significant at 5% level. From the analysis it is concluded that there is no close relationship between the demographic variables of the respondents and level of anxiety in group

## ACKNOWLEDGEMENTS

The researcher student is highly thankful to her research (Guide) Mr. Surendra Sharma Associate Professor and, Ms. Rajwant Kaur (Co-guide) Assistant Professor for timely guidance and constant support throughout the research study and special thanks to all the Principal, teachers who have cooperated and participated in this study

**Source of Funding:** - The researcher student declares that no funds were receives from anyone

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