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Effectiveness of Art Therapy on Examination Anxiety Among Adolescents in Selected Colleges

Jessy P Inego¹, Jyoti Sharma²

1. Research Scholar, Shri J.J.T University, Rajasthan, India
2. Associate Professor, Shri J.J.T. University, Rajasthan, India

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*For Correspondence:

Jessy. P. Inego

Research Scholar, Shri J.J.T University, Rajasthan, India, and
Professor, Thasiah College of Nursing, Marthandam, Kanyakumari District, TamilNadu, India.

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ABSTRACT:

Adolescents learn to cope with changes while concerned with stress, anxiety, social experience and academic achievement. The nurses have an important role to help the adolescent to reduce anxiety by art therapy. The aim of the study is to assess the effectiveness of art therapy on examination anxiety among adolescents in selected colleges at Kanyakumari District. Materials and Methods: Quantitative approach was adopted for the study. Quasi experimental pre-test post-test control group design was adopted. The sample size consisted of 60 adolescents, 30 in experimental group and 30 in control group. The conceptual frame work is based on Von Bertalanffy's general system model. Purposive sampling technique was adopted. The tool used for data collection procedures was Beck Anxiety Inventory. Art therapy was given for one hour twice a week for 3 weeks. Result: The findings showed that in experimental group 76.6% of adolescents had severe anxiety. After providing art therapy, 3.33% had severe anxiety. The mean post-test level of anxiety score among adolescents in experimental group was less than the mean pre-test anxiety among adolescents in control group. Conclusion: The study proved that art therapy has an effect in reducing anxiety among adolescents.

KEY WORDS: art therapy, anxiety, adolescents

INTRODUCTION

The word adolescents evolved from a Latin word "adolescere" meaning to grow, to mature, to emerge and to achieve identity. Adolescents is a distinct and dynamic phase of development in the life of an individual. It is also an important period of transition from childhood to adulthood, which brings about physical, psychological, and social changes resulting in behavioral changes. The World Health Organization has defined 'adolescents' as any person between ages 10 and 19. Today 1.2 billion adolescents stand at the crossroads between childhood

and the adult world. During the period of adolescents the emotional and psychosocial conflicts are evident. Adolescents learn to cope with changes while concerned with self-image, self-esteem, social experience and academic achievement. They are trying to find who they are, what they are about their interests and personalities and where they are going in order to discover their place in adult life.

When an individual faces potentially harmful or worrying triggers, feelings of anxiety are not only normal but necessary for survival. Since the earliest days of humanity, the approach of predators and incoming danger sets off

alarms in the body and allows evasive action. These alarms become noticeable in the form of a raised heartbeat, sweating, and increased sensitivity to surroundings.

The danger causes a rush of adrenalin, a hormone and chemical messenger in the brain, which in turn triggers these anxious reactions in a process called the “fight-or-flight” response. This prepares humans to physically confront or flee any potential threats to safety.

The duration or severity of an anxious feeling can sometimes be out of proportion to the original trigger, or stressor. Physical symptoms, such as increased blood pressure and nausea, may also develop. These responses move beyond anxiety into an anxiety disorder.

There are several approaches existing to reduce anxiety of the college students. They think positively about themselves, pay special attention to their personal hygiene, exercise regularly, getting enough sleep, make their living space clean, comfortable and attractive, eat better, do more of the things that they enjoy. They enable them to express themselves and they might even improve classroom environment. Among this art therapy is one of the best psychological aids for adolescents to promote self-esteem.

Art therapy is a form of projective technique that uses the creative process of art making to improve and enhance the physical, mental and emotional well-being of individuals of all ages. It is based on the belief that the creative process involved in artistic self-expression helps adolescents to resolve conflicts and problems, develop interpersonal skills, manage behavior reduce stress increase self-esteem and self-awareness, and achieve insight.

Need for the study

According to a study by Sathish (2017), the prevalence of high exam anxiety among Phases I-III were 37%, 28%, and 32%, respectively. The high exam anxiety level was more in males than in females. Examination system, lack of time management and extensive course load was the major contributing factors for anxiety related to the examination.

Art therapy practice is based on knowledge of human developmental and psychological theories which are implemented in the full spectrum of models of assessment and treatment including educational, cognitive, emotional conflicts, fear, anxiety, stress, fostering self-awareness, developing coping skills, managing behavior, solving problems, reducing anxiety, increasing self-esteem and achieve insight.

The interpersonal self emerges in the space between the nonverbal art making and the verbalization of its meaning. Through the art making process neurons are activated

which create structural changes through the turning of genes. This process strengthens neurons in the brain which is known as neuroplasticity. In order to promote the integration of both hemispheres, art therapist facilitate attention, focus, communication and logical understanding through the art making process. There is an increasing amount of scientific evidence that proves art enhances brain function. Art can change a person’s outlook and the way they experience the world. (Suzanne Haeyen, 2019)

Statement of the Problem

“A study to assess the effectiveness of art therapy on examination anxiety among adolescents in selected colleges at Kanyakumari District”.

Objectives

1. To assess the pretest and posttest level of anxiety among adolescents in experimental and control group
2. To evaluate the effectiveness of art therapy on anxiety among adolescents in experimental group.
3. To determine the association between pretest level of stress among adolescents with their demographic variables.

Hypothesis

1. There is a significant difference between the pretest and posttest score of anxiety among adolescents
2. There is a significant association between the pretest score of anxiety among adolescents with their selected demographic variables.

MATERIALS AND METHODS

The present study was aiming at assessing the effectiveness of art therapy on examination anxiety among adolescents in selected colleges. Quantitative approach was adopted for the study. Quasi experimental pre-test post-test control group design was adopted. The setting adopted for the study was Thasiah College of Nursing, Marthandam. Convenient sampling technique was adopted. The tool used for data collection procedures was Hamilton anxiety rating scale. Art therapy was given for one hour twice a week for 3 weeks. Section I comprises of demographic variables such as age, religion, family monthly income, education of father, education of mother, occupation of father, occupation of mother, type of family, number of siblings, residential area and hobbies. Section II consisted of Beck anxiety inventory to assess the level of anxiety among adolescents. It consisted of 21 questions; each answer being scored on a scale value of 0 (not at all) to 3 (severely). Higher total scores indicate more severe anxiety symptoms.

Scoring Interpretation:

Table 1 score level and interpretation

Score level	Interpretation
0 - 7	Minimal Anxiety
8 - 15	Mild Anxiety
16 - 25	Moderate Anxiety
26 - 63	Severe Anxiety

Table 2 Frequency and percentage distribution of adolescents according to their selected demographic variables in experimental group and control group. (N=60)

S.no	Demographic variables	Experimental group (n=30)		Control group (n=30)	
		F	%	f	%
		1.	Age in years		
	a)12-13 years	12	40	14	46.67
	b)14-15 years	18	60	16	53.33
	c)16-17 years	0	0	0	0
2.	Religion a)				
	Hindu	12	40	9	30
	b)Muslim	1	3.33	2	6.66
	c)Christian	16	53.33	17	56.67
	d)Others	1	3.34	2	6.67
3.	Family monthly Income				
	a) Below Rs 5000 b) Rs 5000-Rs7000 c)Rs 7000-Rs 9000 d)more than Rs 9000	4	13.33	7	23.33
		10	33.33	3	10
		7	23.34	9	30
		9	30	11	36.76
4.	Education of father				
	a) No formal education	2	6.67	4	13.33
	b) Primary education	11	36.67	9	30
	c)Diploma/Degree	9	30	11	36.67
	d)Postgraduate	8	26.66	6	20
5.	Education of Mother				
	a) No formal education	1	3.33	2	6.67
	b) Primary education	6	20	13	43.33
	c)Diploma/Degree	14	46.67	10	33.33
	d)Postgraduate	9	30	5	16.67
6.	Occupation of Father				
	a) Government	6	20	8	26.66
	b)Private	14	46.67	17	56.67
	c)Own Business	4	13.33	2	6.67
	d)Coolie	6	20	3	10
7.	Occupation of Mother				
	a)Government	5	16.67	7	23.33

	b)Private	16	53.33	15	50
	c)Own Business	5	16.67	1	3.33
	d)Coolie	4	13.33	7	23.34
8.	Type of Family				
	a)Joint Family	2	6.67	4	13.33
	b)Nuclear Family	21	70	24	80
9.	Number of Siblings				
	a) No	5	16.67	3	10
	b) One	17	56.66	9	63.33
	c)Two	6	20	7	23.33
	d)Above Two	2	6.67	1	3.34
10.	Residential Area				
	a) Urban	11	36.67	9	30
	b) Rural	19	63.33	21	70
11.	Hobbies				
	a) Outdoor games	17	56.67	14	46.67
	b) Online/video games	10	33.33	9	30
	c)Coin Collection- Others	1	3.33	6	20
	d)Watching television	2	6.67	1	3.33

The above table predicts that, in experimental group majority (60%) of the adolescents were belonged to 14-15 years of age and 40% belonged to the age group between 12-13 years. But in control group 53.33% of the adolescents belonged to the age group of 14-15 years and 46.67% belonged 12-13 years and no one was in the age group between 16-17 years. In experimental and control group more than half of them were Christians. In experimental group 40% were Hindus and in control group 6.66% belonged to Hindu religion.

The educational status of the father reveals that 36.67% had primary education and 30% completed diploma/degree in experimental group, whereas it is reversed in control group, that is 30 % completed primary education and 36.67% had diploma/degree.

With regard to the education of the mother, it is predicted that in experimental group 46.67% completed diploma/degree whereas only 3.33% had no formal education. But in control group 43.33% had primary education and 6.67% had no formal education. Most of the Fathers and Mothers were working in private sector and less than ¼ of them were doing business in both the groups. It is observed that majority 70% and 80% of them belong to nuclear family in experimental and control group respectively. In the experimental group 56.66% of them had one sibling, 16.67 % had no siblings, 20% had two siblings and 6.67% had more than two siblings and it is almost same in the control group. More than half 63.33% in experimental group and 70% in control group were from

rural area. Most of them were outdoor games in both groups, 33.33% were online/video games and only 6.67% collect coin in experimental group, and 3.33% spends time in watching television in control group.

Table 3 Distribution of pre-test and post-test levels of self-esteem among adolescents in experimental group

Level of Anxiety	Pretest		Posttest	
	f	%	f	%
Minimal Anxiety	0	0	19	63.33
Mild Anxiety	2	6.67	7	23.33
Moderate Anxiety	5	16.67	3	10
Severe Anxiety	23	76.66	1	3.33

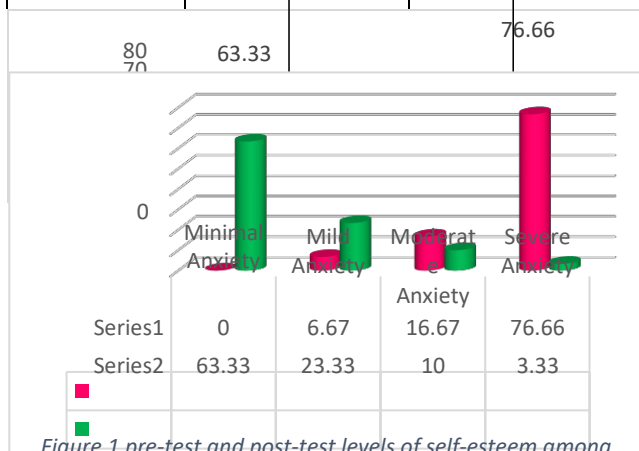


Figure 1 pre-test and post-test levels of self-esteem among adolescents in experimental group.

The above table predicts that majority of them (76.66%) had severe anxiety, 16.67% had moderate anxiety and 6.67% had mild anxiety before administration of art therapy, but after intervention majority (63.33%) had minimal anxiety, 23.33% had mild anxiety and only 3.33% had severe anxiety in experimental group. In experimental group none of them had minimal anxiety whereas after the

Association between the pretest levels of anxiety with their demographic variables

S.No	Demographic Variables	Level of anxiety				χ ²	df	P value
		Mild	Moderate	Severe	Total			
1	Age					19.01	4	18.47*
	a) 12- 13 years	1	3	8	12			
	b) 14- 15 years	1	2	15	18			
	c) 16-17 years	0	0	0	0			
2	Religion					5.95	6	22.46#
	a)Hindu	1	2	9	12			
	b)Muslim	0	1	0	1			
	c)Christian	1	2	13	16			
	d)Others	0	0	1	1			
3	Family monthly income					22.51	6	22.46*

administration of creative art therapy 63.33% had minimal anxiety.

Table 4 Comparison of mean pretest and posttest anxiety score among adolescents in experimental group

Test	Mean	SD	Mean Difference	Paired 't' test	Level of significance
Pretest	16.7	5.30	10.7	11.44	0.001
Posttest	6.53	3.90			

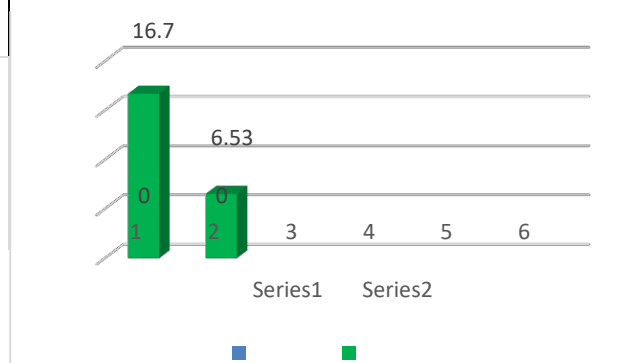


Figure 2 Comparison of mean pretest and posttest anxiety score among adolescents in experimental group

The above table summarizes that the mean pre-test score of anxiety in experimental group was 16.7 and the post-test mean score of self-esteem score was 6.53. The obtained 't' value 11.44 was statistically highly significant p<0.001. This indicates that the mean difference 10.7 is true difference and has not occurred by chance. The above findings fail to support null hypothesis. Hence the researcher rejects the null hypothesis and accepts the research hypothesis. This proves that art therapy was effective in reducing anxiety among adolescents in experimental group.

	a)Below Rs.5000 b)Rs.5000 to Rs.7000 c)Rs.7000 to Rs.9000 d)More than Rs.9000	0 1 0 1	1 2 1 1	3 7 6 7	4 10 7 9			
4	Education of father a)No formal education b)Primary education c)Diploma/Degree d)Post graduate	0 1 0 1	1 2 1 1	3 7 6 7	4 10 7 9	22.51	6	22.46#
5	Education of mother a)No formal education b)Primary education c)Diploma/Degree d)Post graduate	0 1 1 0	1 2 1 1	1 8 7 7	1 6 14 9	2.76	6	22.46#
6	Occupation of father a)Government b)Private c)Own Business d)Coolie	0 1 0 0	1 2 1 1	5 11 3 4	6 14 4 6	23.49	6	22.46*
7	Occupation of mother a)Government b)Private c)Own business d)Coolie	0 1 1 0	2 1 1 1	3 14 3 3	5 16 5 4	24.06	6	22.46*
8	Type of family a)Joint family b)Nuclear family c)Extended family	0 1 1	1 3 1	1 17 5	2 21 7	23.07	6	18.47*
9	Number of siblings a)No b)One c)Two d)Above two	0 1 1 0	1 2 1 1	4 14 4 1	5 17 6 2	23.07	6	22.46*
10	Residential area a)Urban b)Rural	1 1	2 3	8 15	11 19	0.07	2	13.82#
11	Hobbies a)Watching TV b)Playing with friends c)Internet & Browsing d)Others-Coin collection	1 1 0 0	3 1 0 1	13 8 1 1	17 10 1 2	22.91	6	22.46*

The above table predicts their selected demographic variables such as age, family monthly income, education of father, occupation of father, occupation of mother, type of family, number of siblings and hobbies has significant association with the level of anxiety. Whereas the other demographic variables have statistically no significant association with level of anxiety in experimental group.

The above findings partially support the null hypothesis. Therefore, the researcher partially rejects the null

hypothesis and accept the research hypothesis for religion, education of mother and residential area.

RESULTS AND DISCUSSION

The present study was aimed to assess the effectiveness of art therapy on examination anxiety among adolescents in selected colleges at Kanyakumari District. The sample size consisted of 60 adolescents, 30 in experimental group and 30 in control group. The tool used for data collection procedures was Beck Anxiety Inventory.

The above table predicts that, in experimental group majority (60%) of the adolescents were belonged to 14-15 years of age and 40% belonged to the age group between 12-13 years. But in control group 53.33% of the adolescents belonged to the age group of 14-15 years and 46.67% belonged 12-13 years and no one was in the age group between 16-17 years. In experimental and control group more than half of them were Christians. In experimental group 40% were Hindus and in control group 6.66% belonged to Hindu religion.

The educational status of the father reveals that 36.67% had primary education and 30% completed diploma/degree in experimental group, whereas it is reversed in control group, that is 30 % completed primary education and 36.67% had diploma/degree.

With regard to the education of the mother, it is predicted that in experimental group 46.67% completed diploma/degree whereas only 3.33% had no formal education. But in control group 43.33% had primary education and 6.67% had no formal education. Most of the Fathers and Mothers were working in private sector and less than ¼ of them were doing business in both the groups.

It is observed that majority 70% and 80% of them belong to nuclear family in experimental and control group respectively. In the experimental group 56.66% of them had one sibling, 16.67 % had no siblings, 20% had two siblings and 6.67% had more than two siblings and it is almost same in the control group. More than half 63.33% in experimental group and 70% in control group were from rural area. Most of them were outdoor games in both groups, 33.33% were online/video games and only 6.67% collect coin in experimental group, and 3.33% spends time in watching television in control group.

The first objective of the study was to assess the level of anxiety among adolescents in experimental and control group.

The above table predicts that majority of them (76.66%) had severe anxiety, 16.67% had moderate anxiety and 6.67% had mild anxiety before administration of art therapy, but after intervention majority (63.33%) had minimal anxiety, 23.33% had mild anxiety and only 3.33% had severe anxiety in experimental group. In experimental group none of them had minimal anxiety whereas after the administration of creative art therapy 63.33% had minimal anxiety.

The second objective of the study was to find out the effectiveness of art therapy on anxiety among adolescents in experimental group

The study summarizes that the mean pre-test score of anxiety in experimental group was 16.7 and the post-test mean score of self-esteem score was 6.53. The obtained 't' value 11.44 was statistically highly significant $p < 0.001$. This indicates that the mean difference 10.7 is true difference and has not occurred by chance. The above findings fail to support null hypothesis. Hence the researcher rejects the null hypothesis and accepts the research hypothesis. This proves that art therapy is effective in reducing anxiety among adolescents in experimental group.

The third objective of the study was to determine the association between the pretest level of anxiety with their demographic variables

The above table predicts their selected demographic variables such as age, family monthly income, education of father, occupation of father, occupation of mother, type of family, number of siblings and hobbies has significant association with the level of anxiety. Whereas the other demographic variables have statistically no significant association with level of anxiety in experimental group.

The above findings partially support the null hypothesis. Therefore, the researcher partially rejects the null hypothesis and accepts the research hypothesis for religion, education of mother and residential area.

CONCLUSION

Anxiety is an experience of a person which leads to various physical and mental disturbance. It made a person to avoid work, disturbances in concentration, have excessive sweat, increased heart rate and not able to take proper decision. It is the feeling of uneasiness. When a person had difficult experiences in childhood, adolescence or adulthood, difficult in studies, not understanding the concept of studies it leads to anxiety. Sometimes stress and trauma also cause problem. In such situations, art therapy is useful in reducing anxiety among adolescents.

Conflict of Interest

The authors have no conflict of interest.

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