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# Art Therapy as a Means of Overcoming Aggressiveness in Adolescents

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#### **ABSTRACT**

The article in concentrated on the development of students' vocational training program in terms of social partnership and experimental study of its efficiency. The leading methods of this problem study are the following: observations, monitoring, questioning, psychological testing and pedagogical experiment that allows checking of the efficiency of the given art-therapy program on the overcoming of adolescents' aggressiveness within school environment. The paper reveals the determination of "aggression" in psychological and pedagogical literature; explores the role of art-therapy in overcoming of aggression; defines the forms and methods of overcoming of adolescents' aggressiveness; reveals the features of adolescents' aggressiveness; proves the efficiency of the developed art-therapy program called "World without aggression". The main provisions of the article may be used in the organization of similar work in the secondary school system.

#### KEYWORDS

Art therapy, aggressiveness, aggression, aggressive behavior, adolescent, overcoming aggression

## ARTICLE HISTORY

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#### Introduction

## Urgency of the problem

The main goal of art therapy is to harmonize the development of the individual through the development of abilities of self-expression and self-discovery. The value of the application of art in correctional and rehabilitation purposes is that it can be used on a symbolic level to express and explore the wide range of emotions such as: aggression, hatred, resentment, anger, fear, joy. Methodology of art therapy is based on the belief that the inner self of a person

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is reflected in the visual images whenever he draws, paints a picture or sculpts a sculpture.

Overcoming aggression requires special correction a and psychotherapeutic work that focuses on the source of aggression. Teachers and parents are required to give more attention to the child's needs and to create a conducive environment to the formation of the child's self-confidence. Therefore, art therapy is an important means of overcoming aggressiveness in adolescents.

## Exploration of the Importance of Problem

The problem of aggressiveness, as one of the most fundamental determinants of human functioning is a major problem of modern science.

Aggressiveness in adolescence may be an indicator of social maladjustment of the child and the violation of the socialization process in general. It is based on the psychological features forming personality as personal self-centeredness, the need for absolute self-affirmation. The intensification of aggressive manifestations in adolescence is due to a mismatch between negative emotional experience of the child, lack of self-confidence and high tension requirements in communication in this age (Ribakova & Biktagirova, 2015)

Formation of aggressiveness in adolescents is a result of the unfavorable development of the situation, the central element which is alienation, isolation of the child, the feeling of psychological discomfort. It contributes to the development of numerous barriers in interpersonal perception and interaction, increase readiness for aggression (Sablina, 2004).

In this regard, the correction of behavioral manifestations of aggression in adolescence is achieved through a positive overcoming of aggression.

For a long time in the education system, art have traditionally been viewed as a means of aesthetic development and formation of children. Today art therapy is used in social, educational, psychological work as a means to harmonize and overcome the negative phenomena in human behavior through his artistic creation and refers to the psychological impact of art.

#### Literature Review

The possibility of updating the content of the process of teaching fine art is a phenomenon of pedagogical art therapy, the scientific basis which is developed by L.A. Belozerova (2011), L.D. Lebedeva (2004). The use of art therapy is based on the fact that the state of the inner self of the child is reflected in the products of its creativity. When drawing, a child gets the opportunity not only to remove the anxiety, aggressiveness, distrust themselves and others, but to also gain self-confidence and success, as well as the associated positive feelings and patterns of behavior.

Methods of art therapy have potential soft humane support of the child's personality; as well as development of his ability to self-knowledge (Beich, 1988; Bandura, 2000; Lebedev, 2004).

Multidimensional psycho-pedagogical study of this problem in Russian science, in essence, is just beginning; although some problems in the study of aggression and aggressive behavior attracted the attention of many authors, having found reflection in the number of domestic works (Andreeva, 1999;

Sablina, 2004; Kostyunina, Drozdikova-Zaripova & Kalatskaya, 2015, etc.) and foreign psychologists (Bandura, 2000; Baron & Richardson, 2007; Lorenz, 2001).

Despite the exploration of the problem, there is an objective need for the study of the content, tools, forms and methods of overcoming of aggression among adolescents, the validity of methodological support of this process.

The analysis of the current state of the problem showed the presence of contradictions between objective necessity in overcoming the aggressiveness of adolescent children and the inadequate implementation in practice of programs, including effective means for overcoming aggressiveness in this age by means of art therapy.

This allowed us to formulate the hypothesis of the study of this problem that the overcoming of aggression in adolescents will be more successful if:

- It relies on the essential characteristics of the concept of "aggressiveness
- It takes into account the age peculiarities of manifestation of aggression among children adolescents;
- It uses the pedagogical potential of art therapy in overcoming the aggressiveness of adolescent children in the program, "I and aggressiveness".

#### **Materials and Methods**

The reliability of the conclusions of the study is provided by an interdisciplinary analysis of the scientific literature, based on the basic provisions and the scientific findings of psychologists and teachers; using a combination of adequate object, subject, aims and objectives of the study (testing using methods by A. Bassa and A. Darki to identify the level of aggressiveness and diagnosis of aggressive and hostile reactions and methods of mathematical processing of pedagogical experimental data), data processing methods (quantitative and qualitative analysis), methods of mathematical data processing.

The study was conducted in a secondary school in Kazan. The study involved students in grades 7-8, comprised of 30 person aged 14-15 years. The experiment was conducted during 4 months in natural conditions.

Based on the goals, the study was conducted in 3 phases, forming the basis of the formative experiment:

Ascertaining, in which the subjects experimentally determined initial level of the studied characteristics. On the basis of these results is the program of the therapeutic nature of art "The World without aggressiveness."

Forming the process which piloted this program; this was organized for active work to overcome aggression in adolescents by means of art therapy.

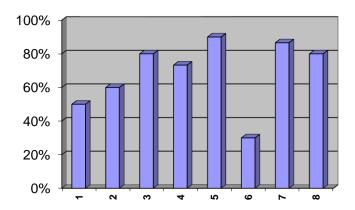
Control - this is the final stage of the research study of the problem; its purpose is the verification of the findings on the impact of the program "World without aggressiveness", by comparing the results obtained in the ascertaining and control stages of the work, it is possible to find out whether the correct forms and methods were used and their effectiveness.

## **Conduction of research**

On ascertaining stage, we investigated the indicators for the selected methods. The results were subjected to processing and sequential analysis.

Table 1. The percentage of adolescents tested according to the method of A. Bassa A. Darki, prone to certain types of aggression on the ascertaining stage

		Feelings of guilt	80%
	Types of aggression	verbal aggression	86,6%
		suspiciousness	30%
		Φ.	%06
		Negativism	73,3%
		Irritability	80%
		Indirect aggression	%09
ע		Physical aggression	20%
ascel tallilly stag	Number of	subjects	Pupils of 7-8 grades



**Figure 1.** The percentage of teens tested according to the method of A.Bassa and A.Darki prone to certain types of aggression on the ascertaining stage.

The types of aggression: physical aggression 1-, 2 - indirect aggression 3 - irritability, 4 - negativism, 5 - offense, 6 - suspiciousness, 7 - verbal aggression, 8 - feelings of guilt

As shown on the table and figure, the tendency to physical aggression include 15 people, that is 50% of the subjects; the tendency to indirect aggression include 18 people that is 60% of the subjects; a tendency to irritability include 24 people that is 80% of the subjects; the tendency to negativism include 22 people that is 73.3% of the subjects; the propensity for the offense include 27 people that is 90% of the subjects; the propensity for suspicion include 9 people that is 30% of subjects; and a propensity for verbal aggression include 26 people that is 86,6% of the subjects. Also the scale of feelings of guilt tends to include 24 people (80%). The most severe forms of hostile reactions in this group are: offense (90% of subjects), verbal aggression (86.6% of subjects) and irritability (80% of subjects).

**Table 2.** The level of hostility in the group of subjects of adolescents on the ascertaining stage

Number of subjects	Subjects with low levels of hostility (%)	Subjects with an average level ( hostility (	Subjects with high levels of hostility (%)
Pupils of 7- 8 grades	0 %	23,3%	76,6%

Table 2 shows the results of the test group according to the level of hostility. Among them, low levels of hostility include 0% of subjects; the average level of hostility include 23.3% of subjects; and high levels of aggression include 76,6% of the subjects. Therefore, the high level of hostility prevails.

stage			
Number of subjects	Subjects with low levels of hostility (%)	Subjects with an average level of hostility (%)	Subjects with high levels of hostility (%)
Pupils of 7-8 grades	16,7 %	46,7%	36,7%

Table 3. The level of aggressiveness in the test group of adolescents on the ascertaining stage

According to the results of diagnostics, low level of aggressiveness includes 16.7% of the subjects; the average level of aggressiveness includes 46.7% of subjects; and high levels of aggression include 36.7% of subjects. Consequently, the average level of aggressiveness prevails, but in spite of this group, there are children who have a high level of aggressiveness. There is a need to work on the overcoming of aggression in this group of adolescent subjects.

The developed program "World without aggression" included the following forms of art therapy:

- 1. Active art therapy -Examine pictures, read books, and listen to music.
- 2. Passive art therapy the client creates art products: drawings, sculptures, paintings, music, literary works.

Art therapeutic agents 1 include: drawing; sculpting, modeling with paper, paints, wood, stone; shaped conversations; writing stories; singing, listening to music and playing musical instruments; expressive body movement, and others.

#### Results

We obtained the following results of the control phase:

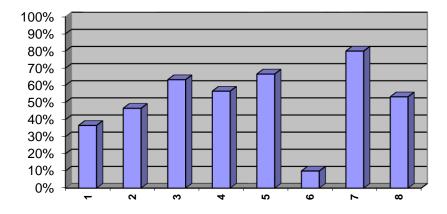


Figure 2. The percentage of adolescents tested according to the method by A.Bassa and A.Darki prone to certain types of aggression on the ascertaining stage.

The types of aggression: physical aggression 1-, 2 - indirect aggression 3 - irritability, 4 - negativism, 5 - offense, 6 - suspiciousness, 7 - verbal aggression, 8 - feelings of guilt

Table 4. Percentage of adolescents tested according to the method by A. Bassa and A. Darki prone to certain types of aggression in the control verbal aggression 80% suspiciousnes 10% %9,99 Types of aggression Negativism 26,6% Irritability 63,3% Indirect aggression aggression 36,6% Pupils of 7-8 Number of subjects

As shown on the Figure 2 and Table 4, there are changes in a positive way. The tendencies to physical aggression include 11 persons, that is, 36.6% of the subjects; the tendency to indirect aggression include 14 people - 46.6% of the subjects; the tendency to irritability include 19 people (63,3%); the tendency to

negativism include 17 people that is 56.6% of the subjects; the tendency to take offense include 20 people (66.6%); the tendency to suspiciousness include 3 people that is 10% of the subjects; the tendency to verbal aggression include 24 people (80%). On the scale of feelings of guilt there are changes which include 16 people (53.3%). More changes were observed in the most severe forms of hostile reactions: the percentage of subjects prone to offense decreased to 23.4% (from 90% to 66.6%), the percentage of subjects prone to verbal aggression decreased by 6.6% (from 86.6% to 80%) and percentage of subjects prone to irritability decreased 16.7% (from 80% to 63.3%).

To find out whether there are significant differences between the "before" and "after" the experiment for each type of aggression, we used a mathematicalstatistical analysis of the data by t - student's test. The results of the analysis for our group tkp=2.04, at the confidence level p=0.05.

Table 5. The level of hostility in the group of adolescents in the control stage

	, , ,		
Number of subjects	Subjects with	Subjects with an	Subjects with
	low levels of	average level of	high levels of
	hostility (%)	hostility (%)	hostility (%)
Pupils of 7-8	12%	23,3%	56,6%
grades			

We present the results of the test group according to the level of hostility in the control stage. Among them, the low level of hostility is 12%; the average level of hostility is 23.3%; and a high level of aggressiveness is 64.7%.

Comparison of the results of the study before and after the hostility experiment

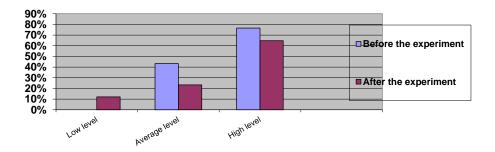


Figure 3. Results of the study of hostility before and after the experiment.

As we can see the percentage of subjects with high levels of hostility decreased by 11.9% (from 76.6% to 64.7%), the percentage of subjects with an average level of hostility has decreased by 20% (from 43.3% to 23.3%). In addition, there was the percentage of subjects with low levels of hostility - 12%.

Thus, we can observe a tendency to reduce the level of hostility in adolescent children.

We present the reliability of our study. For our group tkp = 2.04, with a confidence level p = 0.05. On the criterion of the hostility we found out that temp = 2.21. It follows that the temp> tkp (temp = 2.21) with p = 0.05, confirmed hypothesis H1.

Table 6. The level of aggressiveness in the group of adolescents in the control stage

Number of subjects	Subjects with	Subjects with an	Subjects with high
,	low levels of	average level of	levels of hostility (%)
	hostility (%)	hostility (%)	, ,
Pupils of 7-8 grades	13,3%	70%	16,6%

Here too there are changes in a positive way. The high level of aggressiveness has 5 people (16.6%), the average level of aggressiveness has 21 people ie 70% of the subjects, a low level of aggressiveness has 4 people (13.3%). This indicates that the program is designed to overcome the actual aggression in adolescents. Follow-up care of adolescents showed that there is a significant difference in the mean values for the studied parameters.

The results of this work demonstrate the accuracy of the hypothesis. We have developed a program that contributes to the process of overcoming aggression in adolescents.

Here, there are also changes in a positive way. High levels of aggression include 5 people (16.6 per cent), the average level of aggressiveness include 21 people that is 70% of the subjects, the low level of aggressiveness include 4 people (13.3 percent). This suggests that the developed program is relevant to the overcoming of aggression in adolescents. Control examination of adolescents showed that there is significant difference in the mean values on the studied indicator.

The results of this work prove the validity of the hypotheses. We have developed a program that contributes to the process of overcoming aggressiveness in adolescents.

## **Discussions**

Having conducted theoretical and empirical research, the following results were obtained:

- 1. In 11 subjects out of 30 adolescents, there is a high level of aggressiveness, that is: the low level of aggressiveness include 16.7% of the adolescents, 46.7% had an average level of aggressiveness, 36.7% had a high level of aggressiveness.
- 2) The forming stage of the experiment approved the program we have developed- the art of the therapeutic nature of the "World without aggressiveness", designed to overcome the aggression in adolescents.
- 3) In the control stage, we had to re-examine the level of aggression in adolescents. 13.3% had a low level of aggression, 70% had average level of aggressiveness and 16.6% had high level of aggressiveness.

## **Conclusion**

The obtained results indicate the positive dynamics of overcoming aggression among adolescents. This suggests that the program "World without aggressiveness" promotes effective overcoming of aggression in adolescent children.

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#### Disclosure statement

No potential conflict of interest was reported by the authors

#### Notes on contributors

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#### References

Andreeva, G. M. (1999). Social psychology. Moscow: Aspect Press. 375p.

Bandura, A. (2000). Adolescent Aggression: A study of the impact of education and family relations. Moscow. EKSMO-Press. 508p.

Beich, D. R. (1988). Creative aggression. Moscow: Novoe vremya. 134p.

Belozerova, L. A. (2011). Art - therapy as a means of psychological correction of violations of the emotional states of pre-school children: PhD Thesis. Voronezh: Voronezh State University.

Bassa, A. & Darki, A. (2002). Diagnosis of aggression. Saint-Petersburg: Piter, 80-84.

Baron, R., Richardson, D. (2007). Aggression. Saint-Petersburg: Piter. 187p.

Biktagirova, G. F. & Kasimova, R. Sh. (2015). Development of University Students' Creative Abilities. Review of European studies, 7(5), 101-107.

Kostyunina, N. J., Drozdikova-Zaripova, A. R. & Kalatskaya, N. N. (2015). Prevention of Student Youth's Victim Behavior. Review of European Studies, 7(4), 88-92

Lebedeva, L. D. (2003). Practice of art therapy. Approaches, diagnostics, training system. Saint Petersburg: Retch. 256p.

Lorenz, K. (2001). Aggression. Saint-Petersburg: Amfora. 347p.

Ribakova, L. A. & Biktagirova, G. F. (2015). Peculiarities of Demonstrative Behavior Manifestations of Teenagers Brought up in Orphanages. Review of European studies, 7(4), 140-148

Sablina, N. A. (2004). Behavioral manifestations of aggression in adolescence and possibilities of overcoming them. PhD Thesis. Stavropol: Stavropol State University. 184p.