Prevention of suicidal behaviour of children on the basis of art-pedagogical activity

Sanat-pedagojik aktivite temelinde çocukların intihar davranışlarının önlenmesi

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Abstract. Currently the problem of suicide among children and adolescents is one of the most pressing social problems all over the world. Reasons for such behavior should interest not only parents, psychologists or social services, but also teachers. Art-pedagogical activity can be regarded as one of the effective means to sort out such problems in elementary school. Thus, the purpose of this study is to identify the content of art and educational activities in the prevention of abnormal domains in society after the pilot art-pedagogical session. 87 children at the age of 10-17 participated in the survey. 9 techniques were applied during 6 research steps. The authors argue the establishment of creativity contributes to promotion of individual in society, the development of all the senses, memory, perception, will, imagination, intuition, and stress relief, increase of emotional tone, confidence, and positive attitude.

Keywords: Art-pedagogy; Senses, Memory, Perception; Emotional State; Suicide prevention; Children Behaviour


Anahtar Sözcükler: Sanat Pedagojisi; Duyular, Bellek, Algı; Duyguşal Durum; İntihar Önleme; Çocuk Davranışı
INTRODUCTION

Over the past 45 years worldwide suicide rates have increased by 60%, youths being the group at highest risk (WHO 2014), making it the second most important cause of death during adolescence and young adulthood in 2013 (Mokdad et al. 2013; Arensman 2017).

Adolescence is a crucial developmental period with an increasing autonomy but is also subject to rapid psychological, biological and social changes (Gutman et al. 2017; Moon 2012; Blader 2018). Such changes may make youths vulnerable to environmental stress, which may contribute to psychopathology, alcohol and drug misuse, and risk behaviors (Arpawong et al. 2015), and thus increase suicide risk and repeated suicide-related thoughts and behaviors (Castellvi et al. 2017). Thus, experience show adolescents endorse a lower level of mental health than young and older adults (Tan, Xia & Reece 2018).

One can note suicidal ideation is often recurrent and associated with subsequent risk of suicide attempts (Wasserman et al. 2015), around one third of fatal suicides have made a prior suicide attempt (Cluver et al. 2015). The majority of adolescents engaging in suicidal behaviour represent a hidden population who do not receive professional help (Sheftall et al. 2016).

Thus, school-based screening for suicidal behaviour as well as high interest of special health authorities can be regarded as a useful means of identifying those at-risk (Cotter et al. 2015). Among adolescents already exposed to adversities (such as mental health disorders, drug/alcohol use, adverse childhood experiences), effective mental health services may buffer against future suicidality (Dube et al. 2001; Cluver et al., 2015).

The art-therapy strengthens the identity of the child, as via creating, children think over (Slayton, D’Archer & Kaplan 2010); “feel” its intimate world, search for individual language which connects them with “great external world” and most accurately expresses their “inner little world”. A variety of methods of self-expression, assistance in self-acceptance, positive emotions that arise in the process of art-therapy, reduce aggression and depression (Chong & Kim 2010), increase self-esteem and the adaptive capacity of human-to-day life (Ercegovac, Dobrota & Kuščević 2015).

Everything associated with the word “art”, and including art pedagogy are indicative and means mostly non-verbal communication, this makes this area of pedagogy especially valuable (Hogan & Coulter 2014) for those who has not a fluent speech and experience difficulties in a verbal description of their emotions, or on the contrary overly dependent on verbal communication (Cortina & Fazel 2015). Symbolic speech is one of the foundations of the fine arts, often it enables a person to express feelings more accurately, take a fresh look at the situation and problems in life and find a way through this to their solution (Kopitin 1999; Dalley et al. 2013).

Moreover, art-therapy helps to bypass the “censorship of consciousness”, therefore it represents a unique opportunity for the study of unconscious processes, the expression and actualization of latent ideas and conditions of those social roles and behaviors, which are in the “repressed” form, manifested weakly or in daily life (Stepney 2001). It has an “insight-oriented” nature, which implies an atmosphere of trust, tolerance and high attention to the inner world of the individual (Schlemmer, Carpenter & Hitchcock 2017).

Group forms of art-therapy are applied very widely, not only in health but also in education, social services (Kapitan, 2017). Art-therapeutic process thus takes place in the framework of the therapeutic relationship and the creation of images serves as the primary means of communication (Malchiodi, 2006). In this regard art-therapist creates conditions for non-verbal expression of conscious and unconscious feelings and ideas, helping team members to communicate with each other (Stevenson & Orr 2013).

A number of features of the method of group art-therapy can be defined. The group experience resists alienation, helps to solve interpersonal problems; group reflects the society in miniature, makes apparent the hidden factors such as the pressure of partners, social influence and conformity; the ability to receive feedback and support from people with similar problems (Rubin 2016). In the group of people can learn new skills, to experiment with different styles of relations among equal partners; the group members can identify themselves with others, to “play” the role of the other person to better understand him/her and himself/herself and to explore new...
effective ways of behavior, applied by someone; interaction in a group creates tension, which helps to clarify the psychological problems of each person; the group facilitates self-revealization, self-exploration and self-cognition processes (Rudestam 1999; Slayton 2012).

To sum up, art method (or methods of art-pedagogy) as a public and “lightweight” in the frame of art-therapy, allows to work with the senses: to explore and promote them on a symbolic level, actualize and express conscious and unconscious feelings and needs, including those difficult to express verbally by teenagers (Reynolds, Nabors & Quinlan 2000). In addition, the hidden content of art-pedagogy and art-therapy allows determining the orientation of the person accurately; diagnosing subjective relationship with the world and with oneself, influence the subconscious personality structure. Using elements of art-therapy in the prevention measures enhances protective factors in relation to a potential involvement of young people into a negative environment, including a suicidal direction (Brent 2016).

Thus, the purpose of this study was to investigate the opportunities of art-pedagogical activity in prevention of suicidal behaviour among children. Our five-hour art-pedagogical session was aimed to improve a balanced personality that can keep a settle between its contradictions - polarities (e.g., pessimism optimism, love - hate, weakness - strength dependence - independence, dominance - submission, hope - desperate, etc.), i.e. to achieve a kind of harmony that will help the person in the future to withstand in difficult and stressful situations.

All utilized techniques of the session in the whole have solved following tasks: expansion of horizons of person; development of prospects in life; adequate internal decision-life crises.

**METHOD**

**Search strategy and design**

The group art-pedagogical session, in our opinion, contributes to development of valuable social skills; it supports each other and solve common problems; observe the results of actions and their impact on others; learn new roles and show latent qualities of the person, to see how the modification of the role affects behavior relationships with others; improve self-esteem and strengthen personal identity.

The main procedural steps of art-pedagogical session are presented in Figure 1.

![Figure 1. The main procedural steps of art-pedagogical session](image-url)
In organization of the session we relied on the rules for a specialist in art-therapy (Lebedeva, 2003). Thus, in the art-therapeutic process the command, specifying requirements, enforcement are unacceptable. Participants of the art-therapy sessions (child, adolescent) in line with their views can choose a suitable creativity content, visual materials, and start working at their own pace; they have a right to refuse to perform certain tasks, open the verbalization of feelings and experience, brainstorm ("involvement" in the group communication is largely determined by the ethics and skill of a psychologist); the participants have a right to just watch the activities of the group or do anything they will, if it does not contradict to the social and group norms.

All products of creative graphic activity, regardless of their content, form, aesthetic appearance are accepted and commendable. The ban on comparative and evaluating judgments, marks, criticism, and punishment is adopted".

Based on the above stated rules, our approach to art-pedagogical session is expressed in the following provisions: due to potential of art-pedagogy (lies outside the sphere of everyday life), our conversation is focused on the construction of solutions, perspective look into the future, instead of returning to the problem.

Art-therapy mainly focuses on human “undertakings” rather than on “completion” and this specificity is a characteristic for the art-pedagogy, this session reflects on the positive initiatives of young people. In the art-therapy activities the person forms focus on creation, avoiding the positions of "soul-searching" and "self-incrimination". This session has even more powerful creative potential of art via increased self-esteem, art diagnostics, catalytic self-awareness and self-knowledge.

Art-therapy enables to initiate self-help, self-healing and self-development processes. Art-pedagogy inspires guides and activates. Our session as the integration of art -therapy and art -pedagogy actualizes the potential of creativity; it promotes self-actualization and self-transcendence of personality.

Participants

After holding the developed art-pedagogical session, we conducted a survey. The poll involved all those, who participated in the art-pedagogical session – children at the age of 10-17 (random sampling). Total sample was 87 people (37 boys and 50 girls); their age was the only criterion.

The meeting was organized by the students Pedagogy and Psychology and Social Pedagogy and Self-Knowledge in the Al-Farabi Kazakh National University (Philosophy and Political Science Faculty). They have invited the intending children they knew, passing by teenager from the profession-oriented school established under the Al-Farabi Kazakh National University and students attending the pre-university courses (everyone is learning in the same building).

Participants were informed of the research objectives and general content. In order not to violate ethical principles, written permissions were obtained from the respondents and their parents to use minors’ personal data. No one refused to participate in the session and/or the follow-up poll.

The statistical error was 1%.

Procedure

The session was held several times. Room capacity was limited while the session time could not exceed 100 minutes. The poll included closed and open-ended questions. The questionnaire was designed for students to reflect their subjective-personal experience in a free form.

The questioning was conducted after the session as a self-reflection act. Questions were written on the board:

1. What was your mood before the session?
2. What cognitive processes and individual traits were activated during the session?
3. What material did you prefer during the session? Why?
4. What did you feel at the end of the session?
5. Were there any changes in your mood? Why do you suppose that happened?

Data collection tools

In the selection of techniques, we relied on the basic methodological position - various modalities of creative expressions, represented in painting, music, application activities, and others, maximize the opportunities of the individual (Tararina 2013).

Here are the main stages of the content and technology (they reflect the above stated procedural steps of 6 art-pedagogical sessions):

1. content session stage: fine arts-pedagogical (duration: 1 hour 30 minutes - 1 hour 45 minutes).

   Fine work assists in understanding oneself, to express freely thoughts and feelings, hopes and dreams, to go beyond gloss, to feel the fullness of life, to be free from the negative experiences of the past. It is not only a reflection of the consciousness of the participants in the session and the surrounding social reality, but also it is the process of modeling, expression of attitude to it.

   Drawing participates in the coordination of relations between the left and right hemispheres of the brain, being directly associated with the most important functions (vision, motor coordination, speech, thinking), it does not just contribute to the development of each of these functions, and also connects them to each other. If fine arts-therapy uses imaging process as a tool to achieve the goals, the fine arts-pedagogy promotes the aim of setting and goal formation of personality in the process of creating images.

   We applied a variety of graphic materials:
   1) watercolor and gouache paints, graphic and colored pencils, markers, crayons, pastels and clay even as a means of drawing technique spreading;
   2) drawing paper of different sizes and colors, cardboard;
   3) brushes of different sizes, sponges for painting large areas and others.

   Technique “Breakfast - lunch – dinner”, proposed by A. Kokorenko (2005)

   Purpose: diagnostics and correction of person’s self-perception in the neighborhood of other people.

   Objectives: stabilization of the self-assessment; development of emotional and social intelligence; adoption of own resource and problematic aspects of the personality.

   Inventory: brush, watercolor and gouache paints, graphic and colored pencils, markers, crayons, pastels, water jar, white sheet of paper (A-1).

   Duration: 20-25 minutes.

   Technique “Lifeline / life path” by A. Kopitin (2007, 2010) with the elements of phototherapy

   Purpose: actualization and expression of feelings, associated with different periods of life; their understanding and integration.

   Objectives: to strengthen the image of “I”; identifying and understanding the needs, attitudes and values; acquisition or revaluation of the meaning of life; research relations system, updating and resolution of intrapersonal conflicts.

   Inventory: pictures, glue, paint brush, paper (A-3).

   Duration: 30 minutes.

   We have developed a technique of drawing a “favorite dish” with elements mandalatherapy with plasticine.

   The goal: to enhance the creative activity; give an opportunity to show the different feelings that fill the interior of the human-being.

   Objectives: to search for self-improvement resources; development of emotional intelligence, sensuality; the formation of the skill of reflection of their own conditions and needs.

   Inventory: plasticine of different colors, a jar with water, cut from construction paper circles with a diameter of 27 sm, divided into sectors, a plastic knife to cut the excess clay, wet wipes.

   Duration: 15-20 minutes.

   2 substantive session stage: musical-pedagogical (duration: 1 hour 30 minutes).

   Purpose: to develop emotional intelligence and activation of creative resources.
Objectives: to develop skills for self-expression; removal of internal control; development of creative imagination and reflection.

Inventory: a sheet of A-3, paint, gouache, 5x5 sm glass, brushes of different sizes, wet and dry wipes, a jar of water.

Duration: 15 - 30 minutes.

**Technique of “Take the Lead” (modification of E. Tararina (2013))**

The goal: enhancing personal resources through ritmoterapii.

Objectives: To develop group dynamics; develop a sense of rhythm, concentrating on a specific action (regardless of external conditions), increased intrinsic activity at the expense of the rate of external actions; reducing aggression and anxiety using aligning actions; intensification of cooperation of the left and right hemispheres.

Inventory: drums of various sizes, drumsticks, author of music and ethnic music of the peoples of the world with the use of drum rhythms (disk recording).

Duration: 15-20 minutes

2 substantive stage of the session: musical-pedagogical (duration: 1 hour 30 minutes).

**Technique “Take the rhythm” (modification of E. Tararina (2013))**

The goal: to enhance personal resources through rhythm-therapy.

Objectives: to develop group dynamics; a sense of rhythm, concentrate on a specific action (regardless of external conditions), increase intrinsic activity at the expense of the rate of external actions; reduce aggression and anxiety using aligning actions; intensification of cooperation of the left and right hemispheres.

Inventory: drums of various sizes, drumsticks, original music and ethnic music of the nations of the world with the use of drum rhythms (disk recording).

Duration: 15-20 minutes.

**Technique “Improvisation with musical instruments” (modified by E. Tararina (2013))**

Objective: to identify the rhythm and sound associations in human-being behavior; definition of psycho types of personality through sound impact [8], or interaction effects; develop improvisation skills through sound expression; search internal and external harmonies in the expressions of individual temperament.

Objectives: to learn to listen and hear the internal rhythm that defines the personality of the individual; to develop the ability to approve themselves and their motives through different sounds, pauses, rhythm, melodic number; develop the skills of “conducting” internal and external individual processes in order to improve the quality of interaction in the family and micro society; to define limiting the installation, associated with psychological problems; through creative and gaming “permission” to enable the person to express himself/herself through sound; gain skills of improvisation and spontaneity in various situations of interaction in society; improve and enhance the creative abilities that are basic to the evolutionary formation of the person; develop body motility, and in particular, when dealing with hand instruments.

Inventory: musical instruments with different sound range and the "degree of difficulty of their use; articles giving sound.

Duration: Individually - from 3 minutes to meet and listen to each instrument or liked. In the group - from 5 minutes to an audio playback given situation.

**“Technology of epilogue” or exercise “From the sound to the chord”**

Inventory: musical instruments with different sound range and the "degree of difficulty of their use; items, giving sound.

Duration: from 3 to 10 minutes.

**Technique “I and my talent” (modification of E. Tararina (2013))**
Purpose: to extend the range of social and professional choices; the formation of the skill of self-knowledge; gain experience creating your own "creative product"; discovering new facets of the personality; comprehension especially unique professional abilities of the individual.

Objectives: to learn how to listen and hear the inner "I"; develop emotional intelligence, sensuality, tactile perception of fine motor skills of hands; realize their creative abilities; promote personal and professional growth, self-development.

Inventory: foil in different colors (30 x 30sm), paper (A-4).
Hours: 25-30 minutes.

Drawing Technique with semolina by Shevchenko
Objective: to develop a harmonious interaction of the right and left hemispheres, creative imagination, aesthetic taste, to increase self-esteem, relaxation.
Objectives: strengthening the trust among members of the group; remove emotional stress and reach relaxation.
Inventory: semolina or sand sheet of paper (the number of participants).
Running time: 15-20 minutes.
Format: in pairs.

*Technique “Creating an image of the face in working with clay” (modified by E. Tararina (2013))*

Objective: to establish communication of the unconscious and conscious one; self-acceptance; awareness of personal boundaries; search for self-improvement resources.
Objectives: to develop emotional intelligence; gain experience of creation; develop tactile, fine motor skills.
Inventory: clay, glass of water, napkins.
Duration: 35-40 minutes.

*Technique of creating a collage*

Objective: to plan the future development of reflection, enhancement of personal life, increase self-esteem.
Objectives: to learn how to structure the space in relation to the objectives; Learn to listen and hear the inner voice and intuition; use tactile sensations for more inner experience; to develop emotional intelligence. To develop the ability to adequately take oneself and his/her environment.
Inventory: A3 sheet, glue, magazines, scissors.
Duration: 30 minutes.

**RESULTS**

**The findings of piloting of the art-pedagogical session**

Some of the respondents largely felt stress relief (29 respondents, which is 33% of the sample, stated on this immediately after the session), the increased emotional tone was experienced by 19 respondents (22% of the sample). In addition, 10 people (11 % of the sample) felt problems of confidence in the drawing session (see Figure 2).
Figure 2. The results of answers to the question on appearance of emotions and new states of the respondents during the art-pedagogical session

The responses showed serious discrepancies. If teens believe that imagination (38%) and attention (21%) were the most developed, the boys and girls pointed out that the improvement of adaptive properties of the person (54%), strength of will (37%) and intuition (32%).

In this case, teenagers were less categorical, considering that along with these processes and properties, self-esteem, thinking and imagination are developed simultaneously (see Figure 3).

Figure 3. The results of answers to the question about activization of cognitive processes and individual qualities of respondents – teenagers (14-16 years old) during the art-pedagogical session

The issue of preference in the selection of materials for the session intended partially closed (respondents were asked to tick the preferred material) and open-ended forms - it was necessary to justify preference independently (see Figure 4).
Thus, participants of the art-pedagogical session about equally distributed their preferences in the use of material with a slight advantage in favor of the paints and clay (Figure 5).

The majority of the respondents explained their choice as follows:

“Paint, whether watercolor or gouache provide ample opportunity not only to realize their creative potential, and also to reassure themselves by choosing pleasing colors and diluting it to experiment with the mood, to express their needs and desires at this point, to try oneself in a combination of colors”.

As to clay, following interesting arguments of the session participants were revealed:
There were also unique expressions in terms of the sand. They are:

“Fluctuation of the sand gives strength and belief that while the sand and may be subject to you”.

“Sand - excellent as material, which is pleasant to work with, feeling its friability and fragility, thus feel their confidence and strength, the ability to subdue the elements”.

“Any material, especially sand, you feel that you are a man - the ruler of the world, that in your hands the future of the planet that you’re able to do something good and leave a trail”.

The experience of the developed art teaching session and subsequent questioning leads to the conclusion that through the introduction to the fruits of creativity of all mankind in its various forms and the creation of their own creativity occurs facilitate adaptation of the person in the society, the development of all the senses, memory, attention, will, imagination, and intuition.

DISCUSSIONS AND CONCLUSION

Risk factors such as psychological distress, parental involvement, and especially exposure to bullying and violence have been found to be associated with an increased risk of a suicide attempt in previous studies (Randall et al. 2014).

M. Van Geel, P. Vedder & J. Tanilon (2014) argue cyberbullying is even more strongly related to suicidal ideation. This problem is now regarded as a major public health and spcial problem in the Western world (Hinduja & Patchin 2010).

It is also important to point out a link between school performance and suicidal behavior. Low cognitive ability has already been considered as an important explanatory factor (Sörberg Wallin et al 2018). School performance was defined as an important mediator in the relationship between parental socioeconomic status and risk of non-fatal suicidal behaviour, accounting for 60% of the variance (Jablonska et al. 2012).

An understanding of these relations between bullying behavior, school performance and suicide is critical to those who deal with children and design educational prevention programs for schools (Klomek, Sourander & Gould 2010).

Arts-based inquiries, in turn, provide key to studying the development of disturbed youth, their caregivers, and even researchers into their condition (McCammon & Smigiel 2004). Forms such as dramatic monologue, drawings, models, music improvisation and poems may challenge and thus extend the current understandings of youth, including death by suicide (Mullen, Buttignol & Diamond 2005).

One can note that the controversy surrounding the art of pedagogy associated with the philosophy of positive perception of the world (Kafara 2017), declared the art methods, which in our opinion will prevent the exposure of young people non-traditional religions, sometimes extremist, informal groups (emo, Goths, punks, rockers, metal heads, rappers), cultivating acceptance of suicide as a normal phenomenon (Malchiodi 2014). Art therapists tend to underestimate the art teaching methods (Morev, Popova & Vasilchuk 2012).

Recommendations
The potential of art-pedagogy and art-therapy in the context of the prevention of suicidal behavior and related domains are large enough that the application of appropriate means in mass education and upbringing largely predetermine the solution to the problem with regard to early prevention of suicidal tendencies of teenagers.

The use of developmental, psychotherapeutic possibilities of art pedagogy and art therapy in work with suicidal-directed individuals will allow to exercise influence on the destructive personality indirectly, a soft and gentle way in the harmonious environment of educational institutions, outside of raising additional income, and "expensive" specialists.

**Limitations**

Our sample (87 participants) is not quite large, and this can make broad generalization difficult. With that, all the proposed tools are multi-use. We describe their specific in as much detail as possible. Our findings are also consistent with the urgent publications in the field. Thus, we believe there will be no problems with their implementation in other educational institutions.

With that, despite the fact that there is an interest among specialists, including the mass education, utilization of methods of art-pedagogy, and there are requests to the appropriate services and support of children and "people in crisis", there is still visible lack of specialists, aware of the mechanisms of these areas of care and support, able to apply art techniques in practice.

To sum up, the results revealed that participants felt the stress relief, increased emotional tone, confidence, positive attitude. In general, respondents noted that in addition to these effects of the session, they expressed in their answers to the questions in the survey, they had a positive group emotional mood, joint participation in artistic activities contributed to the establishment of relations of mutual acceptance and empathy. Answers of the respondents to open-ended questions allow us to say that the work on the drawings, sculpture, and other methods of working in art-pedagogy – a safe way of discharging destructive emotions, they can work out the thoughts and emotions that people used to suppress, contribute to a creative expression, development of imagination, intuition, reduce negative emotional states and their expressions. The art-pedagogical session, we have developed, incorporates the best traditions of group art-therapy and art-pedagogy as a "lite" form of impact on personal structures.

**ACKNOWLEDGMENTS**

This article presents the results of the grant project of the Ministry of Education and Science of the Republic of Kazakhstan "Art - pedagogy and art - therapy for the prevention of suicidal behavior of young people in Kazakhstan: development of scientific bases and practical technology" in the aspect of piloting the art-technologies by the authors.

**REFERENCES**


Moon, B.L. (2012). The dynamics of art as therapy with adolescents. Charles C Thomas Publisher.


