Sandplay Therapy in Psycho-Pedagogical Correction of Preschool Children Fears
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Introduction
Relevance of the problem

The problem of children's fears is one of the most topical issues in modern psychology and pedagogy and it demands correction measures for its productive solution. The relevance of the study is confirmed by the fact that the number of
anxious children with excessive anxiety, uncertainty, emotional instability is increasing annually. The reason is not only in specific features of children, but also in personal uncertainty and anxiety of significant part of the population, in a large number of stresses and in a neurotization of society. Fears are followed not only by dysfunctional manifestations in the forms of chronic emotional dissatisfaction, general inhibition, irritability (Zakharov, 2000), "tunnel vision" (Izard & Blumberg, 1985), but also by phobias, anxiety, self-aggression, social and psychological disadaptation.

Many researches in the Russian and foreign social pedagogy and psychology study the problem of children's fears. However, having studied works of foreign and Russian scholars (Blumberg, 1985; Breslav, 1990; Izard & Blumberg, 1985; Klein, 2008; Zakharov, 2000; Zakharov, 2005; Dolgov, 2015; Klocheva, 2015; Bondarchuk, 2015) we came to the conclusion that there are not enough studies on the problem of psycho-pedagogical correction of children’s fears by means of sandplay therapy.

**Status of the problem**

Studying the problem of such emotion as fear objectively, it is necessary to point out that despite the negative influence the fear performs various functions in human life. Throughout human history the fear accompanied people, which was mostly the fear of darkness, fire and the natural phenomena. It mobilized scientific and creative potential of people to fight against nature. The fear has been performing protective function that enables people to avoid danger. The fear is a kind of means of learning the world leading to more critical and selective attitude to the phenomena of life. Therefore, according to A.I. Zakharov (2000), the fear can be considered as natural forwarding of human development. Also, the scholars note that the fear is one of fundamental emotions of a human, which arises in reply to the action of threatening stimulus.

In his Dictionary of Psychology A. Reber (2000) defines the term fear as ‘an emotional state in the presence or anticipation of a dangerous or noxious stimulus. Fear is usually characterized by an internal, subjective experience of extreme agitation a desire to flee or to attack and by a variety of sympathetic reactions’. The fear is usually characterized by internal, subjective experience of very strong excitement, desire to run or attack and a number of sympathetic reactions”. In his differential emotions theory C.E. Izard (2000), the American psychologist, explains that fear belongs to the basic emotion and it is an inherent emotional process with genetically set physiological components and is strictly determined by facial expressions and subjective experience.

It is necessary to distinguish fear and anxiety but these notions are of the same origin. Fear is the affective (emotionally pointed) reflection of the specific threat for life and well-being in the person’s consciousness, while anxiety is the emotionally pointed anticipation of upcoming threat. Unlike fear, anxiety is not always a negative feeling as it may be displayed as joyful excitement, exciting expectation as well. Depending on mental structure of their personality, life experience, relationship with parents and mates, an emotionally challenged child can feel both anxiety and fear. Fear and anxiety have one common uniting component: the feeling of solicitude. C.E. Izard (2008) points out that anxiety and fear have some differences: anxiety is a combination of some emotions, while fear - only one of them. Besides, the scholar classifies fear into situational, which arises in unusual
situations, and general, predetermined by character of the person, their anxiety and suspiciousness.

Taking into consideration concepts of the scholars, we consider the fear to be an emotion that arises in the situation of danger to mental and social life of human and is directed to the source of the real or imaginary danger. It is important to note that there is a variety of fears depending on character, intensity and specification. G.I. Kaplan & B.J. Sadok (1998) define the following types of fear: constructive fear which is a natural protective mechanism that helps to adapt to a specific situation and pathological fear which is an inadequate response to the particular stimulus and may lead to psychopathologies.

So, according to A.I. Zakharov (2005) there are several types of childhood fears: 1) medical fears (fears of doctors, disease, pain, blood); 2) fears connected with physical injuries (fears of war, unexpected sounds); 3) fears of one’s and parents' death; 4) fears of animals and fairy-tale characters; 5) fears connected with sleep (fears of nightmares, darkness); 6) fears of being punished; 7) spatial fears.

We have studied reasons and factors of children’s fears. We support the opinions of such scholars as V.I. Dolgova, G.M. Klocheva & B.A. Bondarchuk (2015), who studied some reasons and factors of childhood fears. These are experienced unpleasant situations, parents' fears, problems in parent-child relations, numerous threats, lack of parental attention, lack of physical exercises, horror movies, psychological problem of a child, etc.

We consider psycho-pedagogical correction to be a psychological influence on structure of a child's mental activity in order to decrease levels of anxiety and fears.


In the research we have studied behavioral symptoms of fear, which are biting of nails, stuttering, tics, enuresis, complaints and reticence.

Hypothesis and purpose of the research

The purpose of the research consists in theoretical verification and experimental testing of forms and methods of preschool children's fears correction by means of sandplay therapy.

The hypothesis of the study is based on the fact that the preschool children fears correction may decrease anxiety and fear provided that:

- characteristics of children's fears are taken into account;
- age-related features of preschool children fears are considered;
- the forming activity on the basis of the special program "Sand Scattering!” with effective methods and forms of psycho-pedagogical correction by means of sandplay therapy is organized.

Materials and Methods

Research objectives

In compliance with the stated hypothesis, purpose and subject-matter of the study there have been generated the following objectives: 1) on the basis of psychological and pedagogical literature’ analysis to define the concepts ‘fears’ and
anxiety' 2) to study types of preschool children’s fears and their manifestations; 3) to
develop the preschool children fears correction program 'Sand scattering!'; 4) to
practically examine forms and methods efficiency of children fears correction (game,
art and therapeutic exercises, sand play therapy), which decrease fear and anxiety
levels of preschoolers.

**Methods of research**

In compliance with the purpose and objectives of the study there have been applied
the following methods:
- theoretical method (study and analysis of psycho-pedagogical and
  methodical literature);
- empirical method (observation, experiments and testing);
- qualitative data analysis and interpretation (Student’s t-criterion for
dependent samples and G-criteria).

**Diagnostic tools**

In the study there were used the following means to diagnose children's fears:

1) The test “Fears in the little house” (Zakharov, 2000; Panfilova, 1999) is
designed to diagnose the predominant types of children’s fears aged 3+
(fears of darkness, loneliness, death etc). The analysis of obtained results
consists in counting fears in the black house and comparing them to the age
norms. The number of fears is of great importance.

2) Questionnaire of anxiety level (Lavrentyeva and Titarenko, 1997) is aimed
to identify anxiety of a child comparing observation results of a researcher,
child’s parents and a teacher;

3) “Kinetic family drawing” (Burns & Kaufman modification, 2000) is a
projective diagnostic technique designed to identify interaction of the child
and parents; it is important to know how the child sees parents and
himself/herself in the family unit.

4) “Imaginary animal drawing”, author Dukarevich (from Venger's, 2005
monograph) is a projective technique and is aimed to identify personal
peculiarities of the child (phobias and excessively emotional topics,
perception of family relationships).

**Research management**

The research was done in 3 stages.

At the first (exploring and theoretical) stage the analysis of pedagogical and
psychological literature on the research subject was conducted; the subject-matter
and research base were defined; diagnostic tools were selected. The experiment
involved children (aged 5-6) of Kindergarten 162 of combined type with the Tatar
language education and their parents. At the second (practical) stage the
hypothesis of the research was checked, there were approved forms and methods of
pedagogical interaction with preschoolers to decrease their anxiety and fears level
by means of sandplay therapy. At the third (generalizing) stage systematization and
processing of the research results were performed, theoretical and experimental
conclusions were made.
Results

The ascertaining stage of the experiment was connected with defining the children's original fears. The pilot research allowed to identify "risk group" - 28% (23 persons) who are prone to fear out of 79. Here are the results of diagnostic techniques. The analysis of obtained results of the test 'Fears in the little house (Zakharov, 2000; Panfilova, 1999 - modification allowed to define the most widespread fears: these are socially-mediated fears – 100%, fears of physical injuries – 95%, medical fears – 78%, fear of darkness and nightmares – 69%, spatial fears – 65%, fear of death – 52%, and the least widespread fears are fears of fairy-tale characters – 39% and fears of animals – 30%. According to the results of anxiety questionnaire (Lavrentyeva and Titarenko, 1997), 17% of girls and 38% of boys have low level of anxiety; 22% of girls and 32% of boys experience medium level of anxiety and 61% of girls and 47% of boys have high level of anxiety.

The analysis of obtained results of ‘Kinetic family drawing' (KFD) (Burns & Kaufman modification, 2000) was carried out from 3 points of view, 1) analysis of drawing's structure; 2) analysis of graphic peculiarities in drawing family; 3) analysis of drawing process. 63% of children drew all family members with happy faces, it may signal about family well-being, however 27% of children distorted real structure of their families and drew themselves very small, or did not draw themselves at all. Here we can point out that if a child doesn't include him/herself in a family unit, he does not have the feeling of a commonality. Some children did not draw their siblings, it may be connected with the competition in families. And in this case a child tries to "monopolize" love and attention of their parents. Answers to a question why this or that family member isn't drawn, were protective: "... I haven't drawn my little sister because there is no place left"; "He has gone for a walk". However, there were emotional answers: "I didn't want to draw him – he fights"; "I don't want him to live with us". The data can show the emotional conflict in the family and dissatisfaction of the child with situation in their family. At drawings of 44% of children there are symptoms of anxiety, such as dark tones, shadings, strong pressing, very large eyes, or the eyes sketched. The children drew a character or a subject with the strengthened pressing of a pencil or strongly shaded it, the contour is outlined several times. We can assume that such reactions are caused by: a) the traumatic experiences connected with a family; b) feeling of isolation; c) autism; d) feeling of an insecurity, high level of anxiety; e) poor contact of the psychologist with the child. Here we have also used quantitative system of the assessment developed by R. F. Belyauskayte (1994) and we paid attention to the symptom complex with 5 components: 1) a pleasant family situation (the common activity of all family members, prevalence of people in a drawing, drawing of all family members, absence of the isolated family members, lack of indicators of hostility, etc.); 2) anxiety (shading, the line with strong pressing, the exaggerated attention to details, etc.); 3) conflicts in a family (deleting of some figures, lack of the main parts of the body, accentuation of some figures etc.); 4) feeling of inferiority in a family situation (small figures, a motionless figure of the author in comparison with other figures, absence of the author, etc.); 5) hostility in a family situation (an aggressive position of a figure, the crossed out figure, the misshapen figure, etc.)

Using projective technique “Imaginary animal drawing" author Dukarevich (from Venger's, 2005 monograph) we have obtained the following results. 22% of children drew a very small animal, it points to child's uncertainty and timidity. 6% of children drew the animal that was too big to be placed on the paper; it may
indicate external pressure on a child. 19% of respondents drew many sharp angles, which can point to the aggression of a child. We paid special attention to drawing of eyes and ears as eyes in drawings are symbols of human fear, ears are anxiety symbols. We can note that 41% of children drew round eyes, accurate lines, eyelashes, and 37% of preschool children have feeling of anxiety. Analysis of obtained data allowed to make a profile of a child with numerous fears. This child is anxious, fearful and uncertain. He is not sociable enough to communicate with mates. As a rule, this child is from a problem family.

At the second (forming) stage we developed and introduced the educational ‘Sand Scattering’ program based on techniques of sand play therapy and art therapy. The program is designed for 10 hours of work with parents and 17 hours work with preschoolers in a group. The main methods of work with parents were lectures, discussion on the topic: “If the child is afraid of something …”, the solution to practical problems and case-studies. During discussion with parents, we informed them that the indifference of parents to feelings and needs of their children prevents them from healthy development. The child feels abandoned when he is offended and laughed at. Such relations between parents and children can cause fears and pathology of the personality.

We divided the group of children into subgroups of 4-5 people and used technique of fairy-tale therapy.

Analysis of sand pictures and sand fairytales revealed the following phenomena:

a) Inner conflicts (for instance, when there was a ‘battle’ in a sand box, and good was fighting with evil, there was a positive emotional climate. But if devastation reigned in the sandy country, one may speak about the presence of inner conflicts);

b) Level and direction of aggression (if there is a battle in a sand box, or there is one who is offended, it points to aggressive behavior).

We used two sand boxes in classes with dry and wet sand and different shapes of fairy-tale characters, animals and people. During sand play therapy a child was offered to make some shapes from the sand. As a result, the child had an opportunity to give shapes to their inner feelings and it helped them to solve their problems and overcome fears and anxiety.

The technique of sand drawing was used as well. It is scientifically proved that sand drawing is an unusual art that develops fine motor skills, improves memory and copes with fears and anxiety. With the help of sand drawing children express their emotions.

At the control stage of the research we analyzed results before and after forming stage of the research and processed the data to test the hypothesis (Student’s t-criterion for dependent samples and G-criteria). At the control stage of the research we repeatedly carried out questionnaires (Lavrentyeva and Titarenko, 1997). Indicators changed, namely, we found out that girls’ high level of anxiety decreased from 61% to 19%, boys’ high level of anxiety decreased from 47% to 15%, and the number of pupils with the low level of anxiety increased by 6%.

Having compared the data of projective techniques before and after the forming stage of the research we obtained the following results. The results of ‘Kinetic family drawing’ (Burns & Kaufman modification, 2000) changed, values of psychological complex according to the 4th category improved, 11% of the respondents (27%
respectively) drew themselves as being little, these drawings proved the presence of anxiety and hostility in the family. The results of 'Imaginary animal drawing' author Dukarevich (from Venger's (2005) monograph) also changed. Only 11% of preschoolers drew round eyes, fine lines and eyelashes; 11% of children were anxious. There were less creatures with big teeth, and it symbolizes verbal aggression of protective character. However, the number of animal drawings with decorative parts increased; it shows that children try get attention of the adults.

During the analysis of figure's outlines we noticed ledges such as a ridge armour and thorns that reflect peculiarities of child's psychological protection. The level of aggressive protection is characterized by sharp ledges and their direction and the number of such ledges has decreased. We observed the insignificant amount of the ledges directed upwards which signal that the child protects themselves from influential people. Perhaps, parents, their siblings, teachers, psychologists can play that role.

The results of projective techniques obtained after the forming stage of the research show that it is necessary to conduct consulting with parents and sandplay therapy with children.

The indicators of fears amount of the test “Fears in the little house” (Zakharov, 2010; Panfilova, 1999 modification) changed. Figure 1 shows results comparing graph of the total amount of predominant fears in the stating stage and after forming experiment in the control stage.

![Figure 1. The total amount of predominant fears at the ascertaining stage and after forming experiment at the control stage.](image)

To check the correctness of applied methods of the correction program and to compare results, we processed the obtained data by means of mathematical statistics. Thus, data of respondents before and after the experiment were compared by means of Student's t-criterion. We put forward hypotheses as follows: H0: Methods and techniques will not reduce level of susceptibility to fears. H1: Methods and techniques will reduce level of susceptibility to fears. Our empirical value $t = 4.69$ is in the importance zone ($t_{cr} = 2.07$ for $P \leq 0.05$; $t_{cr} = 2.82$ for $P \leq 0.01$; $t_{cr} = 3.79$ for $P \leq 0.001$). In this case we reject the hypothesis of H0 and we test
Distinctions between selections are reliable as average values of susceptibility to fear before experiment differ from each other. Presence of distinctions in the importance zone temp > tcr. We applied 'G – criterion' to test our hypothesis. Comparing results before and after the correction program for children will allow us to observe tendencies of repeated measurement – the majority of indicators can increase or, on the contrary, decrease. To prove efficiency of correctional influence, it is necessary to reveal statistically important tendency in the shift of indicators. In this case the most appropriate criterion of distinction is G-criterion. It allows to identify how heterogeneously values change during repeated measurement of the connected one-sample. The purpose of the experiment is to define whether the change of susceptibility level to fears is statistically important and what happened after the forming experiment. Shift is the difference between values of the measured parameter after and before the experiment. As a zero hypothesis we will take H0= {methods and techniques in sandplay therapy will not reduce level of susceptibility to fears}; an alternative hypothesis – H1= {methods and techniques sandplay therapy will reduce level of susceptibility to fears}. To test the zero hypothesis we define typical shift ("+" or ".") and we count amount (quantity) of typical and atypical shifts. In our case the number of negative shifts is higher that the number of positive shifts. So, in this case negative shift is typical. It is important to note that the number n of such shifts is 12. Empirical value of criterion is defined as a number of atypical shifts. In our case Gemp =2. Critical value of criterion Gcr (α; n) is defined with the help of special table where n – total number of shifts, i.e. selection volume. We have 14 such shifts. At the same time value level α=0,05, Gcr (0,05; 14) =3. The zero hypothesis is tested if Gemp ≥ Gcr (α; n). As in the second case Gemp is less than Gcr (0.05; 14) = 3, H1 hypothesis is tested (methods and techniques of sandplay therapy have reduced the level of susceptibility to fears).

**Discussion and conclusions**

Sandplay therapy is an effective opportunity for a child to develop emotionally, intellectually and creatively. It develops imagination, creative thinking. Secondly, activities of such a therapy help to relax physically and mentally, decreases impulsiveness, excessive physical activity, anxiety, aggression, and children's fears. It also facilitates formation of an adequate self-appraisal and self-confidence. Through sandplay therapy a child can tell about experiences and events that may have hurt them. With the help of such information it is possible to avoid negative consequences of the painful moments in the past. Finally, sand play therapy develops fine motor skills. Due to its structure the sand influences tactile sensation and stimulates the nerve endings which are in fingertips.

Analysis of the problem’s status in psychological and pedagogical literature and practice allowed us to identify the following contradictions:

1) between impact of various factors which make the child feel uneasy, feel fear and absence of knowledge and skills of fears overcoming and of an effective solutions of life problems;

2) between attitudes of teachers, psychologists to a solution to the problem of children's fears and lack of forms and methods of effective children's fears correction by means of sandplay – therapy.

Comparing results before and after forming stage we can say that the hypothesis is fully supported by the experiment. Thus, we can make a conclusion that the
program of children's fears correction "Sand scattering!" with effective methods of sandplay therapy reduces the level of anxiety and the amount of children's fears. This program can be used by teachers, psychologists, social workers, tutors in their practice.

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No potential conflict of interest was reported by the authors.

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