A Landscape of Art Therapy and Psychodrama in Children and Adults with Autism Spectrum Disorders in Iran

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Autism spectrum disorder (ASD) is one of the severest psychological disorders in children and adolescents in which symptoms such as stereotypical behaviors, impairments of social skills and dysfunction of verbal skills can affect all of their life aspects. Also, they suffer from sensory dysfunction. This disorder has a high incidence around the world and it is seen in Iran as well. For improvement of these problems, a lot of interventions such as Applied Behavioral Analysis (ABA), Picture Exchange Communication System (PECS), Treatment and Education of Autistic and related Communication Handicapped Children (TEACCH), Family Therapy and etc. are applied, but recently, studies show that the application of supportive interventions via beautiful arts such as drawing and painting, music, clay work, and theatre can lead to better results in the improvement of these symptoms. Art therapy techniques, especially painting, fine arts such as drawing and theatre are performed in an environment in which all sensory stimuli like light, sound, and color can be observed and according to art therapy researches and studies these sensory stimuli can lead to better sensory integration in these children. Also, they can have better eye-contact, motivation, selfesteem. and interpersonal interaction and verbal skills via role-playing at the scene. Therefore, this article discusses a landscape of art therapy and psychodrama on the improvement of symptoms of children and adults with autism spectrum disorder in Iran.

Introduction: Children and adolescents with autism spectrum disorder (ASD) are a group of children with special needs who suffer from symptoms such as stereotyped behaviors and interests, impairments in social interactions and poor and strange verbal skills. These problems have negative effects on their family lifestyles and sometimes these symptoms and problems can lead to secondary psychological problems and issues in their family, especially their parents (Moghaddam, 2016; Moghaddam & Sarabi, 2016; Samadi, 2011).

Unfortunately, besides a lot of scientific researches and studies, the main reasons and etiology of this disorder have not been known yet, but according to the research findings and results, it is shown that a complex of genetic, biological, environmental and psychological factors can lead to the emergence of this neuropsychological disorder (American Autism Association, 2014 & 2016).

Recently, all of the symptoms of ASD were classified into two groups as social interaction and communication skills and also, stereotypical interests and behaviors in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V). Although, in the previous DSM (III and IV) these symptoms just have been classified into three groups (DSM V, 2013 translated by Ganji, 2014).

Besides etiology, all of the psychological, psychiatrical and rehabilitational practitioners have been studied for the best interventions and therapeutic modalities since 1980. Not only Applied Behavioral Analysis (ABA), Picture Exchange Communication System (PECS), Treatment and Education of Autistic and related Communication Handicapped Children (TEACCH), family therapy, sensory integration, and massage therapy have been known as the best and most effective therapeutic interventions in

this disorder, but also any exact interventions have not been explored yet. Therefore, the above-mentioned interventions and modalities just can help to improve these symptoms not treatment (Samadi 2011, Autism Association, 2015; Moghaddam, 2016).

Nowadays, because of the validity and reliability of the diagnostic criteria and scales, the incidence of ASD is high (1 in 66 newborn infants) in the United States of America. Also, it is high in Iran (only 4000 children in Tehran) and 10 in 10000 for boys and 2/4 in 10000 for girls (Social Welfare organization, 2017; Samadi et al., 2011; Moghaddam, 2016).

Art Therapy as a new approach

According to the American Art Therapy Association, "Art therapy employs the creative process of art-making to perfect the physical, mental, and emotional well-being among people of all ages, so that the process helps people to resolve their conflicts and problems; it also causes to develop interpersonal skills, manage behavior, reduce stress, increase self-esteem, and self-awareness, and achieve insight "(American Art Therapy Association, 2018).

No single way exists to present art therapy; consequently, it can appear especially distinctive when performed using and alongside various persons. Art therapy can be a steady stream or organized, unrestricted or goal-directed and can be an amazing approach to create opportunities for self-expression and engagement for children and adults with autism (American Art Therapy Association, 2016).

The reasons for using art therapy for treatment of ASD?

A sign of ASD is a problem with verbal and social language. Occasionally, individuals with ASD are exactly nonverbal and incapable to utilize spoken language to converse at all. On other occasions, individuals with ASD have a challenging time that processes language and turns it into a soft, easy dialogue. Individuals with ASD may also have a difficult time reading facial expressions and body language. So, they may have a problem of joke-telling from a statement or sarcasm from sincerity.

In the meantime, numerous individuals with ASD have an unusual capacity to visualize "in pictures." Lots of people can convert that capacity to appropriate usage in handling memories, recording images and visual information, and stating ideas via drawing or other artistic media. Art is considered as an appearance of expression necessitating little or body language that can create an opportunity for communication.

Regularly, a nonverbal autism individual or an individual with limited language ability is supposed to be incapable of other subjects. So, individuals with ASD cannot be exposed to chances to use artistic media, or the chances can be excessively exciting in additional methods (in large classrooms, for example). Art therapy allows therapists to work alone with people with autism spectrum to design a wide range of skills in a sense that can be more convenient, and therefore more efficient than spoken language (Jo Rudy, 2018).

Advantages of Art Therapy for Pupils with ASD

If you are a teacher in a teaching space, you may wonder if you have the artistic capability to use art therapy in this teaching space. Do not worry! If you have pupils with ASD, you do not need artistic skill and capability to use strategies of art therapy with them.

Consider using art therapy to help your pupils:

- · Investigate and comprehend their feelings
- Be in contact with their feelings, needs and wants
- Improve their self-awareness and confidence
- Reduce their behavioral problems
- Improve their social skills

A lot of pupils with ASD have sensory problems, this means that they are sensitive to certain sights, sounds, textures, and so on. In contrast, some students with ASD are sensory seeking, implying they are looking for specific things to stimulate their senses that can occasionally cause them to act impulsively. It is important to know about any sensory issues your students have when you select art strategies. You do not want the student to either turn off or fix upon a certain medium and not the strategic aim.

If you want the student to really engage in art therapy, it is best to start with non-messy projects that are short in duration. You might have to just start by introducing materials while keeping the students' sensory issues and preference in mind. Let the students touch the materials and get used to them; then come back later and start the project.

Art therapy helps clients to access their feelings. On the contrary, art classes are planned to provide students with instruction on how to achieve specific artistic effects or goals. Despite the fact art classes can be applied for persons with autism, they are not an alternative to art therapy.

The study is rather sketchy about the art therapy effect in individuals with autism. The literature contains mostly of case studies and papers expressing the observed effect of art therapy programs. Yet, some of the papers on the subject indicate that art therapy can do very much. Occasionally, it has opened up a whole world of the chance to a person with autism who has significant artistic talent.

On other occasions, it has generated an exceptional chance for personal bonding. Further probable results contain:

- enhanced capability to imagine and think symbolically
- enhanced capability to recognize and respond to facial expressions
- enhanced capacity to manage sensory issues (problems with stickiness, and so on)
- enhanced fine motor skills (Moghaddam, 2015).

Art Therapy as a Palliative Intervention for ASD

According to studies and researches, the therapeutic intervention objectives for ASD are as followings: improving the verbal skills, increasing communication with the environment, decreasing the stereotypical behaviors and interests, reinforcing the relationship between the child and his or her parents and family, and improving the eye-contact. Furthermore, there are therapeutic goals such as the facilitation of social interaction and sensory integration, better adaptation to the environment and better neuropsychological function and learning (American Autism Association, 2016; Amiri Majd, 2013; Rafeii, 2010).

Among the therapeutic interventions mentioned above, practitioners have found that some of the palliative interventions such as art therapy, including visual arts, music, and drama have the potential for improvement and treatment (CATA, 2011; Case and Dally, 2008; Dally, 2005; Moghaddam et al., 2016).

They have found that flexibility and sensibility of the art elements can lead to better sensory integration in the children with ASD because the most of their problems are due to sensory defensiveness and dysfunction (Moghaddam et al., 2016; Zadeh Mohammadi, 2013; Case and Daley, 2008; Hajloo, 2017). The combination of artistic elements such as paintings, music, clay works, drawings, and drama or applying all of them separately can help these children to be improved, and art therapists have studied about these benefits since 1990 (Case & Daley, 2008; Case & Daley, 2005; Daley, 2000; Moghaddam, 2016; Moghaddam et al., 2016; American Art Therapy Association, 2012). In art therapy, these children can be observed as persons with a lot of abilities and not only art therapy techniques can help them to improve their impairments, but also they can help these children to reinforce their abilities and potentials. According to studies, art therapy can change people's viewpoints about children with ASD. Therefore, applying art therapy techniques has been used in Iran since 2004 (Moghaddam and Zadeh Mohammadi, 2016; Zadeh Mohammadi, 2012).

Painting and Drawing as Therapeutic Art in Children with ASD

Painting is a mental association that teenagers, adults and especially children, can interact with others. For this reason, we can understand the child's mood, desires, and personality using their paintings and of course, this orientation is effective in their educational guidance because, by painting, children experience the discipline in thought and psychomotor skills in the hands (Kamkar Yazdannezhad, 2006; Oliverio Ferraris, 1996). A child's painting is a message and moves us what he or she cannot verbalize, and to review and understand the "language" of painting, offers useful information for the parents, educators, psychologists and all those who want to understand and get the mysteries of the child's world. A child experiences all his or her issues by painting, and tests himself or herself, as well as builds his or her ego. Drawing lines are a reflection of his or her emotional world, and painting is solely a world that is transforming parallel to increase the alertness and the transformation of the child. Painting is very important in the formation of character and mind of the child, not only to enable the child to identify environment and his or her company in it as well as raising questions for him or her, but also allows he or she formulates issues that are irregularly raised from all sides for him or her. In the drawings, like dreams and visions, the child will release himself or herself from the ban and speaks us in the subconscious state of his or her issues, discoveries and apprehensions. Therefore, it must be said that children painting is not merely fostering creativity and sophistication of the child and or an index of evolution, and it should be considered as a medium of research and exchange with the social environment - with the world of adults who are around the child- and as a sign of the child's emotional states (Dadsetan, 2011; Oliverio Ferraris, 1996). In addition, painting is considered as a means to measure intelligence, spatial perception, and the projection of feelings, emotions, and personality of the child; furthermore, all studies in the field of paintings of children show the importance of this art's role in the cohesion and the formation of the child's character; in addition, painting adjusts and improves their information exchange and communication with the environment, and also highly help children for intellectual development and learning, and in general, all people use paintings to convey their thoughts and fantasies or feelings and perceptions to the others (Ozonoff, 2008; Association AAT, 2009; Case and Dalley, 2008).

There is another important point that visual painting as an art in which the aesthetic element is completely evident, can cause discharge and release children's feelings, emotions and sentiments by affecting the limbic system of the brain; furthermore, based on other studies in the art neuropsychology field, elements such as colors, shapes,

sizes and penumbra that are seen in painting, are interpreted and processed as visual data and information in the occipital lobe of the right hemisphere, where is place of interpretation, processing and finally the perception of visual data; then, by the activation of the brain lobe, it causes improvement of the visual perception skills such as eyehand coordination, understanding spatial relationships, visual memory, understanding the shape stability and visual accuracy in children, and therefore increases their learning and perception (Landgartn, 2003).

In the paintings of children with ASD, who suffer difficulties in social interaction, verbal communication, and stereotypical behaviors, when a human image is displayed, it always is small in size, and details of the face and extremities are rarely shown. For example, if dummies drawn by a child, have the eye, the eye is thoughtful with a look at remote or completely devoid of a look. If the child has high performance and or wholly he or she can paint, while drawing several dummies, he or she paints all of them uniformly and the same. Sometimes also, aggression is seen in their paintings (Ganji, 2013; Poorheidar, 2011). Usually due to touch defensive in the limbs, especially hands and fingers, children with ASD cannot look colored pencils, pens, crayons, and other drawing and painting in the hands for a long time that is why parents and teachers are complaining of poor handwriting, lack of attention to drawing and lack of focus on writing and drawing for a long time. Hence, most of these children do not have much interest in drawing, and painting and their paintings are frequently uniform. Also, in some cases, they appear garbled and scrawl, and it seems that they have been fixed in the early stages of the evolution of painting, i.e., scrawl. Free painting is a stereotype among them, and always they paint only a picture.

These children, unlike normal children, cannot reflect their feelings, emotions, fears, happiness and generally, emotions in their paintings. For example, normal children can describe the events that had happened to them and can project their feelings and emotions towards a friend, parent, or peers in his paintings. While children with the ASD, such as children with mental retardation, due to the lack of sufficient attention and focus, and relatively low learning and IQ, are not able to portray the issues surrounding themselves and fail projection in their paintings and feel powerless for drawing what is in their immediate environment. A variety of colors and shape in most of their paintings are low, and symbols, objects, and images in their paintings are stereotypical and uniform (Chitgarzadeh, 2010). Furthermore, art therapy studies show that these children pay more attention to sensory stimuli, such as color and shape that are the main elements, rather than human stimuli, in the painting; moreover, clinical studies and research in the field of education of painting and art therapy among the children show that by painting we can reduce somewhat the stereotypical behaviors and movements in this group of children and improve interpersonal communication among them; in fact, in some ways these children, however with a limited manner, express their thoughts and feelings through painting (Wall, 2004, 2006; Ahmadi, 2011).

In fact, fundamental problems in drawing and painting of children with ASD that create particular problems in the educational environment for them and along their main symptoms, i.e., the deficiency in interpersonal communication, poor verbal skills, and stereotypical behaviors cause the family, especially the parents of the children face many challenges and the various aspects of life are overshadowed (Samadi, 2011). To alleviate such specific problems that there are in families of the children, extensive studies have been conducted. Many of these studies were aiming for applying the so-called family-centered interventions and approaches that by using them and by involving the parent in these programs actively and dynamically, we can reduce not only problems of these children, but also create greater interaction between family members, especially their parents in order to more satisfaction with life in the existing conditions for them and preserve the mental health of the family and art therapy and painting techniques are applied, too (Samadi, 2011; Waters, 2012).

In educational application of family-centered painting techniques, derived from some studies and clinical trials conducted by Case and Dalley (2008), Silvers (2008), Zadeh Mohammadi and Rajabi (2011), Landgartn (2003), Martin (2009), Moghaddam et al. (2015) and kamkar Yazdannezhad (2006), a combination of a variety of painting ways was used. These combination of a variety of painting ways included free painting, painting based on the evolution of painting, copying the shapes of the patterns and images, coloring pictures and shapes, painting of family, drawing of the homunculus and painting with contrasting colors (green, red, yellow and purple, blue and orange, black and white, red and black, pink and gray); in addition, tools for painting and drawing have also been diverse and included colored pencils, crayons, gouache and finger paint. Additionally, the two sets of main symptoms consistent with the DSM V (2013), i.e., stereotypical behaviors and the qualitative defects in social interactions, which are the main symptoms of children with ASD, have been considered in this application. All of these techniques have been applied at family and art therapy research center at Shahid Beheshti University in Tehran, Iran since 2011.

Psychodrama (Theatre Therapy)

Besides art therapy studies, researches and practitioners have studied this issue that can theatre (drama) be applied to children with ASD or not? At first, for answers to this question, we have to review the psychodrama history. Drama (theatre) has been applied for improving medical and psychological disorders by Jacob Moreno and others since 1930. According to the scientific studies, the dramatic language, which is applied for some of the psychological interventions is "Play of Gestalt". In gestalt, the drama is applied for the investigation of "Ego" in "Here" and "Now". Other psychologists believe that some of the psychological interventions such as psychoanalysis are dramatic, too. Therefore, they can show the main aspects of psychoanalysis or psychotherapy at a dramatic framework (Jones, 1996, Translated by Yasrebi, 2005; Akbari, 2008; Moghaddam and Sarabi, 2016).

According to the psychological researches and studies, psychodrama or theatre therapy is a scientific approach in which the psychotherapist applies the different drama methods such as the scenic, dolly and nonverbal drama (theatre) for helping the improvement of cognitive, emotional, verbal, perceptual, behavioral and emotional problems in the clients. Indeed, theatre or drama is an effective method in the rehabilitation of clients who suffer from cognitive, perceptual, behavioral, emotional and other psychological disorders, because the best situation which is the creation of scenes will be happening and the client can express himself or herself in theatre. (Amraei, 2010; Kianian; 2011; Moghaddam, 2016; Case and Dalley, 2008). Role-playing is one of the drama techniques in which clients can show themselves inside and express the characters which is like or opposite of them. Therefore, not only this technique can help the expression of "ego" but also can lead to better self-esteem and motivation. Also, confrontation techniques can be applied because their goals and objectives are like role-playing techniques (same resources).

Psychodrama in ASD

As noted above psychodrama can be applied for some clients with psychological disorders. According to studies, this approach can be applied for ASD, too (American Autism Association, 2014; Moghaddam and Sarabi, 2016).

The best benefits and outcomes of psychodrama in ASD are as the followings: increase of motivation, improvement of self-esteem, social interaction, verbal skills, the perception of the environment, attention and concentration, objective movements, release of tensions and self-expression.

Application of role-playing and confrontation techniques along with the scene, light, decoration, effect, and attendance of people can cause a better social interaction and verbal skills in children and adults with ASD.

Also, sensory integration, which is necessary for their improvement, will happen.

Clients with ASD can communicate with objects better than persons and this can lead to better attention and concentration in the environment. A psychotherapist and director can use this characteristic for the invitation of clients with ASD in peer groups at the scene. At first around the decoration, they have applied warm-up techniques which involve music and motion.

Sometimes they can repeat poems via simple role-playings. Also, they can benefit from pantomime (especially the clients with ASD who have severe verbal problems). Confrontation techniques can be applied by the attendance of two clients with ASD and the psychotherapist.

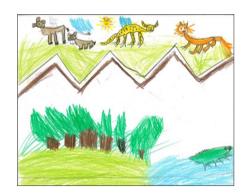
Attendance of psychotherapist can help the management of the scene and the director. After improvement of clients with ASD in the psychodrama techniques some short theatres can be performed by them.

Psychodrama in ASD is as a new therapeutic approach in Iran since 2015 and some little artistic groups and associations can apply it (Moghaddam, 2016, Moghaddam & Sarabi, 2016). Recently a new artistic theatre group called "kind sound" have involved children and adolescents with ASD in music and theatre (Moghaddam, 2017).

The following pictures are the results of psychodrama in children with ASD for 3 years. We have a little drama and music group consists of 12 children with ASD who can learn and perform role-playing and confrontation techniques by myself and other practitioners. We have worked in theatre since 2015 and performed 4 times in amphitheaters and art halls in Iran.

At first, these children could not communicate with each other and just can watch themselves and didn't show any relationship, but after months they could learn verbal and nonverbal communication with each other. They show better self-esteem and self-confidence. Now they like to play on the scene and can be watched by other audiences.

Drama can help them to play and work together. Now they can play simple roles and have better eye-contact and talking with each other. They can sing poems in theatre and also draw pictures via theatre.



Maziar, a 15-year-old boy with ASD



Sepehr, a 10-year-old boy with ASD



Sheida, a 7-year-old girl with ASD



A painting by Maziar as an ASD boy



A theatre performed by students with ASD

Conclusion: ASDs are the most important psychological disorders in childhood. Studies and researches show that one of the most important problems of this kind of disorder is "sensory dysfunction" and not only a lot of therapeutic approaches such as ABA, TEACCH, PECS, art therapy, music therapy, and drugs can help improve its symptoms but also their goal is sensory integration in these children and adolescents. Art therapy is a kind of palliative intervention or approach in which art elements such as drawing, paintings, clay can be used.

According to the art therapy studies and researches, the objectives of therapeutic interventions via paintings and drawings for ASD are as followings: improvement of verbal skills, increasing communication with the environment, decreasing the stereotyped behaviors and interests, reinforcement of the relationship between the child and his or her parents and family, and improvement of eye-contact. Also, there are therapeutic goals such as facilitation of social interaction and sensory integration, better adaptation to the environment and better neuropsychological function and learning.

According to the psychological researches and studies, psychodrama or theatre therapy is a scientific approach in which the psychotherapist applies the different drama methods such as the scenic, dolly and nonverbal drama (theatre) for helping the improvement of cognitive, emotional, verbal, perceptual, behavioral and emotional problems in the clients. Indeed, theatre or drama is an effective method in the rehabilitation of clients who suffer from cognitive, perceptual, behavioral, emotional and other psychological disorders, because the best situation which is the creation of scenes will happen and the client can express himself or herself in theatre. Role-playing is one of the drama techniques in which clients can show themselves inside and express the characters which is like or opposite of them. Therefore, not only this technique can help the expression of ego but also can lead to better self-esteem and motivation. Also, confrontation techniques can be applied because their goals and objectives are like role-playing techniques.

According to studies, this approach can be applied for ASD, too. In addition, the best benefits and outcomes of art therapy and psychodrama in ASD were mentioned above. In Iran, this approach is very new and can be applied besides the other therapeutic approaches for ASD, and the art therapy and techniques of psychodrama should be designed in which the sensory integration occurs for clients with ASD.

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