Original Paper

Research on the Case of Art Therapy and Cognition of Autistic

Children

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Abstract

Due to congenital brain damage, autistic children suffer from difficulties in overall development, especially in interpersonal relation, language and behavior. Many scholars try to understand the inner world of autistic children through various treatments, but only painting, the most primitive language for children, is also the most direct way to express the autistic children's mind. Therefore, there seems to be a certain degree of corresponding relation between artistic creation and message expression, but artistic creation is actually a complex mental activity, and it is difficult to understand the meaning of message in a simple model. This study explores the communication modes in addition to language based on the case of three children's paintings in the "Gallery for Little Friends" initiated by Tencent Charity Foundation, whose main purpose is to develop an alternative way to communicate with autistic children, let us know, interpret and evaluate through their paintings, and then take appropriate actions to transform the messages in the paintings to concrete actions and measures, realize the goal of helping autistic children's oral expression, and try to interpret the inner world of autistic children with painting as a medium.

Keywords

Autism, Applied Behavior Analysis, communication model

1. Introduction

Autistic children are always in an isolated island, they can't understand others, nor be understood by others, because they live in their own world, so they are called the "children from the stars". Although autism in children is a widespread developmental disorder, its exact cause has not been yet understood, the most common therapy at home and abroad is continuous rehabilitation training. However, at present,

there are many drawbacks in the rehabilitation training for autistic children, such as monotony and no systematic treatment.

Recent years, the art therapy based on psychological theory has been gradually applied to the education and development of autistic children. As a necessary supplement, therapeutic art education can enrich its variety, and help enhance the verbal and nonverbal expression ability of autistic children through the integration of visual graphics and words, image of objects and other physical objects.

Based on the case of six children's paintings in the Gallery for Little Friends initiated by Tencent Charity Foundation, this study explores the hidden messages behind these paintings, what kind of world is the world of autistic children? This study also explores the communication models in addition to language based on the case, with the main purpose to develop an alternative way to communicate with autistic children, let us know, interpret and evaluate through their paintings, and then take appropriate actions to transform the messages in the paintings to concrete actions and measures, achieve the goal of help autistic children's oral expression, and try to interpret the inner world of autistic children with painting as a medium.

2. Literature Review

2.1 Background of the Case

Selecting the children's paintings from the "Gallery for Little Friends" initiated by Tencent Charity Foundation as the study subjects, this study through the nonverbal communication model, tries to understand autistic children through painting. "Gallery for Little Friends" H5 is an online and offline interactive public welfare project jointly launched by Tencent Charity Foundation, Shenzhen Aiyou Future Foundation and WABC, and all the paintings shown in the "Gallery for Little Friends" H5 are selected by WABC from the students' paintings. Although they are all autistic, their works and artistic talent make everyone who has seen the paintings moved and surprised. The paintings in this case study include three children's paintings, and the world in these paintings always surprises people. Although the way they handle colors makes people feel puzzled, each painting shocks people. Through painting, these children become peaceful inside, their personality becomes good, and they begin to communicate with people as if they have opened their heart.

By analysis of the paintings in the case this paper hopes to develop a model suitable for understanding the mentality of autistic children, let us know, interpret and evaluate through their paintings and take appropriate actions to transform the messages in the paintings to concrete actions and help in their oral expression, and try to interpret the inner world of autistic children with painting as a medium.

2.2 Art Creation and Art Therapy

There is still no universally accepted definition of art, but in a broad sense, some human experiences are difficult to describe by words, to express these deep feelings and thoughts in the heart, we use a

sharper and more ingenious language to express through creation, which is called art. And creation is a process of showing creativity, a pleasant and interesting process, and also a process able to be conducted at any time and in any place. Creativity or creative thinking is one of the innate abilities of human beings, so creation is not exclusive to artists; male and female, the elderly and the young can participate in the creation to express their emotion and creativity.

Art therapy is also called art psychotherapy, expressive or creative therapy, and it is the mental health discipline combining psychological treatment and expressive art (such as music, dance, drama, poetry, and visual art, etc) (Lu Yaqing, 2000). Can art be used for treatment? Treatment with art is generally called painting therapy, whose purpose is to express the repressed emotion and conflicts in the subconscious mind by art or painting through free creative expression, so the creator can have relief and satisfaction from the process of painting and his or her creation can be used for diagnosis and treatment (Balatner, 1991; Rubin, 1984; Wadeson, 1980; Waller, 2006; Williams & Wood, 1977). According to the definition of American Art Therapy Association, art therapy provides an opportunity for nonverbal expression and communication, and it includes two main aspects: firstly, art creation itself is a kind of treatment, and it can ease the emotional conflicts of the person concerned, improve his or her understanding of things or achieve the effect of relieving stress through the process of creation; secondly, by taking the artistic work of the persons concerned as a medium to analyze psychological state and association from the works, it helps the person concerned to maintain the internal and external harmony and reshape his or her personalities.

The book *Power Beyond the Language* once mentions that the invisible functions of art therapy include: encourage creation, provide media, create relaxing environment, build trusting relationship, and allow free creation. Art therapy seems modest, but strong and effective in fact (Lv Suzhen, 2005). Art therapy attaches great importance to the process of art activities, and it also combines tutoring, counseling, psychological treatment or counseling method. In the process, through painting, device, skills, shaping, and other diversified art media, it lets the subject engage in the expression of visual imago and express the thoughts and feelings hidden in the heart through the imago, and it explores and handles personal problems and potentials through the experience of art expression. In the process of treatment, the performance and the imago expression of the subject not only have the function of treatment and diagnosis, but also provide a communication means between the subject and therapist. The relevant papers on domestic art therapy affirm the positive effects of art therapy, especially in language expression, emotive therapy, self-confidence enhancement, and behavioral expression, etc. The researches on art theory related to this paper are listed as follows:

(1) Cai Yiqing. Intervene Children with Selective Mutism by Art Psychotherapy: A Case Study. National Taiwan Normal University. College of Fine and Applied Arts.1988, The result shows: 1) intervention of art psychotherapies helps the subjects release their emotion and acquire support. And

they make continual and steady progress in terms of external problematic behavior. But it has no immediate effect on their open and comprehensive oral communication. 2) in the process of case study, the researcher has known more about himself through the related examination, changed the usual way of thinking, and embraced the diversity in his life with a more open mind and inclusive attitude.

(2) Wu Xinyi. Intervene the Chronic Schizophrenics with Art psychotherapies: A Case Study. National Taiwan Normal University. College of Fine and Applied Arts.1989, Purposes of the study are: 1) explore the treatment effect of specific art psychotherapies on chronic schizophrenics; 2) in the process of the case study, self-motivated work is reviewed, and the results are: 1) in the process of treatment, the confidence and self-awareness of the study subjects are enhanced; 2) From the fifth week after treatment, the withdrawal behaviors of the study subjects are improved.

(3) Li Jiexi. Influence of Art Education on the Self-concept of Junior Class Students in Primary School and Their Relationship with Their Classmates. National Taiwan Normal University. College of Fine and Applied Arts. With art education, students from experimental group make remarkable progress in self-concept in school and the assessment on acceptance by their experiment group show significant improvement on self-concept in school, peer acceptance, and overall improvement on self-concept in family, self-concept in appearance, self-concept in body, self-concept in emotions, and self-concept. However, it doesn't cause distinctive differences in terms of the above-mentioned aspects.

(4) Lin Meiping. Reseach on Counselling Effect of Art Therapy on Teenagers' Behavior. National Changhua University of Education. In the process of counselling of art therapy, emotional change of the teenagers can help us understand anxiety, and the expression and gain of more profound emotions and happiness. And the effects of art therapy on teenagers' self-esteem are as follows: a sense of safety can be further enhanced, a sense of values can be increased, a sense of competence can be gained, and a sense of purpose can be stimulated.

3. Research Framework and Method

3.1 Research Framework

Lin Rongtai et al. (2008) put forward the painting model to understanding autistic children from the perspective of cognition and discuss the artistic creation of autistic children from the perspective of mental model and communication theory. What they care is not the technique of art therapy, but to build a communication model through their artistic works, and try to explore the inner world of autistic children through their artistic creation. Lin Rongtai et al. (2008) put forward a autistic children-centered communication model, and according to the concept of mental model of Norman (1988), it divides the communicating model with autistic children through artistic creation into three aspects: creation model of autistic children, cognitive model of audience, and artistic creation of autistic children, as shown in Figure 1.



Figure 1. Communication Model for Exploring the Inner World of Autistic Children (Lin Rongtai, 2008)

Based on the conventional linear propagation model, the communication model in Figure 1 integrates the communication model of the linguist Jakobson (1956) and constructs a basic semantic triangle by using the linear propagation between the original message, addresser, and addressee and the reference background of messages called context. Finally, he adds two factors: (1) contact forms the channel or psychological connection between the addresser and addressee; (2) code forms the meaning system shared by the ego structure of messages. These six factors have different corresponding functions in the process of propagation, and then these six factors and six functions constitute an integrated propagation model. These six functions include: (1) motivation or emotive function of addresser (autistic children); (2) cognitive or referential function of context; (3) feeling or conative function of audience; (4) aesthetic or poetic function of message; (5) operation or phatic function of interface (contact); (6) expression or metalinguistic function of culture (code) (Lin Rongtai et al., 2006; Lin Rongtai, 2003). The creation model in Figure 1 refers to the concept of the autistic children's works in their mind, namely, the message they want to express; the cognitive model refers to the emotion and message expressed in the work that the audience interprets, and the artistic creation refers to the bridge between us and the autistic children, also the channel to understand their inner world through their artistic creation. The ideal situation is that the creation model of autistic children is consistent with the "cognitive mode" of the ordinary people, which is impossible. Therefore, this paper constructs a autistic children-centered communication model with the aim of developing a psychological model suitable for autistic children to let us know, interpret and evaluate through their paintings, and then take appropriate actions to transform the messages in the paintings to concrete actions to help their oral expression.

3.2 Research Method

This paper explores the inner world of autistic children through artistic creation by using the communication model in Figure 1. From the perspective of message propagation, to successfully explore the inner world of autistic children through artistic creation should include three levels: (1) whether the audience understand the meaning the autistic children want to express through the images they created, namely, the formation of message; (2) whether the audience know and how accurately understand the original meaning of the message, namely, correct semantic cognition; (3) whether the audience take the right actions to achieve the desired effect, namely, how to effectively influence the expected behavior. From the perspective of message propagation, "artistic creation" is a series of "communication" activities; when "cognition" is not "barricaded", "propagation" is smooth, and communication can be successful. "Work" is the medium for "propagation", and also the medium for "cognition"; and "creation" is the key to making the work into the medium for "propagation" and achieving the "cognition" of audience. In short, a successful communication model of artistic creation should have three levels: (1) image perception, have you seen it? (2) meaning cognition, have you got it? (3) behavior change, have you taken action?

If art therapy is used to help autistic children, what is the difference of the paintings of autistic children? How to use their paintings to achieve the purpose of analysis and art therapy? This may require the professional knowledge of special education, and this paper is not intended to discuss this issue. From the first purpose of art therapy mentioned above, what is the charm and particularity of the paintings by autistic children? None at all! There is no obvious difference between their paintings and those of ordinary children, what their paintings present is just the artistic beauty and the expression of personal emotion. Therefore, we can try to explore the artistic beauty and understand the changes in their mood through the paintings of autistic children, which may help to communicate with autistic children.

4. Results

Taking some children's paintings from the "Gallery for Little Friends" as the subjects for analysis and discussion, this paper makes a systematic analysis and discussion by using the research method of communication model in Figure 1. The following are the preliminary results of the study, mainly using the communication theory in Figure 1 to explore the creation model of autistic children and try to connect with the cognitive mode of audience. Three examples are given to illustrate as follows, and for detailed analysis, please refer to the paper of Lin Rongtai et al. (2008, 2009).

4.1 Character in the Artistic Creation of Autistic Children



Figure 2. Van Gogh Photo + Self-Portrait of Van Gogh + Van Gogh by Liu Yi

The study selects the painting (in Picture 2) of 16-year-old Liu Yi, whose theme is Van Gogh and interpretation is: "Van Gogh has painted many self-portraits in his short and rough life, although the work of Liu Yi is a copy, it has his own spiritual strength".

Generally, our impression of the emotional world of autistic children is that they do not pay much attention to people around them and they treat "people" as "things". Therefore, the stereotyped image of autistic children is solitude, indifference, disobedience and non-cooperation, is that true? We have selected a photo of Van Gogh and a self-portrait of Van Gogh (in Figure 2), and compared them with the painting of Liu Yi. Judging from the image and look, he has fully understood Van Gogh's feelings, especially from the simple and concise lines and color simplification, we can't help wondering do autistic children really have any communication difficulty, or we have not understood their communication model yet?

4.2 Natural World in the Artistic Creation of Autistic Children



Figure 3. The Moon of Spring, the Sea, Meaning Contained in Winter painted by Jielin

Here, we choose the 22-year-old Jie Lin's series of paintings on nature as the case to study. After we see the painting, we can't help asking if this is the natural world in an autistic person's eyes. After Jielin gives an interpretation, we know the world in the art creation is richer than that of what we imagined.

The painting on the left is The Moon of Spring, which shows that in the darkness, the sky is filled with dense clouds again. The laurel lowers the moon. And the fireflies hold lights and escort the secrets of the crazily growing grass. The painting in between is The Sea, which shows that the sea is not only always a single sea, but also it contains 1,000 seas. And the painting on the right is The Meaning of Winter, which shows that there is glowing red on the trees though it has already been winter when everything should be sleeping. It seems to tell us that life still is full of vitality even in the severe winter. From the above three paintings, it's easy for us to know that actually autistic children are considerate and observant. So, is true that their inner world can't be reached by us? Obviously, under a certain circumstance, they are willing to discover, think, and communicate with everything around them. Therefore, to some extent, there exists a corresponding relationship between art creation and message delivery, which means clues of message delivery can be found in the process of art creation.

4.3 The Society and World in Autistic Children's Art



Figure 4. The Photo of the Real World , the Painting of Other Artists, and the Best Time and the Worst Time by Liu Yi

Here, we choose the painting 4-1 by Liu Yi at 16 as the case to study. The theme of his painting is the Best Time and the Worst Time. The painting may be interpreted as follows: "we are leading a busy life and we are also joining the trend of the great times. So, this is the best time, and this is also the worst time". The world is a horrible existence to autistic children as we haven't guided them to know it. From Liu Yi's painting, we can see that only when you keep the same pace with others can you keep up with the pace of society. Otherwise, you will be out, just like what his painting shows. From Liu Yi's painting, we believe that autistic children know a lot about the world. Don't we really believe that they just live in their own world? The above statement and analysis can also be explained by painting, and art therapy is the best way for autistic children to know about the world and society and communicate with others.

5. Conclusion and Advice

Based on the model of autistic children-centered communication, the purpose of the research is to explore how to develop a cognitive model suitable for autistic children through their "art creation" which will help us understand, interpret, evaluate, and take appropriate actions to transform the messages conveyed by "art creation" into concrete action, making up for autistic children's deficiency in speech. The main purposes are as follows: (1) combined with autistic children's communication, mental models, and art psychotherapies related theories, we discuss how to explore their inner world through their art creation. (2) from the perspective of discussion on autistic children's art creation and the interpretation of the audience, a communication channel can be built to communicate with autistic children. And we will give them love and care through cognition, understanding and actions. (3) We want to advocate "there is no limitation or barrier in the world of art" while integrating art creation with medical resources to awaken people's shared memories of painting, advocating that everyone has the ability for creation and painting, and there is no limitation or barrier in the world of art.

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