

A Review of Sand-play in Preschool Integrated Education for Autistic Children

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Abstract: With the deepening of people's understanding of autism, more and more attention has been paid to the group of autistic children. Sandplay therapy as a treatment for autism is not only easy to operate, easy to implement, has a deep theoretical basis as support, but also deeply loved by children, at the same time, it has also been widely recognized in the world, which has some effect in alleviating autistic children's social interaction barriers, language barriers, and repetitive stereotypic behaviors. And since the concept of integrated education was put forward, more and more autistic children have started to study in ordinary schools. As an inexorable trend in the field of special education, the aim is to place children with special needs in regular classes to maximize their potential of children with special needs and enable them to grow up together with ordinary children. In the tide of integrated education, schools will become the best place for autistic children to learn and play sandplay. Based on the analysis of the effects of sandplay on autistic children's interpersonal communication disorder, speech disorder, and repetitive stereotypic behavior, this paper puts forward the basic principles and practical conditions of applying sandplay to preschool integrated education and points out the limitations and future research directions of sandplay in the practice of integrated education.

Keywords: Sandplay, Autistic children, Preschool integrated education

1. Introduction

Chinese psychologists believe that play is a unique activity mode suitable for the characteristics of children, and it is also the best form of activity to promote the psychological development of children. Play therapy includes group games, gardening games, role-playing games, pretend games, sandplay, and so on. But for autistic children, their apparent psychological deficits make it difficult for them to engage in imaginative play, sometimes failing to engage well or follow the therapist's instructions, and it doesn't work as well as it should. Sandplay, a novel form of play therapy used in this study, is more acceptable to children with autism in many studies, and autistic children's interpersonal communication disorders, speech disorders, and repetitive stereotyped behavior have a certain improvement. Therefore, if sandplay can be strategically applied to the pre-school integration

education of autistic children, it will have a breakthrough practical significance for the treatment and later rehabilitation of autistic children.

2. Literature Review

2.1. The Definition of Sandplay

Sand-play, also called sand-play therapy or sand-play therapy, is a combination of analytical psychology and play therapy. Sandplay uses imagery (active imagination) to create a form of therapy that focuses on the space and distance between the patient and the doctor while directing the patient's subconscious expression, apply Sand, water, and sand tools to the creation of images [1].

2.2. The Theoretical Basis of Sandplay

2.2.1. Carl Jung's Analytical Psychology

Sandplay therapy is based on Carl Jung's analytical psychology, in particular his theory of the unconscious and his technique of positive imagination. Carl Jung divides the unconscious into "individual unconscious" and "Collective unconscious". He believes that the individual unconscious comes from personal material, it also includes forgotten, repressed, and creative content; the concept of the Collective unconscious was developed by Carl Jung through the study of myths and the customs of primitive societies [2].

The technique of positive visualization is a technique that Carl Jung has created to directly engage the unconscious. In a safe, quiet environment, by molding and arranging the sand in the frame of the sand table, the patient can build a world corresponding to his inner state and reach the self-personalization stage [3].

2.2.2. Chinese Culture and Philosophical Thought

Chinese culture and philosophy were important sources of Dora Kalff sandplay therapy, notably the I Ching and the Wu Xing, and Zhou Dunyi's new Confucianism. In Kalff's sandplay: the path to healing, the emergence of the self, the development of the conscious self and the personality, the emergence, and transformation and realization of the self, is the key to Carl Jung's analytical psychology and sandplay therapy and healing [4].

2.2.3. Newman's Theory of Stages of Child Development

Carl Jung and developmental psychologist Newman divided the self-development of young children into three stages: mother-infant integration stage, separation stage, self solidification stage [5]. Kalff believes that if the whole pattern of self is not formed early in life, it can also be activated at any later stage of life, and sandplay is precisely what enables self-expression.

2.3. The Basis of Applying Sandplay in Preschool Inclusive Education for Autism

2.3.1. The Characteristics of Autistic Children's Game Behavior

Game behavior, as a kind of intrinsically motivated behavior, is an important way to promote children to master the skills of interacting with peers and surroundings. Qiu believes that the game is the need for children's physical activities, children's cognitive activities, and children's social activities [6]. Games play an important role in the development of autistic children, and through clinical observation, it can be found that autistic children's play behavior has different characteristics from ordinary children.

Freeman and Montgomery studied the game behavior of autistic children living in four different environments: (1) The game behavior of autistic children in the control stage is frequent, repeated, and negative. (2) Peers had little effect on autistic children's game behavior, and they were more strongly associated with objects than peers. In short, because autistic children have certain psychological defects, they tend to be immersed in their world when they play games, not influenced by others, and the game behavior also has repeated and stereotypic characteristics, the game lacks imagination and symbolism [7].

2.3.2. Effects of Sandplay on Autistic Children

Autism (ASD), also known as autism, is mainly clinically manifested as social interaction barriers, language barriers, and repetitive stereotypic behaviors [8], these symptoms seriously affect patients' physical and mental health and quality of life, bringing a heavy burden on their families and society. According to research, sandplay has a certain correlation with autism, can effectively improve the clinical symptoms of autistic children. To understand the intervention effect of sandplay on autistic children, this paper systematically analyzes the 13 articles from three aspects: social interaction barriers, language barriers and repetitive stereotypic behaviors.

2.3.2.1. Intervention Effects on Social Interaction Barriers

Social interaction barrier is the core defect of autistic children, which is mainly manifested as avoidance of eyes, hear but paying no attention, unwillingness to communicate, isolation, withdrawal, and self-enclosed [9], this kind of barrier makes them lack the proper social interaction skills in the social situation, seriously affects their social life, also makes them difficult to integrate into the group. Countless researchers have analyzed the performance of autistic children before and after the sandplay intervention and interpreted the inner meaning of the sandplay they have created, the results show that after sandplay intervention, autistic children's social interaction skills have improved generally, and this is mainly reflected in the following three aspects: First, autistic children increase the eye communication with others. Second, autistic children's mood gradually tends to stabilize, and their aggressive behavior is reduced. Third, autistic children's social language has increased, and can interact with others effectively [10-17].

2.3.2.2. Intervention Effects on Language Barriers

Language barriers are also one of the main performances of autistic children. In the process of reviewing the literature, we have found that through the sandplay intervention, autistic children's language barriers can be relieved to a certain extent. After sandplay intervention, autistic children initially ignore others, soliloquize, language development delay to gradually increased communication with the outside world, active language increases, and can narrate along with the change of the situation, began to express emotion with language. In addition, some autistic children's vocabulary has become richer and begun to learn to use the concepts of "you", "me" and "him" [10-20].

2.3.2.3. Intervention Effects on Repetitive Stereotypic Behaviors

Repetitive stereotypic behavior is one of the core deficits of autism, which is mainly manifested as stereotypic or repetitive behavior, compulsive behavior, ritualized behavior, identical behavior, suicidal behavior, and narrow interest. In sandplay, the autistic individual is in a "spontaneous implementation change" environment, autistic children can choose sandbox freely and decide how to put them on the sand table without being intervened and affected by the outside world. This kind of

spontaneous implementation environment and activity can weaken the autistic children's stereotypic behavior [21]. At present, there are few types of research on the repetitive stereotypic behavior of autistic children in China. From the existing literature, we can find that sandplay can improve the repetitive stereotypic behavior of autistic children, some autistic children have reduced their stereotypic hand-clapping behavior and repetitive language after the intervention, and their interest and attention have also expanded [11, 17, 19]. However, there are also studies showing that the effect of the sandplay intervention on repetitive stereotypic behavior of autistic children is not obvious [10].

2.4. Conditions for Developing Sandplay in Integrated Kindergartens

2.4.1. Create a Quiet, Undisturbed Space

Appropriate space is a prerequisite for sandplay. Although the space needed for the development of sandplay in integrated kindergarten is not necessarily very large, it is enough to put down the sandplay table and the toy rack, but it is necessary to ensure that it has a quiet inner environment, to avoid autistic children in sandplay outside interference.

2.4.2. Provide a Wealth of Materials for Activities

The activity materials in the activity area of the integrated kindergarten provide material guarantees for the development of sandplay for autistic children. In sandplay, children's expression is not through language, but through the use of toys. Scene Modeling and the creation process are the languages of sandplay, and toys are the words of this language, in addition to the two essential elements of sand and sand table, a variety of toys are also essential in sandplay. Toys should be as diverse as possible, including animals, people, plants, buildings, transportation, natural objects, and in the choice of toys, we can not only choose the normal basic sand tools that sandplay matches, but also choose and buy them on our own according to demand. The number of toys should not be too much, nor should it be too little. For children, 300 -- 500 pieces are ideal [22].

2.5. Basic Principles to be Followed in Sandplay in Integrated Kindergarten

2.5.1. Create a Sense of Security in The External Atmosphere

The most important part of sandplay therapy for preschoolers in kindergarten to integrate into a normal learning and living environment is to give autistic children a sense of calm and protection. Because only in a safe, relaxed environment can children with autism truly open up their inner world and reveal their inner world and thoughts to the outside world.

2.5.2. Guide Your Child's Sense of Self

In a relaxed and safe environment, children with autism are allowed to express their thoughts autonomously and gradually establish contact and communication with the outside world, through a series of verbal communication to ease the inner barriers of autistic children to carry out basic communication with outsiders, and ultimately achieve normal communication and communication with classmates, to achieve the real sand table game in the integration of education [23].

2.5.3. How To Create an Atmosphere of This Basic Principle

Teachers, who are in charge of sandplay in integrated education, are responsible for creating a tranquil atmosphere. Teachers should pay more attention to the construction of the whole environment and the organization of activities than the leaders of activities. By leading children into sandplay, the

traditional environment of teachers and children's mindset is broken, children can learn to find their initiative in sandplay ability.

2.5.4. Build Relationships of Equality, Acceptance, and Trust

Once the differences between autistic children are fully understood, it becomes clear that integrating autistic children into everyday interactions and learning to collaborate is a very challenging project. But that doesn't mean the project is impossible. Teachers just need a way to build the right relationships to communicate effectively with children with autism. One of the most basic principles is to allow teachers, normal children, and autistic children to build an equal, trusting partnership. Children with autism can not fully express their inner world in a quiet and relaxed environment when they are creating sandplay without equal relationships. And that's why, in an unequal, accepting relationship, autistic children can't fully communicate what they think to teachers and other children. Failure to communicate often leads to worse outcomes, and that's why the inner thoughts of autistic children can be seen as outlandish and illogical. When autistic children's voices can not be heard by the outside world, it is hard for them to be respected. Over time, autistic children shut down their inner world and refuse to reconnect with the outside world [24].

Therefore, to avoid this situation, a good relationship between teachers and autistic children is essential and the most basic principle. Only when the teacher, as a sandplay instructor, can fully respect and try to accept the inner voices and thoughts of the autistic child, teachers can successfully lead autistic children and normal children to achieve a viable integration of education. The deficiency and future research direction of sandplay in the practice of integrated education.

2.6. The Limitations of The Sandplay in The Integrated Educational Practice and Future Research Direction

The standardization of the existing sandplay in the kindergarten stage still needs to be improved, and the main problems lie in the two aspects of the process and the systematic training of professionals. At the stage when most of the specialization of kindergarten teachers has just been completed, what is needed for sandplay to become a dominant idea in early kindergarten education as an integrative therapy is a more complete education system, a more professional training process for instructors, and wider dissemination and promotion.

As the guide and initiator of sandplay, the role of teachers is self-evident, whether it can be the communication link and lubricant between the normal children and the autistic children determines whether sandplay can integrate the autistic children into the normal children [25]. When autistic and non-autistic children discuss each other's sandbox structures and inner thoughts, the teacher, as a guide and observer, can grasp the degree of intervention to guide rather than interfere with children's free creation. Therefore, a teacher who is passionate about his career and has a high degree of professionalism is the most ideal outcome of the industrialization of sandplay [26].

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Concerns about the lack of widespread use of sandplay in early kindergarten education are another indication of the lack of inclusive education in the public eye [27]. The integrity of the education system and professional guidance and training ensure the feasibility and correctness of sandplay, but these alone can not guarantee the application of sandplay in early education, more importantly, it should help the public to understand correctly the great contribution and significance of sandplay. As autistic children learn to use sandplay to connect with the world, the public should also learn how to observe and understand autistic children's use of sandplay to build their inner world. To avoid the over-interference of teachers in sandplay activities in kindergartens, which can greatly affect the creation and imagination of autistic children, in the future, when autistic children play sandplay, no matter what the participants do, the teacher is only an observer at this time, as long as the child's physical safety is not endangered, bystanders [25]. Too much sand-table creative intervention for autistic children will make autistic children unable to truly express their inner thoughts, thus slowly closing their inner world. By allowing children to learn to use sandplay to fully express their inner world, teachers, as bystanders, can also better understand and help children from the sandplay completed by children.

3. Conclusions

According to the results of the literature search and combing, it can be concluded that: Through the sandplay intervention, the social interaction barriers, language disorders, and repetitive stereotypic behaviors of autistic children have all been improved to a certain extent. Among them, there are still relatively few studies on the repetitive stereotypic behaviors of autistic children in China, some studies show that the intervention effect of sandplay for repetitive stereotypic behaviors in autistic children is not very obvious, in the future, in-depth research can be conducted on the intervention effect of sandplay for repetitive stereotypic behaviors in autistic children, so that this can be better applied to integrated kindergartens. To make sandplay therapy play a more important role in children's integration education, sandplay usually requires two basic conditions and two basic principles. The first condition is to create a quiet and undisturbed environment for the child, which provides sufficient protection for the child's creative process. The second condition is to provide sufficient sand table game props, this makes it easier for children to express themselves as they wish. Two basic principles are the first sandplay instructor to create a safe, quiet, free atmosphere and the second to guide a respectful and communicative relationship between children. Sandplay therapy also has limitations. sandplay does not have a complete industrial chain in China, which means that ordinary people do not fully understand the role of sandplay therapy. The continuing unprofessionalism of tutors, and the market barriers to implementing sandplay therapy in kindergarten to achieve inclusive education.

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