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Play-Based Intervention and the Social Development of Children with Autism: A Review of the Literature

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Abstract. Play is a major means through which children interact with the world. It is significant for a child's mental and physical development. Autism is a developmental disability that affects how children interact with the environment and socialize with others. Children with autism are often immersed in their own world and face challenges in social interaction and communication. Play is often used as a kind of intervention for children with autism. The aim of play-based intervention is to provide autistic children with a comfortable way to interact with the world and express themselves, and to integrate them fully into broader social activities. Play-based intervention benefits the social development of autistic children by improving their social communication skills. Different types of play-based intervention have different focuses. Play-based intervention has some limitations and is not yet widely adopted as a treatment for autistic children. More studies need to be done in the future to provide a comprehensive understanding of play-based intervention.

Keywords: Autism spectrum disorder, autistic children, play-based intervention, play therapy, children's social development

1. Introduction

Autism Spectrum Disorder (ASD) is a developmental disorder that is characterized by repetitive behaviors, limited interests, and difficulty in social communications [1]. It is congenital and very commonly seen in children.

Children with ASD or autism have difficulties with social relationships due to their lack of ability to understand others and communicate effectively. They lack the skills to identify and understand social cues including body language, eye contact and facial expressions, and often they fail to express their thoughts and share their emotions effectively [2].

Due to impairments in social skills, autistic children often have a hard time meeting the high expectations of the environment in which they live. This is shared by most autistic children despite differences in their varying medical indications and childhood experiences [3].

As a result of their social difficulties, autistic children are often on the periphery of their social environment and are more likely to feel lonely and depressed [3]. Some tend to avoid social interactions, while others actively seek social interactions but often behave inappropriately due to lack of knowing how to start and sustain a conversation [4].

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Play is an important means of intervention for children with autism. It is significant for a child's optimal development. It has positive impacts on both the child's skills development and their happiness [5].

It is believed that play-based intervention enhances autistic children's social skills [3]. This research paper aims to explore the question: How can autistic children in elementary school improve their social and communication skills through the medium of play?

2. Literature review

This section reviews the effects of play-based intervention on the social development of autistic children and different types of play-based intervention.

2.1. Effects of play-based intervention

Play is a pivotal activity in children's daily lives. It is every child's primary medium for social interactions in their early childhood, essential to their physical and mental development. It is the children's language, a way for adults to connect with the children's world.

Play enhances children's skills of problem-solving, decision-making, negotiation, collaboration, and manual dexterity by affecting all areas of their brains [6]. In the case of autistic children, play also provides a unique way for them to interact with the world [3]. As a result, play-based intervention is often used as a means of treatment for autistic children.

It is important to note that play-based intervention is similar to but not exactly the same as play therapy. Play therapy can be used professionally to treat autism. It is done by licensed therapists, who design the therapy based on the needs of each individual autistic child [7]. Play-based intervention, on the other hand, can be administered by parents and guardians. It may not be as effective as play therapy, but it has similar benefits on the social development of autistic children and is much more easily and routinely administered. The intentions of both involve solving social difficulties autistic children face and helping with their development [6].

This review focuses on play-based intervention only, while it has similar effects and limitations as play therapy.

Play-based intervention allows autistic children to practice various social skills, including sharing, turn-taking, and effectively working with others. As their social interactions increase through play, autistic children are also more likely to make friends and develop peer acceptance after receiving play-based interventions [3]. The bonds between autistic children and their parents or guardians are also likely to be strengthened as a result of the intervention [6].

In addition, play-based intervention can also help autistic children improve their joint attention and engagement. "Joint attention" refers to the mutuality of communicating with another person [3]. "Engagement" refers to sustaining the mutuality of interpersonal communications [3]. Autistic children can practice engaging with peers or adults through playing, as playing enhances their frequency of starting or responding to a conversation.

2.2. Types of play-based intervention and their distinct focus

Play-based intervention can incorporate different kinds of play, including social play, guided play, and serious games, each of which may support distinct aspects of children's social functioning.

Firstly, social play involves collaboration and communication with peers or adults [5]. It demonstrates intrinsic motivation, which is the motivation to play because of wanting to have fun

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rather than considerations of outside benefits [5]. Intrinsic motivation allows children to focus more on engagement rather than other considerations, such as reality and expected outcomes.

Intrinsic motivation is important to autistic children and contributes to their joy when playing. It reduces their anxiety and doubt by shifting the focus of play away from external considerations, so that they can simply have fun and engage in play. When children do social play, they simply enjoy spending time with others instead of considering something else [5]. Due to their impairments of understanding others and expressing themselves, autistic children generally find social play skills challenging, including verbal or non-verbal communication and turn-taking. Interventions based on social play therefore not only allows autistic children to relax and engage in games but also improves the social play skills of autistic children [5].

One specific type of social play is collaborative play. Collaborative play is when multiple children play and engage together to complete a shared goal [8]. Collaborative play can help improve children's communication skills because children need to effectively communicate with each other to achieve the goal of the game. An example of collaborative play is co-located games, which are games that multiple people play together in the same space [8]. Collaborative play also includes more traditional games, such as board games and physical games like hide-and-seek. These games all provide autistic children with opportunities for social interactions and help them practice their teamwork and cooperation skills [8].

The second type of play that can be incorporated into play-based intervention is guided play, which involves parents or other adults [3]. Although playing without rules may help children express themselves better and have more fun, guided play can also be beneficial, as it reflects the specific kinds of support a child with autism may need. This way, parents or guardians can have a better understanding of how to help their child based on their unique characteristics and needs.

"Serious games" are also a type of play-based intervention that are primarily designed to improve some particular skills of the player rather than for fun. Unlike other games, through which the player may also improve skills, serious games are specifically intended to convey messages to the player or to teach the player knowledge or skills. They can be used for autistic children to enhance their learning and social skills and motor abilities [4].

The use of serious games for autistic children has been proven to be effective. Autistic children who play serious games manifest improvements in controlling emotions, behaving appropriately in a social environment, and reading social cues [4]. These are all skills that serious games are meant to teach them. This result proves that serious games, just like other types of play, have benefits on the social skills of autistic children.

The three types of play discussed are not entirely separate; they can be combined to fit individual need and create stronger results. For instance, guided play and serious games can overlap when parents guide an autistic child through a serious game. This way, not only the child's social skills are improved. Parents also gain a better understanding of what their child needs.

3. Limitations of existing research

Play-based intervention is a promising approach for autism intervention, but it has many limitations. First, although play-based intervention is useful for children with autism, it depends on many factors. By way of one example, the efficacy of play-based intervention depends on the continuity of implementation. It is not as effective if frequently interrupted, especially if used as a clinical therapy [6].

Effectiveness also depends on how the intervention is designed, as the results may vary with different experimental design. For example, when play-based intervention is conducted on a child

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with different groups of peers and at different time and environment, the effects may vary each time. Most previous studies about the effect of play-based intervention or play therapy on autistic children have limitations on some factors or do not have a consistent experimental design, making it hard to conclude an accurate result [6].

More research can be conducted on play-based interventions, particularly regarding their impact on specific areas of social functioning among children with autism, as well as the associated biological evidence. First, although scientists are able to make a general conclusion that play-based intervention is beneficial for autistic children's social skills, they rarely focus on the specific aspects of this topic.

In the case of serious games, for instance, previous studies mainly focused on the impacts of serious games on general social skills, such as communication and reading social signals [4]. Scientists have not yet been able to dig deep into the effects of serious games and understand how they enhance different aspects of specific social skills. Scientists are also not yet able to draw a clear conclusion of why and how play-based interventions benefit children with ASD more than other children [3].

In addition, scientists have not been able to completely understand how play-based intervention affects the brain. More research needs to be done to gather biological evidence on the impacts of play, for example, how it affects the frontal lobe functions in the brains of children with ASD [6]. The frontal lobe is a part in the human brain that is associated with social behaviors and a variety of social skills, such as attention and emotional regulation [9].

Further research is needed to determine the key factors to consider when choosing among the different types of play. This review covers games that have different focuses and a variety of effects, but it is yet unsure if one game is more effective in the advancement of the social development of autistic children than another. There is not yet a conclusion on what is the most important standard when picking a type of play.

4. Conclusion

Play-based intervention is an effective and promising method of intervention for children with ASD. It has been proven to have benefits on the social skills of children with autism; however, it has some limitations and needs more research.

Most existing studies focus on the changes in social behaviors that autistic children display after being treated with play-based intervention, but not many studies have examined the medical aspect of the intervention—how it changes a child's brain. More studies need to be done in order to gain a full understanding of the benefits of play-based intervention and how it works in medical concepts.

Previous research has discussed many different types of play, including social play, guided play, and serious games, all of which are covered in this review. In order to have a more comprehensive understanding of play-based intervention, future research could explore which types of play are most effective for specific aspects of social functioning or for different groups of autistic children.

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