The Effect of Play Therapy on Improving Social Skills in ASD Children: A Systematic Literature Review

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ABSTRAK

Anak dengan ASD menunjukkan kurangnya kemampuan dalam semua keterampilan sosial sejak masa bayinya. Saat ini sudah banyak metode terapi yang digunakan dan dikembangkan, diantaranya adalah terapi musik, fisio terapi, terapi pijat, terapi bermain, dan lain sebagainya. Salah satu yang banyak dikembangkan saat ini yaitu terapi bermain. Terapi bermain mampu memberikan stimulus positif bagi anak. Penulisan ini merupakan hasil dari tinjauan terhadap 12 artikel jurnal yang mendalam tentang berbagai jenis intervensi terapi bermain yang bertujuan untuk meningkatkan kemampuan sosial pada anakanak dengan gangguan spektrum autisme (ASD). Secara keseluruhan, penulisan ini memberikan wawasan mendalam tentang bagaimana berbagai jenis intervensi terapi bermain dapat secara signifikan mempengaruhi perkembangan sosial anak-anak dengan ASD.

ABSTRACT

Children with ASD show deficits in all social skills from infancy. Many therapy methods are being used and developed, including music therapy, physiotherapy, massage therapy, play therapy, etc. One that is currently being developed is play therapy. Play therapy can provide a positive stimulus for children. This writing is the result of a review of 12 in-depth journal articles about various types of play therapy interventions aimed at improving social abilities in children with autism spectrum disorders (ASD). Overall, this paper provides indepth insight into how different types of play therapy interventions can significantly influence the social development of children with ASD.

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1. INTRODUCTION

Autism Spectrum Disorder or ASD is a developmental disorder that generally occurs in children aged 2 to 3 years (Carlson, 2015). Children with ASD show a lack of ability in all social skills since infancy. Social skills are developing emotional bonds by combining children's attention through eye contact, body movements, and understanding other people's feelings. Unlike children

in general, children with ASD will try to avoid people and show repetitive behavior patterns. It has been scientifically proven that children with ASD consider other people's behavior as objects, not as people who can communicate with them (Skoufu, 2019).

Several aspects indicate a child has ASD, including communication such as lack of language and speaking skills (Uzun & Yılmaz, 2020). This greatly impacts the social process because the child cannot express what they want. Then, with behavioral disorders such as having their world, children with ASD may withdraw from their environment. The next aspect is having obstacles in carrying out social relationships and interactions. Social interaction is a connection that occurs between individuals and other individuals and can also occur between individuals and the community environment. In this case, the relationship is carried out repeatedly and continuously. Children diagnosed with this neurodevelopmental disorder show unique symptoms depending on the severity of the autism condition, their level of development, intellectual level, language abilities, and chronological age (Gardner et al., 2022).

Like other children their age, most children with autism enjoy playing with others, interacting, and mingling with their community. However, they often have difficulty understanding the rules of social behavior naturally, resulting in challenges in communicating and forming deep social relationships (Barghi et al., 2023). Although children with autism often face challenges in understanding the rules of social behavior naturally, they can overcome this with the right support and guidance.

According to the World Health Organization (WHO), the number of children diagnosed with ASD worldwide continues to increase from year to year. It was found that 1 in 160 children have ASD. In America, autism is 5 times more common in boys than girls, namely 1 in 42 boys and 1 in 189 girls. It is more common in white children than in black children (Yuswatiningsih, 2021). Then in 2016, a new report was found regarding the high number of children with ASD as many as 1 in 36 children (Afdhal, 2021). Children with ASD in Indonesia have reached 2.4 million children. Every year, 500 children are identified as having ASD. It was found that boys with ASD are more numerous than girls, with a ratio of 5:1. In addition, according to the Ministry of Women and Child Protection, in Indonesia there are 2 cases per 1000 population per year (Josephine, 2023). According to the East Java Education Office, in 2011 there were 388 Special Schools with 13,159 students. Then there were 93 inclusive schools with 1,476 special needs students and 15% of them were ASD children.

Currently, there are many therapeutic methods used and developed, including music therapy, physiotherapy, massage therapy, play therapy, and so on. One that is currently being widely developed today is play therapy. With the provision of these therapies, autistic children are expected to have development in cognitive and behavioral aspects. Play therapy can improve social interaction, communication skills, and the ability to play integratively (Phytanza, 2019). From playing, a social interaction is formed between children and the environment including teachers, parents, and peers. Of course, this can be a stimulus for children to develop their social interaction skills. Through appropriate therapy and a supportive environment, they can learn and grow in developing their social skills (Barghi et al., 2023). For example, with play therapy specifically designed to improve social interaction, they can practice communication skills, understand emotional expressions, and learn to share and cooperate.

Behavior modification techniques that are often applied to children are play therapy. This therapy involves using various media in playing to provide facilities in the form of communication and aims to achieve certain behavioral changes (Indreswari, 2022). By playing, children will have the opportunity to explore their world. Children can explore feelings, the results of their thoughts, and logic. That way, children can create new things, make a difference, and foster feelings of satisfaction. This ability will divert their creative interests to situations outside the world of play. Consistent support from parents, teachers, and therapists is also very influential in this process. With this support, children with ASD can feel more confident in dealing with complex social situations and expand the scope of their relationships over time. The opportunity to interact with a variety of games and social activities also helps them build self-confidence and the ability to adapt to different social situations (Uzun & Yılmaz, 2020).

Play therapy can provide positive stimuli for children because playing is a natural activity for children to get to know their world, express their thoughts and feelings, develop social skills, and learn for themselves (Ibharim et al., 2022). Play therapy is a medium for children to explore relationships with their friends and express their hopes and experiences through play. Often play therapy allows parents to actively participate in their child's growth and development. Play therapy can be taught to parents and parents can become their child's therapist while building stronger and more meaningful relationships. This game begins with simple manipulation of objects (such as reaching, shaking, patting, throwing, and exploring objects with fingers) in the second half of the first year of life (Makarem et al., 2020). This type of play, known as sensorimotor play, involves using objects for practice and developing thinking patterns.

2. METHODS

In conducting a systematic review, several stages should be passed to achieve the research objectives. These stages begin with detailed writing planning. Writing planning starts with determining the research questions used in the systematic review with a formulation using the SPIDER method (Sample, Phenomenon of Interest, Design, Evaluation, Research Type). In this context, the research question that will be discussed is about the types of therapy that can improve social skills in children with ASD. This question is followed by an effort to understand which aspects of social skills can be increased by various existing therapies.

Next, the author conducts a literature review with several steps such as searching for related journals. To create a comprehensive search list, the author uses several key terms in searching related journals using Google Scholar with the help of Harzing's Publish or Perish software. The terms used include play therapy, social skills, autism or ASD, and children. The next stage is the selection of relevant journals using Rayyan by removing duplicate journals, selecting journals by paying attention to titles and abstracts that are under the purpose of writing, as well as a thorough reading of the selected articles, and finally the process of reporting the results comprehensively. After going through this process, from 350 journal articles that were evaluated, 12 journal articles were selected to be reviewed in this writing.



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Journal for review (N = 12)

Figure 1. PRISMA Graph for Journal Selection Flow

In Figure 1. Journal selection flowchart, there are several limitations in this systematic review, including (1) research journals conducted within the last 5 years, namely from 2019 to 2024, (2) research subjects are children with ASD, (3) journals used are in English and Indonesian, (4) the type of research in the journal is experimental or intervention. Journals that meet these criteria will be included in the discussion.

3. DISCUSSION

Individuals with autism have several characteristics, especially those related to social interaction and socio-emotional development. These are considered to be the main aspects of their behavior. In particular, these individuals have difficulties in reciprocal social interactions from an early age. They often avoid eye contact, show little interest in other people's facial expressions, have difficulty understanding other people's expressions and feelings, tend to be interested in physical contact with parents, have difficulty imitating, understanding, and using expressive movements (Skoufu, 2019).

Play therapy is an approach that utilizes play as a means to help individuals deal with and overcome the psychosocial difficulties they experience. In addition, this therapy aims to improve individual development by providing space for them to explore themselves and express their feelings and experiences through play activities (Mulyani et al., 2021). In this context, play is seen as a means of recreation and an effective way to facilitate psychological and social recovery. Play therapy is used to help children redirect unacceptable behavior, develop, and inculcate new coping strategies, as well as patterns in neural circuits and epigenetic mechanisms (Elbeltagi et al., 2023). Play therapy allows individuals to build social skills, improve communication, and develop independence and emotional resilience. Thus, play therapy focuses on concrete aspects of therapy but also provides space for personal development. In this systematic observation, there are several forms of play therapy to improve social skills in children with ASD as follows,

No	Penulis	Subject	Form of Play	Instrument	Type of
			Therapy		Research
1	Mulyani et al.,	19 children	Play therapy	Checklist	One group pre
	2021	attending	with 40 sessions		and post-test
		SLB			design
2	Ishak, 2022	A 7-year-	Lego therapy	Checklist and	Pre and post-
		old child		observation	test design
3	Pratiwi &	25 children	Snakes and	Autism Social Skills	One group pre
	Saloko, 2023	aged 6-9	ladders game	Profile (ASSP) and	and post-test
		years		Test of Playfulness	design
4	Barghi et al.,	30 children	DIR/floor time	Autism Social Skills	Quasi-
	2023	aged 7-10	(going through	Profile (ASSP) and	experimental
		years	tunnels,	Emotion Regulation	
			carrying toys,	Checklist (ERC)	

Table 1. Summary of Play Therapy Journal to Improve Social Skills of Children with ASD

			and reading		
			books)		
5	Chang et al.,	20 children	Thera play	The Korean version of	Pre and post-
	2021	aged 2-9	(active and fun	the Social	test design
		years	games between	Communication	0
		5	child and	Questionnaire (K-	
			mother)	SCQ) and observation	
6	Iskandar &	9 children	Associative play	Observation	Quasi-
	Indaryani,		therapy with		experimental
	2020		plasticine and		
			cardboard		
			picture games		
7	Đorđević et	3 pairs of	Various kinds of	Gilliam Autism Rating	Natural
	al., 2023	twins aged	games that	Scale-3 and	observation
		4-9 years	children like	observation	
8	Kazemi &	8 students	Picture card	Social Skills	Pre and post-
	Abolghasemi,	in Rasht city	games and social	Assessment (SSA)	test design
	2019	in the 2016- 2017	stories		
		academic			
		vear			
9	Panda et al.,	A 7-year-	Floor time	Developmental	Case study
	2019	old child	therapy (various	Screening Test, Indian	cube study
	_017	ora crista	games)	adaptation of	
			0	Vineland Social	
				Maturing Scale and	
				Indian Scale for	
				Assessment of Autism	
10	Moosapoor,	30 children	Puppet games	Gresham Valiot's	Semi-
	2023	aged 7-14	(playhouse,	Social Skills	experimental
		years	hand puppets,	Questionnaire	
			and small balls)		
11	Rabiei et al.,	30 boys	Sensory play	Gilliam Autism Rating	Pre-test, post-
	2020	aged 5-12		Scale-2, and The	test, and
		years		Lincoln-Oseretsky	monitoring for
				Motor Development	1.5 months
10	Talala and	20 -1-11	Companying t	Scale	Due en 1
12	Jabbari &	30 children	Sensorimotor	Gilliam's Autism	Pre and post-
	Vatankhah,	aged 6-10	play with hand	Diagnostic Test, social	test design
	2020	years	puppets	skills scale, and verbal skills scale	
				SKIIIS SCALE	

Based on the literature review conducted, the author found that the majority of studies on the application of play therapy for children employed experimental research methods. These methods included observation and quasi-experimental or semi-experimental designs using a onegroup pre-test post-test approach. The study aims to evaluate the changes that occur in children with ASD. Measurements were taken twice, before and after play therapy. In addition, several studies use a case study approach and quantitative descriptive. The use of measuring instruments is also an important aspect. The scale used in the study is certainly related to various aspects, including social skills, behavior, communication, and the severity of autism experienced by the child. The results of most studies show that play therapy has a positive effect on the social skills of children with ASD.

Various types of play therapy are effective in improving the social skills of children with ASD. Play therapy can improve communication skills and social interactions in children with autism, as well as provide sensory stimulation that is expected to improve brain function in processing stimuli (Mulyani et al., 2021). It can be seen that there are play therapies that can be done, one of which is Lego therapy which is useful for training children's ability to take turns, speak, cooperate, and solve problems. Lego play therapy can have a positive impact by increasing social interactions, which encourages children to interact more positively and boost their self-confidence (Ishak, 2022). The Snakes and Ladders game functions as a significant learning medium, providing a fun experience for children. Research by Pratiwi & Saloko (2023) also indicates that more notable changes occur at the age of 6 years, with boys showing a greater increase than girls.

In addition, nature-based therapy, or floor time therapy, helps children get to know nature while focusing on language learning, cognition, and socio-emotional skills. Children in the experimental group experienced improvements in emotional functioning and social interaction compared to the control group (Barghi et al., 2023). In line with research by Panda et al. (2019), which found that this type of play therapy is effective in improving the social and communication skills of children with autism, as well as strengthening emotional bonds between children and adults. Then thera play, which is an interactive activity between parents, especially mothers, and children, play involves handling thoughts and behaviors through four basic dimensions: structure, involvement, nurturing, and challenge (Chang et al., 2021). There was a significant improvement in symptoms of social interaction and communication, as well as positive changes in restricted and repetitive behavioral patterns.

Play therapy with a variety of children's favorite games can make children feel more comfortable and motivated to participate. Various games, such as puzzles, plasticine, or physical activities, allow children to express themselves, interact with peers, and develop social skills. Research by Đorđević et al. (2023) showed that with a variety of games, twins with ASD tend to participate in manipulative and repetitive play, and often show higher levels of social behavior. Examples include focused gaze, smiles, or vocalizations. In line with research by Iskandar & Indaryani (2020) showed that playing helps children develop socialization skills, learn problem-solving, understand moral and ethical values, and cultivate a sense of responsibility.

Card games and social stories can bring out various expressions, help children recognize the situation that is happening, and improve their social skills. By playing with hand puppets and picture cards to tell social stories, therapists can teach children about signs and facial expressions in various interactions, which helps them recognize and respond appropriately in similar situations (Kazemi & Abolghasemi, 2019). Sensory play with puppets has been shown to increase children's cooperation, assertiveness, and self-control. In line with research by Moosapoor (2023), shows that autistic children feel the benefits and advantages of a play therapy program with dolls that focuses on social stories. This method is particularly engaging for them, as it makes them feel involved and interested in participating. In addition, children can also improve their communication skills, social interactions, stereotypical behavior, and motor development in boys with ASD (Rabiei et al., 2020). This form of therapy can help autistic children express emotions, practice empathy, and develop social skills. This method also increases motivation and communication and helps children control their behavior, creating a healthy communication space for verbal and social skills (Jabbari & Vatankhah, 2020).

Adequate facilities and a supportive environment also play an important role in training children to apply the skills they have learned in everyday life. The number of therapy sessions is also a factor that can improve children's social skills because the higher frequency of interaction provides opportunities for children to practice social skills consistently. Children experience variations in different social situations, which allows them to learn to adapt and develop more effective communication strategies.

4. CONCLUSION

Based on the literature review that has been conducted, it can be concluded that play therapy, especially using an experimental approach, shows significant effectiveness in supporting the social development of children with ASD. Various types of therapy, including Lego therapy, snakes and ladders, and nature-based therapy, have been shown to improve communication and social interaction skills, as well as reduce stereotyped behaviors that often appear. Children involved in play therapy that focuses on social stories, such as the use of hand puppets and picture cards, show progress in expressing emotions and practicing empathy. This method allows them to better understand signs and facial expressions in interactions, which are very important for the development of their social skills.

Supportive facilities and the right environment also play a crucial role in the success of therapy, as they provide space for children to apply the skills they have learned in the context of everyday life. The high frequency of therapy sessions is another important factor, as it gives children the opportunity to practice social skills consistently. With more sessions, children can experience different social situations, which helps them adapt and develop more effective communication strategies. Overall, play therapy not only serves to improve social skills but also creates a healthy communication space for children with autism. This is a very important aspect because having good social skills can contribute to their success in both social and academic environments. With the right approach and adequate support, children with ASD can develop the skills needed to interact more effectively and build positive relationships with others in the future.

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