

# Play Tool Kit to Strengthen Prosocial Behaviour and Empathy among Attention-Deficit/Hyperactive Children

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## ABSTRACT

Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder that affects individuals' ability to regulate their attention, impulses, and activity levels. It is commonly diagnosed in childhood but can persist into adolescence and adulthood. Children with such type of disorder are having copious problems related to social skills. Understanding these core symptoms is crucial in recognising and addressing the challenges faced by children with ADHD. Hence, some interventions have to be introduced in the form of a play toolkit, which has a significant effect on ADHD children's prosocial behaviour and empathy. This play toolkit includes two components: play therapy and doodle therapy. Using play-based activities to enhance social skills, emotional regulation, problem-solving, and cooperation skills in a supportive and engaging environment is essential. Utilising creative activities like drawing, colouring, and art-based projects to facilitate self-expression, communication, and emotional understanding can indirectly improve social interactions. By incorporating these interventions into a comprehensive treatment plan, nurses and healthcare professionals can help children with ADHD develop essential social skills, improve their relationships with peers and adults, and enhance their overall well-being.

**Keywords:** Child, Intervention studies, Neuro-developmental disorder, Play therapy

## INTRODUCTION

ADHD is a neurodevelopmental condition marked by inattentiveness, hyperactivity, and impulsiveness, which can result in challenges with social interactions and managing emotions. Prosocial behaviour and empathy are essential for social functioning, and these skills are frequently affected in children with ADHD [1]. When children diagnosed with ADHD engage in social settings, they often encounter challenges such as sharing, taking turns, active listening, and interpreting social cues. This can result in feelings of boredom, distraction, or disengagement during conversations. Additionally, these students may struggle with regulating their emotions while interacting with peers, experiencing feelings of overwhelm, impatience, or frustration. In social contexts, the distraction or monopolisation of conversations by children with ADHD can lead their peers to perceive them as disinterested or unkind, potentially causing them to be avoided. Consequently, these children miss the opportunities to practice social skills, leading to a decrease in their confidence levels. The absence of meaningful social connections can also contribute to feelings of inadequacy and negative emotional responses during social interactions. In some cases, children with ADHD may actively avoid social situations to evade further rejection [2].

## Significance of Prosocial Behaviour and Empathy Development in Children

Prosocial behaviour encompasses actions that are beneficial to others or society as a whole. It is an important social skill that involves learning how to interact, communicate, and cooperate effectively with peers and adults [3]. For children with ADHD, acquiring these skills can be particularly challenging due to their impulsivity and difficulties in sustaining attention. However, learning and practicing this kind of behaviour is crucial for establishing positive relationships and functioning well within various social settings [4].

Empathy is the ability to understand and share the feelings of others. It involves perspective-taking, recognising emotions, and responding appropriately. For children with ADHD, empathy

development may be hindered due to their challenges in focusing and understanding social cues. However, cultivating empathy is crucial for developing meaningful connections, resolving conflicts, and showing compassion towards others [5].

## Prosocial Behaviour in Social Interactions

Prosocial behaviour plays a vital role in fostering positive social interactions and cultivating healthy relationships, emphasising concern for others' well-being. Encouraging and modelling this behaviour, especially from a young age, is crucial to shape individuals who are compassionate, considerate, and empathetic [6]. It is very important for children with ADHD to teach and reinforce these behaviours in various social contexts, not only to enrich interpersonal relationships but also to contribute to creating a more harmonious and supportive society. It has several benefits, including building trust and cooperation, strengthening relationships, conflict resolution and reduced aggression, enhancing emotional well-being, making a positive impact on society, strengthening communities, and promoting personal growth and development [7].

## Empathy as a Crucial Aspect of Emotional Intelligence

Empathy is indeed a fundamental component of emotional intelligence, which refers to the ability to perceive, understand, and manage one's own emotions and those of others. Developing empathy is an essential component of enhancing emotional intelligence [8]. It involves active listening, perspective-taking, and a genuine willingness to understand and support others. Cultivating empathy in children contributes advantages such as understanding others' perspectives, recognising emotions, emotional regulation, building relationships, effective communication, creating collaborative and supportive environments, making compassionate decisions, and resolving conflicts [9].

## PLAY THERAPY: AN EFFECTIVE INTERVENTION

Introducing play therapy as an intervention for children with ADHD involves understanding how this approach leverages the natural language of children. Play therapy is a therapeutic approach that

utilises play as a medium for communication and expression, especially for children who might find it challenging to articulate their thoughts and emotions through traditional verbal communication. It is associated with behavioural and emotional challenges [10].

Groenman AP et al., have suggested that Behavioural therapies through play therapies have been found to be successful in alleviating symptoms of ADHD, behavioural issues, and functional impairments, according to reports from raters closely involved with the treatment process. It is recommended that individuals with severe Conduct Disorder (CD) or ADHD symptoms, a diagnosis of CD, or those who are single parents be given priority for treatment, as they may experience worsening symptoms without intervention [11].

Ashori M and Dallalzadeh Bidgoli F have suggested in their research that the use of play-based techniques enhances the ability of children to engage in cooperative play and develop positive relationships with peers [4]. Elbeltagi R et al., added in their research that play therapy interventions improved behavioural regulation, emotional regulation, and social competence in children with ADHD. The use of play-based approaches facilitated better emotion management and self-control among participants [12].

Play therapy with doodle therapy has emerged as a promising approach to tackle these issues, offering a supportive setting for children to express themselves, acquire social skills, and enhance emotional comprehension. Play therapy creates a structured yet adaptable space where children can participate in imaginative play, storytelling, and other activities, allowing them to express themselves and develop coping strategies. Through play, children with ADHD can learn to regulate their emotions, enhance social skills, and improve problem-solving abilities within a supportive environment. Similarly, doodle therapy utilises creative expression through drawing, enabling children to convey their thoughts and emotions non-verbally [13].

The study done by Mahardika B and Putra AAP revealed that employing art therapy using doodle art can enhance concentration among children with ADHD across memory, attitude, and skill dimensions. This strategy is tailored to individual child conditions and requirements, allowing them the freedom to express themselves through doodle art. The approach proves highly effective, as evidenced by the positive attitudes and enthusiasm exhibited by students throughout the learning process. They do not only derive enjoyment but also establish meaningful connections with the learning experiences, showcasing enhanced engagement and relatability [14].

In this article, the researcher has considered play therapy as a tool to strengthen prosocial behaviour and empathy. As part of this therapeutic intervention, which is called as a play toolkit, it is one of the parts of nurse-led interventions created by a researcher cum play therapist, who has received certified training in play therapy for children with special needs from one of the recognised organisations: the Play Consortium of India [15]. This play toolkit is based on understanding the live experience of children with ADHD that play is a child's natural way of exploring, processing experiences, and making sense of the world around them. For children diagnosed with ADHD, play therapy offers a structured yet flexible environment where they can engage in play-based activities guided by a trained therapist [15]. It provides a safe space for them to express their feelings, thoughts, and experiences, allowing therapists to gain insights into their inner world and challenges [16].

The play toolkit is built upon the theoretical framework of Cognitive Behavioural Play Therapy (CBPT), which typically incorporates a modeling component to demonstrate effective coping skills. Play serves as a means to indirectly communicate cognitive shifts and introduce positive behaviours to the child [17]. This modeling strategy can be adapted for different cognitive and behavioural interventions. The researcher has undergone two certified trainings (play therapy and doodle therapy) to structure it.

## Play Therapy Tool Kit Includes

- Play way methods with play cards:

S. No.	Component	Sub topics	Sheets
1	<b>Component 1:</b> Games of emotions (Understanding 8 core emotions through story telling)	<p><b>C1.1:</b> Understanding 8 core emotions, Play cards are used to teach a Prosocial behaviour it is to be used with examples when children see other people's behaviour, feelings and experience as an important learning</p> <p><b>C1.2:</b> Talking about concerning act based on the story</p>	<p>Following emotions was discussed:</p> <ul style="list-style-type: none"> <li>Anger: to fight against problems</li> <li>Fear: to protect from danger</li> <li>Anticipation: to look forward and plan</li> <li>Surprise: to focus on new situations</li> <li>Joy: to remind that its important and gives us happiness</li> <li>Sadness: to understand the pain and sorrow</li> <li>Trust: to connect with people whom we love</li> <li>Disgust: to reject what is unhealthy</li> </ul> <p><b>Sharing</b></p> <ul style="list-style-type: none"> <li>Sharing toys</li> <li>Sharing food to hungry</li> <li>Sharing time to show concern</li> </ul> <p><b>Helping</b></p> <ul style="list-style-type: none"> <li>Helping others</li> <li>Helping to the person who is injured</li> <li>Helping the old age</li> <li>Helping in household work</li> <li>Helping the strangers</li> </ul> <p><b>Comforting</b></p> <ul style="list-style-type: none"> <li>Comforting to the sad people, or the one who is hurt</li> <li>Giving a hug to a disturbed person</li> <li>Feeling sorry to the disturbed one</li> <li>Showing kindness</li> <li>Showing care to the animals and the environment</li> </ul>
2	<b>Component 2:</b> Act out loud (play way method how to show empathy, prosocial behaviour)	Childrens are to be taught the response of events with some play cards with pictures and dialogues	<p>Participants have to select suitable emotional mood faces (such as: excited, sad, angry, sick, surprised, happy, unhappy, bored) when asked how will you react if particular event occurs</p> <ul style="list-style-type: none"> <li>Ram falls on the road</li> <li>Meena is crying</li> <li>Seema is happy and laughing</li> <li>Mummy is about to share a gift</li> <li>You are tired and having pain</li> <li>Your friend is unhappy</li> <li>Your friend is not enjoying in a game, how she will react</li> <li>You got first prize in a school</li> </ul>

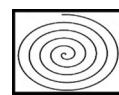
- Doodling activities:

S. No.	Sheet description	Doodle design
1	<b>Sheet 1:</b> Develop patience: (Draw lines shown in the picture)	
2	<b>Sheet 2:</b> Easy flowing with emotions, Wavy/wiggly lines: You are adaptable (Complete the pattern)	
3	<b>Sheet 3:</b> Develop checkers for calming effect. Colour the alternate box with blue pen where you see star	
4	<b>Sheet 4:</b> To develop empathy, to manage emotions, draw double curves over the circle	
5	<b>Sheet 5:</b> To have a logical mind, reducing clutter and confusion from the mind for sharing and comforting others, draw Zigzags: You are strong minded	

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**Sheet 6:**

To develop sharing and emotions overlap the design,  
The circular centre represents a kind-hearted individual

**CONCLUSION(S)**

Play therapy interventions tailored for children with ADHD yield positive outcomes. These interventions not only address core ADHD symptoms but also focus on improving social skills, emotional regulation, and relationships, contributing to the overall well-being and functioning of children with ADHD. Continued research supports the effectiveness of play-based approaches in the comprehensive treatment and management of ADHD symptoms.

**REFERENCES**

- [1] Puspitosari A. Play therapy modified ludo games decreasing hyperactivity, impulsivity, and inattention in children with attention deficit and hyperactivity disorder. *Jurnal Keterapi Fisik*. 2022;7(1):49-57. Doi: 10.37341/jkf.v0i0.330.
- [2] Thoma P, Sonnenburg S, Marcinkowski N, Juckel G, Edel MA, Suchan B. Social problem solving in adult patients with attention deficit hyperactivity disorder. *Psychiatry Res*. 2020;285:112721. Doi: 10.1016/j.psychres.2019.112721.
- [3] Vacher C, Goujon A, Romo L, Purper-Ouakil D. Efficacy of psychosocial interventions for children with ADHD and emotion dysregulation: A systematic review. *Psychiatry Res*. 2020;291:113151. Doi: 10.1016/j.psychres.2020.113151.
- [4] Ashori M, Dallalzadeh Bidgoli F. The effectiveness of play therapy based on cognitive-behavioural model: Behavioural problems and social skills of pre-school children with attention deficit hyperactivity disorder. *JREHAB*. 2018;19(2):102-15.
- [5] Sheykhangafshe FB, Niru VS, Eghbali F, Shabahang R, Fathi-Ashtiani A. The effectiveness of empathy-based intervention for nursing on empathy and management of prosocial behavior intentions and violent behavior of patients. *Iranian Journal of Psychiatric Nursing*. 2023;11(2):39-51. [https://www.researchgate.net/publication/372532666\\_The\\_Effectiveness\\_of\\_Empathy-Based\\_Intervention\\_for\\_Nursing\\_on\\_Empathy\\_and\\_Management\\_of\\_Prosocial\\_Behavior\\_Intentions\\_and\\_Violent\\_Behavior\\_of\\_Patients](https://www.researchgate.net/publication/372532666_The_Effectiveness_of_Empathy-Based_Intervention_for_Nursing_on_Empathy_and_Management_of_Prosocial_Behavior_Intentions_and_Violent_Behavior_of_Patients).
- [6] Hu Z, Wen Y, Wang Y, Lin Y, Shi J, Yu Z, et al. Effectiveness of mindfulness-based interventions on empathy: A meta-analysis. *Front Psychol*. 2022;13:992575. Doi: 10.3389/fpsyg.2022.992575.
- [7] Collins SH, DeLoss DJ, Cañadas E, Lutz J, Findling RL, Keefe RSE, et al. A novel digital intervention for actively reducing severity of pediatric ADHD (STARS-ADHD): A randomized controlled trial. *Lancet Digit Health*. 2020;2(4):e168-e178. Doi: 10.1016/S2589-7500(20)30017-0.
- [8] Storeba OJ, Andersen ME, Skoog M, Hansen SJ, Simonsen E, Pedersen N, et al. Social skills training for attention deficit hyperactivity disorder (ADHD) in children aged 5 to 18 years. *Cochrane Database Syst Rev*. 2019;6(6):CD008223. Doi: 10.1002/14651858.CD008223.pub3.
- [9] Wilkes-Gillan S, Bundy A, Cordier R, Lincoln M, Chen YW. A randomised controlled trial of a play-based intervention to improve the social play skills of children with Attention Deficit Hyperactivity Disorder (ADHD). *PLoS One*. 2016;11(8):e0160558. Doi: 10.1371/journal.pone.0160558.
- [10] Mirzaei H, Hassani Mehraban A, Hosseini SA, Ghasemi Fard F, Jafari Oori M. Comparison of the effect of filial and Adlerian play therapy on attention and hyperactivity of children with attention deficit hyperactivity disorder: A randomized clinical trial. *Iran Rehabil J*. 2019;17(4):341-50.
- [11] Groenman AP, Hornstra R, Hoekstra PJ, Steenhuis L, Aghebati A, Boyer BE, et al. An individual participant data meta-analysis: Behavioural treatments for children and adolescents with attention-deficit/hyperactivity disorder. *J Am Acad Child Adolesc Psychiatry*. 2022;61(2):144-58. ISSN 0890-8567.
- [12] Elbeltagi R, Al-Beltagi M, Saeed NK, Alhwamdeh R. Play therapy in children with autism: Its role, implications, and limitations. *World J Clin Pediatr*. 2023;12(1):01-22. Doi: 10.5409/wjcp.v12.i1.1.
- [13] Daffner MS, DuPaul GJ, Kern L, Cole CL, Cleminshaw CL. Enhancing social skills of young children with ADHD: Effects of a sibling-mediated intervention. *Behav Modif*. 2020;44(5):698-726. Doi: 10.1177/01454455198434733.
- [14] Mahardika B, Putra AAP. Art therapy through doodle art media in increasing learning concentration children with ADHD. *J Child Dev*. 2023;3(2):121-29. Doi: 10.25217/jcd.v3i2.3939.
- [15] Velö S, Kereszteny Á, Ferenczi-Dallos G, Pump L, Móra K, Balázs J. The association between prosocial behaviour and peer relationships with comorbid externalizing disorders and quality of life in treatment-naïve children and adolescents with attention deficit hyperactivity disorder. *Brain Sciences*. 2021;11(4):475. Doi: 10.3390/brainsci11040475.
- [16] Maoz H, Gvirtz HZ, Sheffer M, Bloch Y. Theory of mind and empathy in children with ADHD. *J Atten Disord*. 2019;23(11):1331-38. Doi: 10.1177/1087054717710766.
- [17] Pang Y, Song C, Ma C. Effect of different types of empathy on prosocial behaviour: Gratitude as mediator. *Frontiers in Psychology*. 2022;13:768827. Doi: 10.3389/fpsyg.2022.768827.

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