

Maximizing Joint Attention in Children with Autism Spectrum Disorder: The Impact of Child-Centered Play Therapy at SD Muhammadiyah 1 Candi Labschool UMSIDA

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ABSTRACT

Objective: This study aims to examine the effectiveness of Child-Centered Play Therapy (CCPT) in enhancing joint attention skills in children diagnosed with Autism Spectrum Disorder (ASD), a critical component of social interaction and communication often underdeveloped in this population. **Method:** Utilizing a Single-Case Experimental Design (A-B-A), the research focused on a 7-year-old child with ASD enrolled at SD Muhammadiyah 1 Candi Labschool UMSIDA. The intervention was conducted over two sessions across two weeks, with joint attention skills evaluated pre- and post-intervention. **Results:** The findings demonstrate a significant improvement in the child's Responding to Joint Attention (RJA), particularly in following visual cues and shared object referencing. However, Initiating Joint Attention (IJA), such as initiating pointing or object sharing, showed minimal improvement, indicating the need for extended or supplementary interventions. **Novelty:** This study contributes to the limited empirical evidence on the application of CCPT for joint attention development in ASD populations within Indonesian elementary school settings, offering insights for early intervention strategies. Further research involving a larger sample and longer implementation period is recommended to validate and generalize the findings.

INTRODUCTION

Every child passes through developmental phases that help them to become able to interact and express themselves. Joint attention is one basic quality required for reaching this capacity. Joint attention is the capacity of one person to consciously and cooperatively share focus on an item or circumstance with another person, therefore fostering shared experiences and aiding cognitive and social growth [1]. Joint attention is not only the knowledge that another person is also watching the same thing but also the active cooperation to share that focus. It is therefore a fundamental component in social and communicative growth. Many other cognitive abilities, including language learning and social understanding [2], are based on this capacity. Joint attention, according to Mundy, is a person's capacity to concurrently focus on persons in their surroundings. Usually developing between the ages of 9 and 12 months, joint attention forms the foundation for many other skills [3].

Joint attention (RJA) and starting joint attention (ijA) are two functionally distinct forms. Responding to joint attention is the process by which a youngster looks or moves gaze in response to another person's attempt to coordinate attention toward an item or event [4]. Starting joint attention is the second type of joint attention and entails requesting, providing, displaying, and pointing [4].

Early social behavior deficits arise in at least five categories overall: orientation toward social cues, shared attention, emotions, imitation, and face processing [5]. Children with ASD show primarily a deficiency in joint attention [6]. As described in the DSM-IV (APA, 1994), ASD is typified by a shared attention deficit whereby one lacks spontaneity in sharing joys, interests, or accomplishing something with others. Comparatively to other developmental diseases, children with ASD have a deficiency in joint attention ranging between 80% and 90%.

Often driving the affected people to seem withdrawn into their own world, autism is a ubiquitous developmental condition categorized under Autism Spectrum Disorder (ASD), which shows in early childhood and often causes problems in social interaction [8]. Usually diagnosed in children between 18 and 30 months of age, developmental problems in autism include behavior, social interaction, communication, language, emotional and sensory perception, and even motor abilities [9].

The World Health Organization (WHO) estimates 160 in 10,000 children have autism. With worldwide rates ranging from 1% to 3% [10], the frequency of autism is rising yearly. The prevalence of autism in Asian nations differs: Bangladesh in 2018 (0.76 per 1,000), India in 2017 (1.53–2.19 per 1,000), and Nepal in 2018 (3.42 per 1,000). According to reports, 1 in 270 persons is diagnosed with autism. According to WHO estimates, 16% of the worldwide kid population suffers from autism globally, or 0.76%.

According to the Ministry of Women's Empowerment and Child Protection (KIPA), ASD prevalence in Indonesia reveals two new cases per 1,000 citizens yearly. With Indonesia's population at 237.5 million and a 1.14% growth rate, it is estimated that there are around 2.4 million people with ASD there; 500 more children are diagnosed with autism yearly [11].

Children with autism show limited interests and repeating actions include hand flapping and a strong concentration on a particular item or topic [4]. Children with ASD find it difficult to keep eye contact during talks and to continue reciprocal connection in social events [4]. Gillin claims that social interaction is a dynamic process including relationships between people, between groups, and between individuals and groupings [7].

Early in life, difficulties in social communication abilities usually show themselves as restricted joint attention – that is, exhibiting toys to others, pointing to communicative interest, and synchronized eye gazing between an item and a person [8]. Early social communication skills – including joint attention gestures (e.g., showing a toy to another person, pointing to share interest, and coordinating eye gaze between an object and a person) – as well as the ability to engage in social interaction with others – show great deficits in young children with ASD [9].

Observations made by the researcher at SD Muhammadiyah 1 Candi Labchool UMSIDA revealed that a student diagnosed with ASD – identified as KN – had joint attention problems. Seven-year-old first-grade student KN battled with joint attention, which compromised eye contact, interactions with peers, and speech. Limited shared attention led to KN preferring to be alone and being only slightly attentive to instructor directions. KN showed inattention, little eye contact, and little social connection with classmates in class projects. It was also difficult to concentrate on classes since KN often raced about the classroom and disregarded people around.

A natural approach used to assist youngsters communicate their inner conflict without awareness is play therapy [12]. Children have the chance to explore their world—including their emotions, ideas, and logic—through play, therefore helping them to create new things, discover distinctions, and experience fulfillment [12]. Children's developed skills from play may then be applied in practical contexts outside of the play area [12]. For children with autism, playing serves as a sort of communication [6]. Children with ASD who lack cognitive abilities and struggle with verbal communication may find great benefit from play therapy. Children with ASD are urged to grow in relationships using a child-centered lens [13].

Previous research has demonstrated that play therapy applied to children with autism improves interaction and communication. Activities carried out via play help children with autism improve their social interaction abilities, according to research by Afriany, Rahmiati, and Poiran (2020 [14]. Children with autism, meantime, need more time to understand the background of stimuli. This study cannot completely explain how these youngsters understand different cues they get [14]. A 2016 Suryati and Rahwawati study indicated that just 11% of children kept eye contact prior to the intervention. Play therapy helped to raise eye contact to 64.7% and cause 58.8% of children to turn their heads upon call [15]. Similarly, a study by Iskandar and Indaryani (2020) reported that associative play therapy significantly improved the social skills of children with autism, with an increase from 25% to 75% [7].

Child-Centered Play Therapy (CCPT) is a relationship-based intervention where children with ASD have the opportunity to feel fully accepted by a counselor, a condition that is often unavailable to them [13]. Josefi and Ryan (as cited in Salter, Beamish, & Davies, 2016) specifically identified four key objectives of CCPT interventions: joint attention, imitative response, theory of mind, and functional and symbolic play skills [16]. The role of joint attention in language development is one of the primary reasons for targeting it as an early intervention goal [6].

Kasari, Stephany, and Paparella randomly controlled a research on joint attention and symbolic play using 58 children with ASD aged 3 and 4 years. Children who had symbolic play treatments and joint attention showed more initiative and responsiveness during joint attention tests, according the results [16]. Salter, Beamish, and Davies (2016) observed in relation to the evolution of CCPT that individual treatment employing CCPT has been understudied. A comprehensive literature review revealed that only four studies on this topic have been conducted to date [16].

Based on the issues outlined above, this study examines the effectiveness of Child-Centered Play Therapy in enhancing joint attention, specifically responding and initiating joint attention skills. Therefore, the hypothesis proposed is that Child-Centered Play Therapy effectively improves joint attention skills at SD Muhammadiyah 1 Candi Labschool UMSIDA.

RESEARCH METHOD

a) Research Subjects

The focus of this study was a male 7-year-old boy diagnosed with autism spectrum disorder (ASD). The young kid displayed sensory-behavioral problems, repeated actions, poor social interaction, and poor communication skills—all indicators of autism. The

subject liked to play alone, seldom participated in social events, and generally did not answer the presence or conversation of others. At the time of the study, the subject was enrolled as a student at SD Muhammadiyah 1 Candi Labschool UMSIDA. Especially, the subject had never before taken part in a Child-Centered Play Therapy (CCPT) program, either in an educational environment or another.

b) Research Methodology

This study used an experimental research model whereby the participant was purposefully given a certain intervention by the researcher to track results. Using a single-case experimental design – a technique emphasizing on individual behavior throughout time – the study In behavioral research especially, this design is quite helpful as it enables methodical assessment of the efficacy of an intervention on one subject.

c) Research Design

The research utilized an A-B-A single-case experimental design, which consists of three key phases:

1. In this first phase, baseline stage (A), the joint attention skills of the individual were evaluated free from intervention, therefore providing a basis for future comparisons.
2. Treatment Stage (B): To improve joint attention abilities, the individual had CCPT intervention in which organized therapeutic sessions.
3. Following the intervention, the subject's joint attention capacity was evaluated to ascertain the success of CCPT.

By means of pre-intervention, intervention, and post-intervention phases, this A-B-A design lets researchers track changes in behavior, therefore guaranteeing a thorough evaluation of the effect of the therapy on the development of joint attention in children with ASD.

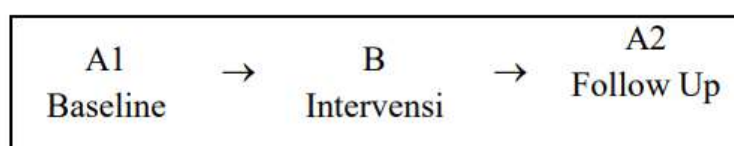


Figure 2.1. Research Design of Single-Case Experimental

d) Implementation Method

The person was watched, and information was gathered using tests and interviews. There were tests both before and following the intervention. Before the intervention, the Pre-Test was given to gauge the subject's initial joint attention capacity; the Post-Test was carried out following the intervention to measure any development.

Designed by Azzahra et al. (2024), the joint attention evaluation tool used in both the pre-test and post-test for children with autism spectrum disorder [18] Designed in line with the phases of Child-Centered Play Therapy (CCPT), the study instrument functioned as a tool for data collecting and Table 1 describes.

Table 2.1. Research Instrument Referring to the Stages of Mullen and Rickli (2014)

Stage	Aspect	Indicator
<i>Agression and pain</i>	There are play boundaries	The child plays correctly by making eye contact
<i>Dependence and independence</i>	Cooperation	The child plays together while making eye contact
<i>Mastery</i>	Initiative in eye contact	The child invites others to play together while making eye contact
<i>Relationship building</i>	Maintaining eye contact while playing	The child pays attention to the therapist and makes eye contact

Over two sessions spread over two weeks, the CCPT intervention was carried out individually and with each session lasting sixty minutes. The study conducted at SD Muhammadiyah 1 Candi Labchool UMSIDA's resource room With an eye on responding joint attention (RJA) and initiative joint attention (IJA), this study sought to assess joint attention abilities in a 7-year-old ASD kid both before and following CCPT.

Under an A-B-A design, the baseline stage (A) evaluated joint attention capacity using the Azzahra et al. (2024) evaluation instrument. Using video recordings, the researcher noted and recorded the child's behavior [18]. CCPT was used in two sessions spread over two weeks during the intervention stage (B). Once a week over two years Following the set protocols described by Mullen and Rickli (2014), the researcher conducted each 60-minute session alone. At last, in the evaluation phase (A), the identical joint attention assessment instrument from Azzahra et al. (2024) was once more applied, with the researcher capturing observations using video cameras [18].

RESULTS AND DISCUSSION

Results

During the baseline stage, the assessment was conducted using the joint attention evaluation instrument for children with autism spectrum disorder developed by Azzahra et al. (2024) [18], with the results presented in Table 3.1.

Table 3.1. Baseline Stage Joint Attention Assessment Results

Component	Indicator	Result
Responding to Joint Attention (RJA)	Following gaze direction (right)	X
	Following gaze direction (left)	X
	Tracking movement of a toy car	√
	Looking at a poster pointed at from behind	X
	Looking at a flashcard on the table	√
	Following finger-pointing direction	X
	Looking at a toy airplane	X

Component	Indicator	Result
Responding to Initiating Joint Attention (IJA)	Looking at a ball tossed into the air	√
	Responding to a musical toy	X
	Making eye contact when given a favorite toy	√
	Making eye contact when a toy stops moving	X
	Returning a played toy to the therapist	X
	Showing an object to the therapist	X
	Pointing to an object	X
	Pointing to a fallen toy	X

Explanation:

√ : Meets the criteria

X : Does not meet the criteria

The table above suggests that the individual shows restrictions in both responding joint attention (RJA) and starting joint attention (IJA). Regarding RJA, the patient finds it difficult to follow most visual cues – that is, monitoring eye gaze, following a pointing motion, or staring at an indicated item. On auditory cues, nevertheless, the individual responds more quickly – for example, leaning toward a music box when it sounds. In the IJA sense, nevertheless, the subject does not yet show initiative in paying attention – that is, in making eye contact, pointing at objects, or offering the assessor toys. These findings show generally that the individual still has limited joint attention capacity.

Table 3.2. Conclusion of All CCPT Stages

Warm-up		Aggression and pain		Dependence and independence		Mastery		Relationship building	
Total	Average	Total	Average	Total	Average	Total	Average	Total	Average
3	1,5	8	4	6	3	7	3,5	6	3

It is clear from Table 3.2 above that the joint attention capacity of the subject during the CCPT procedure did not show a clear trend. During the aggressiveness and pain stage, the subject showed a rise in Joint Attention abilities; in the dependent and independent stage, they dropped. The mastery stage showed a minor development.

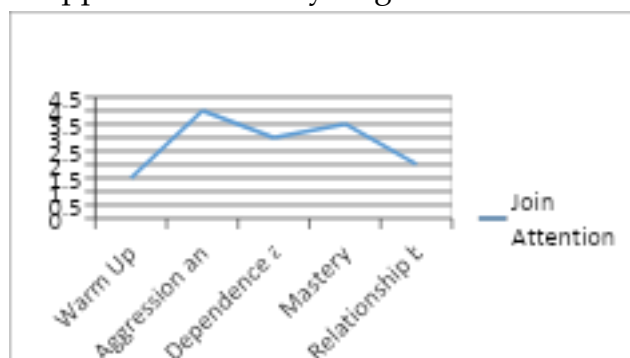


Figure 3.1. Graph of Joint Attention Ability During CCPT Implementation

The evaluation as a post-test conducted in this study used the joint attention assessment instrument for children with autism spectrum disorder by Azzahra et al. (2024) [18], with the results presented in Table 3.3.

Table 3.3. Joint Attention Assessment Results at the Follow-Up Stage

Component	Indicator	Result
Responding to Joint Attention (RJA)	Following gaze direction (right)	X
	Following gaze direction (left)	X
	Tracking movement of a toy car	√
	Looking at a poster pointed at from behind	X
	Looking at a flashcard on the table	√
	Following finger-pointing direction	√
	Looking at a toy airplane	X
	Looking at a ball tossed into the air	√
	Responding to a musical toy	X
Responding to Initiating Joint Attention (IJA)	Making eye contact when given a favorite toy	√
	Making eye contact when a toy stops moving	√
	Returning a played toy to the therapist	X
	Showing an object to the therapist	√
	Pointing to an object	√
	Pointing to a fallen toy	X

Description:

√ : Meets the criteria

X : Does not meet the criteria

Based on the table above, there is positive development in Responding to Joint Attention (RJA) and Initiating Joint Attention (IJA). In the RJA aspect, out of the nine assessed indicators, six have been met. The subject is able to follow the direction of a pointing gesture and look at various indicated objects, such as posters, flashcards, and toys thrown into the air. However, there are still difficulties in following gaze direction to the right and left, as well as looking at a musical toy that produces sound.

Discussion

Meanwhile, in the IJA aspect, out of the six assessed indicators, three have been met. The subject has demonstrated the ability to make eye contact when given a favorite toy and when the toy stops moving. Additionally, the subject is also able to point out an object to the assessor. However, challenges remain in returning played toys, pointing out fallen toys, and showing something to the assessor.

Overall, these results indicate significant progress in Joint Attention, particularly in responding to joint attention (RJA). However, the ability to initiate joint attention (IJA) still needs improvement through additional stimulation, especially in social interaction

aspects such as returning toys and pointing out fallen objects. With continuous practice, it is hoped that the subject can further develop communication and joint attention skills more optimally.

In CCPT, joint attention has been explored as an area where the child shares their interests with the therapist. The showing ability was learned by the subject during treatment since they were given the freedom to choose their own play activities. The researcher did not provide directions, limitations, or instructions regarding toy choices. Moreover, the researcher engaged in play with the subject, allowing them to share their interests without restriction [19].

One of the CCPT approaches is spontaneity. In CCPT, the child controls each session, meaning the structure of CCPT is determined by the child. The toys and activities used are the child's choices during the therapy session [20]. Throughout the CCPT process, the therapist (in this study, the researcher) works to create an environment where the child feels safe, providing opportunities for self-expression in the most comfortable way and meeting their personal level of development [20].

When the child feels safe, their comfort zone can expand, allowing them to engage in a wider range of activities and increase interaction with the therapist [16]. A social behavior that the subject was able to learn was showing their interests to the researcher by holding onto their favorite toy and resisting when restricted by the researcher.

Beyond Joint Attention (JA), several other behaviors related to social interaction skills were observed. These include: (a) Initiating and responding to social interactions (b) Developing attachment with the researcher

The subject demonstrated social interaction initiative by asking to be held while playing on a slide, holding the researcher's hand, pointing at a poster containing their photo, and then making eye contact with the researcher. The subject was also able to develop a bond with the researcher by cooperating during play, imitating the researcher's play actions, following instructions from the researcher, handing toys to the researcher upon request, and asking for help when needed.

CONCLUSION

Fundamental Finding : This study demonstrates that Child-Centered Play Therapy (CCPT) can effectively enhance children's *Responding to Joint Attention* (RJA), particularly in following visual cues such as gestures and object indications, indicating progress in foundational social-communicative behaviors. **Implication** : The findings suggest that CCPT, as a structured yet flexible therapeutic approach, holds promise as an early intervention method for improving joint attention skills in children with Autism Spectrum Disorder (ASD), thereby supporting their broader social development. **Limitation** : However, the study's limited scope – specifically, the small sample size and short duration of intervention – restricts the generalizability of the results and highlights the need for caution in drawing broad conclusions. **Future Research** : Further

investigation should involve larger participant groups and extended intervention periods, while also exploring additional therapeutic modalities and assessing long-term outcomes. Such efforts would provide a more comprehensive understanding of effective strategies for cultivating joint attention and enhancing communication skills in children with ASD.

REFERENCES

- [1] H. Moll, "What we do and don't know about joint attention," *Topoi*, vol. 43, no. 2, pp. 247–258, 2024, doi: 10.1007/s11245-023-09961-y.
- [2] F. Cilia, C. Touchet, L. Vandromme, and B. Le Driant, "Initiation and response of joint attention bids in autism spectrum disorder children depend on the visibility of the target," *Autism Dev. Lang. Impair.*, vol. 5, pp. 1–11, 2020, doi: 10.1177/2396941520950979.
- [3] M. Novitawati, E. T. Admodiwirjo, and D. Basaria, "Efektifitas Child Centered Play Therapy Untuk Meningkatkan Kemampuan Joint Attention Pada Anak Autism Spectrum Disorder," *J. Muara Ilmu Sos. Humaniora, dan Seni*, vol. 1, no. 2, p. 360, 2018, doi: 10.24912/jmishumsen.v1i2.922.
- [4] I. Amritashanti and H. Hartanti, "Efektivitas JASPER Intervention untuk Meningkatkan Kemampuan Joint Attention Anak dengan Autisme Berat," *Murhum J. Pendidik. Anak Usia Dini*, vol. 4, no. 1, pp. 212–220, 2023.
- [5] M. Novitawati, T. Atmodiwirjo, and D. Basaria, "Efektifitas Chil-Centered Play Therapy Untuk Meningkatkan Kemampuan Joint Attention Pada Anak Autism Spectrume Disorder," *J. Muara Ilmu Sos. Humaniora, dan Seni*, vol. 1, no. 2, pp. 360–369, 2017, doi: 10.24912/jmishumsen.v1i2.922.
- [6] N. Dauly and N. Darmayanti, "Pengaruh Group-Based Parenting Support Dengan Metode Kelompok Psikoedukasi Terhadap Kesejahteraan Orang Tua Yang Memiliki Anak Dengan Gangguan Spektrum Autis," *UIN Sumatera Utara*, 2021.
- [7] S. Iskandar and Indaryani, "Efektivitas Terapi Bermain Asosiatif terhadap Kemampuan Motorik pada Anak Autis," *J. Nurs. Public Heal.*, vol. 7, no. 2, pp. 72–76, 2019.
- [8] Sutinah, "Play therapy influences social interaction abilities in autistic children," *Heal. Inf. Res.*, vol. 6, no. 1, pp. 41–51, 2017.
- [9] UNICEF, "The UNICEF/WHO/WB Joint Child Malnutrition Estimates (JME) group released new data for 2021," WHO, 2021. [Online]. Available: <https://www.who.int/news/item/06-05-2021-the-unicef-who-wb-joint-child-malnutrition-estimates-group-released-new-data-for-2021>
- [10] O. A. Tahsa and Y. N. Ekawati, "Dukungan Sosial Keluarga Terhadap Anak Autis Dalam Menjalani Program Terapi Di Pusat Layanan Autis Provinsi Jambi," *J. Psikol. jambi*, vol. 6, no. 2, pp. 41–51, 2021.

- [11] H. Indreswari, A. Miftachul'Ilmi, and K. Bariyyah, "Play Therapy Bermuatan Permainan Tradisional untuk Melatih Kemampuan Interaksi Sosial Anak Autis," JKI (Jurnal Konseling Indones., vol. 7, no. 2, pp. 65–74, 2022.
- [12] P. Utomo, "Model Konseling Kelompok Berbasis Terapi Bermain Asosiatif Untuk Meningkatkan Keterampilan Sosial Siswa ABK," Al-Isyrof J. Bimbing. Konseling Islam, vol. 3, no. 2, pp. 56–72, 2021, doi: 10.51339/isyrof.v3i2.329.
- [13] J. W. Balch and D. C. Ray, "Emotional assets of children with autism spectrum disorder: A single-case therapeutic outcome experiment," J. Couns. Dev., vol. 93, no. 4, pp. 429–439, 2015.
- [14] F. Afriany, S. Rahmiati, and Poiran, "Terapi Bermain Untuk Aspek Sosial Emosional Anak Autis Di Kabupaten Bungo Provinsi Jambi," J. Adm. Sos. dan Hum., vol. 4, no. 1, pp. 24–29, 2020.
- [15] S. Suryati and R. Rahmawati, "Pengaruh terapi bermain terhadap interaksi sosial anak autis di SDLB Prof. Dr. Sri Soedewi Masjchun Sofwan, SH Jambi tahun 2014," J. Ilm. Univ. Batanghari Jambi, vol. 16, no. 1, pp. 142–147, 2017.
- [16] K. Salter, W. Beamish, and M. Davies, "The effects of child-centered play therapy (CCPT) on the social and emotional growth of young australian children with autism," Int. J. Play Ther., vol. 25, no. 2, pp. 78–90, 2016, doi: 10.1037/pla0000012.
- [17] T. Charman and S. Wendy, Social & Communication Development in Autism. 2016.
- [18] S. N. S. Azzahra, Sunardi, and O. S. Homdidjah, "Pengembangan Instrumen Asesmen Joint Attention Bagi Anak dengan Spektrum Autis," J. Pendidik. Tambusai, vol. 8, no. 1, pp. 11881–11887, 2024. [Online]. Available: <https://jptam.org/index.php/jptam/article/view/14184>
- [19] K. Salter, W. Beamish, and M. Davies, "The Effects of Child-Centered Play Therapy (CCPT) on the Social and Emotional Growth of Young Australian Children With Autism," Int. J. Play Ther., vol. 25, pp. 78–90, Apr. 2016, doi: 10.1037/pla0000012.
- [20] M. S. Sunaringsih and L. Wati, "Studi Kasus: Terapi Bermain Memfasilitasi Perubahan Perilaku Menolak Sekolah," J. Muara Ilmu Sos. Humaniora, dan Seni, vol. 3, no. 1, p. 105, 2019.

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