

Assessing The Efficacy of Play Therapy and Social Skills Intervention in Children with Autism: A Quantitative Descriptive Investigation

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ABSTRACT

An investigation of behavioural problems and clinical variables among children with autism employs a quantitative descriptive research design. Social and emotional development of children with autism differs from that of their typically developing peers. Having difficulty interacting with others and forming relationships is one of the most prominent signs of autism. An extensive literature search found that play therapy and social skills therapy aren't commonly used for children with autism spectrum disorders. With frequency tables, both demographic and research variables of the study samples will be analyzed for their qualitative distributions (i.e. closed ended values). Data on socio-demographic variables and clinical variables were collected through the socio-demographic section of the questionnaire. A set of ASSP and ABAT tools was used to measure the participants' social skills and behavior. Statistical differences between the demographic variables of children with autism in experimental groups I and II before intervention were calculated with the chi-square test. Despite the non-significant 'p' value ($P > 0.05$), the experimental I, II, and control groups did not differ significantly. Both the groups were almost similar and comparable. Children with autism can benefit from more targeted interventions and support strategies, which will improve their well-being and quality of life. As a result, parents, caregivers, and healthcare professionals may gain a better understanding of how to cope with the behavioral symptoms of autism spectrum disorder.

Keywords: Autism spectrum disorder, Behavioral problem, Play therapy, Social skill intervention, Clinical variables.

INTRODUCTION

An autism spectrum disorder (ASD) also known as autism, is a neurological condition characterized by a variety of symptoms. Children with autism spectrum disorder often display complex brain and developmental changes during their early years [1]. Children with autism face challenges in their social and emotional development that differ from their typically developing peers. Unlike their friends, these children struggle to initiate and participate in play activities, comprehend the notion of taking turns, establish and nurture friendships, and engage in enjoyable social interactions. There are several types of autism spectrum disorders (ASD), including autism, Asperger's disorder, childhood disintegrative disorder, Rett's disorder, and pervasive developmental disorder. Recently, the DSM-5 has revised its classification of these disorders, which used to share fundamental characteristics [2,3]. These difficulties hinder their ability to grow socially and emotionally in a manner that aligns with their peer's development [4, 5]. These core symptoms encompass challenges in social interactions and relationships, difficulties in verbal and nonverbal communication, restricted and repetitive behavior patterns, and additional characteristics related to movement. One of the primary indicators of autism is the impairment in social interactions and relationships. Social interactions that come naturally to neurotypical

individuals may require additional support and intervention for individuals with autism. Another key symptom of autism is the presence of communication difficulties. Communication impairments can significantly impact an individual's ability to engage in everyday conversations and express their thoughts and emotions. Individuals with autism often engage in restricted and repetitive patterns of behavior or play. Repetitive behaviors can provide comfort and predictability for individuals with autism but may also interfere with their ability to adapt to new situations or engage in activities that require flexibility.

Children with autism can exhibit their first or second signs of autism by the time they are 3 years old [6]. Early detection and treatment of autistic developmental delays can be achieved. Many children with ASD are not diagnosed until they reach school age, and they are not provided with the appropriate interventions until then. Behavioral and development interventions as well as medicine and alternative treatments are available for ASD. Two of these therapies or interventions will be examined in the current study in order to identify their effects on behavioral symptoms of autism. Therapy for social skills and play are included in this category. Play therapy and social skill therapy are not commonly used for children with autism spectrum disorders, according to a comprehensive literature search. There are no studies comparing the effects of these two therapies, according to the researcher. This study examines the effects of two interventions on selected parameters of behavior in children with autism; play therapy and social skill training.

Social skill intervention

A social skill is learned behaviour that involves interactions with others, resulting in competence with social interactions [7]. Interactions with others are necessary for social skills to develop, as they involve both initiations and responses. Their social reinforcement and context-specificity make them effective. The ability to function competently at social tasks is referred to as social skills [8]. Developing social skills means interacting positively with others and the environment. Communicating with others, negotiating, solving problems, and participating in group activities are some of the skills we need [9].

Social skills deficits observed in ASD children include interpersonal interactions, reciprocity, enjoyment sharing, understanding another person's perspective, and understanding another person's interests. Few children receive adequate social skills programming despite ASD's social skills deficits [10].

A child with Autism Spectrum Disorder will suffer from increased withdrawal and social isolation as social skill deficits hinder meaningful social relationships. As a result, children with ASD should have access to a comprehensive social skills training program [11]

Play therapy

Through play, children can express thoughts and emotions they could not express verbally through the medium of appropriate medium. Child-Centered Group Play Therapy Protocol (CCGPT) was used to design the play therapy schedule for the study. In order to protect the safety & welfare of the children, materials, and therapist, limits will be placed on their use of the toys. Children with autism will receive play therapy from the researcher, and the effect will be measured with ASSP and ABAT.

METHODOLOGY

Sample selection

The sample in this study were children with autistic disorder, both male and female (n=147) grouped as experimental I (76) and II (71) who are attending in the selected autism centers at Chennai and who meet the inclusion criteria.

Inclusion criteria

- Age: 6 to 16 years
- Grade of study: IInd to +1 students
- Gender: Both male and female

- Level of autism: Mild to moderate

Exclusion criteria

- Disorders like IDD, ADHD, Conduct disorders and Spastic disorders etc.,
- Deficits in communications may interfere the intervention or assessment

Ethical consideration

Permission and ethical approval for conducting pilot and main study was obtained from the respective department. Informed written consent was obtained individually from the parents and assent form from study subjects participated in the research study. Assurance was given to maintain the dignity and confidentiality of data concerned to each study subjects.

Study design

A quantitative descriptive research design will be utilized in this study to assess the prevalence of behavioral problems and clinical variables among children with autism. A survey method will be used by the researcher to evaluate the behavioral problems of children with autism. Comparison of selected parameters among children with autism in experimental group I and experimental group II

Group	Assessment	Manipulation
1	o-1	x-1
2	o-1	x-2

o-1: Assessment of demographic variables, clinical variables and levels of SER, SPA and DSB

x-1,2: Sessions of play therapy and social skill intervention (12 days) for conveniently selected group

Tools used

The tools used for the study consists of three sections:

- deals with demographic variables and clinical variables of the study subjects
- deals with the ASSP
- deals with the Autism Behavioral Assessment Tool. (ABAT)

ASSP

This study uses a scale with three subscales: interaction, participation, and appropriate social behavior. Based on the reported Cronbach's alpha coefficients, social interaction is stable with a score of 0.92, social participation is stable with a score of 0.89, appropriate social behavior is stable with a score of 0.85, and total scores are stable with a score of 0.93 (12). Moreover, the social interaction scale has a strong test-retest reliability coefficient of 0.89, 0.86 for social participation, 0.86 for appropriate social behavior, and 0.90 for total scores. Test-retest reliability ranged from 0.74 to 0.97 in the current study.

ABST

ABST is a researched modified version of Social Skills Questionnaire - teacher form (SSRS-T). A strong psychometric property is demonstrated by the SSRS-T. An internal consistency estimate of 0.94 to 0.95 is provided for the teacher forms. There is a range of test-retest reliability of 0.68 to 0.87 for the Total Social Skills Scale. It ranges from 0.65 to 0.84 on the Total Problem Behavior Scale, and it is 0.93 on the Academic Competence Scale. For the researcher modified version, ABST Significant Cronbach's alpha value has been obtained.

Data analysis

The distribution of the all quantitative values of variable for the subjects will be examined with descriptive statistics (such as Mean, and Standard deviation). The distribution of all qualitative (i.e. close ended) values of variable for both demographic and research variables of the study samples will be examined with frequency tables. The association tables will also be calculated wherever necessary for comparing the qualitative variables by using chi square test and McNemar test with cross tabulation. The behavioral problems score (quantitative variables) will be analyzed by using repeated measures Analysis of Variance (ANOVA) to find the significant difference between the mean score stress level with each follow up. Gender wise mean behavioral problems score difference will also be calculated by using independent sample t – test. The behavioral problems score and the interventions, play therapy and SSR will be correlated by using multiple regression analysis to obtain odds ratio. All statistical tests will be two-sided. A P-value < 0.05 will be considered for statistical significance. The statistical analysis will be done in SPSS (Statistical Package for Social Sciences) Package with version 28.

RESULTS & DISCUSSION

The table 1 shows the frequency and percentage distribution of demographic variables of children with autism in experimental group I and experimental group II. In terms of age, the participants were split into two age groups: 6 to 10 and 11 to 15. The findings revealed that 43(60%) of the children with autism in the experimental group I and 29 (40%) in the experimental group II were in the age group of 6-10 years. Study included both male and female children with autism. 47(49%) of the children in the experimental group I and 49(51%) the experimental group II were males. With regard to location, 38(47.50%) of the children with autism in the experimental group I and 42(52.50%) in the experimental group II were from urban areas. In case of class at school, 30(59%) children in the experimental group I and 25(41%) in the experimental group II were found to be in second grade. Among the three age groups of mothers who were part of the study, 28 (33%) in experimental group I and 22 (67%) from experimental group II was found to be between the ages of 19 and 24 years.

Considering education status of mothers, among the three groups 27(46%) in the experimental group I and 25(54%) in the experimental group II were found to have higher secondary level of education. Regarding the occupation of mother, 12(55%) of them in the experimental group I and 10(61.5%) of them in the experimental group II were found to be working in private sector. On analysis of family income, 64(53%) of them in the experimental group I and 56(47%) of them in the experimental group II were found to have a monthly family income between Rs. 5001-15,000. On analysis based on experience in handling children with similar disability, none of the families had any previous experience. With regard to source of information about autism 29 (32%) of them in the experimental group I and 21(68%) of them in the experimental group II were found to have received information from the media. The chi-square test was applied to calculate the statistical difference between the demographic variables of children with autism in experimental group I and experimental group II before intervention and the non-significant ‘p’ value ($P>0.05$) confirmed that there was no significant difference between the experimental I, II and control groups. Both the groups were almost similar and comparable. Table 2 shows distribution of the clinical variables of children with autism in experimental group I and experimental group II. On analysis of age of autism diagnosis, 32(44%) of them in the experimental group I and 40 (56%) of them in the experimental group II were found to be diagnosed at the age of 2-3 years. With regard to the person who identified initial symptoms, in case of 27(48%) in the experimental group I and 29(52%) in the experimental group II it was by the mother and among 29(58%) in the experimental group I and 21(42%) in the experimental group II it was done by the professionals (Psychiatrists, pediatrician etc.). Based on how long the child was at the current autism center, 46(26%) of them in the experimental group I and 37 (74%) of them in the experimental group II were found to be attending the current center for 3 months to 1 year. It was found that with regard to the presence of impaired communication, 42(51%) of them in the experimental group I and 40(49%) of them in the experimental group II had impairment in communication. However, 71(52%) of them in the experimental group I and 66(48%) of them in the experimental group II were found to be involved in the interaction while communicating.

Considering presence of repetitive/ stereotypical movements, 50(51%) of them in the experimental group I and 48(49%) of them in the experimental group II were found to have stereotypical movements. With regard to child's difficulty in understanding sign language, 43(52%) of them in the experimental group I and 40(48%) of them in the experimental group II were found to be able to understand sign language. Based on data about presence of stereotypical speech pattern during a conversation about some subject; 56 (52%) of them in the experimental group I and 16(32%) of them in the experimental group II were found to have no such issues. Regarding avoidance of eye contact while communicating, 52(51%) in the experimental group I and 50(49%) in the experimental group II were found to be not maintaining eye contact. With regard to the child's ability to feed self, 66(52%) of them in the experimental group I and 62(48%) of them in the experimental group II were found to be capable of eating by themselves. The chi-square test was applied to calculate the statistical difference between the demographic variables of children with autism in experimental group I and experimental group II before intervention and the non-significant 'p' value >0.05 confirmed that there was no significant difference between the experimental group I and experimental group II were almost similar and comparable. By using independent sample t-test, the pre-test means of selected parameters among children with autism in experimental group I; who underwent play therapy and in experimental group II; those who received social skill intervention was analysed and recorded in the table 3. The mean value of Pre-intervention scores for all the selected parameters such as ASSP total, ASSP-SER, ASSP-SPA, ASSP-DSB, ABAT-S, ABAT-C and ABAT-DB among participants of experimental group I was found to be 60.08, 28.14, 13.17, 18.76, 25.50, 15.84 and 26.13 respectively and among group II the scores were 61.13, 28.83, 13.54, 18.76, 24.90, 17.59 and 26.11 respectively. The statistical analysis revealed that the difference in mean values have a non-significant 'p' value >0.05, which confirmed that there was no significant difference between the experimental group I and experimental group II and they were almost similar and comparable based on their pre-intervention scores of selected parameters.

Table: 1 Distribution of Demographic Variables of children with autism in experimental group I and experimental group II

Demographic Variables		Groups				Chi square test (χ^2)
		Experimental Group - I (n=76)		Experimental Group - II (n=71)		
		No.	%	No.	%	
Age group	6 -10 years	43	59.70	29	40.30	$\chi^2=36.64$ P= 0.06 (NS)
	11 -15 years	33	44.00	42	56.00	
Gender	Male	47	49.00	49	51.00	$\chi^2= 0.83$ P= 0.36 (NS)
	Female	29	56.90	22	43.10	
Geographical Location	Urban	38	47.50	42	52.50	$\chi^2=1.24$ P= 0.27 (NS)
	Semi Urban	38	56.70	29	43.30	
Class at school	Second	30	58.50	25	41.40	$\chi^2= 7.82$ P= 0.61 (NS)
	Third	24	14.30	19	85.70	
	Fifth	22	55.00	27	45.00	
Age of mother	19 – 24 years	28	33.30	22	66.70	$\chi^2= 8.65$ P= 0.13 (NS)
	25 – 30 years	24	48.00	26	52.00	
	30 – 34 years	24	64.10	23	35.90	
Educational Status of mother	Primary Education	26	66.70	23	33.30	$\chi^2= 6.50$

Demographic Variables		Groups				Chi square test (χ^2)
		Experimental Group - I (n=76)		Experimental Group - II (n=71)		
		No.	%	No.	%	
	Higher Secondary	27	45.80	25	54.20	P= 0.39 (NS)
	Graduation and Above	23	42.50	23	57.50	
Occupation of mother	Self Employed	6	46.20	7	53.80	$\chi^2= 4.86$ P= 0.18 (NS)
	Private Sector	12	54.50	10	45.50	
	Public Sector	6	30.00	14	70.00	
	Unemployed	52	56.50	40	43.50	
Family Income	< Rs.5000 per Month	6	60.00	4	40.00	$\chi^2= 2.24$ P= 0.33 (NS)
	Rs. 5001 - Rs. 15,000 per Month	64	53.30	56	46.70	
	>15,000 per Month	6	35.30	11	64.70	
Source of information about autism	Media	29	32.10	21	67.90	$\chi^2= 7.27$ P= 0.26 (NS)
	Health Personnel	22	44.40	22	55.60	
	Other Sources	25	56.80	28	40.20	

Table:2 Distribution of clinical Variables of children with autism in experimental group I and experimental group II

Clinical Variables		Groups				Chi square test (χ^2)
		Experimental Group - I (n=76)		Experimental Group - II (n=71)		
		No.	%	No.	%	
Age of child at the time of autism diagnosis	1-2 years	12	46.20	14	53.80	$\chi^2=5.47$ P=0.065 (NS)
	2-3 years	32	44.40	40	55.60	
	3-4 years	32	65.30	17	34.70	
Who identified initial symptoms?	Father	20	48.80	21	51.20	$\chi^2= 1.21$ P= 0.55 (NS)
	Mother	27	48.20	29	51.80	
	Professionals (Psychiatrists, pediatrician etc.)	29	58.00	21	42.00	
How long the child has been at the current center?	3 months to 1 year	46	26.10	37	73.90	$\chi^2= 7.16$ P= 0.71 (NS)
	>1 year	30	56.50	34	43.50	
Does the child have impaired	Yes	42	51.20	40	48.80	$\chi^2= 0.017$

Clinical Variables		Groups				Chi square test (χ^2)
		Experimental Group - I (n=76)		Experimental Group - II (n=71)		
		No.	%	No.	%	
communication?	No	34	52.30	31	47.70	P=0.896 (NS)
Is the child involved in the interaction while communicating?	Yes	71	51.80	66	48.20	$\chi^2 = 0.012$ P= 0.91 (NS)
	No	5	50.00	5	50.00	
Does the child exhibit repetitive/ stereotypical movements?	Yes	50	51.00	48	49.00	$\chi^2 = 0.054$ P=0.815 (NS)
	No	26	53.10	23	46.90	
Does the child have difficulty in understanding sign language?	Yes	33	51.60	31	48.40	$\chi^2 = 0.001$ P= 0.98 (NS)
	No	43	51.80	40	48.20	
Does the child exhibit repetitive/ stereotypical speech pattern while talking about some subject?	Yes	20	51.30	19	48.70	$\chi^2 = 0.004$ P= 0.95 (NS)
	No	56	51.90	52	48.10	
Does the child avoid eye contact while interacting or communicating?	Yes	52	51.00	50	49.00	$\chi^2 = 0.07$ P= 0.79 (NS)
	No	24	53.30	21	46.70	
Can the child feed self?	Yes	66	51.60	62	48.4	$\chi^2 = 0.008$ P= 0.93 (NS)
	No	10	52.60	9	47.40	

Table:3 Comparison of Mean and Standard Deviation of selected parameters among children with autism in experimental group I and experimental group II

Parameters	Groups				Independent Sample T-test
	Experimental Group I (n=76)		Experimental Group II (n=71)		
	Mean	SD	Mean	SD	
ASSP total score	60.08	16.21	61.13	16.90	T= 0.38 P= 0.70 (NS)
ASSP-SER	28.14	9.65	28.83	10.08	T= 0.42 P= 0.67

					(NS)
ASSP-SPA	13.17	4.57	13.54	4.79	T= 0.47 P= 0.64 (NS)
ASSP-DSB	18.76	3.46	18.76	3.27	T=0.005 P= 1.0 (NS)
ABAT-S	25.50	8.56	24.90	8.54	T= 0.42 P= 0.67 (NS)
ABAT-C	15.84	7.38	17.59	8.02	T= 1.38 P= 0.17 (NS)
ABAT-DB	26.13	6.67	26.11	6.27	T= 0.02 P= 0.99 (NS)

The number of autism cases has also been attributed to a variety of factors, including genetics, obstetric complications, parental characteristics, environmental toxicants, and the availability of school and community resources. [13, 14, 15, 16].

In recent years, there has been an increasing body of evidence to support the value of early diagnosis and evidence-based interventions, which can significantly improve quality of life for children with ASD and their caregivers. [17]

With a range of ages from birth to adulthood, there was a prevalence of ASD ranging from 0.019 to 7.2% in European countries. [18]. In our study, we found that there is a higher prevalence of ASD in urban children. Other studies around the world have found similar results. [19, 20]

There was an increase in risk of ASD with increased urbanization. [21,22] This discrepancy might be caused by factors related to the environment. Children who lived in urban areas were diagnosed with ASD at an earlier age than children living in rural areas, according to another study. Urban children may have better access to medical resources than children in rural areas. [23,24,25]

In order to promote parental awareness and to recognize the early signs of autism spectrum disorder, education about ASD should be strengthened. Similar to studies in other countries, the present study found that more male children were diagnosed with ASD than female children. [26,27]

In a study conducted on 1410 children with ASD aged 4 years and above from 18 European countries, females were diagnosed at a later age than males (after controlling for language ability) [28]

In most developed countries, ASD is diagnosed later than 18 months of age, even though it can be diagnosed at an early age when children are 18 months of age. Since 2004, the diagnosis age for British children with Autism Spectrum Disorder has been 55 months; over the past decade, this figure has not decreased, meaning the rate of early diagnosis has remained the same. [29].

Most ASD diagnoses in children are confirmed after the age of 3 and between 1/3 and 1/2 are confirmed after the age of 6. Moreover, those diagnosed with mild ASD between the ages of 5.6 and 8.6 were diagnosed at preschool age (3.7–4.5). [30]. According to the latest meta-analysis, children under 10 are diagnosed with ASD on average at 60.48 months and at 43.18 months in the global population. Ntre V et al., (2018). It has been confirmed in multiple recent studies that individuals, families and society are involved in early diagnosis of autism spectrum disorders, but most of these results are still controversial or unexplored. [31]

The Autism Spectrum Disorder was diagnosed in 10 children out of 100 aged 5-10 years. Rural and tribal areas should be the focus of future studies. The risk of getting diagnosed with autism is higher in male children than in female children. Policies and programs for children with developmental disabilities must be based on an accurate estimate of the prevalence of ASD in India. [32]

Supporting a child with autism is a mother's responsibility. Besides driving decisions, they are also responsible for delivering interventions. Furthermore, mothers expressed financial strain associated with current and future treatment expenses due to the overall cost of care. The findings are consistent with a number of studies that demonstrate that parents with autistic children are less likely to earn a good living, while others are forced to work long hours or change jobs to afford their child's education and medication. [33,34].

Children with autism are estimated to cost their parents up to \$6200 in annual expenses, or 14% of their recorded income, according to a study. [35] Compared to children with typically developing brains, autism had a 16-fold financial impact on Chinese families. [36] Children's overall development and well-being are heavily influenced by the educational status of their mothers. Mother's education has been discussed in numerous articles in relation to their children. Researchers have consistently found that mothers who have graduate themselves are better at providing a supportive learning environment for their children. Moreover, they tend to have better access to a wide variety of educational resources, a supportive academic environment, and role models who value education.

Conflicting findings have been found in past studies of parental occupation and ASD. It has been demonstrated that children of mothers who completed college have a greater likelihood of enrolling in and completing school. The impact of a mother's educational achievement on her children becomes even greater when she has graduated from college and above. A bachelor's degree or higher is linked to increased academic achievement, self-esteem, and a lifelong love of learning in children of mothers with a bachelor's degree or higher.

In contrast to our own research, a study reported that engineers are more likely to have children with ASD. According to our study, a greater percentage of parents were unemployed. The study aims to compare the effects of both SSIP and play therapy on selected outcome measures by including them both as independent variables.

By comparing each intervention with another, we can get a better understanding of the relative effectiveness of each and the potential benefits they can provide to children with autism. SSIP (Social Skills Intervention Program) and play therapy will be compared using a quasi-experimental design in the second phase of the study. A specific variable can be measured prior and post-implementation in order to assess the impact of both interventions. In order to improve rigor and validity of the study, subjects will be assigned at random either to the SSIP or the play therapy groups. According to the researcher, participants will be assigned to groups according to convenience sampling.

According to a study, the dependent variables were Social/Emotional Reciprocity (SER), Social Participation/Avoidance and Social Skills (SPA), and Disruptive or detrimental Social Behaviors (DSB). ABAT-S assessed specific aspects of social skills, ABAT-C measured communication, and ABAT-DB measured disruptive behavior. Play therapy and the social skill intervention program (SSIP) were independent variables, which in this case influenced the dependent variables.

Researcher developed the Autism Social Skills Profile to assess the social skills of 6-17-year olds with autism [37]. Children with autism can use it to assess their social functioning. In total, there are 49 items on ASSP, including three subscales of reciprocity, participation, and avoidance, as well as detrimental social behavior.

Not only ASSP was designed to identify specific social skills for intervention, but it can also serve as a formative assessment tool [38,39].

Play therapy and SSIP can be explored for their effects on the selected parameters if they are selected as interventions of interest. It is possible to treat a range of developmental issues through play therapy because of its focus on therapeutic play activities, including social interaction, communication, and emotional regulation. Social interaction, social competence, and social interdependence are the specific goals of SSIP.

Further, previous research suggests that females with autism present with milder forms of SER difficulties than males, although these findings may be based on females presenting with milder forms of autism. We used pre-post equivalent experimental groups design to collect data from 8 children before and after implementing social skills training on the Autism Social Skills Profile Rating Scale. [40].

The study used frequency, percentages, means, standard deviations, and independent samples t-tests to analyze data. Almost a third of the maximum score on the social reciprocity and social participation sub-scales was different among participants of the experimental groups' pre-intervention. The intervention also yielded positive results for children in both groups regarding their overall social skills, including subscales. [41].

According to the Behavior Assessment System for Children, Second Edition (BASC-2), two preschool children with clinical levels of somatization completed 14 sessions of the CCPT program. Using CCGPT to promote kindergarten children's social-emotional development appears to work similarly to other studies investigating the effects of social-emotional learning programs.

CONCLUSION

The importance of early diagnosis is one of the key factors of autism spectrum disorder (ASD) and is the focus of much research in the area of neurodevelopment disorders. Diagnostic approaches to ASD must be advanced through early detection and intervention strategies. A computational intelligence technique will be utilized in the proposed research project to enhance diagnostic methods. In order to provide a comprehensive understanding of this population, an in-depth analysis of behavioral patterns and associated clinical factors in the autistic population is being conducted. As a result of their research, researchers hope to develop more targeted interventions and support strategies for children with autism, thus improving quality of life and well-being. In addition, the study may provide insight into how parents, caregivers, and healthcare professionals can cope with behavioural symptoms associated with autism spectrum disorder. The two interventions can be combined to support the development and wellbeing of children with autism when used as part of comprehensive treatment plans.

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