

Key Roles and Strategies of Teachers in Strengthening Home-School Cooperation in the Education of Children with Autism

Anqi Cheng^{1,*}, Jiayi Chen² and Shan Wen³

¹School of Humanities and Social Sciences, Xi'an Jiaotong-Liverpool University, Suzhou, China

²Rosedale Academy, Suzhou, China

³Department of Sociology, Anhui Agricultural University, Hefei, China

* Corresponding Author Email: Anqi.Cheng21@student.xjtlu.edu.cn

Abstract. As the special group of autistic children gradually receives attention from society, the issue of special education for autistic children has gradually attracted the attention of all sectors of society and teachers. In particular, educational institutions should make effective use of the cooperation between school and family, to solve the problems and difficulties encountered by autistic children in teaching. Through extensive literature reading and research, This study identifies the difficulties that autistic children may encounter in specific educational institutions, and analyzes the impact of the model of home-school cooperation on the education of such special children. Then gives specific suggestions from these three parts. It was found that home-school co-operation in special education institutions can effectively help autistic children to solve the difficulties encountered in their education, as well as help teachers to solve the difficulties encountered in their education. As the key person in home-school co-operation, the educational development of autistic children can be effectively promoted through effective communication with parents in many aspects. Thus, autistic children can better receive excellent education.

Keywords: Autistic children, home-school, cooperation, teacher.

1. Introduction

The education of autistic children has gradually been put on the agenda, especially in families with this patient. According to datum from Centers for Disease Control and Prevention (CDC), which said the incidence of these diseases has been on the rise in the past few decades, with more and more patients showing up [1]. Current data show that about 1 in 68 children with autism are diagnosed. At present, the opportunities for autistic children to receive education are gradually increasing with the attention of the public, and they can enter schools to learn. However, the effectiveness and quality of education is still low in comparison to other disease [2]. Because of these special children, many problems arise during their development with their families and special institutions, Children with autism are different from normal children in terms of learning, communication, emotional expression, comprehension, and communication skills. Home-school cooperation is essential if these children need to receive special education which is more relevant to their situation. Teachers play a key role in this part. As the group of people who need to pay close attention to and educate these children with special needs, they have the most persuasive interpretation of the school situation of the children with special needs. Teacher can also more capable of building a bridge between parents and special education institutions through home-school cooperation, to achieve the most appropriate and effective education and treatment for these children with special needs.

Through data investigation and research, this paper points out the special symptoms of autistic children to illustrate the challenges and difficulties that autistic children teachers will encounter in special education. This paper also shows how effective home-school communication can be when teachers are faced with such problems and the impact of home-school cooperation in solving these problems. Recommendations are then made to teachers in special institutions to engage more deeply with the plight of autistic children, and how can home-school communication be used to build Bridges with families with an eye to the way children with autism are taught in the future. Finally, it is

suggested that not only professional institutions but also ordinary schools need to pay more attention to this kind of special children and conduct in-depth research.

2. Challenges faced by Children with Special Needs

2.1. Learning Ability

First of all, children with autism generally have a lower learning ability than normal children, which means that they have difficulty learning new things as normal children do. With the information from the National Institute of Mental Health (NIMH), 671 children with autism were identified and their intelligence was assessed in a series of surveys (see Figure 1). According to the data presented in the table, the average standard deviation of intelligence level is 25.75, which is nearly twice more than the standard sample of WISC-III. In addition, the data also indicates that autistic students are 12 times to have intellectual defects and disorders than normal students [3]. It means that children with this particular disorder are more likely to be intellectually challenged and more unable to learn properly than children in the regular birth cohort.

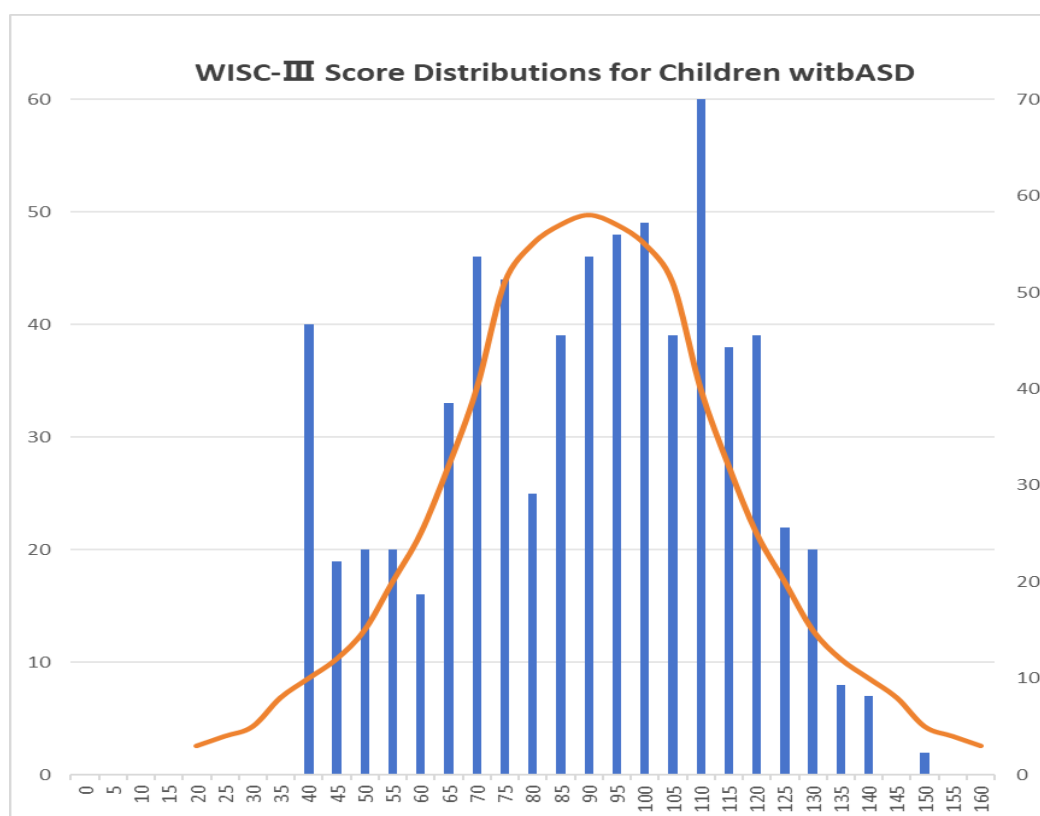


Fig. 1 Table Intelligence of children with and without autism in a WISE-III standardized sample [3]

What is the level of academic proficiency of studThe executive functioning and learning abilities are different for different severities of the disorder. Based on an investigation of executive functioning and symptom severity in Italian preschool children with autism, by creating a control group of children with severe autism and control with milder forms of autism who passed the "gold-standard" test, the study found that the ASD group showed some differences in executive functioning, including poorer performance in inhibition and scene shifting functioning, including poorer performance in inhibition and scene shifting [4]. These differences were statistically significant (see Table 1). With these results we can see that flexible use of comprehension is not something that preschool-aged autistic possessed by children with, and also have difficulty in restraining and controlling themselves.

Table 1. Comparative data on executive functioning and symptom severity surveys in children with mild to severe autism [4]

	Mild ASD	Severe ASD
Sample size	13	14
Mean	60.15	63.00
SD	7.70	4.76
Non-verbal IQ		
Mean	116.85	116.43
SD	11.72	12.95
Card sort sqrt		
Mean	1.31	1.23
SD	0.39	0.33
Night and day sqrt		
Mean	1.48	2.14
SD	0.62	1.07
Pattern making test sqrt		
Mean	1.07	1.11
SD	0.17	0.21
Spin the pots		
Mean	2.69	3.64
SD	2.34	2.89

Values for these tests represent errors. *Sqrt*: square root

2.2. Social Problems and Emotional Management

Children with autism can also exhibit social interaction, emotional management, communication with others, and behaviors that are manifestations that differ from normal children. Firstly, children with autism often face challenges in social interactions with others, and according to the Autism Society of America, more than half of children with autism may not be able to engage in two-way conversations with people [5]. The socializing used by children with autism differs from the normal population but, at the same time, the group with autism is more isolated and desires to have socialization more than the normal population [6]. This means that they are unable to interact socially with their peers as normal children do, and they are unable to have friendly interactions with their peers, thus creating a huge sense of isolation and huge problems in socializing. This will also lead to their inability to establish affectionate and effective connections with their classmates and teachers.

In terms of emotional management, children with autism may be more susceptible to emotional distress and less able to handle their emotions. This may lead to emotional outbursts or feelings of withdrawal due to a small emotion, causing them to shy away or become emotionally attached to learning, which can hurt learning and social interactions. In the article by Reyes, Factor, and Scarpa, it is mentioned that the researchers compared 44 children with autism with regular children (see Table 2) [7]. where the correlation for the ASD (Autism Spectrum Disorder) group is at the bottom left of the diagonal and the correlation for the TD (Normal) group is at the top right of the diagonal. From the table, it can be seen that children with autism show a decrease in emotional regulation with their peers, an increase in emotionality along a decrease in emotional expression. That is, their emotional expression does not show their emotions fully and it is difficult to control the processing of emotions.

Table 2 .TD (Normal) Children and ASD (Autistic Spectrum Disorder) Children: Associations Between Emotionality and Behavioural, Emotional Problems [7]

		1	2	3	4	
1	Emotion Regulation Checklist-Regulation	—	-.16	-.13	-.34	-.32
2	Emotion Regulation Checklist Negativity/Lability	-.27	—	.35	.62**	.65**
3	Strengths and Difficulties Questionnaire-Emotional	-.21	.41*	—	.47*	.28
4	Strengths and Difficulties Questionnaire-Conduct	-.36*	.50*	.62**	—	.54**
5	Strengths and Difficulties Questionnaire-Hyperactivity/Inattention	.13	.31	.34	.01	—

* indicates ≤ 0.05 , * * indicates ≤ 0.01 The group with autism correlated with the survey items on the left and below the diagonal and the group without autism correlated with the survey items on the right and above the diagonal.

2.3. Communication and Behavioral Problems

Children with autism are not only deficient in communication skills but also possess certain stereotypical behaviors in terms of behavior. In this study, it is found that about 25-30% of children with autism cannot use complete language to express their wishes, and only a small portion of them can use individual words to communicate with others [8]. In terms of behavioral problems, children with autism often display obsessive and stereotypical behaviors [9]. For example, having sudden emotional outbursts or engaging in self-harming behaviors. And pressure in parents is somewhat associated with aggressive behavior in children [10].

This needs to be managed and solved by the cooperation of teachers and parents to develop the interests of autistic children through communication between parents and teachers. When their moods are released, their aggressive behaviors will gradually decrease. The author will find that if parents do not intervene in such excesses of autistic children for a long period, they will not only become worse in their moods, but they will also develop bigger problems in their behaviors.

3. Impact of home-school co-operation

3.1. Impact of Home-School Co-operation on Learning Ability

In a study, it was proved that it is possible to investigate that strengthening home-school cooperation enhances the learning ability of children with autism. This study according to the qualitative from semi-structured interviews with senior professors with experience in home-school cooperation in dealing with children with autism [11]. Not only can these children be trained at school, but when they return home, parents can still train their children in the same way as they do at school, and teachers can learn about their students' learning materials at home through communication with parents. Teachers can learn about the material at home through communication with parents and use it consistently in the classroom as a way of reinforcing the child's ability to learn, and what is learned in the classroom can be reinforced after school.

It has been shown through research that teachers' participation in home-school co-operation activities can help children with autism overcome obstacles and promote academic success. Strong home-school cooperation consistently leads to positive outcomes.

Therefore, when dealing with autistic children with poor academic performance and weak learning abilities, teachers can work with families to know what their children are learning at home, they can also let parents know what their children are learning at school. So that home-school co-operation allows autistic children to repeatedly train the learning skills they need to master in two different environments, consolidate and reinforce their knowledge, and strengthen their learning abilities.

3.2. Impact of Home-School Co-operation on Social Disorders

According to a study which refer to the Measures Autism Diagnostic Observation Schedule-Second Edition [5]. Effective improvement and intervention throwing social impairments can be achieved through parent-assisted social skills training (SST), that program found through a standardized, a semi-structured assessment of people with problems such as autism spectrum disorder (see Table 3). However, at present, not many parents are aware of the need to participate in this program. The development of the program above shows that many parents are not receptive to the idea of treating children with social disorders, even though research has shown that it is effective. Home-school communication can increase parental involvement, make parents aware of their importance in home-school cooperation, and reduce social difficulties in children with autism. Strengthen home-school cooperation, make parents aware of their role and needs in education, and actively participate in parent-assisted social skills training (SST) projects, so as to play a positive role in improving the social situation of such special children.

Table 3. The average value measured before treatment and the average score after treatment [5]

Study and measure	P	Cohen'sd
SRS-2-P(T-scores): Total	.158	.776
SSIS-P (standard scores)		
Total Social Skills	.633	.132
Total Problem Behaviors	.782	.231
Social Awareness	.197	.417
Social Cognition	.003	1.20
Social Communication	.134	.491
Social Motivation	.007	1.03
RIRB	.015	.879
SSIS standard scores		
Total Social Skills	.061	.675
Total Problem Behaviors	.032	.803
SSIS Social Skills		
Cooperation	.442	.254
Communication	.071	.647
Empathy	.011	1.01
Self-Control	.443	.259
SSIS Problem Behaviors		
Internalizing	.173	.469
Externalizing	.076	.633
Bullying	.158	.467
Hyperactivity/inattention	.031	.807

Higher levels of parental involvement, utilizing more instructional strategies from previous experience, are more likely to elicit positive changes in social behavior.

The role of being a parent is better able to help children have more spontaneous behaviors, so parents are important in the educational process, including participating in playdates and playgroups with their peers, which allows children to actively practice skills and interact with their parents.

3.3. Importance of the IEP for Communication

Working together and collaborating for effective communication and cooperation between home and school can significantly improve students' chances of success [12]. Studying how parents can carry out focused playtime interventions (FPIs) at home has been shown to have better results for younger (aged less than 11.3 months) children in terms of verbal expression, and Improving Individualised Education Plans (IEPs) can better help communication between parents and teachers to realize the importance of communication [13]. Figure. 2 shows that when parents are involved, students' academic and awareness levels are mostly in the medium to high range.

As shown in Figure 2, the following problems are represented respectively

What is the academic ability and level of the students?

What is the student's cognitive ability for things?

What is the student's ability to master language and express language?

How do students demonstrate social skills?

Whether the student's athletic ability good?

Can Students live independently and take care of themselves?

Whether students can judge the risks outside the family in time and protect themselves in time?

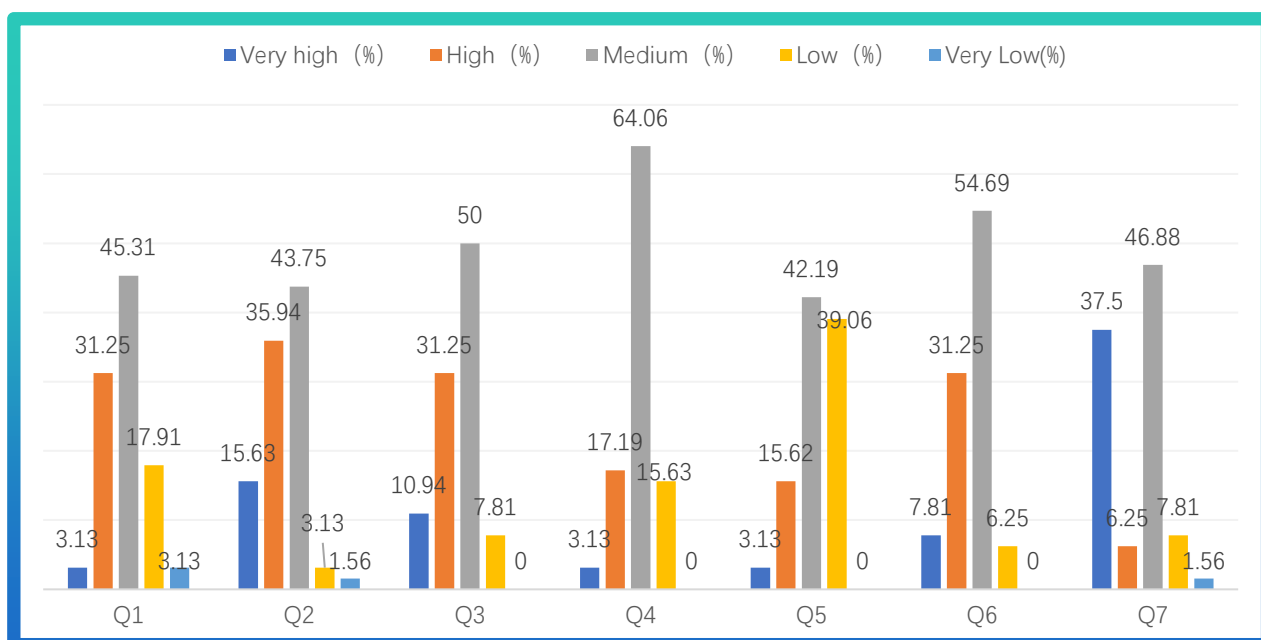


Fig. 2 The percentage of autistic students at LEP level as well as the frequency, from a teacher's perspective (n=64) [13]

Based on the results of these studies, schools can make appropriate programs and measures for Teachers and parents involved in special education for autistic students. To narrow the gap of cooperation between parents and families, parents can be allowed to use videos, web pages, and other information to strengthen their ability, or teachers and other relevant personnel in special institutions to record relevant teaching videos so that parents and teachers can better understand each other to promote the development of children with autism.

3.4. Importance of Parents' Emotional Influence on Autistic Children

However, according to [14], it is proved that the emotions of family members are also extraordinarily important for children with autism, the worse the parents' emotions are, the higher the level of behavioral problems the child may show, so it is possible to try to think differently in dealing with the emotional problems of these special needs children. The study showed that they used 12 ways of coping with different measures, and the effects, but showed that different parents had different levels of reactivity to it in terms of positivity and negativity [15]. The use of certain strategies proved that it can increase the happiness index of families with autistic children, as well as reduce the

stress that they carry within themselves. Teachers can use it to identify whether the strategies being used by the parents are effective or not [16].

It is important to find out where the parents are in terms of their stress levels, and then to consider whether they should be communicating in the moment or not, and it takes a concerted effort from educators, parents, and society to address these issues

3.5. New Counseling Models Used for Behavioral Disorders

In the study, there is a new model of counseling called "school partnership" [17]. It adopts the way of mutual communication between parents, teachers, and counselors, pre-counseling, and post-counseling but the interviews are conducted by telephone, which solves the disadvantageous communication such as long distance, the whole counseling model is divided into three parts.

Pre-consultation interview. Various aspects were covered, including the difficulties faced by both sides between parents and teachers, which facilitated a better understanding of each other's situation as well as parents informing their children of their preferences, and target issues. The percentage of inability to express needs (29.3%), attention (29.3%), and aggressive behavior (14.6%).

The face-to-face parent-teacher counseling meeting is where the parents collect the problems of their respective children and the parents find the overlapping parts with other children, the counsellor identifies the target problems and then the parents and the teachers work together to develop an intervention plan, for example, like, positive reinforcement, timers, etc. Where the implementation of the 8 steps of the intervention plan are carried out by the teachers and the parents working together, and the implementation is required to be documented and signed in weekly as a family [18].

At the end, parents are informed in the form of a telephone interview that weekly reports on interventions can effectively improve this component and proceed to the next step.

The conclusion of this model of counseling was a significant reduction in the frequency of parental concern about the target, a significant reduction in the level of worry about the target, and a significant reduction in the child's hyperactivity and non-compliant behavior.

4. The Ways in Which Teachers Practice Key Roles

4.1. Educational Strategies

Teachers can use special education strategies such as applied behavior analysis, social coaching, and emotion recognition training to help children with autism overcome learning and behavioral challenges [19]. Many autistic children can be relatively sensitive to changes in their environment, therefore, when parents educate their children, they need to do a good job of predicting the psychological state of the educated at the moment. For some children with autism, temporary changes can make it difficult for them to do things on their own, so teachers and parents need to communicate effectively to comprehend the child's recent situation and offer comfort. Teachers should also be there to give support and encouragement to the autistic child.

4.2. Communication Support

Teachers can collaborate with parents to develop communication strategies to better understand the needs of autistic children and establish effective communication channels. One of the major deficiencies of autistic children is that they do not communicate with others, and they need to use external help to help them to be able to have effective and barrier-free communication skills with others. Parents need to work together with the teacher to find the same goal of addressing the root cause of the child's problem. Teachers are also supposed to give parents positive reports on their children's status at school, which reduces parental stress and at the same time allows the autistic child to improve in a short period.

4.3. Monitoring Progress

Teachers can regularly monitor the progress of students with autism, evaluate whether educational programs are effective, and share relevant information with parents. The home-school co-operation approach can enhance the educational environment and at the same time help teachers to better understand autistic children. Because autistic children are emotionally variable, teachers need to intervene to find out some of the problems autistic children have in school. And present the parents with an assessment of the child's recent condition. Parents can communicate through their child's condition in school to encourage and motivate their potential. Reduce their stress and negative emotions while leading them to have a correct and positive attitude towards life.

5. Conclusion

Both parental care and attention to children can be positively associated with the academic achievement and socio-emotional development of children with special needs. Promoting parent-school partnerships can minimize the stress of children with special needs. Parents and teachers, after communication, should establish a common goal to help children with special needs address their psychological stress. An individualized and flexible approach is also very important for children with autism. Teachers at school need to provide private space for special students to have a good digestion of negative things and improve their ability to overcome difficulties. Home-school cooperation can effectively help autistic children to resolve conflicts. Teachers and parents use the means of communication to obtain many effective resources to promote the healthy development of autistic children. At the same time, this paper found that most of the data nowadays, are from random autistic children through a large number of searching literature, and few studies take special schools serving autistic children and autistic children in ordinary schools as survey subjects. Parents and teachers each have their strengths, so for future research directions, there could be more research on these two different directions of home-school co-operation for children with autism as a target group, and strategies for home-school co-operation for children with autism.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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