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# Strategies Used by the Teachers to Manage the Antisocial & Challenging Behavior of Children with Autism Spectrum Disorder: A Case of South Punjab

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#### **ABSTRAT**

Therefore, we decided to conduct this study to learn about and compile the methods/strategies used by special education teachers and other professionals working with children who have autism spectrum disorder to address problematic and antisocial behavior in the classroom. Researchers developed the questionnaire to inquire about how teachers in special education settings observe students with ASD and how they handle students with the disorder in the classroom. Careful thought went into the design of every detail for strategies like first determine the requirements than addressed, prepare for any situation, give choices, keep calm and cool in worst situation, teachers and other related specialists were use in managing the challenging behavior and for educational betterment teachers were speak word for word, clearly, and know what will happen next, makes directions clear and short and treat individually, and for improve social skill teacher were remove physical and sensory discomforts, motivate for play with others, use visual and social stories and also give space for his favorite toy or activity. Two hundred and eighty-six special education teachers from three different districts in southern Punjab took part in the current investigation. This analysis made use of numbers gathered from scientific research. Experts in the area of special education designed and assessed the surveys. Inferences were made based on the responses of the sample population. The study's findings corroborate our claims that educators use these strategies for managing the challenging behavior of students on the autism spectrum. The research recommends that trainings for teachers should be conducted specially to introduce the newest strategies for behavior management of autistic children so they might have their difficulties and antisocial conduct better managed with these strategies.

#### Keywords:

 $Special\ Education, Autism\ Spectrum\ Disorder, Special\ Educators, Strategies$ 

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#### Introduction

Whereas in the classroom setting, teaching young children having autism spectrum disorder is difficult. Specialized care coordination amongst numerous clinicians and many consultations on school placement is sometimes necessary for children having autism spectrum disorder. It's possible for parents and teachers to feel alone when their friends and relatives don't know how to deal with a child's challenging behavior or impairment (Rao and Beidel, 2009). A child's age, when they were diagnosed, and the severity of their symptoms are all factors that might affect how they cope with these social difficulties (Greenberg et al., 2006). Up to half of kids with ASD also exhibit anti-social or challenging behaviors (Hastings et al., 2005).

Hyperactivity, disobedience, self-injury, and repetitive behaviors are some types of challenging behavior and these are communal in ASD children (Baghdadli et al., 2003). Children having autism disorder may also demonstrate a range of antisocial behaviors, including avoidance behavior, attention-seeking behavior, and self-injurious conduct, and these behaviors may be shown in a variation of situations. As a result, the educational community faces several difficulties due to these practices (McClintock et al., 2003).

Harrower & Dunlap, 2001 initiate that in and out of classroom Autistic students may display a wide range of behaviors. Several of which would likely be disruptive in a setting designed for standard schooling. Clapping, hand flapping, engaging in self-injurious conduct, and screaming are all rather prevalent as well. There are a number of other behavior that might fall into this category, such as rocking, mouthing any stuff, looking intensely, and becoming fixated on certain things or ideas. Not every student acts in the same way. When it comes to managing student conduct, the demands of each individual kid will vary.

Without any help, we are unable to progress persons with progressive syndromes, such as autism spectrum disorder, may occasionally exhibit challenging behaviors (Murphy et al., 2005). Extreme and ongoing bad behavior may have a negative impression on a student's theoretical and social development (Reichle, 1990). Studies have also shown that disruptive students hinder teachers' ability to educate them (Carr, 1991). While working with kids who have autism spectrum disorder, special educators and classroom teachers often describe feeling emotionally burned out when faced with difficult conduct that they are ill-equipped to handle (Hastings & Brown, 2002).

Teacher have been given a lot of responsibility for helping adolescents with ASD who are exhibiting difficult behaviors, and there are two main reasons for this. Firstly, for some students, the classroom is the only place they can receive help for problematic conduct. Second, the Persons with Disabilities Education Act (IDEA) mandates that schools carry out functional behavior analyses (FBAs) on students who are at risk of having their educational placement changed as a result of their problematic behavior. One purpose of an FBA is to inform the development of intervention strategies for pupils whose conduct presents difficulties (BIP) (IDEA Improvement Act, 2004).

Child behavior problems like these have been shown to increase parental stress and strain (Hastings et al., 2005) and hence the amount of care needed for the kid (Vasilopoulou and Nisbet, 2016). Parental competence, delusional self, and problem-solving abilities might all be negatively impacted by a child's disruptive conduct (Benson, 2014; Falk et al., 2014). Efforts to mitigate disruptive behavior may have a secondary benefit of relieving pressure on parents. There may be a two-way street at play in the connection between children's conduct and parental anxiety, with the latter lowering parents' resourcefulness in dealing with misbehavior (Greenberg et al., 2006).

Students on the autism spectrum have traditionally benefited from three types of behavioral interventions: preventative, sympathetic, and disciplinary (Leach & Duffy, 2009). There is, however, a dearth of studies using insertion as an independent variable. Inclusion is not a treatment modality in and of itself. Evaluating the success of treatments requires thinking about things like how much time and money are spent on each student and how to best help those who

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have autism spectrum disorder (ASD) who are enrolled in a universal education classroom (Sailor, 1996).

Successful teachers concentrate equal emphasis on establishing appropriate behaviors as a substitute for the antisocial conduct in addition to implementing techniques to eliminate antisocial behavior. Students with ASD have generally been kept apart from their regular education peers despite these benefits (Stainback & Stainback, 1996). Given the thrust for ASD children' enclosure, it's critical to comprehend the obstacles that might stand in the way of this effort and collaborate with educators to find workable solutions.

#### **Review of Related Literature**

Autism Spectrum disorder is a complicated variety of neurodevelopmental disorders, sometimes commonly termed autism spectrum disorder. Word "spectrum" is used for the symptoms of the broad range including deficits of abilities in ASD kids. Children with modest ASD symptoms may also have more severe forms of the disorder (Strock, 2007). The autistic child is highly heritable and has difficulties with social reciprocity, limited interests, and repetitive activities. An approximated one out of every 100 children is diagnosed with ASD. As compared to females, men are identified at a four-to-one ratio. An increased risk of autism spectrum disorder is connected to the genetic variant denoyo, which may be passed down via families or emerge spontaneously (Berebitsky et al., 2014).

Child with modest ASD symptoms may also have more severe forms of the disorder (Strock, 2007). Criteria of Diagnosis about ASD had changed dramatically when the first patient described was published in the 1800s. The early Diagnosis Statistical Manual (DSM) defined autism spectrum disorder as a childhood variety of psychotic, however; Autism was eventually detached from mental disorders, generating its diagnosis. DSM-5 was released in 2013 and included a diagnostic range for Autism. Autism grows increasingly frequent, and the clinical diagnosis and terms are anticipated to continue to alter in the future (American Psychiatric Association, 1952).

Children with autism have an issue in social interactions, difficulty in language and communication, and repeated acts or obsessive interests. The consequences of these activities might range from trivial to severe. Autism varies significantly in severity and symptoms, and it might go unnoticed in children who are just mildly affected or when more debilitating conditions obscure it. Autism's origins aren't known for sure, genetic and environmental variables may have a role, and however this is not a certainty (National Institute of Neurological Disorders & Stroke, 2015).

ASD affects 147 out of every 10,000 kids in the America. According to the most current estimate (Autism and Developmental Disabilities Monitoring Network, 2018). There have been reports of variances in the frequency of ASD crosswise different racial groups. ASD is estimated to impact 264 out of every 10,000 South Koreans and 12 out of every 10,000 Chinese in 2011 (Sun et al., 2013). ASD prevalence figures across areas can't be compared because of the variety of methods used to identify suspected cases (Sun et al., 2015).

Pakistan has just recently begun to become aware of the condition of ASD. In many studies from Pakistan has a higher rate of learning disabilities and autism, it is considered the higher prevalence of autism because of the handy relationship linking the pair of disabilities. According to research conducted on the 6,365 youngsters, 6.5% had moderate intellectual disability and 1.9% had a severe cognitive impairment. In Karachi, an estimated 19.0 out of every thousand children suffer from intellectual disability or learning disabilities (Bashir et al., 2002).

According to another study, around 16 out of every 1,000 children aged 3 to 9 are severely mentally retarded. There was a higher number of autism and cerebral palsy in Pakistani children (2.57/1,000), as well as more severe learning challenges, hearing and vision abnormalities. Morton also found that Pakistani infants had higher rates of serious hearing and vision impairments

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(Mubbashar & Saeed, 2001).

Self-injury, elopement, aggressiveness, property destruction, and improper public conduct (sometimes known as "challenging behavior") are all examples of the problematic behaviors commonly associated with ASD. Excessive prickliness (e.g., rage, prevention, anguish, meltdowns), and chronic non-compliance with ordinary expectations often provide major obstacles. Children with autism spectrum disorders (ASD) have been found to benefit from treating these behaviors (McGuire et al., 2016). According to instructors' subjective accounts, disruptive student behaviors are those that need close monitoring, single out the kid, and have people embarrassed or upset (Turnbull and Ruef, 1996).

In addition, between 30 and 42 percent of kids and adolescents who have autism spectrum condition also have anxiety issues (van Steensel et al., 2011). Several people have different opinions on the contentious issue of anxiety is a co-occurring component of ASD, the result of cognitive problems, or the downstream outcome of dysfunctional environmental interactions. Parents often blame anxiety for their children's problematic responses to stressors like new routines or feared stimuli because the youngster becomes overstimulated, distressed, and tries to flee from them (Bearss et al., 2016). Some on this spectrum have been shown to exhibit avoidance behaviors (such as running away or becoming agitated when demands are made) in reaction to everyday situations when others do not. It appears that escape-driven avoidance encourages the creation of coercive cycles of parent-child and teacher-child contact around everyday activities, as well as the gradual degradation of home and school routines (Lucyshyn et al., 2004).

Problematic reactions in children with ASD are hypothesized to result from a combination of cognitive traits in the kid and environmental stimuli to which the child is vulnerable. Negative social consciousness or irregularities in social-information dealing out (Dominick et al., 2007), raised encouragement or emotional distress (Bearss et al., 2016), inflexibility (Marquenie et al., 2011), narrowness of unpredictability (Rodgers et al., 2012), and heightened sensitivity to sensory input are all factors that can be found in children with autism spectrum disorder (Schaaf et al., 2011). When certain conditions are met, environments have the potential to be a source of vulnerability. These conditions include the presence of a feared stimulus (Neufeld et al., 2014), the presence of regular burdens (Lucyshyn et al., 2015), or the lack of instructors' devotion or the facility of certain actions (Marquenie et al., 2011).

When things aren't done "on the child's terms" (Ludlow et al., 2012) or when there are disruptions to the child's routine or surroundings (Larson, 2006).

Several factors can contribute to undesirable and/or improper actions. Each student conduct is highly variable. The pupil might be uninterested, irritated, or unmotivated. The student may just be unaware of the fact that his or her actions are inappropriate. There might be issues at home that are causing the youngster to act out at school. The list of possible explanations may go on endlessly, but in order to come up with effective remedies, it is essential to analyze the student's behavior pattern first. (Cohen & Spenciner, 2005).

There's a common misconception that autistic students aren't interested in making friends or building relationships. Children on the autism spectrum sometimes struggle to participate in classroom activities because of moderate to severe sensory issues. They may be too excited, causing them to engage in self-stimulatory activities as a means of calming down, which may be a disruption to their fellow students and teachers (Schaaf & Miller, 2005).

When dealing with behavioral issues, parents, family members, educators, and friends may all benefit from behavior management methods, which are essentially behavior intervention programmes that can be used in a variety of settings. Autistic children can benefit from increased insight into their own behavior and the world around them via the use of behavioral management techniques. Parents, educators, and caretakers often feel overwhelmed when confronted with autistic children's behavioral difficulties. Acting out may occur out of nowhere, continue for hours,

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and be extremely difficult to manage. The anxiety or shame that this kind of behavior might cause in social situations is an additional source of distress. Constant temper outbursts at home can leave parents and other carers feeling exhausted and despondent. The youngster is upset because they are unable to achieve their goal. Staff members are at a loss on how to improve matters, and this causes a lot of stress. (

Very little research has been done on how instructors cope with challenging conduct with students with ASD. There is mounting evidence that instructors who work with students who have autism spectrum disorders modify their approaches to teaching. Those caring for children with autism spectrum disorder (ASD) pass reportedly double the time with their charges compared to those caring for typically developing youngsters (Tunali and Power, 2002). According to qualitative research, educators make a wide variety of adjustments to facilitate the child's contribution in classroom activities, give him or her something to do, and help him or her with daily hygiene (Schaaf et al., 2011). As a result, teachers of children with special needs put in more time and energy to encouraging their students' growth than do teachers of generally developing students (Maljaars et al., 2014).

A Functional Behavior Assessment is often used for analyzing behavior. As a means of getting to the bottom of a student's motivations, teachers often conduct Functional Behavior Assessments. A student's behavioral intervention plan is where teachers and administrators document strategies for helping troubled children improve their conduct. Problematic actions need to be clear and easy to see in order to be pinpointed. Functional behavior evaluations are completed with the use of standardized tests, medical record checks, structured interviews, and inperson and online observations (Cohen & Spenciner, 2005).

Teachers are significantly impacted by the daily demands of caring for students with severe and ongoing needs (Gray, 1997). Teachers' levels of stress are strongly correlated with the harshness of the child's problematic conduct within the framework of autism spectrum disorder (Davis and Carter 2008; Estes et al., 2009). There appears to be a two-way relationship between stress in the home environment and problematic conduct (Lecavalier et al., 2006). This makes sense, as overworked parents are less likely to have the mental capacity to come up with creative solutions to the most extreme kinds of problem behavior.

Kalyva & Avramidis (2005) investigate that educator should think about which intervention is most likely to be successful in lowering the challenging behaviors that are often linked with ASD. Positive results from inclusion can be expected if an appropriate intervention is used to lessen the severity of a student's challenging behaviors. Efforts to broaden social networks, such as the Circle of Friends Programme, have been shown to have good societal effects. Positive social habits can also be encouraged through interactions with peers who are at a similar developmental stage. ASD kids might also benefit from having peers in the classroom who can serve as role models.

Psychologists have been educated on the new facts in special education centers, but classroom instructors may or may not have received the same education. It's possible that a teacher dealing with autistic youngsters would be unable to intervene effectively. It is essential to establish the instructors' degree of expertise for them to help their students. The views of cause should also be considered when assessing knowledge levels. Autism's etiology remains a mystery. Current evidence suggests that both environmental and genetic factors may contribute to the development of autism, but the exact cause is still unclear. Although some people feel that the most significant effect is exerted by factors such as immunizations and religion (Landrigan, Lambertini & Birnbaum, 2012).

The treatments now available to educate parents how to manage problematic behaviour in children with ASD have been the topic of much research. The goal of most parenting programmes is to recover parents' ability to deal with challenging behaviors by instructing them on how to  $144 \mid P \mid a \mid g$ 

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better understand and cope with antecedents, encouraging more constructive relationships between their children, and removing variables that keep the problem going (Hodgetts et al., 2013). Nonetheless, they have vastly different underlying philosophies, making it impossible to generalize about the methods they advocate. Some promote proactive, positive tactics (Lucyshyn et al., 2015), while others use penalties (such as time out) to deter undesirable actions (Armstrong et al., 2015). Other initiatives seek to strengthen parents' emotional reserves rather than imparting knowledge.

ASD-diagnosed children less than 8 years old have been the focus of recent reviews of the evidence on interventions for problematic behavior (Horner et al., 2002) & under 6 years (Conroy et al., 2005; Odom et al., 2003). No systematic literature studies addressing the topic of challenging classroom conduct have come to our attention. Furthermore, to our knowledge, there are no literature studies that have looked at the management of difficult behaviors in children with ASD between the ages of 8 and 21. These remaining pieces of data reveal a hole in our understanding of how to handle kids with ASD who exhibit problematic conduct in the classroom (Singh et al., 2007).

There are a number of obstacles specific to the classroom that investigators and therapists attentive in the handling of problematic performance must overcome. To begin, when confronted with a student exhibiting problematic behavior, many instructors assume the position of interventionist despite a lack of training, materials, or time to complete a functional behavior assessment (FBA) and create an effective behavior intervention plan (BIP). Second, measures to lessen disruptive conduct should be tailored to existing norms and procedures in the classroom. Thirdly, the researcher and interventionist have to contend with classroom distractions such as other students and sudden changes in activities that are rarely present in experimental settings.

Teachers' expertise at a school for autistic children has shown that educating a kid with autism requires more work and challenging duties, such as dealing with significant academic and behavioral challenges. Teachers are continuously on the lookout for the most effective techniques to teach their students. Attending professional development seminars and other special events is a common way for teachers to discover successful teaching methods they may use in their classes (Koellner & Jacobs, 2015).

West, Jones, Chambers, and Whitehurst (2012) initiate those Pre-service teachers who had received training on autism thought that there was a need for greater hands-on experience, mentoring, and a better understanding of assistive technologies for them. Ostmeyer and Scarpa's (2012) action study underlined the need of teaching usually developing peers about the features of ASD and how to engage with peers with ASD, as well as the importance of time restrictions. The difficulties posed by cultural differences, such as language hurdles that obstruct accurate diagnosis and dissemination of information about autism spectrum disorders, have received less attention in the literature (Wilder, 2004).

It's not only teaching that teacher are expected to do outside of the classroom. Regular gatherings with teachers and parents as well as student-led discussions are just some examples. Educators' stress levels have been linked to education and training in the field of behavior control and individual differences. Extra time is needed for diversified learning. Teachers must provide a variety of activities and worksheets to differentiate teaching. Teachers may gradually lose their desire to put up the same amount of effort and effort for the sake of their students, and this may lead to burnout (Flook et al., 2013).

Teachers engage diligently not only in the classroom, even out of the class, and their efforts have resulted in several excellent consequences. There is no doubt that teachers have and will continue to have a beneficial impact on a child's achievement. Teacher motivation and encouragement may be important factors in student success. Technology and innovative teaching approaches may help teachers enhance education. Understanding the difference in education and

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assisting a student in reaching his or her objectives are both possible when teachers bring fresh ideas to the class and expose the students to new activities. As a consequence, instructors are in a unique position to influence a student's progress in school (Walker et al., 2012).

Much is understood about how to handle difficult conduct in the classroom with kids aged 8-21. One may assume that interventions that work for younger kids or older adults will also be helpful for this demographic, however there may be unforeseen challenges in using these tactics. The larger stature and greater strength of high scholars may make it impossible to employ therapies designed for younger children.

Several different intervention techniques, typically adjusted to the individual requirements of the pupils and educational institutions involved, have been utilized in research with the aim of decreasing problematic behavior in children with ASD. The results have been mostly positive, indicating that the assessment and intervention methods used were successful. By compiling a comprehensive literature review on the issue of difficult behavioral treatment for autistic children in educational settings, this paper aims to achieve exactly that.

Nevertheless, except from qualitative reports and case studies, very little is known about what parents really do. To better understand how parents and co workers manage problematic behavior in persons with ASD, this study draws on the literature from qualitative, behavioral, and case studies. A combination of reports and observations is necessary to provide a firm basis for future research and to guide the development of a new measure to quantify specific parenting behaviors crucial to the treatment of problem behavior in ASD.

#### Research Methodology Research Design

The primary purpose of this study is to strategies used by teacher in handling anti-social and challenging performance of children with Autism Spectrum Disorder in south Punjab. This study will use a survey as its primary method of data collection. Data is gathered quantitatively using a survey and questionnaire about the strategies used by teacher in handling anti-social and challenging behavior of autistic children in south Punjab.

#### Population/Sample

The targeted population to which the inference was made included all the government and private teachers and psychologists, speech therapists, ABA therapists, occupational therapists, social workers, related field of intellectual and developmental disability in special education institutes in South Punjab constituted the population of this research study, however, only 286 individuals were chosen for the sample of this study.

#### Instrumentation

Researchers devised a self-made questionnaire with an eye on challenges faced the teacher in managing anti-social and challenging behavior of children with Autism Spectrum Disorder in south Punjab. There was a section at the beginning of the survey that asked about the respondent's demographics. Teachers and other related field experts of autistic children used the survey to verify its validity.

#### **Data Collection & Analysis**

A descriptive survey was used with a convenience sample derived from ASD field experts and a teacher's support group in the south Punjab Area that supports the children and teachers of children with autism spectrum disorder.

The researcher intended to use a quantitative (questionnaire survey) approach to data collection, A google form of the survey questionnaire was developed and the link was sent to the teachers and psychologists, speech, ABA, occupational therapists, and social workers through what's app and other social media who deal with the children having autism spectrum disorder in special education and the data was collected.

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This study used a wide range of statistical methods to analyze the data like mean, median, mode, frequency distribution etc through SPSS. The findings, on the other hand, were segmented into the tables below.

Table 1

Sample Description based on demographics									
Sr#	Respondents	Frequency(f)	Percentage						
	-	-	(%)						
Gende	er								

			(/0)
Gene	der		
1	Male	130	45.5
2	Female	156	54.5
_	Total	286	100
Age			
1	25 to 35 years	201	70.3
2	36 to 45 years	68	23.8
3	46 to 55 years	17	5.9
E	Total	286	100
_	oloyee Status	60	
1	ST	63	22
2	SSET	57	19.9
3	JSET	54	18.9
4	Psychologist	17	5.9
5	Educator	54	18.9
6	ABA Therapist	9	3.1
7	Social Worker	15	5.2
8	Speech Therapist	11	3.8
9	occupational Therapist	6	2.1
	Total	286	100
Prof	essional Qualification		
1	M.A , M.Ed (Spl Edu)	178	62.2
2	M.Phil. (Spl Edu)	89	31.1
3	Ph.D.	19	6.6
	Total	286	100
Resp	oondent's Experience		
1	1 - 10 year	197	68.9
2	11 - 20 year	69	24.1
3	20 - 30 year	20	7
	Total	286	100
	of Posting		
1	Rural	146	51
2	Urban	140	49
_	Total	286	100
-	oondent's Division	^	
1	Multan	81	29.3
2	Bahawalpur	107	47.4
3	DG Khan	98	34.3
	Total	286	100

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Table elaborates the results regarding demographics of respondents. Basic demographics asked from the parents were gender, age, qualification and area of respondents. Most respondents responded at the basis of gender were females (62.1%), at the basis of age were between 31-40 years (54.5%), at the basis of qualification were under matric (58.3%) and at the basis of area were from urban areas (78.7%).

**Table 2**Frequency Distribution for Strategies for managing the anti-social and challenging behavior of the child having autism spectrum disorder

Sr#	Statements of	SA	A	UN	DA	SDA	M	SD
	Questions	f(%)	f(%)	f(%)	f(%)	f(%)		
1	For managing the challenging behavior in ASD, Teacher should determine the requirements of the autistic children and then addressed.	137(47.9)	127(44.4)	17(5.9)	3(1.0)	2(.7)	4.38	.70
2	For managing the challenging behavior in ASD, teachers should prepare for situations they expect being challenging.	98(34.4)	157(54.9)	22(7.7)	7(2.4)	2(.7)	4.20	.73
3	For managing the challenging behavior in ASD, teachers give choices to their students for non-preferred activities	38(13.3)	56(19.6)	14(4.9)	106(37.1)	72(25.2)	2.59	1.39
4	For managing the challenging behavior in ASD, teacher should keep calm even student is at his or her worst	96(33.6)	148(51.7)	27(9.4)	12(4.2)	3(1.0)	4.13	.82
5	For managing the challenging behavior in ASD, Keep coolness at all times, particularly while giving feedback.	91(31.8)	139(48.6)	31(10.8)	16(5.6)	9(3.1)	4.00	.96

Table 2 elaborates the consequences of section-1 (strategies for managing the offensive and puzzling performance of autism in special education institutes) of the questionnaire. This section includes the different strategies for special education teacher that how they can manage the challenging behavior of the child having autism spectrum disorder in classroom. Respondents strongly agree (47.9%) that the teacher should determine the requirements of the autistic children

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and then addressed with M (4.38) & SD (.70), agreed (54.9%) that teachers should prepare for situations they expect being challenging having M (4.20) & SD (.73), disagreed (37.1%) that teachers give choices to their students for non-preferred activities along M (2.59) & SD (1.39), agreed (51.7%) that teacher should keep calm even student is at his or her worst with M (4.13) & SD (.82), agreed (48.6%) that Keep a calm, composure at all times, but particularly while giving feedback having M (4.00) & SD (.96).

**Table 4.4**Frequency Distribution for Strategies for managing the anti-social and challenging behavior of the child having autism spectrum disorder

Sr#	Statements of Questions	SA f(%)	A f(%)	UN f(%)	DA f(%)	SDA <i>f</i> (%)	M	SD
1	For managing the challenging behavior in ASD, Teacher should speak word for word	91(31.8)	146(51.0)	27(9.4)	16(5.6)	6(2.1)	4.04	.90
2	For Managing the challenging behavior in ASD, Teacher should speak clearly & calmly	100(35.0)	134(46.9)	23(8.0)	25(8.7)	4(1.4)	4.05	.95
3	For managing the challenging behavior in ASD, the child should know what will happen next.	90(31.5)	144(50.3)	34(11.9)	13(4.5)	5(1.7)	4.05	.87
4	For managing the challenging behavior in ASD, the teacher Makes directions clear, short, and concrete.	137(47.9)	127(44.4)	17(5.9)	3(1.0)	2(.7)	4.37	.70
5	For managing the challenging behavior in ASD, Treat your autistic student like any other student	98(34.3)	157(54.9)	22(7.7)	7(2.4)	2(.7)	4.19	.73

Table 3 also give details the imports of section-1 (strategies for managing the puzzling performance of autism in special education institutes) of the questionnaire. This section includes the different strategies for special education teacher that how they can manage the challenging behavior of the child having autism spectrum disorder in classroom. For managing the challenging behavior in ASD, Respondents agreed (51.0%) that teacher should speak word for word along M (4.05) & SD (.90), agreed (46.9%) that Teacher should speak clearly & calmly with M (4.05) & SD (.95), agreed (50.3%) that the child should know what will happen next with M (4.05) & SD (.87), strongly agree (47.9%) that the teacher Makes directions clear, short, and concrete with M (4.38) & SD (.70), agreed (54.9%) that treat your autistic student like any other

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student having M (4.19) & SD (.73).

Table 4.4

Frequency Distribution for Strategies for managing the anti-social and challenging behavior of

the child having autism spectrum disorder

Sr#	Statements of	SA	A	UN	DA	SDA	$\mathbf{M}$	SD
	Questions	f(%)	f(%)	f(%)	f(%)	f(%)		
1	For managing the anti-social behavior in ASD, treat each pupil as an individual as autism's impacts	137(47.9)	127(44.4)	17(5.9)	3(1.0)	2(.7)	4.38	.70
2	vary. For managing the anti-social behavior in ASD, teachers remove physical and sensory discomforts.	98(34.4)	157(54.9)	22(7.7)	7(2.4)	2(.7)	4.20	.73
3	For Managing the anti-social behavior in ASD, Motivate child to take part in sports that need for precise motor control.	106(37.1)	131(45.8)	35(12.2)	12(4.2)	2(.7)	4.14	.84
4	For managing the anti-social behavior in ASD, teachers use visuals and social stories	96(33.6)	148(51.7)	27(9.4)	12(4.2)	3(1.0)	4.13	.82
5	For managing the anti-social behavior in ASD, Let the child carry his favorite item between activities.	91(31.8)	139(48.6)	31(10.8)	16(5.6)	9(3.1)	4.00	.96

Table 4 elaborates the consequences of section-2 (strategies for managing the anti-social behavior of autism in special education institutes) of the questionnaire. This section includes the different strategies for special education teacher that how they can manage the anti-social behavior of the child having autism spectrum disorder in classroom. For managing the anti-social behavior in ASD, Respondents strongly agree (47.9) that treat each pupil as an individual as autism's impacts vary with M (4.38) & SD (.70), agree (54.9) that teachers remove physical and sensory discomforts with M (4.20) & SD (.73), agree (45.8) that Motivate child to take part in sports that need for precise motor control with M (4.1) & SD (.84), agree (51.7) that teachers use visuals and social stories with M (4.13) & SD (.82), agree (48.6) that Let the child carry his favorite item between activities with M (4.0) & SD (.96).

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**Table 4**Frequency Distribution for Strategies for managing the anti-social and challenging behavior of the child having autism spectrum disorder

Sr#	Statements of	SA	A	UN	DA	SDA	M	SD
	Questions	<i>f</i> (%)						
1	For managing the anti-social behavior in ASD, teachers use Augmentative and Alternative Communication (AAC) for nonverbal.	137(47.9)	127(44.4)	17(5.9)	3(1.0)	2(.7)	4.38	.70
2	For managing the anti-social behavior in ASD, Bring the child to a quieter spot to relax from the crowd if he's oversensitive.	98(34.4)	157(54.9)	22(7.7)	7(2.4)	2(.7)	4.20	.73
3	For managing the anti-social behavior in ASD, teachers build resilience in their attitude, communication,	106(37.1)	131(45.8)	35(12.2)	12(4.2)	2(.7)	4.14	.84
4	For managing the anti-social behavior in ASD, Teachers collaborate with their guardians or primary careers.	96(33.6)	148(51.7)	27(9.4)		3(1.0)	4.13	.82

Table 5 elaborates the consequences of section-2 (strategies for managing the anti-social behavior of autism in special education institutes) of the questionnaire. For managing the anti-social behavior in ASD, Respondent strongly agree (47.9) that teachers use Augmentative and Alternative Communication (AAC) for nonverbal with M (4.38) & SD (.70), agreed (54.9) that Bring the child to a quieter spot to relax from the crowd if he's oversensitive with M (4.20) & SD (.73), agreed (45.8) that teachers build resilience in their attitude, communication with M (4.14) & SD (.84), agreed (51.7) that teachers collaborate with their guardians or primary careers with M (4.13) & SD (.82).

## 4.3 Analysis of Variance of Responses about plans for Handling Anti-Social and Problematic Behavior of Child having Autism Spectrum Disorder. Table 4.6

Comparison of Opinion of Respondents at the Base of Gender (Independent Sample t-test)

Gender	N	M	SD	df	T	Sig.
Male	130	33.32	3.71	284	1.14	.253
Female	156	32.73	4.82			

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#### \*P > .05 Level of Significance

Table 4.6 indicates that the empirical information for male (N=130 M=33.32, SD=3.71) and for female (N=156, M=32.73, SD=4.82) with t-statistics (t (284) =-1.14, P>.05) this demonstrates that male and female respondents do not vary much in their thoughts about approaches for handling anti-social and thought-provoking behavior of child having autism spectrum disorder on basis of gender of participants. Moreover, it illustrates that difference of means is 0.59 for male and female respondents which is also not significant.

**Table 4.7**Comparison of Opinion of Respondents at the Base of Area of respondents (Independent Sample t-test)

Area of Posting	N	M	SD	df	T	Sig.
Rural	146	32.73	3.98	284	-1.03	.303
Urban	140	33.27	4.71			

#### \*P > .05 Level of Significance

Table 4.7 indicates that the empirical information for rural (N=146, M=32.73, SD=3.98) and for urban (N=140, M=33.27, SD=4.71) with t-statistics (t (284) = -1.03, P > .05) which shows that respondents from rural and urban areas had similar views, with no significant differences about policies for supervision anti-social and puzzling behavior of child having autism spectrum disorder on basis of area of participants. Moreover, it illustrates that difference of means is 0.54 which is not significant.

**Table 4.8**Comparison of Opinion of Respondents at the Base of training (Independent Sample t-test)

Training	N	M	SD	df	T	Sig.
No	66	32.74	4.97	284	-547	.585
Yes	220	33.07	4.16			

#### \*P > .05 Level of Significance

Table 4.8 indicates that the empirical information for male (N=66, M=32.74, SD=4.97) and for female (N=220, M=33.07, SD=4.97) with t-statistics  $(t\ (284)=-547, P>.05)$  which shows that there is no substantial difference in the thoughts of yes and no about policies for handling antisocial and problematic behavior of child having autism spectrum disorder on the base of training on specifically about the child having autism spectrum disorder. Moreover, it illustrates that difference of means is 0.33 for male and female respondents which is also not significant.

**Table 4.9**Comparison of Opinion of Respondents at the Base of their Age (One-Way ANOVA).

Age of Respondents	Sum of Square	df	Mean Square	F	Sig.
<b>Between Groups</b>	29.830	2	14.915		_
Within Groups	5378.17	283	19.004	.785	.457
Total	5408.00	285			

<sup>\*</sup>P > .05 Level of Significance

Table 4.9 indicates that the empirical information for Between Groups (Sum of squares=29.830, df=2, Mean square=14.915) and for Within Groups (Sum of squares=5378.17, df=283, Mean square=19.004) with one way ANOVA (F (285) = .785, P > .05) As such, it can be

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concluded that there is little or no significant difference in educators' perspectives from Between Groups and Within Groups regarding approaches for handling anti-social and puzzling behavior of autistic child

**Table 4.10** 

Comparison of Opinion of Respondents at the Base of Employee Status (One-Way ANOVA).

Designation	Sum of Square	df	Mean Square	F	Sig.
<b>Between Groups</b>	239.57	8	29.947		
Within Groups	5168.42	277	18.65	1.605	.123
Total	5408.00	285			

#### \*P > .05 Level of Significance

Table 4.10 indicates that the empirical information for Between Groups (Sum of squares=239.57, df=8, Mean square=29.947) and for Within Groups (Sum of squares=5168.42, df=277, Mean square=18.65) with one way ANOVA (F (285) = 1.6605, P > .05 = .123) which leads to the decision that there is no significant difference in the opinions of teachers from Between Groups and Within Groups regarding policies for handling anti-social and puzzling behavior of child having autism spectrum disorder

**Table 4.11** 

Comparison of Opinion of Respondents at the Base of Qualification (One-Way ANOVA).

Qualification	Sum of Square	df	Mean Square	F	Sig.
<b>Between Groups</b>	58.860	2	29.430		
Within Groups	5349.14	283	18.902	1.557	.213
Total	5408.00	285			

#### \*P < .05 Level of Significance

Table 4.11 indicates that the empirical information for Between Groups (Sum of squares=58.860, df=2, Mean square=29.430) and for Within Groups (Sum of squares=4349.14, df=283, Mean square=18.902) with one way ANOVA (F(285)=1.577, P<.05) which leads to the decision that there is a significant difference in the opinions of teachers from Between Groups and Within Groups regarding strategies for dealing anti-social and thought-provoking behavior of autistic child

**Table 4. 12** 

Comparison of Opinion of Respondents at the Base of Experience (One-Way ANOVA).

Experience	Sum of Square	df	Mean Square	F	Sig.
<b>Between Groups</b>	200.195	2	100.09		
Within Groups	5207.80	283	18.40	5.439	.005
Total	5408.00	285			

#### \*P < .05 Level of Significance

Table 4.12 indicates that the empirical information for Between Groups (Sum of squares=200.195, df=2, Mean Square=100.09) and for Within Groups (Sum of Squares=5207.80, Square=18.40) with one way ANOVA (Squares=5.439, Square=18.40) which leads to the decision that there is a significant difference in the opinions of teachers from Between Groups and Within Groups regarding approaches for handling anti-social and problematic behavior of child having autism spectrum disorder.

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**Table 4. 13**Comparison of Opinion of Respondents at the Base of Division (One-Way ANOVA).

Division	Sum of Square	df	Mean Square	F	Sig.
<b>Between Groups</b>	237.068	8	29.633		·
Within Groups	5170.93	277	18.668	1.587	.128
Total	5408.00	285			

\*P > .05 Level of Significance

Table 4.13 indicates that the empirical information for Between Groups (Sum of squares=237.068, df=8, Mean square=29.633) and for Within Groups (Sum of squares=5170.93, df=277, Mean square=18.688) with one way ANOVA (F (285) = 1.587, P > .05) which leads to the decision that there is no significant difference in the opinions of teachers from Between Groups and Within Groups regarding plans for dealing anti-social and puzzling behavior of child having autism spectrum disorder.

#### **Findings**

The key goal of this research was to classify the strategies teachers use in south Punjab have while dealing with students who have Autism Spectrum Disorder and exhibit challenging or anti-social behaviors. The results presented here are the result of investigations performed as a "strategies used by teachers in managing anti-social and challenging behavior of children with Autism Spectrum Disorder in south Punjab" plan. This is the reason a survey using the Likert scale of 1-5 was therefore carried out the strategies teachers use for managing the behavioral situation of autistic children in their daily routine. In this study almost all teachers and experts from related field of autism will attest to their strategies they use for managing the challenging behavior of children having autism, 47.9% respondents strongly agree that first determine the requirements the behavior of autistic child then addressed, 54.9% respondents are in favor that teacher should prepare for unexpected situation, 37.1% respondent disagree and 25.2% strongly disagree that give choices to their students for non-preferred activities, 51.7% responses were recorded that teacher should keep calm even student is at his or her worst, keep coolness at all times particularly while giving feedback is supported by 48.6% respondents, 51.0% agree that speak word for word, 46.9% agreed that speak clearly & calmly, tell student what will happen next is supported by 50.3% respondents, 47.9% respondents are in favor that teacher makes direction short and concrete, 54.9% respondents agree that treat autistic like other students.

For managing the anti-social behavior 47.9 respondents agree that treat each pupil as an individual, 54.9 respondents are in favor that remove physical and sensory discomforts, 45.8% responses were recorded that motivate child to take part in sports that need for precise motor control, use visuals and social stories is supported by 51.7% respondents, 48.6 respondent are decided that let the child carry his favorite item between activities, 47.9% agree that use Augmentative and Alternative Communication (AAC) for nonverbal, 54.9 respondents are in favor that bring the child to a quieter spot to relax from the crowd if he's oversensitive,45.8% respondent is decided that build resilience in their attitude, communication, 51.7 respondents agree that collaborate with their guardians or primary careers. Overall, teachers and other related therapists responses reveal that they have extensive knowledge about their child's out-of-control behavior but treat it as a disciplinary issue rather than the warning signs of autism. It's fair to assume that teachers not fully trained in making new strategies for managing the behavior of children having autism spectrum disorder. On a negative note, there are no enough facilities even that resource rooms in special education centers for one to one session and behavioral therapies.

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#### Discussion

There is not a solution for dealing with challenging behaviors in autistic children. It all depends on the kid, however there are various preventative measures that may be taken. Each case must be evaluated on its own merits, and all parties involved must cooperate and be as reliable as they can be for the child's greatest potential benefit.

The involvement and support of professionals related autism disorder and also parents are critical for the academic success of children who have this spectrum disorder. It is common knowledge that a significant amount of professionals from special education centers is necessary for managing behavior achievement. However, manage behavior of autism remains a difficult task. Different strategies use by teachers like one to one session, picture exchange, and flexibility, social stories for social interaction etc. Each child needs their own unique social story filled with specific details, clear instructions, a fresh point of view, and encouraging words (Delano & Snell, 2006). The volume of research that has been done on the significance of different strategies for managing behavior of autism was taken into consideration in this study, and the findings showed that the majority of teachers were active in their strategies planning for behavioral management of autistic children. It makes a huge impact on autistic child's behavior when students are active in activities such as playing with other children and a habit of sharing, The results of the studies that were described above were consistent with the findings of our study and support the idea that parental participation had a significant impact in the educational objectives that were accomplished by children who had hearing impairments.

#### Conclusion

This study was conducted to explore the strategies used by educators in handling the challenging and anti-social performance of autistic children in special learning centers especially in south Punjab. On the behalf of finding, it is concluded that there is many strategies teachers can use for managing the behavior of autistic children huge role of parents in achieving better .there is a huge role of therapists related autism spectrum disorder in achieving better results in devolving strategies for managing the behavior of autistic children. Students having autism need a professional team for their betterment in life. All team members are the pillars at which teacher build the multi-story building of education for child. If we minus even one therapist support then teachers are not able to get better results for students with autism spectrum disorder. Although there are many strategies teachers use for managing the behavior of autism but some strategies not propyl use due to the much more responsibilities they have, infrastructural problems and also due to the restricted behavior and diversity in autistic children.

#### **References & Bibliography**

- American Psychiatric Association. (1952). Diagnostic and Statistical Manual of Mental Disorders, Washington, DC: Author.
- Baghdadli, A., Pascal, C., Grisli, S., & Aussiloux, C. (2003). Risk factors for self-injurious behaviors among 222 young children with autistic disorders. Journal of Intellectual Disabilities Research, 47, 622–627.
- Benson, P. R. (2014). Coping and psychological adjustment among mothers of children with ASD: An accelerated longitudinal study. Journal of Autism and Developmental Disorders, 44(8), 1793–1807.
- Berebitsky, D., Goddard, R. D., Carlisle, J., Bundick, M., Quaglia, R., Corso, M., Agosto, V. (2014). An examination of teachers' perceptions of principal support for change and teachers' collaboration and communication around literacy Instruction in reading first schools. *Teachers College Record*, 116(4), 1-28. Retrieved from <a href="https://eric.ed.gov">https://eric.ed.gov</a>
- Carr, E., Taylor, J., & Robinson, S. (1991). The effects of severe behavior problems in children on the teaching behavior of adults. Journal of Applied Behavior Analysis, 24(3), 523–535.
- Cohen, L. & Spenciner, L.J. (2005). Teaching students with mild and moderate disabilities. Upper **155** | P a g

OEconomia Research Article

Saddle River, New Jersey: Pearson Education Inc

- Falk, N. H., Norris, K., & Quinn, M. G. (2014). The factors predicting stress, anxiety and depression in the parents of children with autism. Journal of Autism and Developmental Disorders, 44(12), 3185–3203.
- Greenberg, J. S., Seltzer, M. M., Hong, J., & Orsmond, G. I. (2006). Bidirectional effects of expressed emotion and behavior problems and symptoms in adolescents and adults with autism. American Journal on Mental Retardation, 111(4), 229–249.
- Harrower, J.K. & Dunlap, G. (2001). Including children with autism in general education classrooms. Behavior Modification, 25(5), 762-784.
- Hastings, R. P., Kovshoff, H., Brown, T., Ward, N. J., Espinosa, Degli, F., & Remington, B. (2005). Coping strategies in mothers and fathers of preschool and school-age children with autism. Autism: The International Journal of Research and Practice, 9(4), 377–391.
- Hawkins, E., Kingsdorf, S., Charnock, J., Szabo, M., Middleton, E., Phillips, J., & Gautreaux, G. (2011). Using behaviour contracts to decrease antisocial behaviour in four boys with an autistic spectrum disorder at home and at school. *British Journal of Special Education*, 38(4), 201-208.
- Kalyva, E., & Avramidis, E. (2005). Improving communication between children with autism and their peers through the "Circle of Friends": A small-scale intervention study. Journal of Applied Research in Intellectual Disabilities, 18, 253–261.
- Leach, D., & Duffy, M. L. (2009). Supporting students with autism spectrum disorders in inclusive settings. Intervention in School and Clinic, 45, 31–37
- National Institute of Neurological Disorders and Stroke (NINDS). (2015b, November 3). Retrieved from <a href="http://www.ninds.nih.gov/disorders/autism/detail-autism.htm">http://www.ninds.nih.gov/disorders/autism/detail-autism.htm</a>
- Rao, P. A., & Beidel, D. C. (2009). The impact of children with highfunctioning autism on parental stress, sibling adjustment, and family functioning. Behavior Modification, 33(4), 437–451.
- Reichle, J. (1990). National working conference on positive approaches to the management of excess behavior: Final report and recommendations. Minneapolis, MN: Institute on Community Integration, University of Minnesota.
- Roeyers, H. (1996). The influence of non-handicapped peers on the social interactions of children with a pervasive developmental disorder. Journal of Autism and Developmental Disorders, 26, 303–320.
- Sailor, W. (1996). New structures and systems change for comprehensive positive behavioral support. In L. K. Koegel, R. L. Koegel, & G. Dunlap (Eds.), Positive behavioral support: Including people with difficult behavior in the community (pp. 163–206). Baltimore, MD: Brookes.
- Schaaf, R.C. & Miller, L.J. (2005). Occupational therapy using a sensory integrative approach for children with developmental disabilities. Mental Retardation and Developmental Disabilities 11, 143-148.
- Stainback, S. B., & Stainback, W. C. (1996). Inclusion: A guide for educators. Baltimore, MD: Brookes.
- Strock, M. (2007). Autism Spectrum Disorders (Pervasive Developmental Disorders). Centers for Disease Control and Prevention (CDC). (n.d.-a). Autism Spectrum Disorder (ASD): Signs and Symptoms. Retrieved April 2015, from <a href="https://www.cdc.gov/ncbddd/autism/signs.html">www.cdc.gov/ncbddd/autism/signs.html</a>
- Vasilopoulou, E., & Nisbet, J. (2016). The quality of life of parents of children with autism spectrum disorder: A systematic review. Research in Autism Spectrum Disorders, 23, 36–49.
- Gray, C. (2000). The new social story book (Future Horizons, Inc). Texas: Arlington. (Original work published in 1994).
- Harrower, J.K. & Dunlap, G. (2001). Including children with autism in general education **156** | P a g

#### OEconomia Research Article

classrooms. Behavior Modification, 25(5), 762-784.

- American Psychiatric Association. (1952). Diagnostic and Statistical Manual of Mental Disorders, Washington, DC: Author.
- Autism Society of America (2018). Home | Autism Society of America [online] Available at: http://www.autismsource.org [Accessed 19 June, 2018].
- Baghdadli, A., Pascal, C., Grisi, S. and Aussilloux, C. (2003). Risk factors for self-injurious behaviors among 222 young children with autistic disorders. *Journal of Intellectual Disability Research*, 47: 622–627. doi: 10.1046/j.1365-2788.2003.00507
- Bashir, A., Yaqoob, M., Ferngren, H., Gustavson, K. H., Rydelius, P. A., Ansari, T., & Zaman, S. (2002). Prevalence and associated impairments of mild mental retardation in six-to tenyear old children in Pakistan: a prospective study. Acta Pediatric, 91(7), 833-837.
- Berebitsky, D., Goddard, R. D., Carlisle, J., Bundick, M., Quaglia, R., Corso, M., Agosto, V. (2014). An examination of teachers' perceptions of principal support for change and teachers' collaboration and communication around literacy Instruction in reading first schools. Teachers College Record, 116(4), 1-28. Retrieved from <a href="https://eric.ed.gov">https://eric.ed.gov</a>
- Conroy, T., & Yell, M. L. (2019). Free appropriate public education after Endrew F.v. Douglas County School District (2017). Touro Law Review, 35(1), 101–169. Retrieved from <a href="https://www.tourolaw.edu">https://www.tourolaw.edu</a>
- Gray, D. E. (2006). Coping over time: The parents of children with autism. Journal of intellectual disability research, 50(12), 970-976.https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2788.2006.00933.x
- Hodgetts, S., Nicholas, D., & Zwaigenbaum, L. (2013). Home sweet home? Families' experiences with aggression in children with autism spectrum disorders. Focus on Autism and Other Developmental Disabilities, 28(3), 166-174.https://journals.sagepub.com/doi/abs/10.1177/1088357612472932
- Landrigan, P. J., Lambertini, L., & Birnbaum, L. S. (2012). A research strategy to discover the environmental causes of autism and neurodevelopmental disabilities. Environmental health perspectives, 120(7), a258-a260.
- McConkey, R., & Bhlirgri, S. (2003). Children with autism attending preschool facilities: The experiences and perceptions of staff. Early Child Development and Care, 173(4), 445-
- Mubbashar, M. H., & Saeed, K. (2001). Development of mental health services in Pakistan. EMHJ-Eastern Mediterranean Health Journal, 7 (3), 392-396, 2001.452.
- Murphy, G. (2005). Understanding challenging behavior. In Severe Learning Disabilities and Challenging Behaviors (pp. 37-68). Springer, Boston, MA. <a href="https://link.springer.com/chapter/10.1007/978-1-4899-2961-7">https://link.springer.com/chapter/10.1007/978-1-4899-2961-7</a> 3
- National Institute of Neurological Disorders and Stroke (NINDS). (2015b, November 3). Retrieved from http://www.ninds.nih.gov/disorders/autism/detail autism.htm
- Ostmeyer, K. & Scarpa, A. (2012). Examining school-based social skills program needs and barriers for students with high-functioning autism spectrum disorders using participatory action research. Psychology in the Schools, 49(10), 932-941.
- Rodríguez, I. R., Saldaña, D., & Moreno, F. J. (2012). Support, Inclusion, and Special Education Teachers' Attitudes toward the Education of Students with Autism Spectrum Disorders. Austim Research and Treatment, 2012, 1-8.doi:10.1155/2012/259468