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## **SUPPORTING PUPILS WITH AUTISM SPECTRUM DISORDER IN EDUCATIONAL SETTINGS**

**Abstract:** Autism spectrum disorder (ASD) is a developmental disorder, which affects the way a person communicates with and relates to other people and the world around them. About 1.55% of the general pupil body receive additional supports because they have been diagnosed with an ASD. The focus is on the needs of pupils with ASD and how they can be supported to achieve their potential. ASD is a spectrum condition, so some pupils with ASD require little support in school and are relatively independent in their learning.

The **aim** of the study is to shown kind of interventions, which can be effective for some pupils with ASD.

**Results:** there are numerous different approaches such as: antecedent-based interventions, behavioral packages, cognitive behavioral intervention, comprehensive pre-school or early interventions/programmes, discrete trial teaching, early intensive behavioral interventions, exercise, extinction, functional behavior assessment, functional communication training, joint attention, language training, modelling, multi-component socials interventions, naturalistic intervention or naturalistic teaching strategies, parent-implemented interventions, Picture Exchange Communication System, pivotal response training, schedules, social narratives, social skills training, social communication training, technology-aided instruction and intervention, visual support, structured play groups, and many others.

**Conclusions:** classrooms are social environments that rely heavily on being able to interact, socialize and communicate with others effectively. The challenges that pupils with ASD face with regards to communication skills and socializing can intensify their feelings of stress, anxiety and depression. This can lead to a decrease in academic performance. Working with any of these methods can improve outcomes they can achieve.

**Keywords:** Autism spectrum disorder, Pupils, Support, School, Classroom

### **Introduction**

Autism spectrum disorder (ASD) is a developmental disorder, which affects the way a person communicates with and relates to other people and the world around them. ASD is the name for a range of similar conditions including autistic disorder, Asperger syndrome and pervasive developmental disorder – not otherwise specified (PDD-NOS) (APA, 2013). About 1.55% of the general pupil body receive additional supports because they have been diagnosed with an ASD (Brugha et al., 2013). ASD can affect children and young people with any level of intellectual ability, from those who are profoundly learning disabled, to those with average or high intelligence. Having ASD doesn't necessarily imply learning difficulties. Some children and young people have learning difficulties and require high levels of support, whilst others such as those with Asperger syndrome or 'high-functioning autism' are very academically able. Some children may also have additional specific learning difficulties. It is very common for children and young people with ASD to have sensory issues, alongside impairments in social imagination, and a narrow repetitive pattern of interests and activities. These challenges can cause higher than average levels of stress, anxiety and depression. The focus is on the needs of pupils with ASD and how they can be supported to achieve their potential. ASD is a spectrum condition, so some pupils with ASD require little support in school and are relatively independent in their learning.

Macedonian education available in schools for pupils with ASD – particularly in primary – has improved remarkably in recent years. The system recognizes that many schools, primary post-primary and special, have embraced open and inclusive policies for educating this cohort of students. It is disappointing therefore that some mainstream schools have restrictive practices which effectively exclude students with ASD – even from special classes – unless they are able to follow academic programmes and be included in mainstream classes for at least a part of the week. Despite the growth and corresponding improvement in supports and educational provision for students with ASD, the availability of appropriate mainstream and special placements continues to be problematic in certain areas of the country, particularly for those with more complex learning and/or behavioral difficulties. It can be found confusion in the system about the purpose and role of special classes for students with ASD, with some schools appearing to believe that the classes are resourced only to cater for the more able students with ASD. We are concerned that some students may be inappropriately placed or retained in mainstream or special classes when they might be more appropriately placed in a different setting.

Majoko (2017) argues that the description of characteristics associated with ASD is challenging, given the many individual differences amongst learners with ASD. Not all learners with ASD can be described as experiencing identical challenges. However, some common challenges that may be experienced by learners with ASD have been described in the literature. Such challenges include difficulties in interacting with others, verbal and non-verbal communication challenges, a prevalence of repetitive behavior and difficulties processing sensory input (Majoko 2017; Park, Chitiyo & Choi 2010).

The **aim** of this review article is to shown type of interventions, which can be effective for some pupils with ASD.

## NCSE's 7 Principles

The National Council for Special Education (NCSE) in USA supports an inclusive education system that enables children and young adults to achieve their potential.

**Principle 1:** Students, irrespective of the severity of ASD and/or cognitive ability, are welcome and able to enroll in their local schools.

**Principle 2:** Students with ASD have an individualized assessment, which informs teaching and learning and forms one part of an ongoing and cyclical process of assessment, intervention and review of outcomes.

**Principle 3:** Access to education and care is available on an equitable and consistent basis to students with ASD.

**Principle 4:** Students with ASD have access to a wide-ranging curriculum that is relevant and appropriate to their needs.

**Principle 5:** Students with ASD have access to available educational schemes and supports on the basis of their needs rather than disability category.

**Principle 6:** Available resources are used to maximum effect to drive improved outcomes for students with ASD and State services work together to achieve this.

**Principle 7:** Parents' role as the child's natural and primary educators is respected (NCSE, 2015).

Bond et al. (2016) identified eleven different types of interventions. These categories are not mutually exclusive, and a specific intervention may span two or three categories of focus. The categories just provide a way of grouping similar types of interventions and approaches together. Within each category, there are numerous different approaches. In the table 1, examples of interventions are provided.

**Table 1**

Examples of interventions explored within this document, categorized by focus

<b>Intervention focus</b>	<b>Type of Intervention</b>
Joint attention	Play-based/turn-taking intervention
Social interventions	Peer-mediated instruction and intervention
Social Skills Training	
Modelling	
Prompting	
Reinforcement	
Pivotal response learning	
Play based interventions	Structured play groups
Challenging / interfering behavior	Behavioral interventions
Self-management	
Naturalistic interventions	
Antecedent-based interventions	
Differential reinforcement of alternative, incompatible or other behavior	
Social narratives	
Discrete trial teaching	
Parent-implemented intervention behaviors	
Exercise	
Adaptive / self-help	Visual support
Technology aided instruction and interventions	
Communication interventions	Milieu (social environment) teaching
Incidental teaching	
Picture exchange communication system	
Video modelling	
Language training	
Task analysis	
Pre-academic / academic skills	Direct instruction
Comprehensive interventions	
Multi-sensory interventions	
Cognitive	Cognitive behavioral interventions

## Who Can Put the Interventions into Practice?

The evidence indicates that a wide range of people can effectively put these interventions into practice. The implementers in the majority of the interventions reviewed were teachers and other educators (such as teaching assistants). Other implementers were children and young people without ASD, parents and carers, and children and young people with ASD. Implementers may require training in the specific techniques of the interventions to deliver them effectively.

## Outcomes

The types of outcomes that might be achieved, and the extent of the outcomes, are likely to vary depending on the severity of ASD, the type of intervention implemented, the age of the child or young person, and other factors that might affect a child or young person's learning. The interventions were designed to improve children and young people's skills and behaviors. In most cases the interventions focused on either developing social skills (communication skills, or the reduction of challenging or disruptive behavior) or academic attainment (for example, abilities in reading and maths). A few of the interventions focused on improving school readiness, the wellbeing of children and young people, vocational skills and improving their play and interaction with peers. The evidence indicates that the interventions did, in some cases, lead to positive outcomes for children and young people with ASD. The outcomes identified, starting with those most frequently occurring, centered around:

- **Improved attainment and academic performance** – for example, increased readiness for school, improved test results, or improved vocational skills.
- **Improved social skills and communication** – with peers, teachers and/or others.
- **Improved behavior** – for example, reduced challenging or interfering behaviors, improved behavior during play, increased self-regulation, increased adaptive or self-help behaviors, and improved joint attention (positive attention in an activity by two or more people).
- **Improved wellbeing** – for example, improved mental health. Peer mentoring for students with ASD has been shown to increase levels of self-esteem, increase social satisfaction and decrease levels of bullying experienced by students (Bradley, 2016).

## Other Points to Consider When Designing and Providing Support Packages

There are several things to be considered when designing and implementing support for children and young people with ASD. Some key considerations are presented below, but there may be other factors affecting the specific child or setting that should be considered.

### Severity of ASD and Effectiveness

Most studies do not address whether the effectiveness of an intervention depends on the severity of ASD, and acknowledge the need for further research in this area.

### Age and Effectiveness

There is a gap in the evidence base regarding the effectiveness of interventions targeted at older young people (over 16s) diagnosed with ASD, and whether the effectiveness of interventions differs with age. Only five of the studies reviewed focus on participants aged 14 and over 29. With this limited evidence base, it is not possible to assess the effectiveness of different interventions for children and young people of differing ages.

## **Setting Type and Effectiveness**

Most of the studies found interventions could be flexibly adapted and implemented effectively in a variety of settings. There was no evidence that setting type had a particular impact on the effectiveness of an intervention. However, it is important to consider where a particular approach will be implemented when planning interventions.

## **Intervention Length and Effectiveness**

It is important that each intervention is implemented for long enough to achieve positive outcomes. However, there was no conclusive evidence to suggest that the length or duration of an intervention had a significant impact on the effectiveness of that intervention.

## **Other Considerations**

Other key considerations that need to be thought about when planning or delivering support for young learners with ASD include:

- Whether or not a specific intervention or approach is available within the locality. For example, not all of the interventions and approaches outlined in this document are available in every country or local authority area. It may be worth checking what is available via the local authority.
- Any ethical implications or concerns associated with the particular intervention or approach.
- Practical implications associated with its implementation. For example, is there sufficient space available to implement the approach? Does an approach require peace and quiet, or few distractions? What resources are required (e.g. visual display equipment, toys, Lego etc.)?
- The capacity (time) and capability (skills and experience) of those implementing the intervention. What might be feasible and realistic? What else does the intervention have to align with? Is any training or support needed?

## **Crisis Intervention**

It is important to realize that challenging and/or violent behavior is not necessarily linked to special educational needs but is a broad, societal issue. While challenging behavior can be associated with a diagnosis of ASD, it is inappropriate to consider that all students with ASD present with it. Only a minority of students who may or may not have special educational needs demonstrate serious, challenging or violent behaviors in school settings. Schools have a duty of care to all their students and staff. Their management of challenging (and sometimes violent behavior) must be consistent with a student's right to be treated with dignity and to be free of abuse. Schools should make every effort to prevent the need for the use of restraint and seclusion. School policies in this area should form part of overall policy on the positive management of behavior which emphasizes the importance of having: preventative strategies in place to avoid the emergence of challenging behavior; good staff/student relationships to promote positive student behaviors; and early intervention to manage challenging behavior if/when it arises. It is clear that some schools feel let down by the educational and health systems. They consider they are being asked to educate a small number of students who at times can exhibit extremely challenging and sometimes violent behaviors towards both themselves and others, without access to sufficient, necessary clinical and therapeutic advice and guidance. The reality is that staff members, including teachers and SNAs, are currently being injured in schools. While such incidents are few, they are nevertheless serious when they arise. Views expressed on this issue were perhaps the most forceful, divisive and emotional heard during our consultation process. They

ranged from: under no circumstances should separate rooms be used in schools for the management of behavior to the absolute need for separate, lockable rooms for the safety of the student, other students and staff.

The literature is clear that many students with ASD can need time and space to self-regulate their behavior and to avoid sensory overload. In our view, the only legitimate rationale for use of seclusion and/or restraint is in an emergency situation to prevent injury or harm to the student concerned or to other students or staff members. Even then, as schools are not approved centers under the Mental Health Act, great care should be taken not to break this law in their use.

## **Supports for Families of Children with ASD**

ASD is a lifelong condition and parents and families play an important role in the life of a child with ASD. We recognize that parents can face additional emotional, practical and financial stresses in supporting their child and that they require ongoing information on services available. We understand the importance of adopting a child centered approach within the family context, in supporting parents and families and in equipping them with the relevant knowledge and understanding of the ongoing impact an ASD diagnosis may have on their lives. We should be aware of how important respite services can be in providing a break for parents and families and indeed for the children with ASD themselves. We believe these services have the potential to contribute enormously to making family life sustainable for all members and need to be equitably available based on the needs of their child. It is for this reason that we believe parents should not be obliged to bring their children to and from respite to school, as this can seriously erode their time for respite. Positive impact of parent education were identified, including reductions in stress and anxiety, improved coping, improved parent-child interaction and communication, improved understanding of ASD, efficacy and confidence and improved parental quality of life (Preece and Trajkovski, 2017).

## **Conclusions**

Classrooms are social environments that rely heavily on being able to interact, socialize and communicate with others effectively. The challenges that pupils with ASD face with regards to communication skills and socializing can intensify their feelings of stress, anxiety and depression.

This can lead to a decrease in academic performance. Working with any of these methods can improve outcomes they can achieve. Having ASD doesn't necessarily imply learning difficulties.

Some children and young people have learning difficulties and require high levels of support, whilst others such as those with Asperger syndrome or 'high-functioning autism' are very academically able. Some children may also have additional specific learning difficulties. Continued sharing of experiences and the ongoing development of collective pedagogic strategies that support the learning of all, including the learning of those with ASD, is of greater value than ongoing debates on which educational settings are most appropriate. The focus on placements and arguments for and against special school placements can be counterproductive. Focusing on where learners should be educated detracts from considerations on how best to support learning for diverse groups of learners. The end goal for inclusive education is an inclusive society, one in which opportunities are open to all people.

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## THE OPINION OF THE MAINSTREAM SCHOOL TEACHERS ON THE CONTENT OF THE AUTISM TRAINING: THE A-CLASS PROJECT

**Abstract:** Autism in the classroom is hard for teachers to deal with, especially as many children on the spectrum have accompanying challenging behavior. Giving accurate information about autism and behavior to teachers and teaching them to adapt their curriculum using good autism practice has been shown necessary to be effective in improving children's education. However, in some parts of Europe, such education is extremely limited or non-existent.

The aim of this article is to present initial research of the multinational project funded by Erasmus + program that has been developed to establish teacher education training program in six European countries based on Applied Behavior Analysis (ABA) method.

**Methodology:** To ensure that the training is relevant and appropriate a survey was created out in Autumn 2020 to identify the areas of training that they felt most important. A total of 223 respondents from seven countries took part in the survey: Denmark, Italy, Spain, Macedonia, Cyprus, Czech Republic, and Croatia. Data were evaluated with descriptive approach.

**Results:** Most of the respondents (60.4%) did not receive any training in autism spectrum disorders (ASD) during university studies and more than half of the respondents (53.1%) have never heard of Applied Behavior Analysis (ABA).

**Conclusion:** Teachers agreed that they need additional education. There was no wide difference between countries regarding the content that they felt important to be included in the training curriculum. Six procedures were suggested for training: Behavior management strategies, Functions of behavior, Using reinforcement in the classroom, Extinction, Token economies and Group contingencies.

**Keywords:** Autism, ABA, Behavior