



## Restricted, repetitive and stereotyped patterns of behaviour, interest and activities

### Part One: Managing special interests in young children with autism.

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“Obsessions”, “circumscribed interests”, “special interests”, “routines”, “rituals”, “preoccupations” are some of the terms used when describing the behaviour of young children with autism. These behaviours belong to one of the three core areas of impairment in children with autism. To put these behaviours in perspective it is helpful to go back to diagnostic criteria and consider the three core areas affected in children with autism. According to DSM-IV-TR (2000) these are:

1. Qualitative impairment in social interaction
2. Qualitative impairments in communication

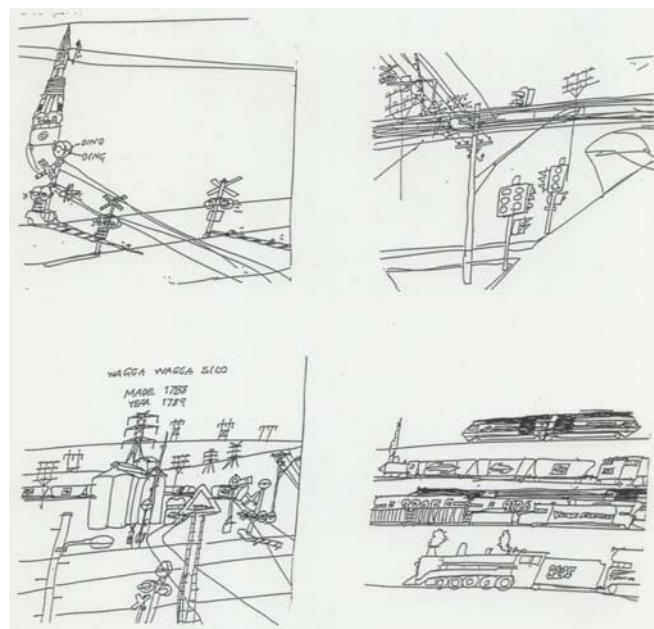
*And the area this fact sheet is concerned with:*

3. Restricted, repetitive and stereotyped patterns of behaviour, interest and activities, as manifested by at least one of the following:
  - a. encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus.
  - b. apparently inflexible adherence to specific non-functional routines or rituals.
  - c. stereotyped and repetitive motor mannerisms e.g.: hand or finger flapping or twisting, or complex whole-body movements.
  - d. persistent preoccupation with parts of objects.

Special interests or obsessions fit into this third area of “restricted, repetitive and stereotyped patterns of behaviour, interest and activities”. Children must have at least one of the symptoms from this area of impairment, together with symptoms from the other two areas for a diagnosis of autism to be made. So young children with autism may have preoccupations, *and/or* non-functional routines or rituals *and/or* motor mannerisms *and/or* preoccupations with parts of objects. Some children with autism may present with all of the symptoms in this core area while others may have only one or two. Recent research suggests that these symptoms are more likely to occur after about three years of age.

Because autism is a developmental disorder, symptoms will change over time and with age and development.

What is important is that with each of these symptoms, there is a descriptive word used to emphasise that we are not talking about occasional odd interests or odd movements. These are “encompassing” preoccupations, “apparently inflexible adherence” to routines and rituals, “repetitive” motor mannerisms, and finally, “persistent” preoccupation with parts of objects. All young children can have favourite toys and activities, and favourite topics of conversation, but for the child with autism, these interests become intense and focussed to a degree that exceeds what is expected in typically developing young children. Some children will move from one obsession to another and the obsession may last for weeks or months before it changes. Others may develop an interest, for example, in trains and Thomas the Tank Engine in early childhood and continue with this interest through adolescence and into adulthood. Below is an illustration by a teenager with autism who at three years of age would only play with his Thomas trains and only wear Thomas clothes. You can see that the train obsession has continued and he now draws complex pictures of railway sidings, trains and railway crossings.



## Why do children with autism develop special interests and obsessions?

Recent research is helping us to understand how children with autism think and learn. The findings of brain imaging studies are pointing to problems in several areas of the brain. For example: increased brain volume but decreased grey matter in the limbic system (social cognition and emotions); Reduced neurons in cerebellum (motor) and parietal lobes (attention); Abnormalities in prefrontal cortex (executive function) and fMRI decreased activity in fronto striatal circuits (executive function).

These brain anomalies affect emotions and behaviour. For example, we know that some children with autism have difficulty moving from one task or activity to the next. They can have an inability to move the focus of their attention – they get stuck and cannot shift their attention easily. This might be perceived as being obsessed with an activity or thought but may also be explained by problems with weak central coherence (inability to integrate

detail into the whole). Poor executive function (the ability to plan, time, adapt behaviour to act appropriately and with relevance to a situation) may explain why some children are rigid and inflexible and would prefer to follow strict routines. These behaviours may also occur when children are excited or anxious.

#### Some of the problems children with autism have with thinking and learning:

- Difficulty seeing cause & effect relationships
- Focus on details
- Difficulty sequencing
- Difficulties with understanding of time
- Compulsiveness
- Distractibility
- Attending
- Visual thinking

### What can we do to manage special interests and obsessions?

When discussing obsessions in autism, the term 'obsessions' is used narrowly, to indicate strong, repetitive interests. First there needs to be some thought as to how much of a problem the obsession or special interest is for the child and also the family and others such as teachers or therapists. The rule of thumb when making decisions about whether or not to intervene or change behaviour (including special interests or obsessions) is to ask yourself:

- Does the behaviour endanger the child or others?
- Does the behaviour increase the likelihood of social rejection or isolation?
- Does the behaviour interfere with or preclude participation in enjoyable activities and an education programme?
- Will the behaviour be acceptable in 5 years time?

In preschoolers with autism, obsessive and special interests are most likely to be judged inappropriate because they fall into the third scenario and interfere with learning new skills and participating in educational programmes. Removal of obsessions is unwise and rarely successful. Take an existing obsession away and a new one will appear that may be worse than the one you removed so care needs to be taken. Early intervention and response to obsessional activities is recommended because the longer an obsession continues, the more entrenched it becomes and more difficult to reduce.

1. **Management, limitation and control** are better than trying to remove obsessions. Gradual change will also be less distressing for the child. This should be done gradually with an emphasis on teaching new skills or play activities.
2. **Time:** Set clear consistent rules about when and where obsessional activity is allowed and when is it not. Photographs or simple behaviour scripts can be helpful (see fact

sheets 29 and 32 for ideas about timetables and first-then strategies). An oven timer that shows time passing for a young child may be helpful when setting limits on the time spent talking about or playing with a favourite topic/activity.

3. **Object:** Limit the amount of a preferred object the child may have. For example,: Only three stones in the pocket, not the whole bag-full. Leave the Thomas trains in the kinder bag. “Blankie” stays in the car.
4. You may find that you can develop some shared activities that utilize obsessions and special interests. For example, play trains together for a set time during the day or evening before bed; go to the library together to find books about the special topic of interests and look at them together.
5. You must be consistent across settings and people when introducing management of obsessions. It is very confusing for a young child with autism if limits are different depending on where and with whom he/she is.



### **Remember obsessions can be used as rewards to increase new behaviours and teach new skills**

There is an “upside” to obsessions and special interests. They can be used as rewards and motivators to teach new skills and behaviours. Studies over the past twenty years have been reporting the successful use of objects of obsession rather than only using the more usual reinforcers such as stickers, food and stars to reward on task performance, and to decrease inappropriate behaviours during work and play sessions. Some special interests also provide a source of enjoyment for young children who have limited play skills.

If the obsession is not dangerous, to the child or others, intruding on learning opportunities or excluding the child from social opportunities it's probably OK to let it go.

### **References and Useful websites**

Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR), (2000)  
American Psychiatric Association

Marjorie H. Charlop-Christy and Linda K. Haymes (2004) Using Objects of Obsession as Token Reinforcers for Children with Autism. *Journal of Autism and Developmental Disorders*, 28, 189-198.

Ami Klin, Judith H. Danovitch, Amanda B. Merz, Fred R. Volkmar (2007) Circumscribed Interests in Higher Functioning Individuals With Autism Spectrum Disorders: An Exploratory Study. *Research and Practice for Persons with Severe Disabilities*, 32, 89-100

National Autistic Society UK “Obsessions, repetitive behaviours and routines”  
[www.nas.org.uk/nasisp/polopoly.jsp?d=1071&a=7103](http://www.nas.org.uk/nasisp/polopoly.jsp?d=1071&a=7103)