



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

### Part Two: Managing routines, rituals and repetitive motor mannerisms.

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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.

Adherence to non-functional routine or rituals and stereotyped and repetitive motor mannerisms 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.

### Why do children with autism do these things?

Some young children with autism develop a resistance to, or fear of, change that then involves being rigid in their approach to their surroundings. Insistence on sameness, routines and rituals begin. Certain items must be placed in particular places and not moved. Objects may be stacked or lined up in a repetitive manner. Certain routes must be followed to and from familiar places. Particular cutlery and crockery must be used or the child refuses to eat or drink. Perhaps confusion coping in a world that is overwhelming is the cause of this behaviour, so the young child with autism responds to this uncertainty by being in control of what they can...usually their immediate environment, the objects in that environment and also the people in it. Repetitive motor mannerisms may occur when some children are excited, anxious, or worried. For others, sensory sensitivities and physical enjoyment may drive repetitive jumping, arm flapping, twiddling of fingers in front of their eyes and covering ears and eyes with their hands.

It must be said that repetitive behaviours/mannerisms in autism is a somewhat neglected area of research. In the past, these behaviours were associated with lower levels of functioning and repetitive motor mannerisms are also seen in children with intellectual disability who do not have autism, so we cannot say they are particular to children with autism. These behaviours were also thought to increase during the preschool years. There is now some evidence that repetitive motor mannerisms develop differently to insistence on sameness and these behaviours follow different trajectories over time.

Richler et al, (2008) concluded that restricted and repetitive behaviours

"show different patterns of stability in children with ASD, based partly on the 'subtype' they belong to. Young children with low NVIQ (non verbal IQ) scores often have persistent RSM behaviours (motor mannerisms) ...However, these behaviors often improved in children with higher nonverbal IQ (NVIQ) scores... Many children who did not have IS behaviors (insistence on sameness) at a young age acquired them as they got older, whereas children who had these behaviors sometimes lost them. Trajectories of IS behaviors were not closely related to diagnosis and NVIQ."

## What should we do about routines, rituals and repetitive motor mannerisms?

First, ask yourself the questions: "How much of a problem is it?" and "Who for?" The answer is often that these behaviours are a problem for parents/carers, teachers and therapists rather than the child him/herself who is quite happy to be preoccupied in these ways. Therefore it is unlikely that the child will want to change his/her behaviour! The rules of thumb when making decisions about whether or not to intervene or change behaviour are 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, adherence to non-functional routines and rituals and displaying repetitive motor mannerisms may be judged inappropriate because they fall into one or more of these categories, or may be tolerated by the family and others and are not seen as problematic.

Let me give some examples:

### 1. Behaviour: Repetitive Pacing

"Andrew" (4 years) paces the fence line in the back yard of his home for about 1 hour every time he arrives home from preschool. This is the only time he paces like this and he was able to tell his parents that it makes him "feel good" when he does this. He is able to come inside and get on with the rest of his day after this pacing. For "Andrew" it seems that this repetitive pacing is necessary for him to calm himself after the social demands of attending the busy preschool environment. His family decided that this was OK and felt they did not need to stop the behaviour because it occurs in the privacy of his own home and does not interfere with anyone else.

### 2. Behaviour: Repetitive flicking of ears.

"Billy" (3 years) was constantly flicking his ears with his finger tips. He has made them bleed with the frequency of the flicking. He did not seem distressed about this, but his family and others were. It was unclear as to why "Billy" was doing this and he generally under reacted to pain so it was not thought to be a sensory issue. A general assessment of his learning, communication and play skills revealed that he had a developmental delay, no functional speech and very few play interests. Observation over one week found an association between "Billy" wanting something and the ear flicking. He would stand beside an adult and flick his ears. Management included

slowly introducing some photographs of desired objects (usually food). "Billy" learned to use these to make requests and as this communication skill increased, the ear flicking decreased.

### 3. Behaviour: Rituals and routines - Shopping aisles.

"Tamsyn" (4 years) enjoyed shopping in the supermarket with her parents and always wanted to go on this outing. However, when they arrived she would scream if her parents did not go down every aisle in the supermarket starting with aisle number 1. She would read the number and then direct her parents down that aisle. At first the family thought it was "cute" that she could read numbers but this behaviour became very problematic when the shopping trip extended into a very long activity. They could not skip the aisles they did not need to buy anything in or "Tamsyn" would throw herself on the ground and scream. Other shoppers pointed and stared or told the parents "She needs a good smack." It was decided that change would be introduced gradually to decrease this routine. At first, shopping was limited to going to buy one item. Before going out, it was explained to "Tamsyn" that mum would be buying "milk today". She was shown a photograph of the type of milk that would be bought and "Tamsyn" knew the aisle number for that item. A simple behaviour script with photographs was prepared and read before the shopping trip. "Car, shop, milk, home." "Tamsyn" also took this with her. Very simple instructions, consistency, use of a reward for "good shopping" and a gradual increase in items to be bought worked to change this rigid routine. (While this was happening, mum and dad did most of the shopping when "Tamsyn" was at child care!)

- ❖ Before developing a response or management plan to deal with restricted, stereotype behaviours it is essential to gather the following information about the child's:
  - ✓ current profile of autism symptoms,
  - ✓ developmental level,
  - ✓ communication skills and
  - ✓ preferred activities (possible use of these as rewards).
  - ✓ Careful observation of the child to find out when and where restricted, stereotype behaviours occur and whether there are any triggers to the behaviour.

**Further reading:**

Emma Honey, Helen McConachie , Val Randle, Heather Shearer and Ann S. Le Couteur (2008) One-year change in repetitive behaviours in young children with communication disorders including autism. [Journal of Autism and Developmental Disorders](#) , 38, 1439-1450

Richler, J., la Huerta, M., Somer L., Bishop, D. & Lord, C. [Stability of Individual Restricted and Repetitive Behaviors in Children with Autism Spectrum Disorders](#). [The International Meeting for Autism Research \(London, May 15-17, 2008\)](#)