

# Children with autism and Thomas the Tank Engine

## Research and findings

In June and July 2001, The National Autistic Society (UK) conducted a survey of 81 parents of children with autism and Asperger syndrome to investigate their putative 'special relationship' with Thomas the Tank Engine. The survey confirmed our assumption from anecdotal evidence that children with autism spectrum disorders associate far more strongly with Thomas the Tank Engine than with other children's characters.

## Summary findings

- Children on the autism spectrum associate with Thomas before any other children's character (57%).
- These children maintain their association with Thomas longer than for other characters, commonly two years longer than their typically developing siblings.
- Around a third of parents consider that their children have an 'obsessive' relationship with Thomas.
- Thomas serves an important role as a comfort blanket / friend in a friendless world for many children with autism.
- Thomas can be a point of entry to the world of communication and learning.
- For some children, Thomas can inspire previously unthinkable leaps of emotion, imagination and symbolic play.

## Why Thomas?

Thomas seems to hold a particular fascination for a number of reasons:

- The calm and clear narration which exaggerates and 'signposts' changes clearly.
- The easy to follow storylines, where something usually goes wrong but it is resolved by the end of the episode.
- The still background and scenery. (Children with autism can be easily distracted by detail and small changes either in sound or movement.)
- The easily recognisable and bold colours.
- The 'friendly' faces whose expressions are exaggerated and are set for some time and so can be understood. "Without doubt it is the faces on each engine which first attracted his interest. The expression on the faces never changes and he knows they won't talk back to him!"

- The accuracy of the models. Most interestingly, copies of the licensed toys are recognised instantly as being less accurate by some children and are rejected as 'not being Thomas'. "They notice a difference in things very easily and so it is important that these little models are exactly the same as the ones on the telly."
- The predictability of the roles played by different characters.
- The suitability of Thomas for identification, listing and collecting, all common characteristics of many children with autistic traits.

## **A developing relationship**

As children with autism develop and grow up, their relationship with Thomas commonly progresses through a number of phases, varying according to their location on the autism spectrum:

- An initial fairly passive affinity with the videos.
- Holding or other fairly passive use of the die-cast toys.
- Lining-up the toys usually in a regular, repeated and rigid order, perhaps according to favourite characters.
- Moving toys up and down on a surface or track in a regular and restricted manner.
- Possibly concurrently with the last two stages, a love of the books which may involve learning stories word perfectly, (even though the words and/or the meaning may not always be understood).
- Re-enactment play (which can appear to be imaginative play) with mechanical Thomas toys which may involve accurate repetition of whole chunks of the script from the videos. (Re-enactment sometimes moves into a 'fantasy' stage where children seem to be living and believe that they are the character or object rather than pretending.)
- Use of the Thomas CD ROM and/or use of the Thomas website, (where a familiarity of Thomas and the characters captures a child's interest when otherwise it might not be drawn to the activity).
- Thomas provides comfort and security

Many parents mention the 'calming', 'comforting', 'security blanket' role of Thomas. Some children had to have their die-cast models with them at all times, including in bed. In other cases the security may involve leaving the video on in the background for the comfort and sound whilst children are eating or involved in other activities.

"It's a kind of security blanket for him. Now he's older he's obsessive with trains of any description, but always goes back to Thomas." (Boy of 12)

"I believe that Thomas has been his security blanket." (High functioning boy of 5)

"It calms him, stops his tantrums, makes him relax and while watching it he learns and interacts with his brother (i.e. if there is a funny scene he looks at his brother and they laugh together). Thomas has been a wholly positive influence." (High functioning boy of 2)

"He carries at least one train in his pocket but a lot more when visiting and staying at Grandmas. As long as he has his Thomas trains wherever he is he's usually very happy." (Medium functioning boy of 7)

## **Thomas can be a friend in a world with few friends**

Children with autism spectrum disorders do not make friends easily. About 10% of parents questioned mention Thomas or other characters being substitute friends.

"He is especially fond of Thomas, Percy, James and Gordon. The four models of these engines have been his substitute friends for many years and accompany him everywhere. The Thomas model was accidentally lost on holiday, and we were unable to find an exact replica for several months I shall never forget the shriek of pure joy when he was presented with the replacement." (Medium functioning man of 21)

Thomas may remain a friend when security is needed through teenage years

"I haven't tried to move him on from Thomas because Thomas was his friend when he was feeling sad and low and sometimes is still."

This association with Thomas as a friend sometimes merges into Thomas as a fantasy world where children talk to Thomas or the other characters as if they are real and they are one of the characters themselves.

"He sometimes talks to Thomas - I think he probably thinks of him as a friend." (High functioning boy of 6)

"Thomas/James is like his way of escaping into his own little world. He is totally oblivious to what is going on around him." (Medium functioning boy of 4)

This is consistent with other anecdotal reports of children with autism believing that they are the character or object rather than pretending.

## **Learning and Thomas**

About a quarter of responding parents described their children's relationship/association with Thomas to be partly about learning, primarily around colours, numbers and language. The significance of Thomas' role in all forms of learning is considerable, but especially noteworthy is the influence on language learning, which is often late to develop and sometimes entirely absent in children with autism.

"He watched very intently. It encouraged speech/ eye contact." (Quite low functioning boy of 15)

"He learned his colours and numbers through Thomas and grew in confidence when he was correct." (High functioning boy of 5)

"He has very limited speech but he said Thomas and Gordon when he has seen them on TV." (Quite low functioning boy of 3)

"The names of the engines were the first words he used before Mum and Dad!"

Parents also describe the interest in Thomas as a 'gateway' to learning: in other words without the interest in Thomas their children would not have had the motivation or interest to try new skills such as computer skills.

### **Thomas - a stimulus for emotional learning and gateway to other learning**

Most interesting perhaps is the learning of facial expressions and emotions mentioned spontaneously by 8% of parents. Even when a child with autism speaks, their 'communication' is often poor because of the missing 'theory of mind' - understanding people and their thoughts and emotions. The suggestion from this research is that Thomas helps children with autism to build up some basic 'theory of mind' knowledge.

"It's really encouraged me ... he's really responded to it and hes finally recognising feelings. It's been quite long in coming. He recognises these smiley and sad faces."

"He has learnt from the Thomas stories about feelings happy and sad. It has enabled us to help him make sense of some of his daily experiences by using Thomas stories." (Quite low functioning boy of 13)

This may help to make sense of concepts such as friendship which would otherwise still be alien. A boy of 9 said that he had learnt about friends from Thomas and that he had friends himself now. He said that he learnt why Thomas was friendly with some of the characters and why others were enemies.

### **Does this tell us anything useful about learning for children with autism?**

Children with autism often respond well to visual impact. One-to-one-teaching, because it involves an element of social interaction, can be stressful and problematic. It may be that traditional teaching is less successful for some children with autism than computer based interactive teaching would be.

### **Symbolic play**

Symbolic play is normally thought to be absent or very poorly developed in children with autism. Therefore, although there are only a few examples of symbolic play from the research they are still noteworthy.

"I remember they were doing some tests on him. They had different coloured blocks. They had red blocks, green blocks, blue blocks. All he was interested in was turning them into a Thomas game: the red one was James, the green one was Percy and the blue one was Thomas. And he was moving them around the table like they were trains. He was not at all interested in what the people running the tests were trying to focus him on. He was saying: 'So you be Thomas and I'll be James.' And then he'd try a little bit of a conversation. 'Where are you going today, Thomas?'"

"He really does seem to concentrate on Thomas. It's the only real programme that he does, he's never really imitated anything but with Thomas he does even if this is by lining the characters on the kitchen worktop and covering them in broken up tea bags (tar on James) and soap suds (snow on Thomas). It's very messy, but it is progress." (Medium functioning boy of 6)

## **Common language traits are evident in the way children with autism associate and play with Thomas**

The use of language around Thomas displays common patterns. Children with autism spectrum disorders often recite whole chunks of text, in many cases before they can understand a lot of the words they are using. There is a pattern of progression to using script from Thomas almost appropriately in other life-situations and in some cases so appropriately that one wouldn't know the language was from Thomas if one didn't know the scripts. Echolalia is common: echoing and repeating specific words or a few phrases frequently without at first understanding them:

"He started talk echolalically using phrases from Thomas videos, eventually using them in context! Even his first foray into reading was spelling engine names with magnetic letters on the fridge." (High functioning boy of 5)

"He speaks in Thomas language constantly e.g. 'Bust my buffers' as an expression of surprise." (Medium functioning boy of 5)

Parents can use the language around Thomas to their advantage, disciplining their children with Thomas script or symbolism with such expressions as "Stop, the signal is up". In some cases in this research 'normal' language failed as a communication tool where Thomas language worked.

## **Conclusion**

Thomas plays a vital role in the lives of some children with autism, acting as an initial point of entry into realms as vital as speech, emotion and imagination. For many other children on the autism spectrum, Thomas serves as a comforting, familiar and reassuring presence in a world that is frequently frightening and incomprehensible.

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I freely admit this is 'nicked' from the National Autism Society's website and can be found at: <http://www.autism.org.uk/about-autism/our-publications/reports/our-policy-and-research-reports/children-with-autism-and-thomas-the-tank-engine.aspx>

So all credit goes to them for this useful article!