

‘Someone needs to do crazy stuff’

“He’s the nutter who does all the crazy stuff” was the response from a colleague’s son when I asked about the “hyper” child in his class. Not the way I would like to see Attention Deficit and Hyperactivity Disorder, or ADHD, characterised more generally, but it made me think that sometimes perhaps we all need someone to do the crazy stuff.

There is much debate about the nature, prevalence and appropriate intervention when it comes to learning difficulties such as ADHD. As with many neurological disorders, because of the continuum of symptoms and the varying degree of severity, it can be difficult to diagnose a particular problem among potential overlapping candidates (hence it is more useful to talk about autistic spectrum disorders rather than autism).

Yet within this range of symptoms it is often all too easy to forget any positive aspects of ADHD as we are trying to understand and cope with the negative. While the disorder is not determined by

Learning disorders: modern society’s benefit or bane?

Susan Greenfield on why ADHD has some positive points

genetic factors, we have discovered that at least some of the genes indirectly associated with it seem to have been selected since the appearance of modern humans: it seems that we have evolved to have a certain level of hyperactivity within human populations.

So why might evolution have fingered these genes for us? It has been suggested that some of the typically inattentive behaviour comes about through novelty seeking and risk taking, traits associated with at least one of the clutch of genes linked with ADHD. In groups of early humans, individuals who excessively seek novelty might have aided migration, improved foraging and allowed for the early detection of dangers – great for the Mesopotamian plains but not

necessarily characteristics considered desirable in a school setting.

If we think a little more about the evolutionary advantages of novelty seeking and risk taking, the overarching benefit seems to be the acquisition of new knowledge through exploration. This behaviour may be responsible for bringing information to light, though not necessarily for exploiting, using or even remembering it.

In some circumstances this may be beneficial for the group, even if not particularly advantageous for the individual. Knowledge about fire includes not only its definition and appearance, but also what looks like fire but is not, what happens if you shout “fire”, and how much it hurts to touch a hot gas cooker.

This auxiliary information that builds meaning around the semantic definitions is often learned through exploration (or observation of exploration) rather than through teaching.* As we strive to prepare our young





people for a prosperous and productive life in the burgeoning knowledge-based economy, perhaps we will come to give greater value to cognitive diversity. Of course we should do as much as we can to help address the attention difficulties of these children through diet, exercise, teaching style and, where necessary, medication.

However, while we attempt to minimise the negative effects of learning disorders, let's not lose sight of how society might benefit from "the nutters who do the crazy stuff". It must have been a nightmare to teach Mozart ■

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References

* J. Williams & E. Taylor (2006) *Journal of the Royal Society Interface* 3, 399-413
