

HIGH, YET UNBALANCED, INTELLIGENCE



“People do not think that we have thoughts and feelings of our own. They think we are stupid.”

~ Meaghan Buckley

They need to know that I am very intelligent. They need to challenge me more. I get bored really easily and when I am bored my mind shuts down. Also my mind is not engaged when I am using my rote speech.

Kim Peek had language areas in both sides of his brain and clearly had a prodigious memory. His missing corpus callosum or integrating network made it impossible for him to piece together all the bits of information he memorized into a meaningful whole, but he had outstanding detail or mechanistic cognition.

Whatever deficits he had in theory of mind or mentalism, the ability that allows most of us to relate to ourselves and others as mental beings, with feelings, motives, beliefs and consciousness of self, he more than made up for with his remarkable memory and mechanical capabilities. He had a remarkable mind for facts and details and the ability to relate to objects in the material world by means of manual, mathematical and visual-spatial skills. 97

Yes, his mind was different, but who is to say whether it was better or worse. People with autism might seem gullible because they are incapable of lying.

They are easily taken advantage of because they are childlike in their innocent belief that everyone is telling the truth. We may pride ourselves in our ability to win friends and influence people, but in the end, does our ability to con and manipulate others really give us the higher ground? Does it make us better?

If you look at the most extreme example of mentalism, you get someone who has superb social, political, and inter-personal skills, but has no qualms about lying and cheating his way to the top. Whereas the most extreme example of mechanism is an autistic savant or the IT experts in Silicon Valley.

Really where fear gets you misled is in being so easily distracted by the outward manifestations of autism. Inside we are unique individuals who have our own sense of reality. Our reality is one of swirling eye popping chaos. Outside. Inside it is less terrifying but it still takes getting used to.

If you had the choice of being born again with or without autism, which would you choose?

I would choose autism. Because I am unique and one of a kind. Everyone is too concerned about doing the same thing. So boring. It isn't a bad thing to be unconventional. It is only a problem when that unconventionality is misunderstood.

And how are you misunderstood?

I am going out of my mind really. Hard to appreciate how much frustration I feel going through the motions of living everyday. People do not think that we have thoughts and feelings of our own. They think that we are stupid.

But sometimes you act stupid, Meg.

Yes, because to act smart I would have to make myself crazy. My behaviors allow me to escape from myself.

Because I have my own idiosyncrasies. Everyone is different. Even when silly, my idiosyncrasies satisfy me.

I am your funny wiring daughter and to be really well I need to express myself in my own way.

In his article, "Autism As a Disorder of High Intelligence," Bernard Crespi hypothesizes that autism involves high, yet imbalanced, intelligence. This is why, although autism is genetically correlated with high intelligence, individuals on the spectrum tend to have substantially lower IQs than controls. 98

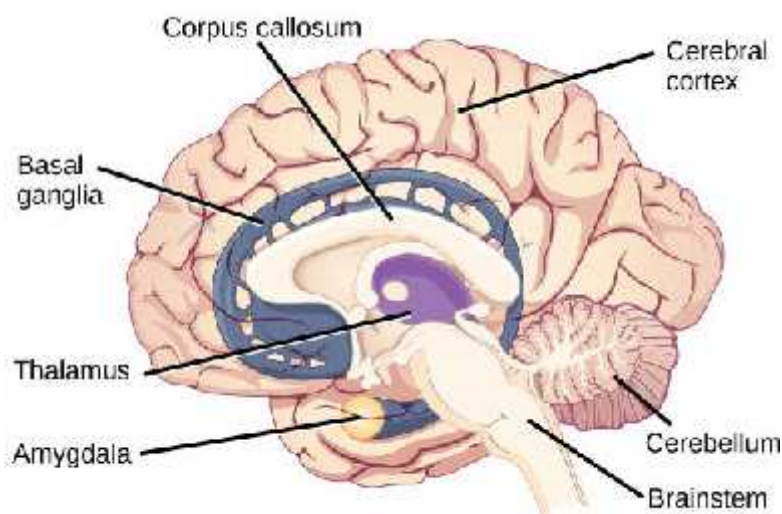
Crespi contends that some or most of the components of intelligence are increased in autism, but they are increased in such a way that overall performance is often reduced. What he means is that people with ASD have enhanced specific skills or interests but a reduced general integrative intelligence more common to neurotypicals. 99

Of course, another explanation is simply that standardized IQ tests were created by neurotypicals for neurotypicals. They were not created to take into consideration differences in brain types.

One explanation for autism intelligence could be their extraordinary memory capacity. Let's examine this further. Just like with computers, memory is a critical function of the brain. There are three types of memory: sensory, short term and long term memory.

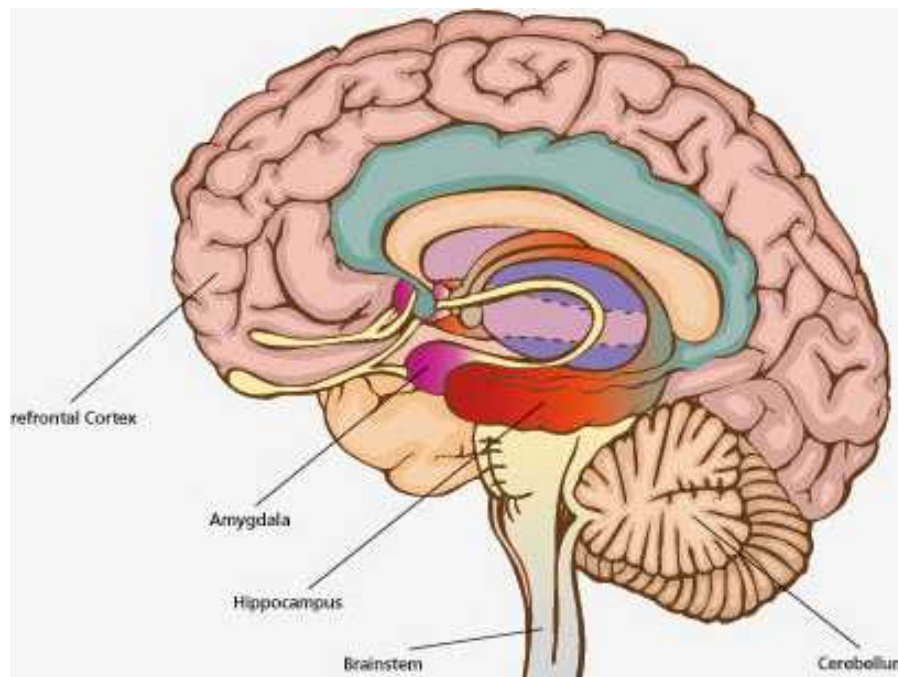
Each type of memory operates differently, but all contribute to the formation of lasting memories. The first two types of memory are limited in duration. For instance, you might remember a phone number for a few minutes but, unless you use it over and over again, it does not pass into long term memory. 100

There are also implicit and explicit memories. Implicit memories are actions or skills that we have learned but cannot verbalize. These memories typically operate on autopilot, without conscious awareness, such as how to tie your shoes, eat with a knife and fork and how to write or type. 101



The cerebellum and the basal ganglia are involved in the formation of these "motor" program memories.

Explicit or declarative memories, on the other hand, can be verbally expressed. These memories include facts, events and spatial memories of locations. These memories are easy to acquire and easy to forget... unless you have autism. 102



Many areas in the medial temporal lobe and prefrontal cortex play a role in the formation and storage of explicit memory, but the key structure involved for short term memory to be encoded into long-term memory is the hippocampus.

Because memory is so important, it does not remain stored in the hippocampus permanently. Instead, long term memories become integrated into the cerebral cortex. This process is known as cortical integration and it protects and preserves the information stored in the brain. 103

So it is quite possible that as fast and flexible as our neurotypical brains are, the autistic brain - like the very latest computer model - is capable of a lot more information storage. We might have more RAM, but they have a bigger, better hard drive, probably due to some form of neuronal recycling.

Areas of the cortex that are not being used for such things as planning, problem solving, impulse control and social skills are recycled for storing memory of just about everything an autistic person hears and sees. Since they don't fine tune or

filter out much information, more detail passed through the cerebellum to the hippocampus and from there to areas in the cerebral cortex.

I have an amazing memory for details. I remember all of my toys and all of my educational games in minute detail. You would be surprised at how much information I absorb just existing. Tiny itty bitty details.

We assume that people with autism are mentally handicapped because they are not able to speak like we do. They are not able to move as gracefully as we do. They sometimes behave strangely and are socially inept. How could they possibly be as smart as us, if they don't resemble us in every other way?

Unfortunately, this is the current state of mind of almost everyone where autism is concerned. **Everyone is understanding, but no one really understands.**

But, as Meaghan says, we have to start somewhere in setting the record straight, because the longer we go on assuming autism is a disability, rather than a remarkable ability that we would be wise to appreciate and learn from, the longer we will all miss out.

Autism easily resembles mental retardation if misunderstood. Really everything boils down to understanding.