The Wright Perspective

Social Commentary from the C-Suite to Main Street

Autism and How To Treat It

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People with autism have normal intelligence, but they are unable to communicate their thoughts and feelings. In fact, many of them have a very high IQ. Because of their inability to communicate, special tests are required in order to measure their intelligence accurately. Those with a special ability are called autistic savants.

What causes autism? Much research is taking place, but there still is no good answer. There are many theories about the cause, and there is so much data that it makes research quite a daunting task. Just as I did in my blog on Gulf War Syndrome, we can use common sense to help dismiss many leading theories.

The numbers: 1 out of 150 newborns are autistic, and it is four times more common in boys. These numbers are pretty much consistent around the world.

If the cause of autism was a vaccine, I would expect to see it spread evenly between boys and girls. I would also expect to see cases only in areas where the vaccine was administered. I'm not implying that every vaccine is safe, but I don't believe this can be the cause of autism.

If our food, water, or toxins in the atmosphere caused it, I don't think it would be so evenly distributed across the world.

Because of the frequency and distribution of autism cases, there has to be something very fundamental that causes it. My personal theory is that autism is an evolutionary change in human development. I know that may sound crazy, but as humans advanced beyond being hunter-gatherers, our bodies are having to make rapid changes to suit our new environment. As we become so bombarded by information, the brain is having to rewire itself. One UK study found that many of the fathers and grandfathers of autistic children were engineers. Is it possible that autism is an evolutionary step forward for humans?

The amygdala is the section of the brain that controls our reaction to fear. During the development of an autistic child, the amygdala grows faster than normal. Since the amygdala is growing faster than the rest of the brain, it becomes compressed and many neurons are destroyed. If the amygdala is the cause of autism, then the search for a cure may be difficult. We just don't know enough about the brain to fix this.

Although the cause and cure is uncertain, we still must find an effective way to treat the kids already born with autism. There already aren't enough teachers for our schools, and there is no way we can give the one-on-one attention needed for 1 out of 150 children. This means it will be left up to the parents to administer the complex care needed for their children.

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There is a very good documentary on autism called "A Mother's Courage: Talking Back to Autism" that is airing on HBO. Parents and educators will find the film both inspirational and enlightening. I believe the treatment developed by Soma Mukhopadhyay will be effective in treating almost every case of autism. It is very important that parents intervene as early in child development as possible, but Soma's technique of rapid prompting is just as effective on adults. The early diagnosis and treatment of autism is critical so they can start rebuilding the connections in their brain as soon as possible.

So how do we treat kids with autism? First, you must recognize that the kid is NOT stupid. You must treat them just the same as you would treat a "normal" child. They are quite capable of learning, they just can't communicate with you. The primary goal is to provide them with the tools they need to communicate. Once they are able to communicate effectively, they can then be integrated into the normal classroom environment.

People learn new things in different ways. An auditory learner has to hear things in order to learn. A visual learner has to see things. A tactile learner has to actually touch and do things. The second step of treatment is identifying the type of learner, as well as determine which brain circuits are working properly. Once you know which senses are functioning, you simply present new information to them in a form compatible with their method of learning.

To identify their method of learning, you must pay close attention to their activities. The lack of correct wiring in their brain causes some senses to be dominant over others. Many times their brain can not process more than one sense at a time, so if you try to use all of their senses they just shut down. Auditory hypersensitivity will cause them to cover their ears. Visual sensitivity can be identified by the way they look at objects, many times they look out of the corner of their eyes. Tactile sensitivity can be displayed by trouble walking or difficulty in grasping objects.

Because of the high sensitivity of a particular sense, they will self-stimulate (or "stim") in order to calm down. Since their brain can't process all senses at once, stim basically overloads the brain circuits and shuts down all of the senses. Although they must be allowed to stim often, it is impossible to teach them while they stim since their brain is effectively shut down. It may sound mean, but you must regulate the amount of time spent stimming. To do this, Soma sets a timer and explains that we will talk for ten minutes. If they do get overly anxious, then stop the session and let them stim for a short while in order to calm down. To reduce their stress, it can be helpful to let them guide the conversation into being about subject that they find interesting.

Soma's rapid prompting method is based on applied behaviour analysis, neuroscience, and the Jean Piaget theory of four developmental stages. There is very little cost involved, but lots of patience is required. Before you begin, you will need a few pencils, several sheets of paper, a timer, and a letter board. A letter board is simply a board with the alphabet on it (A through Z and 0 to 9). They are very easy to make, but I've created a letter board template for you to download and print as an example. You may want to laminate the sheet to protect it, but eventually you will want the student to graduate to

typing on a computer keyboard.

Although the child may be nonverbal, the act of reading or typing uses a different section of the brain than speech. That is why this technique has such a high success rate. With rapid prompting, you are not prompting them with the answer, you are prompting them to initiate the action of answering.

Let's sit through an imaginary session to learn how this works:

The student is first seated at a table. The teacher does not sit across the table from the student, but side-by-side with them. Since the left hemisphere of the brain processes language, the teacher should sit to the right side of the student. The logic here is that since the left brain controls the right side of the body, you want them to engage in the process using their right hand.

At this point, the child is probably anxious and stimming. The teacher sets a timer and explains to the child that they will talk for ten minutes. Throughout the session, the teacher engages one sense at a time to determine what is working properly. The childs method of stimming may lead you to the right diagnosis. The teacher must use several different methods to keep them focused on the task. The teacher tears the paper into strips, uses speech, and taps on the desk to use sound. To create a visual stimulus, the teacher uses hand gestures, points, and motions (kinesthetic prompts). Giving the student a pencil to point with and touching them on the hand gives them tactile sensations.

The teacher tears off two strips of paper (sound) and writes "Animals" on one and "Plants" on the other one. As the teacher writes each word, she says the word out loud and then spells the word. It goes something like this:

"Today we are going to talk about biology. Would you like to learn about Animals a-n-i-m-a-l-s (taps on desk) or Plants p-l-a-n-t-s (taps on desk)?"

The student is then prompted to make a choice. At first, it is important to carefully engage all of the senses one at a time. Even if they are not looking directly at the paper, they still hear the taps to understand that Animals is on the right side and Plants is on the left. The idea is to get them to point to the choice they want to make. Again, you are not prompting them with the correct answer - you are prompting them to make a decision.

At first, the communication is going to pretty much be a one-way conversation. That is where the letter board comes in - with the board they are able to spell out their responses by pointing to each letter. First forming words, then moving on to complete sentences. They will rapidly catch on to this technique and can then move on to using a computer keyboard to type messages.

There is nothing like the look on the faces of the parents when their nonverbal, non-communicative teen suddenly becomes freed from the shackles of autism and is able to finally express themselves. With enough patience, I honestly believe that Soma Mukhopadhyay's technique of rapid prompting will

be a reliable way to communicate with these kids.

For many children with autism, our society has viewed them as useless human beings with no skills and no hope. That thought couldn't be further from the truth. I hope that one day soon there will be a cure for autism, but for now, we owe it to these kids to not forget them or just throw them away.

I hope this helps!

-Gary Wright II

P.S. Please repost / tweet about this and help me spread this message to parents.

P.S.S. Soma - I love you for what you have done for these kids. You are my hero!