Autistic Savants

Introduction

When working with children with Autism, parents may recognize that their child has extraordinary skills not exhibited by most persons. These skills may take many forms and parents will need to know what these behaviors actually mean. This Parent Teacher Conference Handout will explain this unique set of behaviors for parents who may be confused.

The autistic savant is one of the most fascinating cognitive phenomena in psychology, "Autistic savant" refers to individuals with autism who have extraordinary skills not exhibited by most persons. Historically, individuals with these exceptional skills were called 'idiot savants,' a French term meaning unlearned (idiot) skill (savant). In a 1978 article in *Psychology Today*, Dr. Bernard Rimland introduced a more appropriate term 'autistic savant,' which is the current label.

The estimated prevalence of savant abilities in autism is 10%, whereas the prevalence in the non-autistic population, including those with mental retardation, is less than 1%.

There are many forms of savant abilities. The most common forms involve mathematical calculations, memory feats, artistic abilities, and musical abilities. A mathematical ability which many autistic individuals display is calendar memory. They could be asked a question like: What day of the week was May 22, 1961? and they can determine the answer within seconds-Monday. Others can multiply and divide large numbers in their head and can also calculate square roots and prime numbers without much hesitation.

Examples of some memory feats include: remembering everything about presidents (birth/death, term in office, names and birth dates of family members, cabinet members, etc.), memorizing the U.S. highway system, and remembering everyone's birth date, even after meeting the person once and not seeing him/her for 20 years.

Some autistic individuals with savant abilities are incredible artists. Dr. Rimland's son, Mark, is quickly establishing himself as an excellent watercolor artist. A child named Nadia drew beautiful pictures of horses, and her drawings have been compared to those of Rembrandt. Interestingly, she lost her drawing abilities when she started to learn to speak. Another artist with autism, Richard Wawro, who was described in an issue of Reader's Digest, is legally blind and draws in crayons. His works sell for up to \$10,000, even the Pope owns one of his paintings.

Music is another common savant ability. Many performers with autism have perfect pitch and also have a great memory for music. In some cases, a person can hear a classical piece once and play it back in its entirety. Tim Baley, who also has Fragile X, is a concert pianist and the piano player for Hi Hopes, a musical group of singers and performers with autism and/or mental retardation. Hi Hopes played at the Los Angeles autism conference a few years ago and have even played at the White House. (Tim's mother wrote a book about his life. If you would like to obtain a copy of her book or learn more about Tim, you can write to: Mrs. Baley, Box 8207, Anaheim, CA 92812).

NASET's Parent Teacher Conference Handout

The movie Rain Man exposed millions of people to autism as well as the autistic savant phenomenon. (Unfortunately, some people now have the impression that all autistic individuals have these abilities.) In the movie, Raymond displayed a great memory for ball player statistics, memorized parts of the telephone book, and counted cards in Las Vegas. One wonders why this year's national autism conference is being held in Las Vegas!

The reason why some autistic individuals have savant abilities is not known. There are many theories, but there is no evidence to support any of them. For example, Dr. Rimland speculates that these individuals have incredible concentration abilities and can focus their complete attention to a specific area of interest. Admittedly, researchers in psychology feel that we will never truly understand memory and cognition until we understand the autistic savant.

Stephen M. Edelson, Ph.D.