



## Every Color of the Rainbow: Shining a Light on the Autism Spectrum

5th Apr, 2010 | Source : CARF International

Blue, green, yellow, orange, and red: all colors of the visible spectrum of light. From a scientific perspective, color is made up of a range of wavelengths, most detected by the human eye. Brain waves cycle at different frequencies as well, and can manifest themselves in a different spectrum: the autism spectrum.



According to the World Health Organization, the autism spectrum “is a spectrum of psychological conditions characterized by widespread abnormalities of social interactions and communication, as well as severely restricted interests and highly repetitive behavior.” There are three forms of autism spectrum disorders (ASDs): autism, Asperger’s syndrome, and Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS).

The last twenty years have seen a tremendous growth in the number of reported cases of ASD, thanks in part to the awareness raised by the Oscar-winning 1988 film *Rain Man*, starring Dustin Hoffman as an autistic man and Tom Cruise as his caretaker. Current figures from the CDC show a more than tenfold increase in rates of childhood ASD diagnosis since the 1980s, with boys four to five times more likely to be diagnosed than girls.

### Early Intervention

According to Myers and Johnson (2007), “Intensive, sustained special education programs and behavior therapy early in life can help children acquire self-care, social, and job skills. Available approaches include applied behavior analysis (ABA), developmental models, structured teaching, speech and language therapy, social skills therapy, and occupational therapy.”

Jeri Kendle, Acting President/COO of the [Southwest Autism Research and Resource Center \(SARRC\)](#), adds, “With more than 80% of those currently diagnosed under the age of 22, much of the public focus has been on younger children.” Dr. Greg MacDuff, Executive Director of the [Princeton Child Development Institute \(PCDI\)](#), confirms, “There has been some pretty compelling evidence that a high percentage of children are able to successfully enter the public school system if they are provided intensive behavior treatment before the age of five.”

Reduced budgets and conflicting priorities often make it difficult for states to prioritize funding for early intensive behavioral intervention (EIBI); however, Jacobson, Mulick, and Green’s study, as presented in *Behavioral Interventions* (1998), indicates that for an initial investment of \$33,000 to \$50,000 per year for a child with autism or PDD-NOS, ongoing educational savings can range from \$187,000 to \$203,000, and savings from reduced family support and public services can range from \$656,000 to \$1,082,000 per individual.

Given that eligibility standards and resources vary greatly from state to state, it is important for parents to be aware of the options available to them. As described in *Life Journey Through Autism* (2006), the Individuals with Disabilities Education Improvement Act (IDEA 2004) “provides federal funding to state and local school systems to provide special education services to eligible students with disabilities”, and Section 504 of the Vocational Rehabilitation Act and the Americans with Disabilities Act (ADA) “are civil rights laws designed to protect people with disabilities from disability-related discrimination concerning services (such as school), employment, and public accommodations.” Both of these laws recognize the needs and rights of members on the spectrum; however, it falls largely on the individual’s parents to pursue the benefits that these

regulations can provide.

### **Continuing Support**

The help of active support groups and private resources, such as SARRC in Phoenix, Arizona, is critical. Not only can these organizations provide parents with much-needed navigation through unknown educational and social service options, but they often offer important primary services such as early intervention programs, life skills education, recreational programs, and vocational training, as well as help with transitioning to higher educational pursuits. "We have benefited greatly from the dedication and commitment of parents, youths, staff, and the generous support of the community to build the caliber of programming we have available," reports Kendle.

It is important to champion the resources of many groups to support the needs of members of the autism spectrum. "Working together with the New Jersey Department of Education, the New Jersey Division of the Developmentally Disabled, our donors and the parents themselves, we still operate at a deficit for most of our programs," says Dr. MacDuff.

"As children age it is important for them to create a vision statement for their future, as well as an inventory of their strengths and weaknesses. This becomes a tool to assist them in their Individual Educational Plans (IEPs)" says Dania Jekel, Executive Director of the [Asperger's Association of New England](#). There is a very real need to assist youth in transition with the necessary skills to pursue additional education and to secure employment and/or independent living. Intensive life coaching assistance can often make the difference in empowering youth to pursue their emancipation. "For a relatively small investment, great benefits can be achieved through support. Two hours a week for an eight-week session can help a youth get past being stuck," describes Jekel.

Many of the world's most creative and celebrated geniuses have been rumored or known to be members of the autism spectrum, including Ludwig van Beethoven, Wolfgang Amadeus Mozart, and Albert Einstein. With more tolerance regarding personal differences and an eye toward long-term benefits, we can help many more members of this spectrum lead productive lives and make a real contribution to society, creating a brighter future for everyone. After all, white light is made up of every color of the rainbow.

For assistance and referrals contact the [Autism Society of America](#)

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[Article from NewsweekShowcase.com](#)

URL : <http://www.newsweekshowcase.com/health/articles/Every-Color-of-the-Rainbow>  
Published : 2010/04/05

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