



March/April 2016 Updates

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First Brain Imagery Study Of Sluggish Cognitive Tempo

Researchers from the University of California Davis compared 13 typically developing adolescents and compared them to 7 AD/HD and 9 inattentive AD/HD adolescents using fMRI. They found those subjects with AD/HD had a hypoactivation of the right superior parietal lobe, and altered processing in the supplemental motor area and thalamus in those with AD/HD only. Those with higher levels of Sluggish Cognitive Tempo were found to have hypoactivity left superior parietal lobe. The authors believed this difference may be connected to impaired reorienting, or attention shifting in those with Sluggish Cognitive Tempo. Those with Inattentive AD/HD had differences in their supplemental motor area and thalamus which may cause deficits in preparing to respond to stimuli. The scientists said these results demonstrated the difference between AD/HD and Sluggish Cognitive Tempo.

Fassbender, C. et al. (May 1, 2015). Differentiating SCT and inattentive symptoms in ADHD using fMRI measures of cognitive control. NeuroImage: Clinical. DOI: [10.1016/j.nicl.2015.05.007](https://doi.org/10.1016/j.nicl.2015.05.007).

The Visual System and Dyslexia

Yeatman recently wrote an article where he reviewed research that has found differences in how dyslexics process visually. He said, “Indeed, reading might start in the retina and the visual cortex, but successful decoding of even a single written word requires the participation of multiple brain systems including regions of the brain that are specialized for processing language, spatial attention, programming eye movements, and more.” Continuing, he stated a problem in one or more of those processes could cause reading difficulties. He stated the definitive research indicating the core deficit in dyslexia is phonemic awareness and then reviews the research that indicated they have visual deficits, too.

The Visual System and Dyslexia

He discussed the finding that dyslexics have more difficulty than controls identifying fast moving visual stimuli. However, when they are given synthetic multi-sensory reading instruction with phonological awareness their phonological processing improves along with their ability to identify fast moving stimuli. There is also research that has found dyslexics have difficulty in visuospatial attention, or attention allocation to different stimuli in the visual field. However, Yeatman stated neither of these findings have been found to significantly negatively effect reading in dyslexics to date.

Yeatman, J.D. (February, 2016). What is the Role of the Visual System in Reading and Dyslexia? Baltimore, MD: International Dyslexia Association . From website: <https://eida.org/what-is-the-role-of-the-visual-system-in-reading-and-dyslexia/>.

Females, AD/HD, and Suicide

Researchers from Berkley found that females who were originally diagnosed with AD/HD, Combined Type were far more likely to engage in suicidal attempts and completions than those without the diagnosis. The other factors that raised suicidal risk factors were early impulsivity, maltreatment, parenting stress, poor peer relationships, and problems with response inhibition. Impulsivity was also linked to self-harm.

Hinshaw, S.P. (September, 2015). Self-Harm as a Developmental Outcome in Girls with ADHD: Clinical Significance and Underlying Mechanisms. The ADHD Report, 23(6), 1-6.

A Review of Mindfulness and Research & AD/HD

A literature review of the use of mindfulness to treat AD/HD indicated there are no double blind, randomized controlled studies of mindfulness and AD/HD. It was speculated that mindfulness may help in increasing volitional control of attention and emotional self-regulation. It may be a good adjunct to use with AD/HD adults along with cognitive behavioral therapy (CBT), However, there has been no brain imagery studies on the effects of mindfulness on AD/HD and the researchers concluded its use is not quite ready for prime time.

Mukerji, A. et al. (March, 2016). Mindfulness as an Intervention for AD/HD. The ADHD Report, 24(2), 1-9, 13.

EEG Diagnosis of AD/HD

Scientists from UCLA reviewed the literature related to using EEG theta-beta ratios, like the NEBA Health System and concluded that such techniques should not be used even to aid in the diagnosis of AD/HD.

Loo, S.K. et al. (December, 2015). Should the EEG-Based Theta to Beta Ratio Ratio be Used to Diagnose ADHD? The ADHD Report, 23(8), 8-13.

Sluggish Cognitive Tempo and College Students

Researchers from the University of Syracuse found that college students who reported slow reading rates and executive function difficulties related to sluggish cognitive tempo did not actually have the significantly lower performance in these abilities than their non-impaired peers. They just perceived they did.

Lewandowski, L.J. et al. (February 2016). Focus on Sluggish Cognitive Tempo – Sluggish Cognitive Tempo in College Students: New You See it, Now You Don't. The ADHD Report, 24(1), 1-5.

Barkley Responds to the Research in The Previous Slide

He wrote he believes sluggish cognitive Tempo is not primarily a disorder of executive function, is primarily associated with internalizing disorders, and cognitive sleepiness and motor sluggishness are its primary dimensions. He believes that Cognitive Behavioral Therapy may be the best treatment modality for sluggish cognitive tempo.

Barkley, R.A. (February, 2016). Update on Sluggish Cognitive Tempo and Commentary on “Sluggish Cognitive Tempo in College Students” by Lewandowski et al. The ADHD Report, 24(1), 6-7,13.

Cannabis Use Disorders and AD/HD

A group of researchers from New York state found the percentage of people with cannabis use disorders and AD/HD was between 43% and 36%. This was considers extremely high.

Notzon, D.T. et al. (March 31, 2016). ADHD Is Highly Prevalent in Patients Seeking Treatment for Cannabis Use Disorders. Journal of Attention Disorders. DOI: 10.1177/1087054716640109.

Depression and AD/HD in Adults

A recent study on the east coast found that the adults who had received more treatment for their AD/HD over the years and cognitive behavioral therapy to control ruminations were more resilient to depression regardless of the severity and symptoms of their AD/HD.

Oddo, L.E. et al. (April 7, 2016). Investigating Resilience to Depression in Adults With ADHD. Journal of Attention Disorders. DOI: [10.1177/1087054716636937](https://doi.org/10.1177/1087054716636937).

Anxiety and AD/HD Children

A recent study out of Australia found that anxiety difficulties are quite common among children with AD/HD between the ages of 6 and 8. Other factors that were found to increase the anxiety was the subtype of AD/HD the child had, parental distress and economic disadvantage.

Mulraney, M. et al. (March 28, 2016). Correlates of Anxiety in 6- to 8-Year-Old Children With ADHD: A Community-Based Study. Journal of Attention Disorders. DOI: 10.1177/1087054716638510.

AD/HD Medication Compliance in AD/HD College Students

Canadian researches found that AD/HD college students tend to consciously adjust the use of their AD/HD medications using a cost benefit analysis. Often they would take the medication on school days, but not on the weekends. They often stated their parents expected them to take their medication.

Gould, O.N. et al. (March 25, 2016). Self-Management of Adherence to Prescribed Stimulants in College Students With ADD/ADHD. Journal of Attention Disorders. DOI: 10.1177/1087054716638509.

Multi-Modal Therapy and Exercise with AD/HD Boys

German and Swedish researchers compared supervised high-intensity interval training (3 sessions per week 4, 4 minute sessions at 95% maximum heart rate) to a standard physical fitness program in boys with AD/HD. The results indicated when the two therapies were combined the boys had significantly better physical fitness, motor skills, attention and quality of life.

Mebler, C.F. et al. (March 24, 2016). Multimodal Therapy Involving High-Intensity Interval Training Improves the Physical Fitness, Motor Skills, Social Behavior, and Quality of Life of Boys With ADHD A Randomized Controlled Study. [Journal of Attention Disorders](https://doi.org/10.1177/1087054716636936). DOI: 10.1177/1087054716636936.

Driving & AD/HD

French scientists investigated the high way driving skills of adults with AD/HD with a simulated driving test and an evaluation of sleepiness. They found the both problems with inhibition and sleepiness/attention independently negatively effected driving in AD/HD adults. Their impairment in executive function also caused problems.

Bioulak, S., et al. (March 23, 2016). Objective Level of Alertness and Inhibitory Control Predict Highway Driving Impairment in Adults With ADHD. Journal of Attention Disorders. DOI: 10.1177/1087054716633751.

Amygdala Size and AD/HD

The amygdala is the area of the brain that processes fear and is the beginning of the emotional/limbic system. Spanish and Polish researches recently found that those with AD/HD as a whole have smaller amagdalas than the general population. They also have significantly less activation to pleasant stimuli than do those of non-AD/HD people. However, they had higher activation when viewing unpleasant situations. This may explain some of the difficulties AD/HD people have with emotional regulation and may also be somewhat related to impulsivity.

Tajima-Pozo, K. et al (March 10, 2016). Amygdala Abnormalities in Adults With ADHD. Journal of Attention Disorders. DOI: 10.1177/1087054716629213.

AD/HD and Substance Abuse

A group of international researchers from several different countries conducted a survey of over 1200 adults with AD/HD regarding substance use disorders. The results indicated the more persistent and severe their AD/HD the less likely treatment would cause a remission in their substance usage. This was especially true of those with comorbid conduct disorder and/or antisocial personality disorder. The researchers recommended frequent assessment of the person with AD/HD's stance usage.

Kaye, S. et al. (February 27, 2016). Persistence and Subtype Stability of ADHD Among Substance Use Disorder Treatment Seekers. [Journal of Attention Disorders](https://doi.org/10.1177/1087054716629217). DOI: 10.1177/1087054716629217.

DSM-5 Age of Onset Criteria and Adults with AD/HD

Norwegian and American scientists found that adults with AD/HD have poorer quality of life and less social adjustment than those without AD/HD. They recommended when getting self-assessment data from a patient who may be AD/HD using a higher age cutoff than age 12.

Chandra, S. et al. (February 27, 2016). Assessing the Validity of the Age at Onset Criterion for Diagnosing ADHD in *DSM-5*. [Journal of Attention Disorders](https://doi.org/10.1177/1087054716629717). DOI: 10.1177/1087054716629717.

AD/HD and Sensory Gating

Sensory gating is the ability to filter our irrelevant sensory information. Good sensory gating helps people not be overwhelmed by irrelevant stimuli. French researchers tested the sensory gating abilities of AD/HD adults using EEG. They found that AD/HD adults have poor sensory gating.

Micoulaud-Frachi, J.-A. et al. (February 19, 2016). Sensory Gating Capacity and Attentional Function in Adults With ADHD A Preliminary Neurophysiological and Neuropsychological Study. Journal of Attention Disorders. DOI: 10.1177/1087054716629716.

AD/HD Symptom Fluctuations in AD/HD Teens

A group of German and American scientists found that adolescents with AD/HD experience significant daily fluctuations in the manifestation of their AD/HD symptoms. As a result the researchers recommended intensive and frequent diagnostics with frequent symptom rating and treatment alteration to match changes.

Schmid, J. et al. (February 18, 2016). ADHD Symptoms in Adolescents' Everyday Life Fluctuations and Symptom Structure Within and Between Individuals. Journal of Attention Disorders. DOI: 10.1177/1087054716629214.

Gambling and AD/HD

Canadian researchers found that those with AD/HD are more at risk of being problem gamblers than those without AD/HD. They also found those with gambling problems were more at risk of being AD/HD than the general public.

Theule, T. et al. (February 1, 2016). Exploring the Relationships Between Problem Gambling and ADHD A Meta-Analysis. Journal of Attention Disorders. DOI: 10.1177/1087054715626512.

AD/HD and Celiac Disease

A review of the literature out of Belgium to determine if AD/HD and celiac disease were connected demonstrated there is no connection between the two disorders. Hence, the investigators determined that screening for celiac disease need not be done when doing a diagnostic for AD/HD and vice versa.

Erturk, E. et al. (January 29, 2016). Association of ADHD and Celiac Disease What Is the Evidence? A Systematic Review of the Literature. Journal of Attention Disorders. DOI: 10.1177/1087054715611493.

Reality Monitoring in Those with Autism

A recent study out of Great Britton indicated those with ASD are significantly impaired in reality monitoring of past events due to anomalies in there medial prefrontal cortex. This causes problems with their ability to process social and self-referential information as well as memory and executive function.

Cooper, R. A. et al. (February 22, 2016). Reality Monitoring and Metamemory in Adults with Autism Spectrum Conditions. Journal of Autism and Developmental Disorders. DOI: 10.1007/s10803-016-2749-x.

The Frontal Lobes and ASD

British scientists found that adult males with ASD have abnormal connectivity in their frontal lobes. These differences correlate with the symptoms of autism. This they believe indicates that ASD is in part a disorder on abnormal neurobiological development of the frontal lobes that persists throughout life.

Canti, M. et al. (2016). Frontal networks in adults with autism spectrum disorder. Brain. DOI: 10.1093/brain/awv351.

High Functioning Autism, Asperger's Disorder and Empathy

English scientists found that those with high functioning autism had significantly more difficulty recognizing facial expressions and empathizing with others when compared to those with Asperger's Disorder. The researchers believed this may demonstrate the two disorders are separate.

Montgomery, C.B. et al. (February 16, 2016). Do Adults with High Functioning Autism or Asperger Syndrome Differ in Empathy and Emotion Recognition? Journal of Autism and Developmental Disorders. DOI: 10.1007/s10803-016-2698-4.

Inflammation and ASD

English scientists reviewed the literature regarding the interplay of inflammation in the prenatal environment and the development of ASD. They found this may account for some case of ASD, but they were unsure as to the mechanisms of causation.

Young, A.M.H. et al. (2016). From molecules to neural morphology: understanding neuroinflammation in autism spectrum condition. Molecular Autism. DOI: 10.1186/s13229-016-0068-x.

Under Diagnosis of Female ASD

A study done in England indicated that females with ASD have significantly better non-verbal communication than males with this disorder. It was speculated this is one of the reasons ASD is under diagnosed in females.

Rynkiewicz, A. et al. (2016). An investigation of the 'female camouflage effect' in autism using a computerized ADOS-2 and a test of sex/gender differences. Molecular Autism. DOI: 10.1186/s13229-016-0073-0.

Teens with Autism and Anger

US based researches found that adolescents with ASD are at risk of perseverative anger rumination. Those with the most tend to have the most impairment by autistic symptoms, depression, and behavioral dysregulation.

Patel, S. et al. (April 19, 2016). Association between anger rumination and autism symptom severity, depression symptoms, aggression, and general dysregulation in adolescents with autism spectrum disorder. Autism. DOI: 10.1177/1362361316633566.

ASD & Math

A recent study of those with High Functioning ASD indicated that 22% met criteria for Specific Learning Disorder of Math and 4% were gifted in math. What made the difference was verbal, perceptual ability and level of test anxiety.

Oswald, T.M. et al (September 29, 2015). Clinical and Cognitive Characteristics Associated with Mathematics Problem Solving in Adolescents with Autism Spectrum Disorder. Autism Research. DOI: 10.1002/aur.1524.

Comprehensive Treatment

- **To start out a person on the spectrum gets from 25 to 40 hours per week. This goes on for at least a year.**
- **Treatment can include: speech and language therapy, occupational therapy, psychiatry, physical therapy, gastrointestinal treatment, neurology, counseling, social skills training, etc.**
- **The following are inclusive programs:**
 - **Applied Behavioral Analysis (ABA), DIR Floortime, Autism Partners, TEACCH, Social Thinking, etc.**

Durand, M. (2014). Autism Spectrum Disorder: A Guide for General Practitioners. Washington, DC: American Psychological Association.

Asperger's Disorder, Depression & Anxiety

Research conducted in Sweden recently indicates that 70% of those with Asperger's Disorder have experienced at least one Major Depressive Episode, and 50% have experienced recurring episodes. Fifty percent had Anxiety Disorders. None of the subjects had psychosis, but almost 50% meeting criterion for personality disorders.

Lugnegård, T., Unenge Hallerbäck, M., Gillberg, C. (2011). Psychiatric comorbidity in young adults with a clinical diagnosis of Asperger syndrome. Research in Developmental Disabilities, 32, 1910-1917.

Generalized Anxiety Disorder and ASD

“We know that young children with Asperger’s syndrome are prone to develop mood disorders...and some children seem to be almost always anxious which might indicate Generalized Anxiety Disorder (GAD)...they may be in a constant state of alertness, leading to a risk of mental and physical exhaustion.” (p. 17)

Attwood, T. (2007). The Complete Guide to Asperger’s Syndrome. Philadelphia, PA: Jessica Kingsley.

Autism, Sameness, and Uncertainty

British and U.S. researchers found that sensory under and over responsiveness in children with autism is associated with insistence on sameness behavior, and their level of anxiety is related to intolerance of uncertainty.

Wigham, S., et al. (April, 2015). The Interplay Between Sensory Processing Abnormalities, Intolerance of Uncertainty, Anxiety and Restricted and Repetitive Behaviours in Autism Spectrum Disorder. Journal of Autism and Developmental Disorders, 45(4), 943-952.

Social Anxiety Disorder and ASD

- **People with ASD are at great risk of having Social Anxiety Disorder (SAD).**
- **Those with SAD and ASD need cognitive behavioral therapy (CBT) and often medication. They will also need social skills training and self-esteem restructuring.**

Attwood, T. (2007). The Complete Guide to Asperger's Syndrome. Philadelphia, PA: Jessica Kingsley.

Treatment of Anxiety in Those with ASD

- **Cognitive behavioral therapy, social skills training, and antidepressant medication.**
 - **Making sure therapies for autism continue (i.e., speech language therapy, etc.)**

Durand, M. (2014). Autism Spectrum Disorder: A Guide for General Practitioners. Washington, DC: American Psychological Association.

ASD and Obsessive Compulsive Disorder

- People with ASD can have repetitive behaviors that appear OCD-like. If they are interrupted the person often melts down.
- Modest improvement has been seen using response prevention and modifications of exposure.
- Cognitive behavioral therapy
- Applied behavioral analysis
- Teach “**THE RULES**”

Woodbury-Smith, M. (2014). Asperger Syndrome and Forensic Issues. In J.C. McParland, A. Klin, and F.R. Volkmar (Eds.), Asperger Syndrome: Assessing and Treating High-Functioning Autism Spectrum Disorders. New York, NY: Guilford, 394-314.

Depression and ASD

- **Reportedly, 25 to 34% of those with ASD meet criteria for depression**
- **Treatment anti-depressants and social skills training**

Durand, M. (2014). Autism Spectrum Disorder: A Guide for General Practitioners. Washington, DC: American Psychological Association.

Average Age Non-Disabled Americans Loose Their Virginity

- **Mean age at first intercourse for women aged 15 to 44: 17.2 years**
- **Mean age at first intercourse for men aged 15 to 44: 16.8 Years**

Centers for Disease Control and Prevention, National Center for Health Statistics (November 6, 2015).
National Survey of Family Growth: Vaginal Sexual Intercourse. From website:
http://www.cdc.gov/nchs/nsfg/key_statistics/s.htm#vaginalsexual.

Henault & Attwood ASD Sexuality Study

- **Derogatis Sexual Function Inventory**
- **19 males, 9 females; Mean age 32, range 18 to 64; 21 Asperger's Disorder; 5 HFA; 2 PDD: Average IQ**
- **“Although all developed an interest in sexuality around age 14, 11 of the 28 participants were still virgins.”**
- **For those who had intercourse the mean age for their first experience was 22.**

Henault, I. (2005). Asperger's Syndrome and Sexuality: From Adolescence through Adulthood. Philadelphia, PA: Jessica Kingsley.

Sexuality & ASD

“By then he had learnt a way to escape his uneasiness of lack of communication. It was masturbating on the edge of the bed or sofa.”

(Rajarshi (Tito) Mukhopadhyay)

Mukhopadhyay , T. R. (2011). The Mind Tree: A Miraculous Child Breaks the Silence of Autism. New York, NY: Arcade.

ASD, Sexuality and Suicide

“The desire for a girlfriend, which goes along with sex drive was so important to this young man that his failure made him consider whether life was worth living.” (p. 13)

Newport, J., and Newport, M. (2002). Autism-Asperger's & Sexuality: Puberty and Beyond. Arlington, TX: Future Horizons.

Abuse of Children with ASD

- **18.5% of children with ASD have been physically abused**
- **16.6% of children with ASD have been sexually abused**

Brown-Lavoie, S.M. et al. (September, 2014). Sexual Knowledge and Victimization in Adults with Autism Spectrum Disorders. Journal of Autism and Developmental Disorders, 44(9), 2185-2196.

ASD and Pornography

“The interest becomes unacceptable when the adolescent or adult with Asperger’s syndrome considers that (pornographic, sic.) photographs are a realistic representation of typical people and sexual activities on a first date. Fortunately we now have programs specifically to inform adolescents and adults with Asperger’s syndrome about appropriate levels of intimacy and sexuality.” (p. 193)

Attwood, T. (2007). The Complete Guide to Asperger’s Syndrome. Philadelphia, PA: Jessica Kingsley.

Stalking and Autism Spectrum Disorder

- **The young man with ASD who is a bagger in a grocery store and the cute young woman.**
- **What to do?**
 - **Assess the function of the stalking**
 - **Teach replacement and appropriate behaviors, the vocabulary of relationships, the difference between an acquaintance, friend and romantic interest, and social norms and rules.**

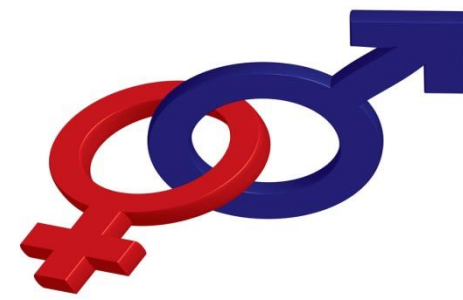
Durand, M. (2014). Autism Spectrum Disorder: A Guide for General Practitioners. Washington, DC: American Psychological Association.

Charli: An Adult on the Spectrum

“...I often engaged in activity that today would be called ‘stalking.’ While I truly intended no harm, I experienced unbearable loneliness and if some handsome young man appeared on the periphery of my solitary life, my better judgment deserted me.” (p. 38)

Grandin, T. (2012). Different...Not Less: Inspiring Stories of Achievement and Successful Employment From Adults with Autism, Asperger’s and ADHD. Arlington, TX: Future Horizons.

Celibacy



“I have remained celibate because doing so helps me to avoid the many complicated social situations that are too difficult to handle. For most people with autism, physical closeness is as much a problem as not understanding social behavior.” (Dr. Temple Grandin, p. 133)

Grandin, T. (1995). Thinking In Pictures: And Other Reports From My Life With Autism. New York, NY: Vintage.

Anita Lesko: Adult on the Spectrum

- **Registered nurse anesthetist & aviation photojournalist**

“I haven’t been on a date for 14 years. I realize this is shocking to most people, but it just happened this way because of all the things I’ve been doing with my time. I didn’t make a conscious decision not to date – it just happened.” (p. 201)

Grandin, T. (2012). Different...Not Less: Inspiring Stories of Achievement and Successful Employment From Adults with Autism, Asperger’s and ADHD. Arlington, TX: Future Horizons.

ASD & Asexuality

- **“A feature of ASDs is a characteristic under- or over-sensitivity in the sense domains. For someone on the spectrum, intimate relationships can present a potential minefield of sensory input from strong perfume to overwhelming touch” (p. 25).**
- **“Our findings suggest that, on average, people on the spectrum are actually *less* likely than the neurotypical population to be homosexual, although they do appear to identify significantly *more* with an asexual orientation” (p. 25).**

Stork-Brett, K. et al. (February. 2012). ASD SEX & GENDER STUDY PRELIMINARY REPORT. Department of Psychology, University of Queensland, St. Lucia, Australia. Kat Stork-Brett (k.stork-brett@uqconnect.edu.au).

Gaming, Depression, Addiction, & Social Phobia

“In conclusion, in the study population, online gamers who played excessively had higher incidence of comorbidities including internet addiction, depression, and social phobia. Depressive symptoms increased in severity with longer weekly online gaming hours, female gender, and severity of social phobia symptoms”.

Wei, H-T et al. (July 28, 2012). The association between online gaming, social phobia, and depression: an internet survey. [BMC Psychiatry](https://doi.org/10.1186/1471-244X-12-92). DOI: 10.1186/1471-244X-12-92.

Compulsive Gaming, Internet Use and Autism

- **Those with autism are particularly vulnerable for “web/game” addiction because game developers create games with compulsion –rich conditions, and those with autism are easily grabbed by it.**
- **They can create their own reality they feel safe in, too. They feel safer in it than in the real world.**

Grandin, T. et al. (2015). The Loving Push: How Parents and professionals Can Help Spectrum Kids Become Successful Adults. Arlington, TX: Future Horizons.

Gaming and Pornography

“Interviews with 58 adults with ASD indicated several themes were identified, including perceived benefits of video game use (e.g., social connection, stress reduction) as well as perceived negative effects (e.g., time use, addictive potential). Participants also noted both positive and negative aspects of game design that affect their overall enjoyment. The most frequent all-time favorite video game genres were Role-Playing (31%) and Action-Adventure (19%).”

Mazurek, M.O. et al. (October, 2015). Video games from the perspective of adults with autism spectrum disorder. Computers in Human Behavior, 51, 122-130.

A case study suggests that internet gaming and viewing pornography may be related. It also appears to be related to social isolation as well as avoidance of social situations.

Voss, A. et al. (September, 2015). Case Report: Internet Gaming Disorder Associated With Pornography Use. Yale Journal of Biology and Medicine, 88(3), 319-324.,

Sex, Stereotyped Interests, & ASD

“The results confirm that the presence in individuals with ASD of repetitive behavior, stereotyped interests, and sensory fascinations may influence the sexual development. Specific features in our sample in line with this suggestion were the presence of compulsive masturbation, “autistic” fetishism with the ritual use of objects, fascinations with a sexual connotation and strange fears associated with sex. It should be noted that the number of “unknown” answers in this section of the study was high. It is therefore not possible to make statements about the true prevalence of these behaviors” (P. 267).

Hellemans, H, et al. (June, 2010). Sexual Behavior in Male Adolescents and Young Adults with Autism Spectrum Disorder and Borderline/Mild Mental Retardation. Sexuality and Disability. DOI: 10.1007/s11195-009-9145-9.

ASD & Sexual Offense

“Sexual curiosity and drive (along with a lack of appropriate channels for sexual expression and interaction) can lead individuals with AS (ASD, sic.) to explore websites for child pornography without understanding the criminal and predatory context. They can be drawn to online sexualized communication with underage children and adolescents without perceiving how old the person really is. Furthermore, social challenges leave individuals with AS vulnerable to charges of inappropriate touching others or stalking when they are attracted to or develop a crush on a person, but do not know how to initiate social contact” (p. 339).

Powers, M.D. et al. (2014). Asperger Syndrome in Adolescence and Adulthood. In J.C. McPartland, A. Klin, and F.R. Volkmar (Eds.). Asperger Syndrome: Assessing and Treating High Functioning Autism Spectrum Disorders. New York, NY: Guilford, 311-366.

ASD & Child Pornography

“Accessing child pornography is not currently known to be a frequent behavior of young persons with AS, but enough cases have arisen to demonstrate the need for prosecutors to inform themselves of the condition and adopt a policy of restraint in the investigation and prosecution of such cases.” (p. 1)

Klin, A., Volkmar, F., et al. (No Date). Principals for Prosecutors Considering Child Pornography Charges Against Person’s with Asperger’s Syndrome. From website:

<http://www.harringtonmahoney.com/documents/Principles%20for%20Prosecutors%20-%209-14-08.pdf>.

Case Study: ASD Adult Pedophile with a Doctorate

- **Although the person had a doctorate in psychology his adaptive functioning was measured at the pre-adolescent level in social, emotional and sexual development.**
- **“Once again, he escaped into an imaginary world, but this was the world of child pornography, access to which is illegal. One of the characteristics of Asperger’s syndrome is confusion regarding social and sexual boundaries, and Nick did not recognize the clear moral and legal boundaries” (p. 115).**

Attwood, T. et al. (2014). The Autism Spectrum, Sexuality, and The Law: What Every Parent and Professional Needs to Know. Philadelphia, PA: Jessica Kingsley.

ASD, Child Pornography, & Offender Treatment

Keep them away from sociopaths

- **The Sex Offender Treatment Programme (STOP) and Enhanced Thinking Skills (ETS) program can be appropriate for offenders with ASD, however, the following needs to be done:**
 - **The person's self awareness may be limited, or non-existing**
 - **The person may be too anxious to do group role play**
- **Such an individual should do individual work with a therapist with training and experience working with those who have ASD and sexual offense.**

Powers, M.D. et al. (2014). Asperger Syndrome in Adolescence and Adulthood. In J.C. McPartland, A. Klin, and F.R. Volkmar (Eds.). Asperger Syndrome: Assessing and Treating High Functioning Autism Spectrum Disorders. New York, NY: Guilford, 311-366.

Environmental Concerns

- Keep lighting low
- Subdued colors
- Limit distractions
- Limit noise
- Only absolutely essential people present
- No perfumes, aftershave, scented soaps
- Give frequent breaks-
Attention/Anxiety

- This will help assure Meltdown will not happen

Brooking, J. (Summer, 2015). Asperger Syndrome in the Criminal Justice System. Altogether Autism Journal, p. 8-9.

From website:

https://issuu.com/parenttoparentnz/docs/aa_journal_feb_2015_nocrop.

- Have a dog present in the room.
One trained as a therapy dog.

Johnson, R.A. (2011). Animal-Assisted Interventions In Health Care Contexts. In P. McCardle, McCune, S., J.A. Griffin and Maholmes, (Eds.), How Animal Affect Us: Examining The Influence of Human-Animal Interaction on Child Development and Human Health. Washington, DC: American Psychological Association.

Special Fonts for Dyslexia

A recent study indicated the OpenDyslexic Fonts do not improve reading in dyslexics.

Wery, J.J. et al. (March 18, 2016). The effect of a specialized dyslexia font, OpenDyslexic, on reading rate and accuracy. Annals of Dyslexia. DOI: 10.1007/s11881-016-0127-1.