

M5A1: Course Project Part II—Practice

*ASD: Autism Spectrum Disorder*

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## Course Project Part II—Practice

In the American bestseller, *Jonathan Livingston Seagull*, by Richard Bach, we meet *Fletcher*. Fletcher does not seem like the other gulls; he has been trying with all of his might to learn to fly gracefully at any height like the rest of the gulls that Jonathan trains: “Fletcher’s whipstall at the top was all the worse for this rage and fury at failing [...] He fell backward, tumbled, slammed savagely into an inverted spin, and recovered at last, panting, a hundred feet below his instructor’s level (Bach, Munson, & Bach, 1970, p. 102).” Fletcher screeched, “You’re wasting your time with me, Jonathan! I’m too dumb! I’m too stupid! I try and try, but I’ll never get it (Bach, Munson, & Bach, 1970, p. 102).”

Jonathan encourages at the beach in the evenings, inspiring the gulls. “Each of us is in truth an idea of the Great Gull, an unlimited idea of freedom, and precision flying is a step toward expressing our real nature [...] Everything that limits us we have to put aside; That’s why all this high-speed practice, and low-speed, and aerobatics ... (Bach, Munson, & Bach, 1970, p. 103).”

Aristotle proclaimed by way of his own thoughtful definition of *artist*, “We are of the opinion that, at least, knowledge and understanding appertain to art rather than experience; and we reckon artists more wise than the experienced, inasmuch as wisdom is the concomitant of all philosophies rather in proportion to their knowledge [...] But this is so because some, indeed, are aware of the cause and some are not [...] For the experienced know that a thing is so, but they do not know wherefore it is so; but others—and by that I mean the scientific—are acquainted with the wherefore and the cause (Aristotle, 1991).”

Is the pursuit of knowledge of causation best approached or trusted as an art form or a science? Is art a science or is science an art form? When it comes down to bolts, the pure

enigma surrounding the fundamental fervent germ forever active in the seed of Autism Spectrum Disorder (ASD) begs still for answers with our earnest scores and tomes of research, therapies, and well-meaning diagnostic procedures. It seems commonsensical that artists *and* scientists will do well by society if rolling up their emblematic sleeves in unison in order that a newer more broadly scoped collaboration might serve to procure firm and fuller answers if perusing the solemn heart of *why* and wherefore as the basis of our questions.

In order that deserved ethical pursuit of the intricate task of fitting the current jagged bulky puzzle pieces of ASD findings coalesces, we must together conjure the birth of a far less flummoxed map that might crystallize a translucency enabling us to only then refer to our unified findings of ASD as *knowledge*. The multifaceted nature of the genesis of ASD and the gaps in the sole connectivity of our research loom now as if brawny discombobulated boulders, heavily fated to remain out of connection with each other. This should not be so; while it be still right and good that we utilize the labs of our known science in order for the continuation of theory, we must also rise to esteem the proven gifts that genuine practice of interpersonal connection with ASD folks will surely bring in tandem with our laboratories in order to conscientiously arrive at a robust deduction of a wholesome cartography in the still uncharted waters of ASD. DSM-5 deducts prematurely; it attempts to reduce the irreducible as of yet. A thing is not reducible until consensus of such thing is agreed upon as being *a thing*.

ASD is a neurodevelopmental disorder recognizable in infants anywhere from birth to a year and a half of age. “It afflicts tens of thousands of American children from all socioeconomic levels and is seemingly on the increase—estimates range between 30 and 60 people in 10,000 [...] A recent study by the Centers for Disease Control and Prevention reported that the rate of autism among children is about 1 in 50 [...] This reported increase in autism in

recent years is likely due to methodological differences between studies and changes in diagnostic practice and public and professional awareness in recent years rather than an increase in prevalence (Butcher, Mineka & Hooley, 2007, p. 528).”

The branch of psychology that is referred to as *psychodynamics* seems large enough in scope and breadth to be able to house the many dilemmas inherent in Autistic Spectrum Disorder/ASD. This is because it deals with the interrelation of the emotional, unconscious, and conscious mental forces at work which aid in determining one’s personality or motivations in life.

Autistic children and teens on the spectrum are fascinating human beings who are highly specialized in certain areas of their brains. This can be seen to the average on-looker as special talents or knowledge in particular fields or areas. For example, if an ASD child excels naturally at singing, this is all that he will fixate upon during most of his hours, or if another ASD child excels in the area of technology, one might find him/her absorbed in hours of seeming play that otherwise normal folks, or the neuro-typical humans rather, might refer to as *work*.

Interacting with children/teens on the spectrum is much like dealing with the highly specialized elite who have earned a Ph.D. versus the more generalized knowledge inherent in receiving a broader-based B.A. It seems that particular brilliance be at work in these intense and highly sensitive ASD children and teens, and yet the certain price tag inherent with such specificity of brilliance is the whole or partial paralysis of their autonomic nervous systems; this is the stuck skeleton taxing them beneath the wildly colorful and highly specific face of ASD.

Physiology seems pertinent focus in the way of searching remedy or treatment due to the fact that the brains of those with ASD possess faulty wiring due to the ANS/autonomic nervous

system's complications. There is a clear correlation between the autonomic nervous system's alterations or demise and the behaviors of and in these *on the spectrum* contenders.

Diagnosing ASD has come down to very specific generalizations—a saddest oxymoron. “Autism Spectrum Disorder is a new DSM-5 name that reflects a scientific consensus that four previously separate disorders are actually a single condition with different levels of symptom severity in two core domains (American Psychiatric Association, 2013, pp.1-2).”

DSM-5 has been updated from DSM-IV-TR with regards to what professionals and we common folk have grown widely familiar with terming *Autism* by way of eliminating four marked subtypes or categories of the disorder: Asperger's, Autism, Childhood Disintegrative, and Pervasive Developmental Not Otherwise Specified disorders. “Diagnostic criteria for intellectual disability (intellectual developmental disorder) emphasize the need for an assessment of both cognitive capacity (IQ) and adaptive functioning [...] Severity is determined by adaptive functioning rather than IQ score (American Psychiatric Association, 2013).”

ASD characterization is incredibly specific regarding diagnoses: “ASD is characterized by 1) deficits in social communication and social interaction and 2) restricted repetitive behaviors, interests, and activities, or RRBs. Because both components are required for diagnosis of ASD, social communication disorder is diagnosed if no RRBs are present (American Psychiatric Association, 2013, p. 2).”

Among the characteristics that have become the calling cards that broadcast positivity in having ASD, there exist the common denominators of echolalia, an agreed pathological craving for routine, a need for sameness, an interpersonal disconnect with regards to typical human eye contact, a sensitivity to normal noises—and especially to loud or vexing noises, a fixation on certain repetitive behaviors, and stemming/slapping/vehement shaking of hands or arms, as if...

*automatic*. These children grow nervous around unpredictable things such as dogs or babies and they portray a sense of urgency in finding out information that they require in nondescript moments in sporadic instances within normal conversation.

Glitches abound amidst the professional opinions regarding the new changes to ASD diagnostics in DSM-5. One work group that critiqued and reported on the changes from DSM-IV-TR to the newer DSM-5 are not thrilled due to their collective surmising that the new changes will decrease the diagnosis of ASD given to roughly thirty percent of those who would have formerly been diagnosed with having Autism. The work group concurs specifically about this newfound upset:

*“We believe the archived data used in a number of these analyses have too many inherent limitations to assess the criteria proposed for the DSM-5, particularly in regard to sensitivity and specificity [...] Those limitations stem from the study samples dating to 1994 and the restrictive way data from that sample were collected and evaluated [...] They make any legitimate review and comparison virtually impossible and do not justify claims that the number of children diagnosed with ASD under DSM-IV-TR criteria would not qualify for services under DSM-5 criteria (O'Neal, Connors, & Psychiatry.org, 2014).”*

This births the resultant idea that perhaps someone we know today who was formerly diagnosed with ASD will not meet the criteria anymore. This alone in and of itself marks a new epoch in the annals of ASD and the conscientiousness of the psychiatric community at large. This has the capacity to hold serious implications in our society that are beyond calculation in fathoming at this early half-blind date.

Communicating with those who toil in the field of ASD can come in handy in order to plug the current working status and human voice aspect into the disorder harmoniously. Mrs. Ramona Sowa is an Analytic Behavioral Analysis Technician who is currently completing her B.A. at University of Colorado at the Denver campus as she finalizes her Registered Behavior Technician certification, majoring in Psychology with a concentration in family counseling.

Due to the known privacy statutes of HIPAA regulations, Ramona conceded that though she could not offer details regarding specific ASD child clients that she has experienced in her scope of practice, she *would* certainly offer answers to my interview questions regarding behaviors of those with ASD with whom she is or was familiar. She has supervised a summer club and claims to have worked in-depth with a total of seven children who are diagnosed with ASD; they range between ages two to fifteen.

Ramona shared something with me that stuck in my mind and has been bouncing around ever since: “When you have met one person with Autism, you have met *one* person with Autism (R. Sowa, Personal communication, August 30, 2015).” This seems counter to the specificity of measures with regard to diagnostic criteria that lends itself in the new DSM-5. With all of the findings of the similarities in characteristics with those who have been diagnosed with ASD, it shocked me that Ramona would offer such contrary personal insight.

In her experience, Ramona claims that ASD differs between those who have it—that it is difficult to categorize these children/teens, or to rightly presume that they all have the same similarities. From my research, I disagree, but field practice is apples and theory is oranges. Her opinion *is* shared by well-meaning physicians and professionals who say that of all of the neurodevelopmental disorders found in DSM-5, ASD is “...among the most difficult to

understand and treat [...] (and) one of the most severe and puzzling disorders occurring in early childhood (Butcher, Mineka, & Hooley, 2007, p. 527).”

On the point of DSM-5’s necessary criteria for ASD, one of the items is that one must show signs of restrictive repetitive behaviors, or RRBs. Ramona had this to share:

*“Stemming, as I have observed, usually occurs due to overexcitement [...] This excitement can be due to need to express happy emotion or can originate from feelings of being overwhelmed, then the kiddo is unable to express this emotion verbally and the emotion is expressed physically in body movement [...] Other RRB’s are rocking, scripting-repetitive verbalization and even pacing (R. Sowa, Personal communication, August 30, 2015).”*

When I asked Ramona how she would go about treating/providing therapy for a child of ten years of age who bites, hits, swings at items, and grows enraged by being asked questions, she said that she could not comment specifically about a specific client, but did offer, “Any child with behavioral issues should be professionally evaluated at the discretion of the custodial parents (R. Sowa, Personal communication, August 30, 2015).”

When asked if she believes that ASD children and teens are capable of deep feeling and of experiencing empathy with others, Ramona enthusiastically responded, “Absolutely! People with ASD are not void of emotion or the ability to empathize, but rather, the social barrier surrounding their emotions prevent or decrease their ability to express emotions in the same socially acceptable ways that neuro-typical people do (R. Sowa, Personal communication, August 30, 2015).” I concur with this in my personal experience, knowing and trying to relate rightly to a handful of ASD children/teens.

Finally, I asked Ramona to detail for me some kind of possible semblance of a map of



*what it is* that signals or prompts these children with ASD to crave an inner balance or a re-centering of concentration. I touched on lead-filled vests, their heaviness and if this physicality was somehow relieving. This is how Ramona put it:

*“Imagine yourself in a room with all the lights on, a mirror ball spinning, a red flashing exit sign over the door, many people in the room all talking at the same time, a radio turned up all the way, elevator music in the background and a barking dog [...] This is what the experience of overstimulation is like in a kiddo’s brain with Autism [...] The need to re-center is the need to ‘tune out’ the stimulations and quiet the brain in order to be able to focus on one thing at a time (R. Sowa, Personal communication, August 30, 2015).”*

The causal factors regarding ASD are many loose ends that must be carefully braided together in coming years. Those diagnosed with ASD are known to be short-tempered, easily upset by strange or seemingly odd occurrences, disturbances, or noises—to which they quickly become fixated on understanding what it is, why it is occurring and if it could please stop, and *now*. Patience, or the reward that it may bring to some, is not seemingly in ASDs’ hard-wiring or blipping anywhere near their inner biological or genetic radar. Their emotions seem to run high at such moments of disturbance with little that one can do to calm or rationalize that all is well. The fact that this sensitivity characteristic is so prevalent among those with ASD, the thought beckons: what are the scientific fundamentals of such internal *registration* or relation to self within these ASD children and teens? What will happen when they are no longer teens and DSM-5 and the plethora of books on the subject must not specify that ASD be a children’s disorder? ASD is in a very large way, in its infancy in our society. It has not permeated to its fullest extent as of yet. When it does, I expect that all eyes will be on helping them.

Likening the genesis and constructional system of emotions that make up a complex soup, my cousin, Joseph E. LeDoux, the Henry and Lucy Moses Professor of Science at New York University in the Center for Neural Science, shares in his newest book *Anxious*, “I’ve been promoting the basic idea that conscious feelings are assembled from non-emotional ingredients for quite some time (2015, p. 227).” *Bricolage* is a French word used regarding the “idea that emotions are psychologically constructed states (LeDoux, 2015, p. 227)” wherein a varied array of fundamental and erratic building blocks are involved, whereas the individual that is experiencing such is termed as the “*bricoleur* (LeDoux, 2015, p. 227).” Joe offers:

*“It is not often appreciated that there are two distinct classes of physiological adjustments controlled by the ANS [...] The first is an innate physiological response that anticipates a certain innate behavior [...] Thus, when the defense system detects danger, it initiates both behavioral and physiological responses that have been wired in by their usefulness [...] Metabolic support is needed to carry out the response to its completion [...] Such homeostatic adjustments occur on the fly rather than by way of innate programming and are regulated by specific momentary needs of the body [...] This helps explain why physiological responses correlate better with simple innate reactions than with complex learned emotional behaviors, as the latter can be quite variable from person to person and thus do not show a reliable pattern across individuals the way responses associated with innate behaviors do (LeDoux, 2015, p. 58).”*

On the subject of any human brain registering pain or pleasure, Joe shares, “I argue that stimuli that produce conscious feelings of pain and pleasure in humans can involve three separate neural states: sensory, motivational and conscious (LeDoux, 2015, pp. 143-44).”

The comorbidity of ASD with epilepsy begs to be pursued further in our modern day. One journal states specific findings in neural connectivity and functional anatomy of the ASD's abnormal *brain wiring*:

*“New data suggest abnormally strong activation in parietal cortex during suppression of distractors, at the same time as integrative regions in prefrontal and medial temporal cortices are abnormally quiescent [...] Non-autistic brothers of people with autism seem to share the prefrontal and medial temporal hypoactivation but not the posterior hyperactivation, suggesting that low activity in integrative brain regions may be an endophenotype reflecting familial patterns of brain organization that may place individuals at heightened risk for autism (Society for Neuroscience et al., 2004).”*

Heavy metals in the brain can be fatal in some cases and are linked to causal factors in ASD: “Certain metals, depending on what particular frequency of the electromagnetic spectrum they are exposed to, such as BASF Carbonyl Iron Powder can actually absorb the microwave radiation instead of amplifying it [...] The basic physics involved in that simple event lends tremendous insight into what is going on inside the brains, intestines, and all the way down to the mitochondrial DNA of the EMF sensitive, vulnerable sub-populations such as the unborn, newborns, infants and school children, and the role these microwave emissions play in Autism (Imbriano & The Fullerton Informer, 2013).”

Iron is the alleged terrorist of all of the metals associated with ASD. It hides out and can't be absorbed easily. One meta-study showed specific results regarding ferritin, iron, hemoglobin, etc.:

*“Iron has an important role on cognitive, behavioral, and motor development. High prevalence of iron deficiency has been reported in autism [...] The sample was composed of 116 children between 3 and 16 years with a diagnosis of autistic disorder according to DSM-IV criteria [...] Serum ferritin, iron, hemoglobin, hematocrit, mean corpuscular volume, and red cell distribution width values were measured [...] We found that 24.1% of subjects had iron deficiency, and 15.5% had anemia [...] There was a significant positive correlation between age and ferritin and hematological measures [...] Results of this study confirmed that iron deficiency and anemia are common in children with autistic disorder [...] Conclusion: These findings suggest that ferritin levels should be measured in subjects with autism as a part of routine investigation (European Journal of Pediatrics, Herguner, Kelesoglu, Tanidir, & Copur, 2012).”*

Genetics point to the *Fragile X* chromosome as plausibly causal of ASD as well. For the sake of the following, we now know that Federal Law prohibits text that calls disorders *mental retardation*, but instead now refers to it as *intellectual disability*:

*“Fragile X syndrome is currently considered the leading inherited cause of intellectual disability, with a prevalence of 1 in 4,000 males and 1 in 8,000 females [...] Diagnosis is based on DNA analysis that usually identifies the number of CGG repeats in the fragile X mental retardation 1 gene at the Xq 27.3 site on the long arm of the X chromosome [...] Individuals with the full mutation have 200 or more repeats, an expansion that typically is associated with methylation of the promoter region of the gene that results in deficient or reduced protein expression [...] The fragile X mental retardation protein, or FMRP, is*

*believed to be essential for normal brain development and function and is expressed throughout the body, as evident in connective tissue abnormalities and hyperextensive joints in some individuals with the full mutation [...] Carriers of FXS typically have the premutation with CGG repeats in the 55–199 range [...] Although most permutation carriers do not have intellectual disabilities, they may have more subtle features such as shyness and anxiety, and they may also have physical features such as premature ovarian failure and the fragile X-associated tremor/ataxia syndrome [...] FXS is distinct from autism in that diagnosis is based on DNA tests, not behavioral observations, however, some individuals with FXS also meet diagnostic criteria for autism (Hatton et al., 2006).”*

“Particularly implicated in deficits of long-range connectivity and coordination of cognitive functions is the cerebellum, one of the most common sites of anatomic abnormality in autism [...] MRI morphometry reveals hypoplasia of the cerebellar vermis and hemispheres, and autopsy studies report reductions in numbers of cerebellar Purkinje cells [...] Moreover, recent genetic and MRI-behavior correlation studies suggest that cerebellar abnormality may play a more central role in autism than previously thought [...] Neurobehavioral studies have shown associations between cerebellar anatomic abnormality and certain motor, cognitive, and social deficits (Society for Neuroscience et al., 2004).”

Treatment of those with ASD is broad in scope with a cornucopia of theories hidden like Easter eggs all over the allegorical *yard* of the mental health community. Practice and theory are still being tested and researched in every capacity imaginable.

“Please let people know that I am an intelligent, autistic girl (NBC 11 Alive, WXIA, & Watson, 2015).” This was the answer that eleven-year-old ASD diagnosed nonverbal, Graciela,

gave to an interviewer as she tapped it out on an alphabet board that she has learned to utilize in such fashion in order to communicate with people. Graciela had learned RPM: Rapid Prompting Method. This method of treating ASD children/teens was created and currently practiced by Mrs. Soma Mukhopadhyay, from India. Soma is a mother whose son, Tito, is a non-verbal ASD. Now residing and practicing her coined *RPM: Rapid Prompting Method* in Austin, Texas, Soma trains ASD children along with their friends and families to learn and incorporate RPM into their daily living in order to provide successful communications with ASD children and teens.

RPM “involves constant, faced paced questions, prodding and engaging the child, using the alphabet board (NBC 11 Alive, WXIA, & Watson, 2015).” The results are now wowing the scientific community at large. Soma’s son, Tito, is now a young adult and highly esteemed published East Indian-American poet. When young, Tito elucidated through his poetry what it feels like to have ASD. He wrote a poem entitled *The Mind Tree*. The title he chose in and of itself speaks volumes regarding his own stance, as he feels that he is/was a quite capable and normal mind that is/was somewhat paralyzed or *stuck* in/as ... a *tree*. Amazingly close to the truth of the matter as per science, the autonomic nervous system, or ANS, is somewhat sadly *stuck* in those with ASD. A wealth of research is currently going on that delves into the possibility of harmful EMF rays indirectly attacking the ANS. Cultures that are swimming in electronics better heed this new research and its findings promptly.

Treatment(s) of non-verbal ASDs is wide and varied, but RPM is shining brightly in the way of proven results in the area of beneficial interpersonal communications:

*“RPM is distinct from other methods as it is based upon how the brain works [...]*

*The aim is to bring the student to maximum learning through the open learning channel and to elicit the best—not simply to test—out of the child to enable*

*maximum output in that given time [...] As a student's cognitive and motor proficiency increases, the sophistication of a student's response also improves [...] It uses prompting to initiate a student's independent response, without physical support [...] In addition to teaching letter-chart pointing, RPM also utilizes stencils and other drawing exercises to lead to independent handwriting (Mukhopadhyay, HALO, & White Lion, 2015).”*

Treatment methods continue to ripple in the enigmatic ASD pond worldwide. The mental health community has begun to show higher—and much deserved—professional regard for integrative or alternative medicines. For example, in PTSD sufferers, it has become widely known that melatonin aids in their symptoms, helping them to sleep without traumatic memories haunting to wake them. In the same vein, homeopathic medicine’s resurgence in the medical and mental health communities holds hope for treating those with ASD, though it admits that doing so proffers challenges in some cases:

*“Autism needs a hardcore-Hahnemannian approach [...] Valuable symptoms including reaction to vaccines, family medical history, thermal sensitivities and sleep postures form a part of the very detailed information that a physician would need [...] The real challenge is to understand what the child is expressing both verbally—if s/he is articulate—and nonverbally [...] It is only through a deep understanding that a homeopath is able to prescribe effectively [...] Two medicines require a special mention for their effectiveness in the treatment of Autism: Carcinocin and Secretin, which neutralizes the excess levels of peptides [...] Homoeopathic medicines in this scale are faster acting and at the same time gentler [...] They are able to hold the “slipping back” of the old symptoms and*

*can be used for a longer period with frequent repetitions [...] Homeopathic philosophy is a constant reminder that the greatest healing power lies within the body itself (Sharma, 2007)."*

"There is no single treatment for autism [...] Treatments can include intensive skill-building and teaching educational sessions known as applied behavior analysis, ABA, and many more interactive, child-centered versions of behavior treatments [...] Treatment may also involve special training and support for parents, speech and language therapy, occupational therapy and/or social skills training (American Psychiatric Association, 2015)."

During the final portion of my interview, I asked Ramona if she could please describe what she believed that ASD is *not*. She replied, "ASD is not mental retardation, it is not the fault of the parents, and it is not the same for all kiddos (R. Sowa, Personal communication, August 30, 2015)." This rang in like high noon tower bells in accord with *Seagull's* end . . .

Moments prior to the darling and tenacious *Fletcher's* beloved flight mentor, Jonathan, was to lift his wise wings to depart for the next realm of being, he passed his bright torch of having taught many great and small gulls on to the still doubtful and earnest Fletcher, offering a reckoning to encourage his new solo mission in his absence:

***"Don't you think that there might be other flocks, other Fletchers, that need an instructor more than this one, that's on its way toward the light? [...] Don't believe what your eyes are telling you [...] All they show is limitation [...] Look with your understanding, find out what you***



*already know, and you'll see the way to fly (Bach, Munson, & Bach, 1970, p. 124-25)."*

Perhaps as a society with ASD on the rise, we will do well to begin to learn how they think and learn instead of trying to have them learn how the neuro-typical learn. The ASD *Fletchers* of our world have much brilliance and loveliness to offer our earth and her skies.

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Appendix: Transcript of Communication.

\*Appendix

Interview with Ramona Sowa – Transcript of Communication

**Questions for Autism/ASD Therapist/Professional**

**The Questions:**

**From Melissa Crider Sent 8-30-2015 – Email Communication**

1. How many children/teens do you treat or have you treated who you have diagnosed with autism or who have been diagnosed and come to you for care?
2. When people say on the spectrum, can you define that in your own words please?
3. What is your opinion on DSM-IV versus the DSM-V clumping all of the spectrum under the title of Autism Spectrum Disorder instead?
4. Regarding genetics, do you find that the parents of the children/teens you treat had or have some proclivity for addiction or other ails or disorders? If so, how often? If not, what do you make of this?
5. Is it possible for an autistic child to possess also components of schizophrenia?
6. Can you please describe a common RRB/restrictive repetitive behavior that your patients exhibit?
7. How can OCD/Obsessive Compulsive Disorder not be akin to ASD, or is it?
8. How do you treat/provide therapy for a child of ten years of age who bites, hits, swings at items, and grows enraged by being asked questions? This girl was raised by her father with an absent mother and the mother has now re-entered her life at this tender age of ten.
9. Do you believe that an ASD child/teen is capable of deep feeling and of sharing empathy through certain techniques that you coach him/her through?

10. Which parts of the brain are affected by an agitation or feeling of taxation when having to make decisions?
11. Have you ever utilized lead-filled life jacket vests that provide a sense of weight/security around the torso/chest of an autistic child/teen?
12. Please describe the map of the brain and signals that make an ASD child/teen crave an inner balance or a re-centering of concentration?
13. Do you believe that harmful EMF rays and Thimerosal mercury found in common vaccinations are suspect for causation to a human being contracting ASD?
14. What are three things that you have learned that ASD is not?

**The Answers:**

**From Ramona Sowa on 9-5-2015 – Email Communication**

Hi Melissa,

I am an ABA Line Technician; Analytic Behavioral Analysis is the most studied and successfully documented therapy for autism in the last 30 years. I have been With Consultants for Children for nearly 1 ½ years. Line technicians follow the treatment program set up by the BCBA. It is conducted while taking data of the progress along the way. Changes to the program are made according to the charted data. I have just completed my Associates degree and am finishing my BA at UCDC, CU Denver. My major is psychology with a concentration in family counseling. I am currently completing a Registered Behavior Technician certification.

-Ramona Sowa

Due to HIPAA regulations I cannot write about any current or past clients, I will answer your questions about behaviors I have witnessed and/or worked with.

1. I have personally worked with 7 clients from age 2 to 15 years old during my employment. During summer club I supervised many kiddos on field trips.
6. RRB's are common with some kids with Autism, not all. One noticeable habit is 'hand flapping' sometimes called 'stemming' that can be upsetting or feel threatening to others unfamiliar with this habit. Stemming, as I have observed, usually occurs due to overexcitement. This excitement can be due to need to express happy emotion or can originate from feelings of being overwhelmed, then the kiddo is unable to express this emotion verbally and the emotion is expressed physically in body movement. Other RRB's are rocking, scripting-repetitive verbalization and even pacing. See documentary *Loving Lampposts* found on Autism Speaks website.
7. It is my understanding that OCD-obsessive compulsive disorder is not genetic (ASD is genetic), but is a personality disorder, which can be managed successfully through cognitive behavioral therapy.
8. I cannot comment on this question as it involves a specific person. Any child with behavior issues should be professionally evaluated at the discretion of the custodial parents.
9. Absolutely! People with ASD are not void of emotion or the ability to empathize, rather the social barrier surrounding their emotions prevent/decrease their ability to express emotions in the same, socially acceptable ways neuro-typical people do.
11. Weighted vests, blankets and stuffed animals can be useful for some children in some circumstances when employed by trained adults.
12. Imagine yourself in a room with all the lights on, a mirror ball spinning, a red flashing exit sign over the door, many people in the room all talking at the same time, a radio turned up all the way, elevator music in the background and a barking dog. This is what the

experience of overstimulation is like in a kiddo's brain with Autism. The need to re-center is the need to 'tune out' the stimulations and quiet the brain in order to be able to focus on one thing at a time.

13. While I do believe in severely limiting exposure to toxins in the environment and possibly harmful chemicals, studies have found no correlation to Thimerosal and the incidence of ASD. It is important to know empirical scientific information regarding 'rumors'. "A 2013 CDC study [PDF - 204 KB] added to the research showing that vaccines do not cause ASD. The study looked at the number of antigens (substances in vaccines that cause the body's immune system to produce disease-fighting antibodies) from vaccines during the first two years of life. The results showed that the total amount of antigen from vaccines received was the same between children with ASD and those that did not have ASD." <http://www.cdc.gov/vaccinesafety/concerns/autism.html>

14. What I have learned that ASD is not; many, many things but here are a few:

ASD is not retardation.

ASD is not the fault of the parents.

ASD is not the same for all kiddos .

When you have met one person with Autism, you've met one person with Autism.