

THE AUTISM AND ASPERGER'S HANDBOOK:

Putting It Together Volume 1

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The Autism and Asperger's Handbook:

Putting it Together, Volume 1

(Sample)



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Preface



In Volume 1, I cover a variety of topics including:

- Myths and misinformation about ASD
- The history of autism
- Etiology, prevalence, and diagnostic considerations
- Neurodiversity and self advocacy
- Humor
- Research findings
- The Mitchell Model
- Functional behavior assessment
- Treatment/educational planning
- Traditional treatment interventions
- Sensory integration
- Social skills development
- Language development
- Technology initiatives
- Additional interventions

Volume 2 addresses topics such as:

- Strengths of autistic people
- Role models
- Autism in the arts and entertainment
- Redefining autism in our world
- ASD as a culture/neurodiversity
- Behavioral de-escalation and restraint
- Behavior support systems and staffing
- Learning styles and curriculum
- Education and mental health issues
- Functional fixations
- Transition planning
- Resources for autistic adults
- Vocational considerations
- Higher education
- Family stressors
- Bullying

- Advocacy, legal, and political considerations
- Risk factors and safety concerns
- Tragedies in the ASD community
- First responders and hospitalization
- Parenting and grand-parenting
- Siblings

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Sample Section

This is a section from the book that gives a flavor for the style and interactive nature of the book as a whole. Unfortunately, the file size of the sample book needs to be under 20 MB, so I had to cut several things out, including some great video clips illustrating several points, but I hope you enjoy it nonetheless!

Sensory Integration

Sensory integration can be integral to the success of the Mitchell Model across any number of interventions and settings. In the therapeutic programs I've designed over the years, I've emphasized the need for sensory diets for the majority of autistic children involved. Whenever possible, I've included the consultation of occupational therapists to develop the sensory diets for each child, as well as the overall sensory integration approach for the program itself. However, it's been my experience that occupational therapists don't always buy into the importance of sensory integration, despite growing peer-reviewed research that confirms the efficacy of sensory diets with autistic people. There is no longer an argument for sensory integration being a fringe modality, as it is essential for many autistic



people to have as a prerequisite before embarking upon a wide variety of tasks. There does seem to be an "old school" of occupational therapists who focus primarily on fine and gross motor skill issues such as handwriting, buttoning, or using utensils, although the "new school" of occupational therapists seems to fully embrace sensory integration. It's kind of like Jack Nicholson's "Joker" versus Heath Ledger. However, there simply

isn't enough time and money to allow occupational therapists to be the ones fully implementing and tracking sensory diets. It has to be a collaborative approach with all team members pitching in as needed. A half an hour per week just isn't going to cut it.

The hope of developing a sensory diet is so that an autistic person can regulate their own sensory input so

that they don't become overwhelmed when trying to carry out daily activities and task demands in a variety of settings. The process of determining how the sensory diet should be constructed and carried out can be very meticulous and time-consuming, although the benefits are often very high. All of us can benefit from changes in sensory stimulation, although I think the difference is that many autistic people tend to be very particular about what types of sensory input they are able to function under, more so than for most neurotypicals. Sometimes, providing sensory adaptations across a setting can benefit everyone. For instance, there are several inclusion classrooms in the country which have now switched to



exercise ball chairs for all students, autistic or otherwise. The result has been that autistic students get the sensory stimulation they may need while the teacher reports that the rest of the class is showing better posture and higher levels of attentiveness while using the new chairs. Sometimes, it just makes sense for everyone. We all are responsive to different types of sensory stimulation, whether it be soothing music to put us in the mood for a

romantic dinner, strobe lights to get us dancing at the club, or rubbing our feet at the end of a long day. Two each, his/her own.



Brain research has demonstrated that autistic people tend to process different senses in different ways than neurotypicals, and this doesn't necessarily have to be a bad thing. Sometimes, certain senses can be heightened for autistic people whereas others may be dulled and difficult to

process. When I'm speaking with autistic children who describe frustration with being overwhelmed by sensory input, I often talk about their senses being a kind of special ability, almost like a superhero. When I was a child, I had a very good sense of hearing. One day our dog got loose on his leash while running through the woods. We couldn't find him for hours, and when my father and I went driving around the back roads with our windows down, trying to listen and look for any clues, we were quite discouraged. Finally, over the noise of the engine and our tires on the dirt road, I heard some rustling about 50 yards away in the middle of the woods. I asked my father to stop. I got out of the car, and found my dog, exhausted, wrapped around a tree with his leash, unable to escape. Sometimes a little extra sensory sensitivity can go a long way. With the kids that I



work with these days, they like to identify as a superhero instead of someone who is burdened by their senses. Sadly, Superman, Spiderman, and other superheroes often aren't able to be completely free in their lives, as the demands of their special abilities can place inordinate pressures on them on a daily basis. In some ways, autistic children are no different. With great power comes great responsibility, and often more than a fair share of headaches as well.

And yes, real-life autistic superheroes (or at least heroes) do exist. There are autistic people who have been successful in various endeavors, not in spite of their sensory differences, but because of them. For example, a phenomenal swimmer by the name of Kendall Bailey (pictured on the next page) became a sensation leading up to the 2008 Paralympic Games in Beijing, representing the United States. As a child, Kendall was described as being uncomfortable all the time, except when he



was in the water. The water was calming for him and he craved the feeling of being enveloped in it. When he had moments of dysregulation, described as being hysterical, his family remembers him lying in the empty backyard kiddie pool as they poured gallons of rice over him to soothe his senses. After such auspicious beginnings, he began to take up swimming as a hobby, and then as a sport. He responded incredibly well to the water, and did not feel the need to adhere to complex social rules and expectations, as would be required in other sports. He became highly skilled in swimming, as described by his coach: "I think swimming always suited him because he doesn't interact with people in the water. He can isolate himself in his own little world, and the flow of the water around his arms and legs, it just

feels good to him. And the faster he goes, the better it feels." Talk about intrinsic motivation.

I've seen several autistic children over time react in a similar fashion to Kendall when in the water. Once he discovered a diving mask, I know of one child who could instantaneously go from being highly agitated in social situations to completely at ease under the water in his own world, exploring the sensation of water without hesitation as he soothed himself. For him, water continues to be a tool for emotional self-regulation. Although he has moved on to include other strategies, water serves an important function for him.

Over time, the goal is to decrease reliance on sensory diets for regulation, as I've found that autistic people are eventually able to learn what works for them in self-regulating their own levels of sensory stimulation for optimal daily functioning. For instance, when Temple Grandin was younger, she placed herself into farming equipment that would squeeze her and provide the stimulation she needed to control her high levels of anxiety around certain situations. She came to rely on this type of pressure and developed a "hug machine" that she was able to use on a daily basis. When I met Temple about 10 years ago, she told me that if she hadn't used her hug machine that morning, that she would have been an anxious mess while trying to navigate novel social situations. However, a couple years ago when she was being interviewed on television, the host asked her

about her hug machine, and Temple indicated that it had broken a couple months prior, but that she no longer needed it since she was now hugging people more often. Of course, I started to tear up when I was thinking about how happy this would make her mother, my friend Eustacia Cutler. I guess it's true after all that the only thing constant is change.

When people think about sensory integration, the easiest and most obvious place to begin is through tactile stimulation.

There are many tried-and-true methods that we still use, such as sand and water trays, dry rice and beans trays, stretchy fabric that we can wrap around autistic people, weighted vests, pressure vests, large exercise balls, large peanut balls, textured squeeze balls, various hand manipulatives, deep pressure, pillows and couch cushions, repetitive brushing with surgical brushes, and a host of other items. All of these items may have higher or lower levels of effectiveness for the tactile sensory needs of certain autistic people. Sometimes we simply have to try a bunch of different items until one seems to stick. In my office, I have a

Movie 1.1 Water and bean trays



Sensory supplies don't have to be expensive, as seen with these items purchased at a wholesale store.

closet of sensory supplies that I can whip out during evaluations so that autistic people can get a sense for what works and doesn't work for them. You just never know exactly what is going to click in until it actually does. I've had some children go into la-la land with a particular scent, while others run screaming from the room after smelling the same scent.

Vestibular activities can also be linked in with tactile stimulation, as movement can be very important as well. I remember working with one family who was

absolutely at their wit's end trying to figure out how to get their eight-year-old child to sleep through the night without him waking up and trying to climb out a window, break objects, and cause other types of havoc. Finally, we noticed that he responded very well to being rocked in a hammock. This was the only time that he actually seemed to stay still throughout the day as he would spend most of this time running from one area to the next, thoroughly exploring, and often destroying his surroundings. So, the family decided to install a hammock for sleeping in his

bedroom. They eventually taught him how to push off the wall with his foot to provide vestibular stimulation for himself whenever he needed it throughout the night. I'm not sure how good this was for his back, but he was certainly a much happier child throughout the day when he gained sufficient sleep and remained safe.

However, just because tactile stimulation seems to be the easiest and most obvious solution, other senses need to be addressed as well. When tactile stimulation techniques seem to be failing, I often turn to olfactory methods. The sense of smell seems to be hardwired into memory, as research suggests that less neural processing is involved in order to experience smells, as opposed to other senses. This is why we tend to be transported back in time very easily when we smell certain smells. For me, whenever I smell fried dough, I automatically drift back to a concession stand at the Rutland Fair near where I grew up in Vermont. So, I often encourage autistic people to go through a series of smells, whether it be candles, aromatherapy, foods, and so on, until they find something that works for them in



soothing their anxieties. Even if the primary sense which is overwhelmed may not be smell, focusing on olfactory options can often relieve over- or under-stimulation indirectly.

Visual adaptations can also be very effective sensory interventions. For instance, autistic people, similarly to many other people, may respond well to changes in the visual field by replacing fluorescent lights with natural lighting, reducing distractions and clutter within sight, changing the color scheme to colors which are reported by that person to be more soothing, wearing tinted lenses (produced by Irlen or other companies), and so on. When approaching tasks that are lengthy, it may be helpful to block certain portions of the task with a piece of paper or another object so that only one part is visible at a time, making the task more manageable than seeing all the information at once, which can create more anxiety.

Noise can be particularly bothersome for many autistic people as well. Often, autistic children may use loud screaming in order to drown out the noises around them when they are too overwhelmed. It seems that some of these children are not bothered by

Movie 1.2 Noise Sensitivity from “Mercury Rising”



Bruce Willis' character attempts to reduce excessive noise to help calm an autistic child as the boy screams to drown out the sounds around him. Willis' character also uses visual strategies to establish a social connection. (Sorry, I had to delete this limit the sample book's size)

sounds that they can actually control, but more by sounds which are out of their control. It's a little bit like being ticklish, as some people may go into virtual convulsions just with the anticipation of being tickled, even though it's impossible to tickle oneself (Go ahead, try it!). Reducing certain sounds in the environment can often be attainable, although sometimes it's not feasible. So, some autistic people may respond well to having noise-reducing earbuds with them to use, headphones if the earbuds are bothersome, or even earmuffs if it's not too warm out. In this way, their hands can be freed up so that they don't have to hold their ears when upset. And, they may not feel the need to scream and disturb others. Certainly sounds may be more disturbing than others, such as crunching sounds or intermittent tapping. If these

sounds can be predicted, then adjustments can be made and systematically desensitized. Over time, oversensitivity to sounds can dissipate if worked with proactively, and autistic children may be able to grow up to become comfortable in crowds of people, and other noisy situations.

Finally, the sense of taste can be a serious difficulty for many autistic children. Earlier in this book, I discussed food sensitivities since many autistic children tend to be very reactive to new tastes and textures. However, systematically over time, different foods can be introduced with incentives provided. However, we don't need to spend too much effort in this area unless proper nutrition is not being obtained. On the flip side, some children seek out great quantities of stimulation through taste, and mouth objects across their environment as a way of exploring the world. This can be quite dangerous at certain times and is generally seen as the main reason for higher rates of lead poisoning among autistic children. If certain senses are dulled, such as tactile sensitivity, children may choose to explore the world through taste as a result. It may be important to develop tactile stimulation alternatives as efficiently as possible so that they can shift into exploring the world through touch instead of through their mouths. Nevertheless, there may be a need for the sense of taste to be regularly stimulated, and in such cases, accommodations can be made for chewing gum, healthy and tasty snacks, and if the need arises, chewy tubes can be introduced. I usually try to stay away from chewy tubes since they

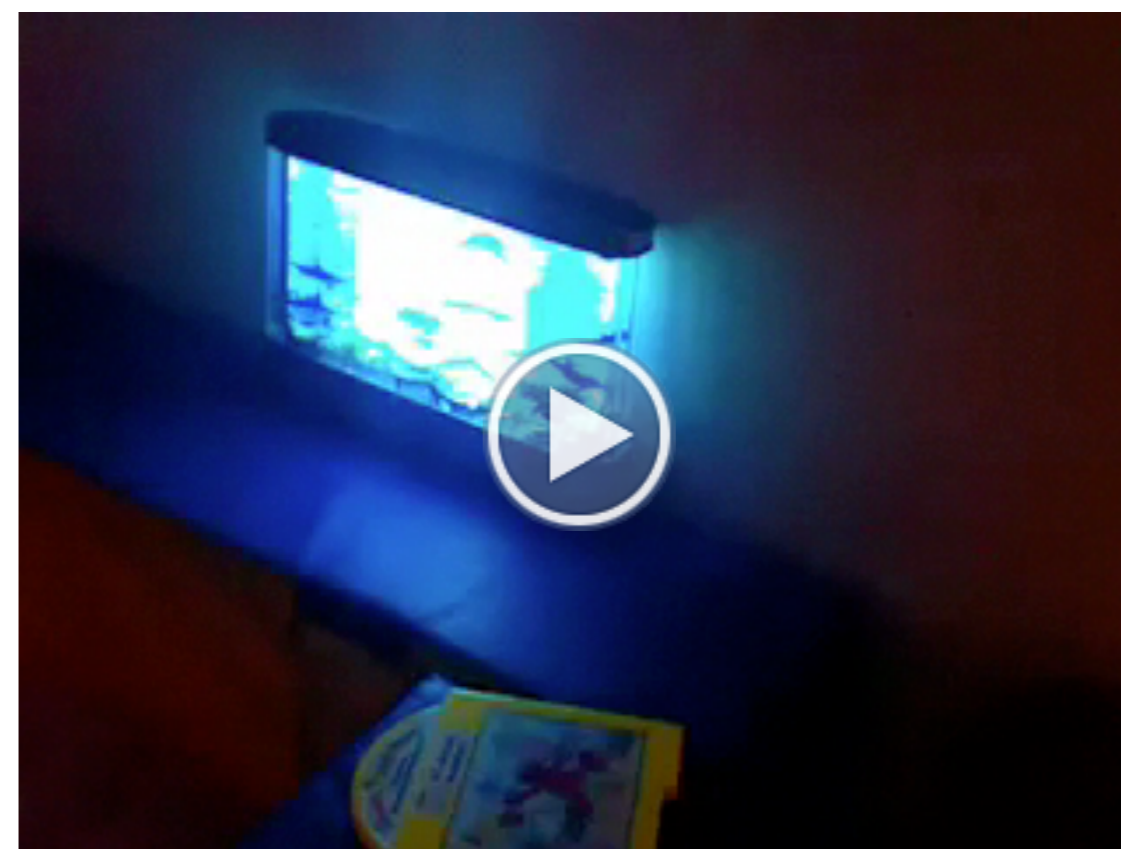


do have a negative social connotation to them. Although, if it works, go for it. I also sometimes suggest chewing a durable fabric or towel with some flavor possibly applied. Visions of Jerry Tarkanian (pictured on the left) from his old basketball coaching days at UNLV come to mind. Jerry used to march up and down the courtside chewing on towels to

keep his anxiety under control, and started a bit of a fad back in the day for basketball players. As far as I'm concerned, it's better to chew a towel than to chew through your clothing on a daily basis, or worse yet, chewing one's wrist until it is covered with calluses and retains permanent scarring.

Sometimes, focusing upon a single sense for sensory integration is not enough. Some autistic children require more comprehensive stimulation from a number of senses simultaneously in order to be productive over the course of the day. I also suggest that families develop a sensory corner in their

Movie 1.3 Multisensory Rooms



This is a short video of a room I designed for a program using some Snoezelen supplies along with other items, complete with aromatherapy, light projector, ball pit, multicolor fiberoptic strands, bubble tube, swing, and so on.

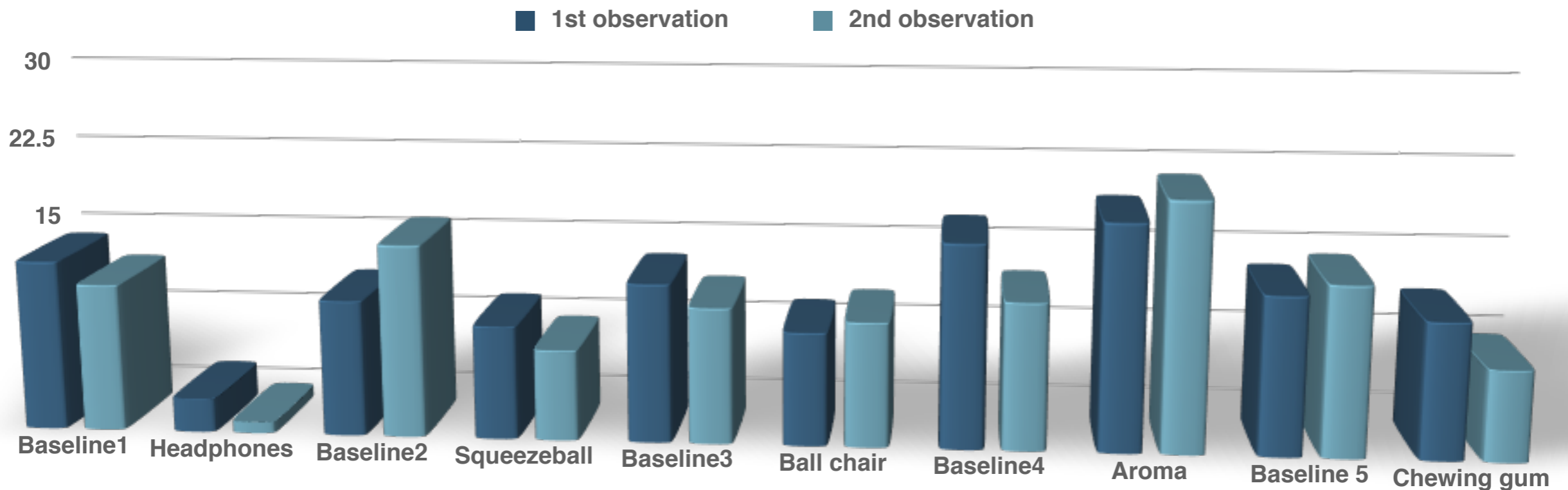
homes, or that teachers devote an area of the classroom in which a variety of sensory options are available. Multisensory rooms/spaces, whether the materials come from Snoezelen, other companies, or are simply thrown together from trips to hardware and craft stores, can provide intensive stimulation for short periods of time. It's been my experience that some children who immerse themselves in the settings for a few minutes at a time during key points of the day, come out of the room with a

renewed ability to engage in task demands and be highly productive for profoundly longer periods of time than they would be able to engage otherwise. And besides, it could be a neat experience for everyone. I sometimes joke that the small vibrating hand-shaped chair in the corner of my office is really for me when I'm feeling stressed out (okay, maybe I wasn't really joking).

So, how do we figure out which sensory approaches will work with which autistic people? The process can be streamlined by engaging in some exploration ahead of time before we start in with a trial and error approach. I often use the Sensory Profile, developed by occupational therapist Winnie Dunn, although there

are now other options on the market as well. One of the standards is the Alert Program, which uses the book "How Does Your Engine Run?" The assessment provided can lead us quickly into determining which direction to go with sensory integration. Sometimes, responses to questions might suggest moving toward auditory options, visual options, tactile options, and so on, saving us time from mucking around with things that probably won't work. Once we have some kind of an idea where we're going, I like to have the team engage in systematic data-gathering, on some behavior such as ear-pulling (see chart below), to see which specific techniques might be most effective

Effect of Different Sensory Inputs on Ear Pulling per Hour



for particular autistic individuals. The process goes something like this:

(Sorry, that's all I could squeeze in for 20 MB!!!)