The Positive Effects of Drumming on Children with Autism

By Robert Damm, PhD, and Dr. Stephen Workman

Autism Spectrum Disorder (ASD or autism) most commonly affects a person’s ability to communicate clearly and relate to others. It can present itself in many different ways and depths. Some with autism lack the ability to communicate beyond a few words at a time in short choppy phrases, while less severe forms allow others to participate in normal daily activities with only subtle hints that they are actually autistic. The disorder hinders the communication occurring in different parts of the brain. Doctors are not completely sure what the exact causes of autism are, but there seems to be a genetic link that can be inherited within a family. Many people with autism also have other learning disabilities such as ADD, ADHD, or anger management issues. A lot of progress is being made towards understanding the causes of and effective treatment or management of autism.

Since autism is a disorder that occurs when the brain is forming and developing, most of the symptoms become obvious during the early stages of life when a child is learning to talk, play with other children, and learn different behaviors. Parents may notice that their children play alone, don’t make eye contact or respond when spoken to, are having trouble communicating at their age level, or have lost some of their previous communication skills. Sometimes autistic individuals have high levels of anxiety or nervousness, or they develop repetitive movements such as high amounts of rocking. Other behavioral difficulties include anger and/or frustration, decreased patience, and difficulty following instructions and/or cooperating.

A variety of techniques are used to help people with autism. Since there are so many ways that autism can present itself, treatments are unique to each individual. Common methods include physical therapy, speech therapy, and medications. Recently, music therapy has shown great success, and has been added as a well-respected treatment option.

**WHY DRUMMING?**

While individuals with autism face many challenges including communication and repetitive “tick-like” behaviors, they often excel in music, math, art, and visual skills. The combination of math, music, hands-on stimulus, and repetition makes drumming a good fit. Experience has shown hand drums to be particularly effective with autistic students. The singularity of a hand drum reduces the possibility of overwhelming the student while allowing numerous playing options. Students are able to express themselves, be creative, and have a physical outlet.

**WORKING WITH AUTISTIC STUDENTS**

The authors have taught many autistic students and have noticed similarities in how these students have responded to drumming. In particular, Neal and Susie (whose names have been changed to protect their privacy) are examples of success.

**Neal**

Neal took hand drumming lessons. He is a highly verbal, creative, and imaginative boy who loves to tell stories. He learned to make a wide range of sounds on his djembe using a series of techniques (e.g., bass, open tone, muffled stroke, “swish” with fingertips, etc.), along with a number of rhythms/patterns. He was especially responsive to the integration of story-telling and drumming. For example, *Hand, Hand, Fingers, Thumb*, (Dr. Seuss), had a recurring text of “Dum ditty Dum ditty Dum dum dum,” which was played as “Ta ti-ti ti ta ti ta ta” or “1 &-uh 2 &-uh 3 & 4.” In a similar way, Neal played rhythms from *Dr. Seuss*, inspired by the syllabication and rhythms of words and phrases consisting of animal names. For example, Neal interpreted “tiger zebra alligator fox” on the drum as “Ti-ti ti-ti ri-ti ri ta ta” or “1 & 2 & 3-e-&-uh 4.” Soon, Neal was composing his own rhythms in association with characters he created.

In terms of strictly musical and drumming objectives, Neal worked on consistency of technique and sound production, and awareness of handing (right and left). His weekly djembe lessons included improvising, composing, and memorizing a variety of rhythms. He composed rhythms that represented many different styles and meters, each of which he named to correspond with a character in his story. Neal would tell his story, and with the introduction of each new character, he would play the associated rhythm. Every week he would review his list of rhythms, retell the story (with integrated drum rhythms) he had previously created, and then continue the expanding narrative by adding new characters (with drum rhythms) and developing the plot.

Each week Robert transcribed Neal’s text and typed new pages for him to add to his book. He was always positive and excited to be playing, composing rhythms, and telling his stories. He always seemed to enjoy his hour-long lessons. Sometimes, when his mother dropped him off for a lesson, she would say, “He’s had a bad day, so if he is unable to focus or if he causes you any trouble, please give me a call and I’ll come and pick him up.” Robert never had to call her; he was always excited to play.

Neal and his family moved to another state, so Robert is not teaching him anymore. Robert contacted Neal’s mother to ask her to reflect on what she perceived as the benefits of having Neal in drum lessons and to have Neal recount his memories of taking drum lessons. Here is her response:

“My youngest son was born with a chromosome deletion that manifests in multiple disorders, but when he is drumming, he is just Neal. Neal with his drum. During drumming lessons, he can escape labels, while at the same time benefit from several different aspects of the drumming as therapy. First, drumming is an excellent creative outlet, but it is also an activity that provides proprioceptive input. For someone like Neal with sensory processing issues (part of his ASD diagnosis), the sensory feedback he gets from hitting the drum facilities self-awareness, orienting his body in the space he occupies. Although he does not hit the drum hard, he still experiences pressure through impact that gives his brain the necessary signals it needs to help him respond more appropriately to his environment. That same sensory input is calming as well as organizing, which in turn, can foster Neal’s ability to quiet his otherwise often erratic behavior in order to process and respond to what he observes. In addition to sensory processing challenges, Neal copes with ADHD. Being able to focus on a given activity at specified time...
The singularity of a hand drum reduces the possibility of overwhelming the student while allowing numerous playing options.

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