

# FACT SHEET Rhythmic Interventions for working with Autism

Many people with Autism have a love of Music

## **AUTISM and SENSORY DYSFUNCTION**

Autism is not a single entity, but rather a grouping of underlying conditions that impact individuals in different ways, at different stages across the lifespan, & which generally include levels of sensory dysfunction that impairs social interaction (Goodwin-Emmons & McKendry-Anderson, 2005). Sensory dysfunction refers to difficulties in processing sensory information that leads to maladaptive responding, including developmental delays, problems with physical coordination, learning delays, problems with attention & low self-esteem, (Lane, Miller & Hanft, 2000).

Individuals on the Autism spectrum may either be hyper-responsive, hypo-responsive or demonstrate fluctuating responsivity to sensory feedback from their environment. These individuals fail to modulate their sensory responses adequately & often develop defensive behavioural patterns, including avoidance of disruptive events, self stimulation, repetitive movements & self-injurious behaviours in order to self-regulate (Huebner, 2001).

## **Rhythmic Music and Emotional Attunement**

One of the commonest challenges for people living with Autism is recognising & responding to others feelings – emotional reciprocity.

Music is a language of emotion & can be used to both express feelings & draw attention to other's feelings. Attunement, refers to being able to identify or 'tune in' to how others are feeling utilising a range of sensory information. Musical exercises that focus on reading & aligning emotional expression between group members help cement this skill.

#### **Rhythmic Music, Coordination & Balance**

Many individuals with autism present with challenges of fine or gross motor control or both. Rhythmic music, including drumming can help develop muscle tone, balance and grounding, assisting the individual find a sense of physical stability. Key exercises that promote bilateral hand use, crossing of the middle line, sitting and standing balance & visual tracking can all be incorporated into fun musical activities.

Bellini, S. (2007). Social skills training for youth with ASD. Child Adolescent Psychiatric Journal, 17(4):857-73, Goodwin-Emmons, P., McKendry-Anderson, L. (2005). Understanding Sensory Dysfunction. London: IKP Huebner, R.A. (2001). Autism - a sensorimotor approach to management. Maryland: Aspen Publishers Lane, S.J., Miller, L.J., & Hanft, B. (2000). Sensory Integration – Patterns of function & dysfunction. In Press.

## RHYTHM PLAY FOR SOCIAL SKILL DEVELOPMENT

Social impairment is a common feature of Autism & many people struggle to develop ongoing meaningful relationships outside their families. At the heart of this issue is a lack of social understanding, often driven by low levels of emotional awareness & non-verbal behaviours such as eye to eye contact & other gestures, (Bellini, 2007).

Play is a complex childhood activity that extends into adulthood & is a key platform for social interaction & social learning. Children & youth with autism often struggle to play cooperatively with others, & avoid social play, preferring to play alone (Huebner, 2000)

Group rhythm based musical activities can address a wide range of social skills in a safe & fun context. Group music making is a cooperative process & as such requires all of the different social skills required in other teamwork activities. The quality of the music played by the group is often a representation of the quality of their relationship & the social skills they master, particularly those related to communication.

Rhythm games can be incorporated that specifically develop individual social skills. For example the common 'Call & Response' routines used universally by music teachers & music therapists support reciprocal interaction & can be used to teach the pragmatics of communication between individuals. Similarly, exercises can be developed that focus on eye contact, & sound localisation. Group rhythm play also extends an individuals ability to focus in the moment, bolstering attention levels, that are equally relevant to developing healthy relationships.

# **Rhythmic Music and Emotional Regulation**

Difficulties with arousal modulation is a defining trait of autism, where individuals regularly over-react or under-react to sensory information. Rhythmic music can replicate levels of emotional intensity and be used to help people control their emotional response by engaging in exercises that practice moving from high energy rhythms to calming patterns. These same exercises can then be transferred from the drum to the body making them available to the individual at any time. Rhythmic musical exercises can help individuals with auditory sensitivities learn to tolerate different sounds and volume levels. The use of head-phones is common in music classes with children with high levels of audio sensitivity, and these are often gradually removed over the course of an intervention as the individual becomes more accustomed to the sound.