

What's New in the Parent Empowerment Center

by Sabra Follis, Music Therapy Intern

You may have noticed the recent changes in the NMTSA Parent Empowerment Center (PEC). We now have new article notebooks sorted by subject, and you will find easier access to copies of each article. Soon, a checkout system will be in place for our expanding lending library. As we acquire more materials to share, we are welcoming any suggestions or donations to the library. Every two weeks a different article will be on the counter featured as "NEW in the PEC." These articles may vary in subjects from Autism and Movement, Down Syndrome, Music Therapy and more. We welcome you to see the exciting changes!

A Word About Our Supporters

NMTSA would like to specially recognize Paul and Cynthia Jacobson's December 2007 Facilitating Relationships donation. Paul Jacobson researched and provided a generous donation which enabled NMTSA to purchase the Chef Call paging system. This paging system has been a valuable tool for our therapists and families allowing client caregivers to page their therapists once they are ready. This system has markedly improved the use and efficiency of each therapist's time. Thank you Paul and Cynthia!

Neurologic Music Therapy Services of AZ
2702 N 3rd St – Suite 1000
Phoenix, AZ 85004

Thank you to our first quarter 2008 donors!

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Friends of NMTSA Program

Friends of Kris' Camp / Friends of NMTSA allows participants to make automatic monthly donations via a credit or debit card. It was idealized by a parent of a child who attends both NMTSA and the ACT Program as well as Kris' Camp during the summer. The following individuals donated monthly during 2007 to NMTSA through this valuable program:

Travis & Natasha Andres
Dan & Angie Braude
Chris & Cheryl Butterworth
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Tony & Carol Daniels
The Demko-Wilson Family
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If you are interested in this program, please pick up a registration form in our Parent Empowerment Center or e-mail Brendan Anderson at BAAnderson@nmtsa.org.

Functional Cadence

The Rhythm of NMTSA



Celebrating 27 Years of Serving the Phoenix Community!

Upcoming Programs

Check out our website at www.NMTSA.org for information about upcoming events and fundraising opportunities

The SuperScope: Tool of the Trade

Thanks to a generous anonymous donation, NMTSA has purchased a SuperScope machine – this device allows recorded music to be changed in tempo to create a CD for home listening to help clients be more functional. Ask your therapist for more information about this exciting tool!

Contact Us

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Fax: 602-840-6431
e-mail: info@nmtsa.org

NMTSA and Best Practice

by Suzanne Oliver, MT-BC, NMT Fellow

The first in a series on Best Practice and NMTSA

People often ask "What is it that makes NMTSA different from other service providers, and what motivates parents to drive long distances, week after week, in order to access therapy for their children?" Neurologic Music Therapy Services of Arizona/NMTSA has provided services to persons with developmental disabilities and their families in the Phoenix Metropolitan Area since 1982. NMTSA is recognized by many for its evidence-based approach to treatment for persons with neurological impairments, and persons with autism specifically.

NMTSA's mission focuses on best practice, defined as the most efficient and effective way of accomplishing a task based on repeatable procedures that have proven themselves over time for large numbers of people, and positive behavioral supports. The organization and its staff maintain a close relationship with researchers from Colorado State University (Neurologic Music Therapy, Center for Biomedical Research in Music), Syracuse University (inclusion and communication), and the University of Florida-Gainesville (autism and movement disorders), in order to remain current with best practice approaches for the individuals served. Indispensable elements of NMTSA's treatment philosophy are identified below. (Primary researchers are as indicated. However, for a complete list of research references as well as specific articles ask your therapist or check the NMTSA Parent Empowerment Center.)

1. The identification of **psychomotor regulation disorders**, i.e. an inability to initiate, inhibit, and/or sustain movement which impedes demonstration of true intent and masks cognition; *Dziuk, Larson, Aposto, Mahone, Denckla & Mostofsky (2007); Nayate, Bradshaw & Rinehart (2005); Rinehart, Bradshaw, Brereton & Tonge (2001); Teitelbaum, Benton, Shah, Prince, Kelly & Teitelbaum (2004); Teitelbaum, Teitelbaum, Nye, Fryman, & Maurer (1998); Vilensky, Damasio & Maurer (1981)*
2. The identification of **emotional motor dysregulation** that exacerbates psychomotor regulation symptomatology; *Dapretto, Davies, Pfeifer, Scott, Sigman, Bookheimer & Jacoboni (2006); Trevarthen et al. (1998); Williams (1996)*
3. The **presumption of competence** supported by the lack of empirical data linking autism and mental retardation and the existence of data linking dyspraxia in autism to decreased IQ scores; *Biklen & Burke (2006); Biklen & Kliwer (2006); Dawson, Soulieres, Gernsbacher & Mottron (2007); Donnellan, in press; Edelson (2006)*

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Recommended Read

Check out these books and articles in the Parent Empowerment Center!

Donnellan, A.M.; Leary, M.R. (1995). Movement Differences and Diversity in Autism/Mental Retardation: Appreciating and Accommodating People with Communication and Behavior Challenges

Corbett, B.A.; Mendoza, S.; Abdullah, M.; Wegelin, J.A.; Levine, S. (2006). Cortisol Circadian Rhythms and Response to Stress in Children with Autism.



By Dena Reany, ACT Lead Teacher

It is the end of the school year for our ACT Program, and the students would like to share some of their original Word Association thoughts....

On learning:

"I can learn, because I am capable"- ALAN

"I learned hope in myself, not in the people that help me"- COLLIN

On ACT School:

"We are very smart"- MC KENNA

"Is fun when we get together and kind and get learning"- MAX

On intelligence:

"Good body my belief"- SHERIDAN

"I am confident"- ALYSSA

"Very much in me"- NOAH

On Autism:

"Great hope to make a difference"- AARON

"We are all smart, but people don't know it"- D'MICO

On summer:

"Family you like"- SHERIDAN

"Get swim"- ALYSSA

Corporate Sponsorship Opportunity

Do you know of a company who would like to gain philanthropic exposure for their business and support one of NMTSA's community-building programs? It is part of our mission at NMTSA to continue to develop top-quality programs that meet the needs of the individuals and families served and to offer these programs free of charge and/or with minimal cost to the Phoenix community. NMTSA is currently looking for a generous corporate sponsor to underwrite the invaluable Competency-Based Communication Community Training and Peer Support Programs, which trainS approximately 130 communication partners a year and offers an opportunity for clients to communicate with their peers using augmentative communication accommodations. Let us know if you can help! Please contact Paige at: pjacobson@nmtsa.org or 602-840-6410 Box 2 for inquiries and/or more information.

Staff Spotlight: Brendan Anderson

By: Suzanne Oliver, Executive Director

You may have noticed a lot of positive changes at NMTSA in the last year—things like our new logo, updated website, promotional DVD, working computers throughout the clinic, an active clinical music studio, updated newsletter format, and more. What you may not have seen is who is behind the scenes making these things happen. *Brendan Anderson* was hired in April 2006 as the NMTSA Project Manager, and he has done just that! His creativity, attention to detail, and action-focused approach to work has resulted in great things being accomplished here at NMTSA. From design and marketing to everyday functional work tasks, Brendan is the go-to-guy to make things happen. In addition to working for NMTSA, Brendan also works for the Phoenix Symphony as their Digital Media Coordinator, designs and shoots promotional videos with his business Anderson Media, is the conductor for the Ahwatukee Concert Band, and is an accomplished composer (visit his website at www.brendananderson.com). Last we heard Brendan was receiving seven different paychecks!! He is busy, active, and definitely gets the jobs done. He also happens to be the husband of Jenna Anderson, our Clinical Coordinator. We are happy for the connection that brought him to NMTSA, are extremely grateful to have him as part of our team, and we are thankful for all the many projects he coordinates and completes for us. You may actually never see Brendan, but know that he is active behind the scenes designing and implementing all of our ideas and coming up with practical solutions to serve you and the community better, while making things more efficient for NMTSA's staff. Thank you, Brendan!!

A Note From the Executive Director

It is amazing how quickly the year is flying by! Summer brings the completion of some things and the beginning of others. We look forward to working with all of you during the summer; adjusting schedules, developing home programs, renewing our bodies and minds through planned relaxation. While some venues look at summer as an opportunity to fear regression and loss of skills, we look at summer as an opportunity to apply learned skills in a different way. I encourage all of you to talk with your therapists about things you can do this summer at home and while on vacation, to promote ongoing skill development and integration of skills learned throughout the year. Spend some time in the Parent Empowerment Center exploring resources and reading new articles. Enjoy time for yourselves, and take some time to learn and apply valuable information that can help your child continue to integrate his/her skills throughout the summer months.

Research Corner Oxidative Stress in Autism

By Sarah Studebaker, MM, MT-BC, NMT

An interesting article, but first, a chemistry lesson... Normal metabolic and detoxification functions in the body as well as exposure to environmental pollutants and infections produce molecules within the body (oxidants) that must be broken down (by antioxidants). Oxidative stress is a term used to describe the level of cell damage caused by oxygen reactions in the body. This stress is higher when the body is unable to remove oxidants and repair cells fast enough.

Okay, now, back to the article... Researchers examined the levels of oxidative stress, mercury (strongly associated with oxidative stress), and selenium (an antioxidant) in brain tissue from the cerebellum (motor area of the brain) of individuals with autism and individuals without autism. They found that levels of oxidative stress were significantly higher in individuals with autism. Mercury levels were found to be a little bit higher, but not significantly so. They also found that there was a decreased amount of the antioxidant selenium, which is involved in binding to mercury in the brain. The researchers speculate that this could be a possible reason why heavy metals can be more toxic for some individuals with autism.

Cells in the cerebellum are especially sensitive to the results of oxidative stress. Some of the results of damage to the Purkinje cells (specific type of cells in the cerebellum) can be difficulty with motor execution, motor planning, sensory processing, other cognitive and emotional processes, and attention-orienting. This study is the first of its kind, utilizes a very small number of samples, and should not be overly interpreted. However, it is an interesting additional insight in the quest to understanding autism.

To read more pick up a copy in the Parent Empowerment Center...

American Journal of Biochemistry and Biotechnology 4(2): 73-84, 2008.

Best Practice (continued from page 1)

4. The **provision of competency-based communication accommodations** that decrease frustration and thus improve emotional motor responses; provision of a communication system that allows for active, ongoing, open-ended communication vs. fixed and predetermined responses; Biklen & Burke (2006); Donnelan, in press; Wetherby, Prizant & Schuler (2000)
5. The **provision of sensory accommodations** that improve sensory processing and facilitate motor mapping, thus allowing for skill demonstration and initiation of novel motor patterns; Anzalone & Williamson (2000)
6. The **provision of rhythmic accommodations** that prime the motor system and facilitate initiation and fluency of movement as well as improve cognitive processing via standardized neurologic music therapy interventions; Thaut (2005); www.colostate.edu/depts/cbrm

In the future, this series will feature and explain in detail the treatment elements and supporting research of each best practice area. Until then, please talk with your therapist for more information.



Meet the Newest NMTSA Board Member Chris Butterworth, MBA

My wife and I have two boys, one who has autism. By day I'm a full-time Realtor and team-lead for The Butterworth Group at Dan Schwartz Realty. I've recently formed a marketing company, Perpetual Marketing, geared towards helping other real estate agents reach their potential. I also maintain an autism-related blog, HappyChucks.com. My background and experience is centered around marketing and helping small to mid-sized companies grow.

NMTSA has become a big part of our son's life. The organization is filled with terrific people, who push the limits of what our son can accomplish, while always assuming his competence. I joined the Board of Directors as a way to give back to the people who give so much to our son. I hope to use my experience and abilities to help NMTSA continue to attract top-level talent, and to further their mission of delivering high-quality services at reasonable fees to every family who needs them, while promoting the therapeutic value of neurologic music therapy.