

Music therapy helps autistic children

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Miracle Mile resident Rosanne Walden and her family welcomingly embrace the potent power of music.

Walden's 12-year-old son, Adam, though diagnosed with moderate to severe autism when he was 3 years old, has an affinity for music that has provided positive new approaches for his academic education, Walden said.

At first, the Waldens attempted to maintain Adam's hyperactivity by encouraging him to play an instrument. Adam soon gravitated toward the cello, leading to his performances around the country, like at the United Nations two months ago, his mother said.

Adam, who will be the first autistic child to attend the Millikan Middle School and Performing Arts Magnet, is currently a prospective study subject for the Music Enhanced Learning Opportunities for Developing Youth research program at UCLA, Walden said. Through the study, researchers will be able to study Adam's brain functions when he is playing melodies, she added.

In 2006, Istvan Molnar-Szakacs, a research neuroscientist at the UCLA Tennenbaum Center for the Biology of Creativity, developed MELODY to use music as a research and therapeutic tool to study children and individuals with autism, he said. Currently, research for MELODY is conducted under the auspices of The Help Group – UCLA Autism Research Alliance, which is a partnership between the UCLA Semel Institute for Neuroscience and Human Behavior and The Help Group, said Elizabeth Laugeson, the director of the alliance.

The Help Group, a comprehensive nonprofit, specifically serves children with special needs related to autism spectrum disorders, learning disabilities, abuse and emotional challenges.

MELODY's first study, funded by the GRAMMY Foundation in 2008, was developed to use functional MRI to identify the main brain regions involved in processing emotion from faces and in processing emotions in music, Molnar-Szakacs said. This specific study also sees how those brain systems differ in typically developing children and children with autism, he added.

"Behaviorally, children with autism have difficulties with social situations, processing emotion and understanding others' emotion," Molnar-Szakacs said.

About a month ago, MELODY's second grant to study the effects of music education on socio-emotional functioning was funded by the NAMM Foundation, the supporting organization of the international music products association, Molnar-Szakacs said.

This recent grant will enable researchers to go directly to The Help Group's schools for a naturalistic, 12-week period study to access the children's behavior, musical ability and emotional functioning and collect quantitative and qualitative data, he said. Molnar-Szakacs added that this study will likely begin in the fall or early next year.

“We hope through this study to establish the positive impact of music education on developing and improving these critical social-emotional skills,” Laugeson added.

Since autism was identified in the 1940s, literature suggested that autistic individuals have a special affinity to music, such as enhanced pitch memory and pitch labeling, Molnar-Szakacs said. This literature ultimately suggested that music might be an effective way to communicate with autistic children, he added.

Molnar-Szakacs, whose interest in neural bases of social communication led to his studying autism and socio-emotional communication, said he wanted to develop a higher research program like MELODY rather than have just one project.

MELODY currently comprises three components: research, education and music therapy, Molnar-Szakacs said. The music therapy element of MELODY has not yet been funded, but this music-based therapeutic intervention will be developed based on the results from the two funded studies, Molnar-Szakacs added.

The reasons for music's powers are debatable, but music's impacts clearly exist for every individual. Despite his research in music's undeniable influence, Molnar-Szakacs said he believes it is not up to him to explain why music is so powerful.

“Inherently, you know why music is powerful, you can feel why music is powerful,” he said. “I think that everybody (feels) that very same effect, that music allows them to maybe go back to their childhood and remember certain songs, or ... bring back memories of people, places or events.”

For Adam Walden, his musical intuition provides a powerful and effective tool for teachers.

Adam's talent has allowed teachers to link musical components with his academic education to facilitate learning, Walden said. For example, to teach Adam about the Revolutionary War and the eighteenth century, teachers first encouraged Adam to learn about the music of the era. As a result, Adam gradually became interested in the era, making it possible to teach him the facts of the history, his mother said.

“Adam learns like a Polaroid photograph. You present it all to him, and he gets like the tiniest outline of what it is, but as you continue to present it to him, it comes in clearer and clearer, and he goes from knowing nothing, to when it comes to focus, he knows it all,” she added.

Vanya Green, a board-certified music therapist at Mattel Children's Hospital Child Life/Child Development Services who specializes in facilitating creative expression and anxiety reduction/increased relaxation through music therapy, explained that music can express both an idea and emotion simultaneously.

“I think whereas words are oftentimes symbols of something that you want to express, especially if you want to express a certain emotion, music is sort of a direct expression of that, and I think people feel that when they hear music,” Green said.