

STRAIGHT TALK *About* **Autism**



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The Magic of Music

Barry M. Prizant, Ph.D., CCC-SLP
and Geoffrey Barnes, Ph.D., MT-BC, LMHC

Part one of two parts

Author's Note: I recently had the wonderful opportunity to be interviewed by Geoffrey Barnes, a Music Therapist at the Boston College Campus School, and Adjunct Instructor at Lesley University in Boston, Massachusetts. Geoff had recently attended a workshop I presented on The SCERTS Model and was struck by the similarities in goals, objectives, and strategies in our approach to social communication and emotional regulation and those of music therapists. Part one of this combination article / interview begins with a question from Geoff that prompts a discussion of the varied ways in which music can be used as an effective medium for engaging and motivating persons with ASD to communicate, learn, and maintain a well-regulated emotional state.

Geoff: Can you talk about ways that you've seen music be helpful for children and older individuals with autism?

Barry: Yes, and there are so many. I'll begin by citing a number of different ways I have seen music be effective, followed by a more in-depth discussion of how each addresses common challenges experienced by persons with ASD.

1. Music can be the medium to enhance social communication at the level of the dyad as well as in more complex social interactions.
2. Music can be used to support emotional regulation, by increasing predictability and familiarity; and by decreasing or elevating energy levels as needed.
3. Music is a motivator for active engagement and participation.
4. Music is one way to emphasize a person's strengths.
5. Music can support coordination and motor development.
6. Music can provide a context and a shared interest to engage a family member with ASD.
7. Music can provide opportunities to "step out" socially, perform, and "give back" to others.

8. Music can be the link to trigger positive emotional memories, and to help a person reflect on and better understand feelings.

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We all know that social communication and interpersonal engagement can be challenging for many individuals with autism. Music can play a significant role in motivating the person to express a variety of intentions such as those involved in making choices, requesting actions of others, commenting, and even refusing or rejecting. These communicative goals may be expressed through verbal or nonverbal means. Of course, music provides many opportunities for turn-taking and other aspects of more extended social interaction.

Music can also support communication and social interaction at a number of different levels. First, music may be used at the level of the dyad, or one-to-one interpersonal interaction. A relevant concept that comes from research in infant and early child development is that of the *proto-conversation*—that is, the earliest form of "conversation" involving the turn-taking structure between one person and another. Initially proto-conversations occur through vocalization and actions, and then as motor skills develop, through the use of gestures whereby children imitate what we do and we, in turn, imitate their vocalizations and movements. Thus, this early form of reciprocal interaction begins with single turns, but quickly expands to extended turns over many exchanges. This type of dyadic or one-to-one interaction provides an ideal vehicle within which to use music as a supportive framework to support the "dance" of social reciprocity.

Additional ways to use music to support reciprocity or turn taking include stopping at different points in songs with

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which the child has become familiar so that he or she can fill in sounds or words; or taking turns beating a drum or other percussion instrument. These are common strategies used by caregivers across all cultures in supporting children's language and social development. They are especially effective for people with autism who thrive when things are predictable and when interactions do not depend on the processing and production of spoken language. Indeed, the music-speech development connection in autism is seen when children's first words emerge within the context of singing songs or in gestalt chunks of language "scripted" from music.

Music may also be used at more complex levels of interaction involving more than one person. These types of interactions are especially challenging for people with ASD as they require monitoring and attending to multiple partners and participating in social interactions in which turns are "negotiated" and hence less predictable. Furthermore, there is a greater need for rapidly engaging and disengaging attention, another challenging area for people with ASD. For example, activities such as singing in unison with multiple partners require awareness of what our partners are doing, a situation that becomes even more complex when there are individual singing parts. Of course, this can also occur with musical instruments as well. Consider the well-known children's song, *Old MacDonald Had a Farm* which requires the child to come up with an animal or a sound at the appropriate time (following, "and on this farm he had a ____").

Songs such as *Old MacDonald* are particularly important for creating a "social dynamic" in which each participant is part of a larger event that involves the coordinating of his or her behavior with that of many others, resulting in a "whole" that is greater than the sum of its parts. Such participation fosters a sense of social membership, with all individuals contributing. When music is used as a means to facilitate group participation, many individuals with ASD progress and go on to be part of the school choir or band which, in turn, fosters greater social membership.

Music can be used to support emotional regulation by increasing predictability and familiarity; and by elevating or decreasing energy levels as needed.

Geoff: In your work on the SCERTS model, there is a great deal of focus on supporting a person's emotional regulation; that is, availability for learning and engaging and maintaining a well-regulated emotional state. And for quite some time in your publications, you have emphasized

the need for predictability and familiarity for persons with ASD. Do you wish to expand upon that and say a word about music's role in that regard?

Barry: It is well accepted that maintaining a well-regulated emotional state is another considerable challenge for persons with ASD. Predictability and familiarity are so important to this end, and we have been talking about this for more than three decades as essential supports for people with ASD. It is important to recognize that although all people do better when things are predictable, people on the spectrum tend to crave predictability and familiarity to a greater extent than the rest of us. If we reflect on what we know of the experience of autism, it is that too often the world and encounters with other people are perceived as unpredictable and confusing, resulting in anxiety that may range from mild to severe. Persons with ASD often experience too much novelty or unfamiliarity as stressful, and may react by avoiding or being less willing to engage with unfamiliar people or activities. However, the more a person can anticipate what's going to happen, develop expectations about events that become increasingly familiar, and is better able to predict the behavior of others, the more likely it is that that individual will be emotionally well-regulated and will be able to stay actively engaged in activities. When we can anticipate what is going to happen, we feel more comfortable, and if necessary, we can seek information to feel better regulated emotionally. If, however, what is coming at you is relatively novel or unfamiliar, we tend to sit back and play a more passive, protective role.

Music by its very nature can help to create that sense of familiarity, predictability, and anticipation, especially when it is used thoughtfully and with planning. Music is a perfect medium for helping to create predictability in the lives of people with autism when used throughout the day in routines that also foster trust in other people and in the world.

We can think of music on a continuum of predictability. For example, a piece of recorded music always sounds the same and is therefore highly predictable. So, individuals who need more predictability—including those who are more challenged or younger—can benefit greatly from the predictability that music provides if songs or recorded music are used consistently in different routines and activities. Music may be infused in the flow of daily routines as a "cue" to

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mark specific activities, events, and transitions throughout the day. There’s no coincidence that the “cleanup song” is one of the most frequently sung songs in American schools. It helps children to understand what the expectations are, and it supports successful participation during transitions, a time that may be difficult for many children, but especially for those with ASD. This is understandable if we consider that cleanup time is a potentially stressful time because transitions by their very nature create uncertainty and often require children to leave preferred activities. Music can be used in so many ways to create predictability as part of routines, including morning greeting songs, transition songs, and in preparation for leaving school.

Geoff: One of the things I appreciate about your work is your discussion of the need for predictability, yet at the same time, the need for flexibility. Could you discuss how music may play a role in achieving this goal?

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Barry: If you think of music as providing an overall template of predictability, then that gives us the structure in which we can introduce flexibility. Music has that unique quality to provide a template through consistent and repetitive rhythm, melody, and even use of gestures. Within that structure we can swap out different rhythms, musical dynamics, or even insert the names of children. We can then offer choices (e.g., *fast or slow; loud or soft; whose turn?*), and by doing so, we introduce flexibility and variability and provide children with a greater sense of control.

There are so many routines in life, outside of school, in which music potentially may play an important role in supporting a well-regulated emotional state by lowering or raising energy levels. Such routines may include transitions to new settings, meal times, bedtime routines, potty training routines, and so forth. If a person with ASD has had a very busy, active, or stressful day, the use of songs or instrumental music can help that individual achieve a calmer and better-regulated state. Conversely, when energy levels are low, music and movement may assist in helping a person become more alert and focused.

Part two of this article will expand upon this discussion by presenting additional ways to use music effectively in order to maximize its positive impact on the lives of persons with ASD. 🏠

Editor’s Note: This interview has been formatted and edited by permission of Dr. Prizant.

BIO



Dr. Barry Prizant has more than 40 years experience as a clinical scholar, researcher and international consultant to children and adults with ASD and their families. He is an Adjunct Professor, Brown University, and Director of Childhood Communication Services, a private practice. Barry is co-author of *The SCERTS Model: A comprehensive educational approach for children with ASD* (Prizant, Wetherby, Rubin, Laurent & Rydell, 2006) and the assessment instruments, CSBS, and CSBS-DP (Wetherby & Prizant, 1993, 2002). He has published more than 100 articles and chapters and has presented more than 700 seminars and keynote addresses in the US and internationally. Barry developed and co-facilitates an annual weekend retreat for parents of children with ASD, and is the recipient of the 2005 Princeton University-Eden Foundation Career Award for “improving the quality of life for individuals with autism.” For further information, go to www.barryprizant.com, or contact Barry at Bprizant@gmail.com.