

Using Music to Improve Task Learning

Learning to wash hands, go to the bathroom and other self-care skills are significant steps toward independence for young children. Children feel empowered when they have accomplished such tasks and their adult caregivers are pleased to be relieved of such responsibilities. Each step toward independent self-care is a milestone that is expected and valued. However, for young children with autism such steps may not occur naturally.

Self-Care Behaviors and Children with Autism

Several factors influence children with autism and their ability to readily engage in self-care activities.

Children with autism:

- May not see the value in learning the task.
- Are unlikely to be motivated by adult approval or the desire to conform to a social standard.
- Prefer predictable routines, rather than establishing new ones.
- May have communication deficits that inhibit their ability to express their needs.
- May not understand the sequence of steps needed to complete the task.
- May have sensory difficulties that create additional challenges.

Given these challenges, parents and caregivers often need to engage in intentional and regular opportunities for teaching and practice.



Researchers hypothesized that using songs to prompt a series of steps might help a child with autism more independently complete multi-step self-care routines.

Song Intervention

Research shows that songs can assist children with memorization and sequencing of events. In a study published in *Music Therapy Perspectives*, researchers hypothesized that using songs to prompt a series of steps might help a child with autism more independently complete multi-step self-care routines.

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Andy

At the time of the study, Andy was a three-year-old boy diagnosed with Autism Spectrum Disorder. While Andy was strong in some early academic concepts, he had deficits in communication and social interaction. He needed maximum assistance to complete basic activities of daily living. He was selected for the study based on the suggestion of his teacher, occupational therapist, and parents; his interest in music; and his difficulties with multiple-step tasks such as hand-washing, cleaning up, and toileting.

The Teacher

Andy's teacher had a baccalaureate degree and was certified in early childhood education. She had never used a music therapy intervention, although singing was routine throughout the day.

The Intervention

Transition objects were used to introduce each task (a bottle of soap for hand-washing, a diaper for toileting, and a toy in use for cleaning up). The study examined the use of a song and the use of just lyrics. The teacher alternated the song and lyrics daily. The words were the same for both, but the melody was used only with the song.

The teacher used a familiar tune to sing the steps needed to complete a task. For example, the steps for hand-washing were sung to "Row, Row, Row Your Boat." For toileting, a unique song including the 10-step routine was composed by the first author and sung by the classroom teacher. The pre-composed song "Clean-up" by Barney and Friends was a song already used by the teacher during the cleaning up routine.

Results

The number of steps that Andy could complete increased for each task. The song was more effective than the lyric intervention for hand-washing and cleaning-up, and the lyrics worked better for toileting.

Prior to the intervention, Andy completed only one of seven steps for hand-washing. With the song, he performed an average of 4.6 steps and with the lyric about four steps. However, the steps he completed varied.

For toileting, he went from having no independence to learning and performing all but the last step (re-dressing). However, he did not perform all steps each time, but rather did a maximum of five of the 10 steps. His success served as a much-needed starting point for his toilet training.

Singing the clean-up song also was quite effective. Andy completed 4 of the six steps each time the song was sung.



Conclusions

Songs can be an effective approach to multiple-step tasks for children with autism within inclusive classrooms. With the consultation of an occupational therapist and a music therapist, the classroom teacher was able to integrate the song successfully within the daily classroom routine.

However, songs that the child knew prior to the study seemed to work better than unfamiliar songs or spoken words. ■

To Learn More

Kern, P., Wakeford, L., & Aldridge, D. (2007). Improving the performance of a young child with autism during self-care tasks using embedded song interventions: A case study. *Music Therapy Perspectives*, 25(1), 43-51.

