



Media Q&A: Inclusive Instrumental Music Program Research

A new peer-reviewed research investigation published in *Advances in Mind-Body Medicine* (ADVANCES, Winter 2026, VOL. 40, NO. 1) found that students with intellectual and developmental disabilities (IDD) experienced significant psychosocial growth when participating in inclusive instrumental music programs with peer mentors.

The study, *"Outcomes Assessment of a Novel, Multisite, School-Based Inclusive Instrumental Music Program with Peer-Mentoring for Students with Intellectual and Developmental Disabilities,"* was led by neurologist Barry Bittman, MD, in collaboration with **United Sound**, a national nonprofit organization dedicated to inclusion through music.

1. What is this study about?

This peer-reviewed study evaluated the psychosocial development of students with intellectual and developmental disabilities (IDD) who participated in the United Sound inclusive instrumental music program for the first time. United Sound offers a structured, school-based instrumental music program that pairs students with IDD ("new musicians") with trained peer mentors. The study was implemented across eight U.S. public schools over a school year.

2. Why is this study important?

This research is the first multisite, observational study to systematically measure psychosocial growth in students with IDD. This research demonstrates quantitative evidence that inclusion through music can foster empathy, resilience, self-confidence, and other life skills essential for independence and employability.

3. Who conducted the study?

The research was led by Barry Bittman, MD, neurologist and Chief Population Health and Strategy Officer at the Inland Empire Foundation for Medical Care, with collaborators Dorean White, Tiffany Bunstein, and Julie Duty (founder and executive director of United Sound).

Funding was provided by the Yamaha Music and Wellness Institute, a 501(c)(3) nonprofit dedicated to education and research.

4. What is United Sound?

United Sound is a national nonprofit organization that trains and supports music and special education teachers as well as peer-mentors to create inclusive instrumental music programs in schools. The program in 120 schools across the US pairs students with and without disabilities in bands and orchestras through a peer-mentoring model that emphasizes three key strategies: Communicate, Modify, and Empower.

5. How was the study conducted?

The study:

- was conducted across eight public schools between 2023–2025.
- focused on 60 students with IDD (ages 11–21; 43 males, 17 females).
- included weekly music sessions averaging 45 minutes for a full school year.
- matched new musicians with volunteer non-disabled student mentors.

6. What were the key findings?

Using a newly developed Special Education Student Assessment (SESA) designed by a team of experienced special education teachers led by the principal investigator, researchers documented statistically significant improvements across all 10 psychosocial measures, with gains ranging from 8.2% to 29.8%:

- 29.8% - ability to endure stressful environments
- 24.7% - impulse control
- 24.5% - resilience
- 18.8% - self-confidence
- 14.6% - empathy
- 13.2% - pride
- 13.0% - appropriate assertiveness
- 9.8% - willingness to participate in non-preferred activities
- 9.1% - peer-appropriate communications
- 8.2% - positive peer interactions

7. How were psychosocial changes measured?

Each student's special education teacher, who interacted with them on a daily basis, completed pre- and post-program assessments at the beginning and end of the school year using a 1–4 Likert scale ("never" to "often").

Confidentiality was ensured through de-identified data submitted for analysis.

8. What about the mentors?

Bidirectional benefits, enhancing the growth of both mentors (student volunteers from general education music classes) and new musicians, were noted. Mentors reported that the experience deepened their empathy, patience, and appreciation for diversity. Several described it as transformative, noting they became "more inclusive people" both at school and at home.



One mentor noted, “This program has made me more patient, understanding, and open-minded. At school, I find myself more supportive and encouraging of others, even outside of music. At home, I’ve become more grateful for the little things and more aware of how important it is to be kind and inclusive. It definitely made me a better person overall.”

9. What are the implications for schools?

The study also points to critical implications for education systems. Many music teachers experience burnout early on, and report being under-resourced, particularly in inclusive classrooms that often lack the necessary support to engage all learners effectively. By integrating peer mentorship and special education support, United Sound directly addresses these challenges. This program reduces the instructional burden on music teachers while expanding meaningful opportunities for every student.

10. How does this connect to future employability?

Skills like self-confidence, resilience, impulse control, and the ability to endure stressful environments, which improved in this study, are recognized predictors of successful employment and independence for individuals with disabilities.

11. What are the study’s limitations?

- A randomized control group could not be used due to ethical and practical constraints.
- A comparable comparison activity could not be identified.

12. What’s next?

Future research should explore:

- Larger sample sizes
- Longitudinal tracking of new musicians extending beyond high school to help determine the program’s ultimate long-term impact
- Mentor leadership development
- Potential reduction of music teacher burnout

13. How can schools proceed to offer the United Sound program?

While many schools recognize the need for improving inclusive education, frankly it’s often easier said than done.

Our program is the perfect way to engage students with intellectual and developmental disabilities, as well as existing student musicians who benefit considerably from serving as peer mentors..

United Sound is a turnkey solution that provides educator and student mentor training, teaching materials, resources, and games and swag to make it all a lot of fun!



Participating schools pay a one-time startup fee that includes new instruments for the musicians and updated program materials each year. Families pay just \$35 per year for their student to participate. In order to help schools and families without the resources to participate, United Sound relies on a combination of generous donations and grant funding.

Consider the following to support your music educators on this journey:

- Share this webpage: www.unitedsound.org/overview to get a feel for how our program works.
- Send us an email! We recognize that each school is unique and so is every one of our chapters. Our commitment is to tailor our program to meet the needs of each community.

14. What's the main takeaway?

"This isn't just about music," said Dr. Bittman. "It's about building self-confidence, empathy, impulse control, and resilience—traits that often determine success in life and in the workforce. Inclusive music education is an essential investment in our students' futures."

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