







# Effectiveness of Active Music Therapy on Echolalia and Pitch Frequency in Level-One Autism Spectrum Disorder Children

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E d i t o r	R e v i e w e r s
Asoke Kumar Saha  Professor Department of Psychology, Jagannath University, Dhaka, Bangladesh drasoke@psychology.jnu.ac.bd	<b>Reviewer 1:</b> Farhad Namjoo  Department of Psychology and Counseling, KMAN Research Institute, Richmond Hill, Ontario, Canada. Email: farhadnamjoo@kmanresce.ca <b>Reviewer 2:</b> Mehdi Rostami  Department of Psychology and Counseling, KMAN Research Institute, Richmond Hill, Ontario, Canada. Email: dr.mrostami@kmanresce.ca

## 1. Round 1

### 1.1. Reviewer 1

Reviewer:

In the paragraph starting with “Recent advances in neuroscience and developmental psychology...”, statements about alterations in motor planning and cortical connectivity are broad. More specific articulation of how these alterations relate to pitch modulation is needed.

The week-by-week intervention description (e.g., “In the first week, the children were introduced to...”) lacks structure and reads more like a narrative than a replicable protocol. Distinguishing required versus optional activities would enhance methodological clarity.

While the intervention appears delivered by one therapist, the Methods section does not specify therapist training, supervision, or adherence checks. This omission raises concerns about fidelity and consistency of implementation.

The sentence “participants were randomly assigned to the experimental or control group using simple randomization” does not specify the actual procedure (e.g., computer randomization, sealed envelopes). Clarifying the method is necessary for reproducibility.

The Methods section states that power was set to 1.00 during sample estimation. A power value this high is unusual in behavioral research, and the manuscript does not justify why this value was selected.

In the paragraph describing the use of Praat, the manuscript says “Praat was used to extract pitch contours...” but does not specify the speech stimuli used (e.g., sustained vowels, syllables, spontaneous speech). Without such details, the acoustic analysis lacks transparency.

The statement that the selected subscale represents “the primary behavioral indicator of verbal repetition” oversimplifies the instrument. Since the subscale includes more than pure echolalia, a justification for its exclusive use is required.

In the paragraph beginning “Before performing the repeated-measures ANOVA...”, the manuscript reports that assumptions were checked but does not provide actual test statistics. Including values would improve transparency and scientific rigor.

Response: Revised and uploaded the manuscript.

## 1.2. Reviewer 2

Reviewer:

In the paragraph beginning “Music therapy incorporates elements of rhythm, melody...”, the discussion of why musical elements may influence prosody remains descriptive. The mechanism linking rhythmic entrainment to pitch modulation would benefit from deeper elaboration.

Several sentences in the introduction highlight only beneficial effects of music therapy, such as “Music therapy... has gained recognition as an effective therapeutic medium...”. Acknowledging mixed or limited findings in the literature would provide a more balanced background.

In the section discussing local studies, the paragraph mentioning “structured speech repetition programs... among Persian-speaking autistic children” does not address how Persian prosodic patterns differ from other languages. This omission is important because pitch contours can be language-specific.

The Results section reports several large effect sizes, but the Discussion does not explain what these values imply in terms of practical or clinical significance. Integrating this interpretation would enhance the discussion.

The sentence “Tempo–rate demonstrated a modest but significant improvement...” does not acknowledge that the interaction effect was borderline. The conclusion should be more cautious regarding tempo outcomes.

The phrasing “Active music therapy can address core deficits in prosodic processing...” appears overly strong given the small sample and single-site recruitment. The statement should be moderated to reflect the study’s limitations.

Response: Revised and uploaded the manuscript.

## 2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.