



Finding Voice Through Rhythm

A Culturally Grounded Music Therapy Approach for Autistic Children

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Rhythm • Connection • Regulation • Participation

1. INTRO / BACKGROUND

Context

Kazakhstan is undergoing a major transition in mental health and education. Professional training and therapeutic approaches were historically aligned with Russian-language systems. Since 2022, these pathways have become less reliable, while migration and displacement have increased the need for accessible, culturally responsive support. Kazakhstan has also become a place of relocation for some families displaced by the war in Ukraine, including families raising neurodivergent children.

Why local culture matters

Kazakhstan holds a powerful but underused resource: its own musical and improvisational traditions. This project explores how rhythm, dombra-based sensory engagement, and shared musical exchange can support autistic children across communication styles, without treating spoken language as the only valid form of participation.

2. PROJECT AIM

To describe a culturally grounded, music-based intervention developed in Almaty for autistic children, focusing on regulation, engagement, communication attempts, and parent-child interaction.

Neurodiversity-affirming focus

Low-resource adaptability

Cultural continuity

3. CULTURAL RESOURCE

Aytys / Aitys

Aytys (or Aitys) is a centuries-old Kazakh tradition of improvised sung poetry, recognized by UNESCO as Intangible Cultural Heritage of Humanity (2015). Two performers (akyns) engage in a lyrical battle, exchanging rhymed verses accompanied by the dombra (traditional lute). The themes range from social commentary to personal expression, and traditionally, some forms (badik) were used as healing folk songs.

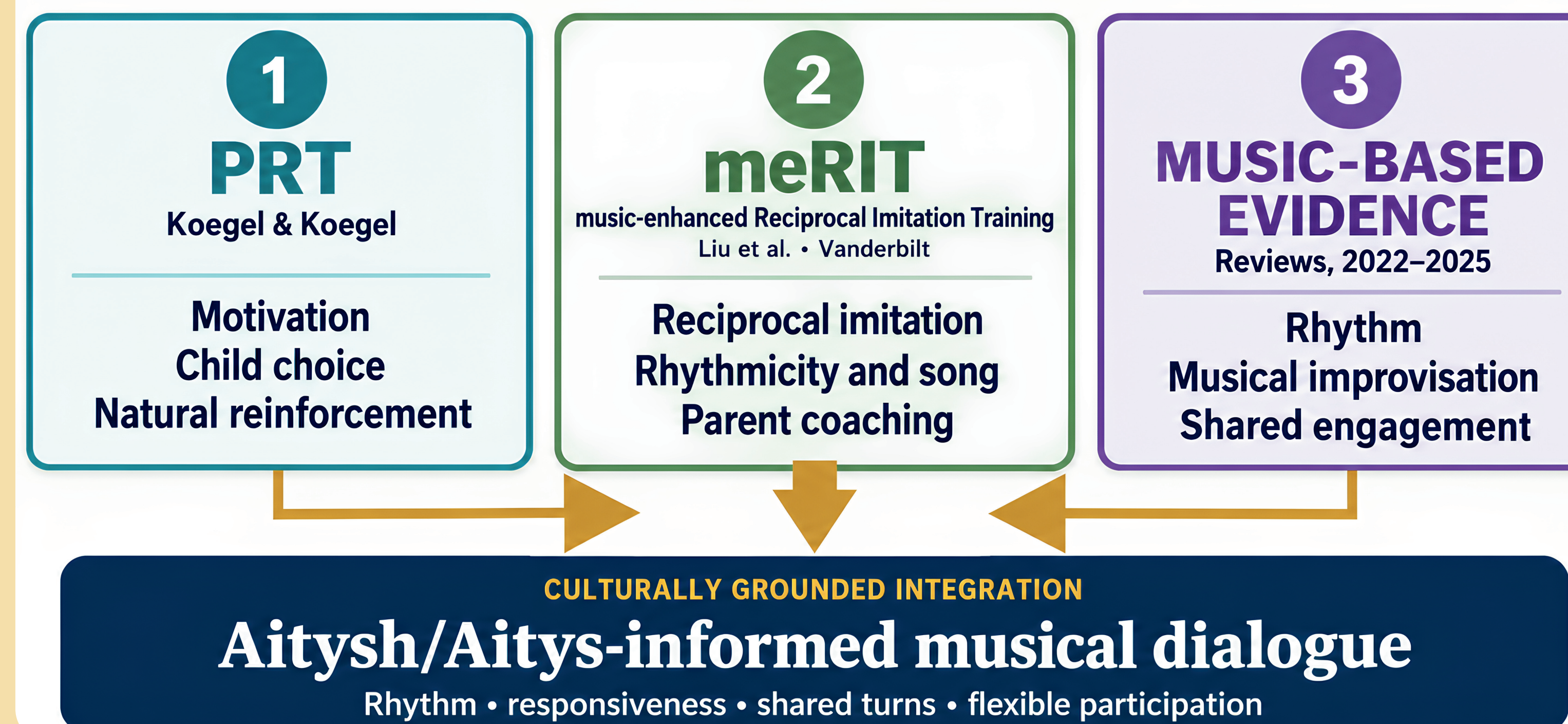


Participation can be vocal, rhythmic, gestural, instrumental, or shared silence.

4. THE INTERVENTION MODEL

THERAPEUTIC FOUNDATIONS

Three evidence-informed pathways into one culturally grounded model



These foundations inform the model; protocol fidelity or treatment equivalence is not claimed.

5. PRACTICE-BASED METHODS

The intervention adapts Aytys principles, call-and-response, rhythmic exchange, turn-taking, into structured therapeutic sessions for autistic children. Each session follows a predictable flow:

- 🎵 Warm-up — Greeting song, body rhythm → Regulation
- 🎯 Topic — Child chooses interest → Agency
- 🎵 Core — Musical exchange → Turn-taking
- 🌟 Improv — Free response → Expression
- 👏 Closing — Goodbye song → Integration

6. AYTYs & FREESTYLE RAP AS A WORKING BRIDGE

Different traditions, shared interactional principles. The comparison helps communicate how rhythm and improvisation can become accessible tools for participation.

Element	Aytys / Aitys	Freestyle rap
Structure	Improvised verse	Freestyle verse
Interaction	Dialogic exchange	Call-and-response
Timing	Dombra-supported	Beat-supported rhythm
Expression	Storytelling, emotion	Identity expression
Participation	Turn-taking	Lyrical exchange

Note: this is a conceptual bridge, not a claim that the traditions are identical.

7. RESULTS: EARLY PRACTICE-BASED OBSERVATIONS

Preliminary observations from Almaty sessions suggest:

- 🎵 Increased engagement and spontaneous vocal or musical participation
- ≈ Structured rhythm supported regulation and reduced visible anxiety
- ↔ Improved turn-taking, shared attention, and reciprocal response
- ✦ Children with limited spoken communication participated through singing, gesture, movement, and instruments
- ❤️ Parents reported more connection and carryover of musical routines at home

These observations are not controlled outcome data.

8. PRACTICE IMPLICATIONS

Aitys channels intense verbal expression into rhythmic, creative dialogue.

- ♦ Rhythm structures rapid speech.
- ♦ “Rizz” supports confident responses.
- ♦ Call-and-response builds turn-taking.

Example:

Peer says "You're weird." → "At least I'm interesting - you're just boring."

For hyperverbal autistic students, Aytys provided a culturally familiar structure for channeling verbal intensity and building self-protection through words.

9. LIMITATIONS

- Practice-based observations from one local program
- Participant characteristics and session frequency require fuller documentation
- No comparison condition or standardized pre/post measures yet
- Future evaluation should track sensory response, communication mode, caregiver feedback, and change over time

10. DISCUSSION / CONCLUSION

This project highlights the potential of culturally grounded, low-resource interventions in contexts where formal services are limited. By reframing local musical practices as tools for regulation, engagement, and shared communication, it offers an accessible model for supporting autistic children and their families.

This model may be especially relevant in contexts of migration, displacement, and cultural transition, where families benefit from supports that are relational, accessible, and grounded in meaningful cultural practices.

The child determines how participation takes form.

References

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