

Supplementary Data on Musical Pieces

This supplementary document provides a detailed description of the musical pieces selected for the intervention sessions. The pieces were carefully chosen to stimulate motor responses in infants while maintaining a calming auditory environment.

Piece No.	Origin/Source	Duration	Frequency Range	Tempo (BPM)	Instrumentation	Acoustic Features
1	Persian Traditional Lullaby	2 minutes	20-30 Hz	60	Daf and tar	Soft, repetitive melody for familiarity, gradually introduces infants to the session.
2	Iranian Folk Song A	3 minutes	30-40 Hz	70	Santoor and kamancheh	Steady rhythm with gentle crescendos, intended to gently stimulate sensory-motor responses.
3	Custom Composition B	2 minutes	40-50 Hz	75	Ney flute	Emphasis on steady rhythm with minimal pitch variation to encourage motor engagement without overstimulation.
4	Persian Lullaby	1 minute	20-30 Hz	55	Flute	Concluding, calming melody to ease the transition to rest.
5	Iranian Folk Song B	2 minutes	25-35 Hz	65	Setar and daf	Slow tempo and consistent rhythm to engage motor responses subtly and soothingly.

Notes on Acoustic Features:

- Frequency Range:** Low frequencies (20-50 Hz) were prioritized to gently activate sensory-motor pathways in infants without causing overstimulation.
- Instrumentation:** Traditional Persian instruments were selected for cultural relevance and simplicity (e.g., single instrument or small ensemble) to maintain tonal consistency and familiarity.
- Tempo and Rhythm:** The pieces maintained slow to moderate tempos (55-75 BPM), culturally resonant and well-suited to infant motor engagement, aligning with soothing effects.

This selection respects Iran's musical heritage while adhering to evidence that low-frequency, steady-rhythm sounds are beneficial for infant motor stimulation and calming.