



ENHANCING THE PERCEPTION OF LAYAM FOR BHARATANATYAM DANCERS WITH HEARING IMPAIRMENT: INNOVATIVE APPROACHES AND TECHNIQUES

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Abstract

Layam, or rhythm, is a fundamental element of music and communication, enriching human expression through its patterns and sequences. For individuals with hearing impairments, the perception of rhythm presents unique challenges, particularly in the context of Bharatanatyam dance. This study explores innovative methods to enhance Layam perception for hearing-impaired dancers. Utilizing visual notations, tactile feedback, cross-modal integration, and mobile applications, we aim to develop effective techniques for understanding and performing Bharatanatyam. The study involves an experimental design with a sample of 10 women, focusing on the first three speeds of Thattu Adavu. The results suggest potential methodologies for global application, fostering inclusivity and enriched musical experiences for the hearing impaired.

Keywords: Layam, Bharatanatyam, hearing impairment, rhythm perception, tactile feedback, visual notation, multisensory integration.

INTRODUCTION

Layam, the rhythmic backbone of music and communication, transcends sound to encapsulate human expression. For those with hearing abilities, rhythm is an intrinsic guide in daily life. However, for individuals with hearing impairments, experiencing and understanding rhythm presents unique challenges. This research

investigates methods to help hearing-impaired individuals perceive and appreciate rhythm in Bharatanatyam, emphasizing connection, communication, and enriched experiences.

Literature Review

The perception and appreciation of rhythm, or Layam, are vital in Indian classical music. For individuals with hearing impairments, this presents unique challenges. Existing research highlights various innovative approaches to enhance Layam perception, bridging the auditory divide and fostering musical inclusivity.

Visual Representations of Layam

- **Visual Notations:** Specialized visual notations using symbols and graphical representations to convey rhythmic patterns (Sharma & Rao, 2017).
- **Color-Coding:** Associating specific colors with different Layam elements to facilitate pattern recognition through color shifts (Srinivasan et al., 2020).

Tactile Feedback

- **Tactile Metronomes:** Devices producing tactile vibrations in sync with Layam beats, enabling physical rhythm perception (Sarathy et al., 2018).
- **Wearable Technology:** Gadgets providing real-time haptic feedback synchronized with Layam patterns (Krishnan & Venkatesan, 2019).

Cross-Modal Integration

- **Multisensory Approaches:** Combining visual, tactile, and auditory cues to enhance Layam perception through holistic understanding (Gupta & Kapoor, 2016).

Technology and Mobile Applications

- **Mobile Apps:** Smartphone applications dedicated to Layam training, offering interactive exercises and feedback (Subramanian & Ramesh, 2020).

Communication and Education

- **Rhythmic Communication:** Incorporating rhythmic cues into visual signaling in sign language and presentations (Jones & White, 2019).

AIM

To explore and develop innovative approaches and techniques for enhancing the perception of Layam in Bharatanatyam among individuals with hearing impairments.

OBJECTIVES

To study different approaches and techniques enabling the hearing impaired to understand the first three speeds of Thattu Adavu.

METHODOLOGY

1. *Sample Size*: 10 women passionate about Bharatanatyam, selected from the Hyderabad Foundation of Deaf Women.
2. *Sampling Method*: Judgmental sampling to select individuals with no prior personal connections to the researchers.
3. *Study Design*: Experimental research study.
4. *Study Duration*: 25 days per month, with 2-hour daily sessions, over 6 weeks.
5. *Study Site*: Hyderabad Foundation of Deaf Women, Ameerpet, Hyderabad.
6. *Sample Criteria*: Participants must have 100% hearing impairment and a strong passion for Bharatanatyam.

STUDY PROCEDURE

1. Selection of participants from the Hyderabad Foundation of Deaf Women.
2. Initial training on Bharatanatyam fundamentals.
3. Physical preparation through exercises to enhance posture and comfort.
4. Introduction to Thattu Adavu focusing initially on movement.
5. Gradual introduction of Layam patterns and trikala (three speeds) through Indian Sign Language (ISL).

TEACHING METHODOLOGY

1. Vibration: Participants feel floor vibrations during Thattu Adavu performances.
2. Sensory Touch: Holding hands and pressing palms to differentiate speeds.
3. Clapping Hands: Clapping hands while dancing to understand speed variations.
4. Diagrams: Writing Sollu Kattu on tables and touching corresponding speeds.
5. Visual Representation: Displaying Sollu Kattu on an iPad with changing speeds.

EXPECTED OUTCOME

Development of methodologies to help hearing-impaired individuals globally understand the Kalam in Bharatanatyam, enhancing their perception of Layam.

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