



## EVALUATING NOVICE ANGKLUNG PLAYERS' EMOTIONAL AND EXPERIENTIAL RESPONSES TO CUE-GUIDED SELF-TRAINING METHODS USING FACE RECOGNITION AND PARTICIPANT FEEDBACK

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### **Abstract:**

This study investigates how novice angklung players emotionally and experientially respond to three cue-guided self-training methods: Notebar (NB), Hand-Sign Bot without Preview (HB), and Hand-Sign Bot with Preview (HBP). The purpose of the study is to clarify how different cue modalities influence comfort, focus, and engagement during traditional instrument learning. The novelty lies in combining continuous facial affect analysis using OpenFace with thematic analysis of open-ended participant feedback, allowing a detailed examination of cognitive and emotional demands during training. A total of twenty-seven novices, consisting of nine Indonesian and eighteen non-Indonesian participants, completed three counterbalanced training cycles. Emotional states were recorded through frame-by-frame valence and arousal extraction, and subjective perceptions were collected after each method. Results show that NB provides the most accessible and low-stress experience. HB is perceived as the most realistic but introduces the highest attentional load. HBP offers anticipatory support for some learners but creates split-attention difficulty for others. Indonesian participants generally exhibit more positive valence and lower arousal, indicating that cultural familiarity moderates affective responses. By integrating quantitative affective indicators with qualitative perceptions, this study identifies how

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cue design influences novice learning and offers guidance for developing adaptive and culturally responsive digital angklung training systems.

**Keywords:** angklung training, cue-guided, face recognition, valence–arousal emotional, traditional instrument

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