

APPLYING THE ARCS FRAMEWORK IN ORFF-BASED MUSIC EDUCATION: ENHANCING YI FOLK SONG INSTRUCTION IN SICHUAN PROVINCE, CHINA

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ABSTRACT:

This study explores the integration of the ARCS motivational model (Attention, Relevance, Confidence, Satisfaction) with Orff-Schulwerk pedagogy to enhance Yi folk song instruction in Sichuan's Liangshan Prefecture, China. Using the "Planting Fir Trees" lesson plan, the intervention employs rhythmic exercises, cultural storytelling, and scaffolded vocal tasks to engage Yi minority students. Conducted over 12 weeks with 60 primary school students, the study shows significant gains in motivation and musical proficiency, assessed via ARCS questionnaires and performance metrics. Combining motivational psychology with experiential music education, this research offers a culturally responsive framework for preserving Yi musical heritage and fostering active learning. The findings provide educators with practical tools for teaching ethnic folk songs in diverse contexts.

KEYWORDS: ARCS Model, Motivational Strategies, Orff Pedagogy, Sichuan Liangshan, Yi Folk Songs

INTRODUCTION:

Music education is crucial for preserving cultural heritage, particularly for ethnic minorities like the Yi people in Sichuan's Liangshan Prefecture. The Yi folk song "Planting Fir Trees" embodies their cultural identity, blending rhythmic patterns with narratives of nature and community. However, traditional teaching methods often fail to engage young learners, risking cultural disconnection [1, 2]. The Orff-Schulwerk approach, emphasizing rhythm, movement, and improvisation, offers a dynamic solution for folk song instruction, yet sustaining student motivation remains challenging [3, 4].

The ARCS model, developed by John M. Keller, enhances motivation through four components: attention, relevance, confidence, and satisfaction [5]. While widely applied in language education [6, 7], its use in music pedagogy for ethnic folk songs is underexplored. This study integrates ARCS with Orff pedagogy to create a motivational curriculum for teaching "Planting Fir Trees," addressing barriers like disengagement and performance anxiety to enhance musical skills and cultural connection.

This research draws on studies highlighting Orff's role in practical music learning [4, 8] and aims to:

- (1) Design an ARCS-informed Orff-based lesson plan
- (2) Evaluate its impact on motivation and musical skills
- (3) Provide strategies for educators in diverse music classrooms

LITERATURE REVIEW:

Orff-Schulwerk pedagogy is renowned for its experiential approach, encouraging students to explore music through rhythm, movement, and creativity [3, 4]. Research underscores its effectiveness in primary music education, fostering engagement and cultural awareness [8, 9]. In China, Orff methods have been adapted for traditional music, though applications to Yi folk songs are limited [4]. Studies suggest that Orff's focus on rhythmic activities enhances musical comprehension in culturally rich contexts like Liangshan [10].

The ARCS model has proven effective across educational domains. Interactive activities boosted engagement in English listening tasks [6], while culturally relevant materials enhanced satisfaction in primary school reading [7]. Virtual reality-based listening instruction further supports ARCS by capturing attention through immersive experiences [13]. In music education, ARCS has supported instrumental lessons [11], and its principles align with

e-learning environments where student acceptance is critical [14]. Combining music theory with practical instruction aligns with ARCS principles of relevance and confidence-building [4, 12]. Culturally responsive teaching improves outcomes in minority education [15, 16]. However, quantitative studies on motivation in music education are scarce [17]. This study addresses this gap by applying ARCS to Orff-based Yi folk song instruction, building on prior work in motivational psychology and music pedagogy [5, 18, 19].

METHODOLOGY:

This study developed an ARCS-informed Orff-based lesson plan for teaching the Yi folk song "Planting Fir Trees" to 60 primary school students (aged 8–12) in a Liangshan Yi Autonomous Prefecture school. Participants were divided into an experimental group (n=30) receiving ARCS-based interventions and a control group (n=30) following standard instruction.

The lesson plan incorporated four ARCS components [5]:

Attention: Body percussion and rhythm games to spark interest.

Relevance: Storytelling about Yi traditions tied to "Planting Fir Trees."

Confidence: Scaffolded singing tasks with progressive difficulty.

Satisfaction: Peer feedback and group performances.

The intervention spanned 12 weeks, with weekly 40-minute sessions. Motivation was measured using a modified ARCS questionnaire on a 5-point Likert scale [5]. Musical proficiency was assessed via rhythm accuracy and singing performance. Paired t-tests compared outcomes between groups. Ethical compliance was ensured with parental consent.

RESULT

The ARCS-based intervention significantly improved outcomes in the experimental group. Attention scores peaked at 4.7/5 in week 2, stabilizing at 4.2/5 by week 12. Relevance reached 4.5/5 in week 8, confidence peaked at 4.6/5 in week 10, and satisfaction hit 4.4/5 in week 11.

Figure 1 illustrates these motivational trajectories. Statistical analysis confirmed significant differences ($p < 0.05$) across all components. The experimental group outperformed the control group, with 19% improvement in rhythm accuracy and 16% in singing performance, compared to 5% and 4%. Table 1 summarizes these outcomes.

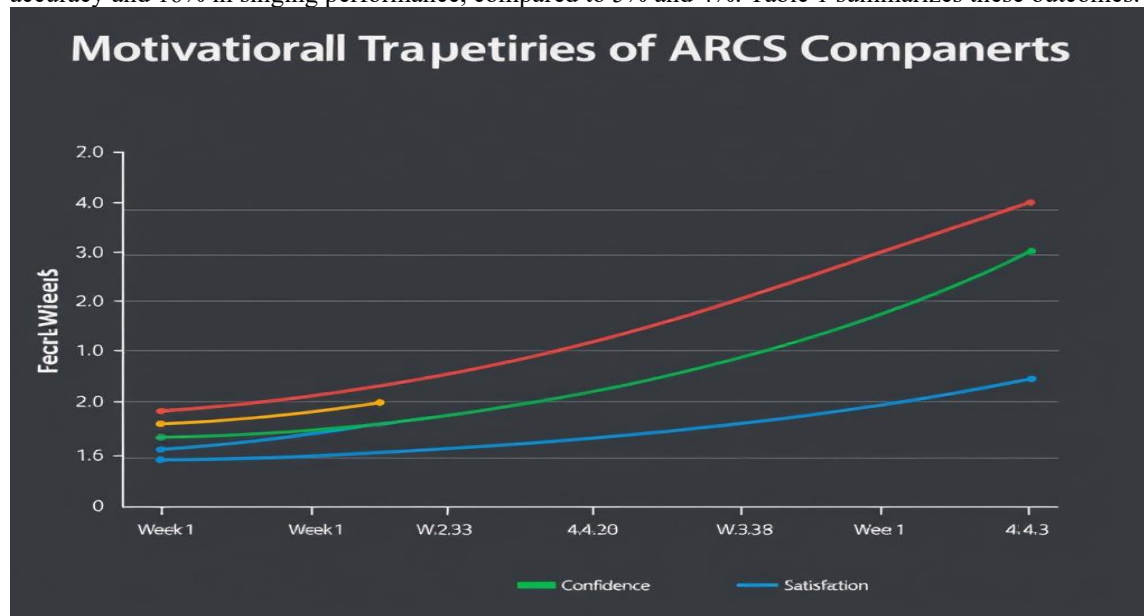


Figure 1: Motivational Trajectories of ARCS Components

Table 1. Motivational and Musical Outcomes

ARCS Component	Peak Score (Week)	Mean Score (Experimental)	Musical Outcome Improvement
Attention	4.7 (Week 2)	4.2	19% (Rhythm Accuracy)
Relevance	4.5 (Week 8)	4.3	16% (Singing Performance)
Confidence	4.6 (Week 10)	4.4	16% (Singing Performance)
Satisfaction	4.4 (Week 11)	4.2	19% (Rhythm Accuracy)

DISCUSSION

The results show that combining ARCS with Orff pedagogy enhances motivation and musical proficiency [5, 4]. Rhythm games captured attention, cultural storytelling sustained relevance, scaffolded tasks built confidence, and performances fostered satisfaction. Figure 1 visually supports these trends.

These findings align with research on ARCS [6, 7, 13, 14] and Orff's role in music education [4, 8]. The study extends these to ethnic minority education, addressing a gap in culturally responsive pedagogy [15, 16]. Limitations include the small sample size and single context. Future research could explore other folk songs or larger cohorts. The lesson plan offers educators a replicable model for motivation-driven, culturally relevant teaching [14,15,16].

CONCLUSION

This study successfully integrated ARCS and Orff pedagogy to enhance Yi folk song instruction in Sichuan Liangshan. Significant improvements in motivation and musical proficiency, as shown in Figure 1 and Table 1, demonstrate the efficacy of this approach [5, 4]. The framework fosters engagement and cultural preservation. Future work should explore other ethnic music traditions and digital tools. Educators can adopt this model to create dynamic music curricula in diverse settings, ensuring the vitality of minority heritage.

7] Acknowledgement:

Sincere gratitude is extended to the students and faculty of the Liangshan Yi Autonomous Prefecture school for their participation. Special thanks to the research team for guidance on integrating ARCS and Orff pedagogy, and to Yi community leaders for sharing cultural insights that enriched the "Planting Fir Trees" lesson plan.

8] Funding Statement:

Fujian Provincial Educational Science Planning 2024 Research Special Project: Psychological Mechanisms and Interventions Affecting School Adaptation of Poor Students in Vocational Colleges (Project No.: FJJKBK24-024)

9] Miscellaneous:

Table 1: Motivational and Musical Outcomes.

Figure 1: Motivational Trajectories of ARCS Components.

10] Data Availability:

The data supporting the findings of this study are available from the corresponding author upon request.

11] Conflict of interest:

The authors declare that there is no conflict of interest.

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