Effects of Instructional Models and Musical Creativity on Undergraduate Students' Traditional Music Ability

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Abstract

This study examines differences and interaction effects among undergraduate students' traditional music ability, instructional models, and musical creativity. A quantitative comparative design was employed with a sample of 36 students from the Department of Drama, Dance, and Music Arts at Universitas Negeri Padang, Indonesia. Participants were selected through purposive sampling and assigned to an experimental group and a control group. Data were analysed using descriptive statistics, box plots, one-way analysis of variance (ANOVA), and two-way (2×2 factorial) ANOVA using Jeffreys's Amazing Statistics Program (JASP). The results indicate that students with high musical creativity achieved higher traditional music ability scores (M = 73.33, SD = 2.35) than those with low musical creativity (M = 62.78, SD = 4.76), $F(1,16) = 35.567$, $p = 0.001$, $\eta^2 = 0.69$. Students who received explicit instruction also attained higher traditional music ability scores than those taught using the conventional instructional model, with this difference most evident among students in the high-creativity group (M = 73.5 versus M = 61.0). The two-way ANOVA revealed significant main effects for musical creativity (p = 0.012) and instructional model (p = 0.001), as well as a significant interaction effect between the two factors (p = 0.001). Overall, the findings indicate that instructional approach and musical creativity jointly shape traditional music ability outcomes, with explicit instruction most effective among students with higher levels of creativity.

Keywords: explicit instruction, instructional models, musical creativity, traditional music ability, undergraduate music students

Introduction

Educational quality is commonly assessed in relation to whether average student achievement meets established learning targets. Within globalised contexts, education systems are also expected to support the development of memorisation, as well as critical and creative thinking and communication skills, in ways that enable social participation. These forms of learning allow learners to engage with contemporary life and respond to global change, particularly in artistic and cultural domains that shape the responsibilities of future generations (González-Zamar & Abad-Segura, 2021; Li, 2022; Song & Lim, 2022).

At the same time, educational aims, especially in the arts, extend beyond conventional indicators of attainment. In music education, musical thinking may be understood as both an intellectual and an aesthetic mode of engagement, while musical ability defined solely in technical terms may have limited relevance when music is positioned as a curriculum subject. Murphy (1999) argues that "musical thinking" involves intertwined cognitive and aesthetic dimensions and questions the educational value of narrowly framed technical competence in school-based music learning. From this perspective, the educational role of music lies not only in skill acquisition but also in interpretation, response, and meaning-making.

Within this broader framing, concerns have emerged regarding students' engagement with traditional music, particularly in relation to creativity and cultural awareness. In Indonesia, and specifically in West Sumatra, students involved in traditional music instruction often exhibit passive learning behaviours and limited initiative in creative exploration. This situation has been associated with instructional practices that prioritise replication and correctness over interpretation and expressive agency. As creativity occupies an increasingly visible place in national and international education discourse, it becomes necessary to examine teaching strategies that nurture student creativity in relation to concerns about the sustainability of cultural heritage. Previous studies have called for more dynamic and student-centred approaches in music education (Hallam & Prince, 2003; Nikolić et al., 2023), but relatively few have looked at how such approaches interact with learners' existing creative capacities in the context of learning traditional music.

In discussions of traditional music learning, questions of cultural context and practice require careful consideration. Traditional music practices are typically grounded in oral and embodied modes of transmission: musicians learn through listening, observation, and participation under the guidance of experienced practitioners, with knowledge circulating within closely connected musical communities. In contemporary institutional settings, including schools and universities, notation is often introduced to support efficiency and standardisation in learning. However, in some instances, reliance on notation may diverge from practices that musicians and communities themselves regard as appropriate to the tradition and may not fully prepare students for performance grounded in oral transmission (Shahanum & Mohamad Adam, 2016). For this reason, structured instructional approaches in traditional music learning need to be attentive to oral, embodied, and contextual forms of knowledge. In this study, traditional music learning is approached as both a cultural practice and a learning domain that calls

for adaptive teaching strategies responsive to culturally situated practices while also enabling students to develop technical, interpretative, and expressive capacities. This framing provides a basis for examining whether explicit forms of instruction, when appropriately adapted, can be used in traditional music learning without displacing locally recognised performance practices.

Creativity plays a central role in music learning, particularly in settings where interpretation and variation are essential to practice. In traditional music learning, creativity contributes not only to personal expression but also to the ongoing renewal of musical forms. Hallam and Ingold (2021) and Langer (2007) suggest that creative engagement enables traditional music to function as a living artistic practice rather than a fixed repertoire. Artistic development is not limited to technical accuracy; it also involves emotional awareness, aesthetic judgement, cognitive engagement, and reflective thinking (Mahgoub et al., 2022; Suryawan et al., 2022). Creativity in music also involves responding meaningfully to the work of others through interaction among performers, audiences, and their social contexts (Kokotsaki & Newton, 2015). Research further shows that such creative engagement is more likely to develop in learning environments that allow exploration and open-ended musical interaction (Mróz & Ocetkiewicz, 2021; Richardson & Mishra, 2018). In the learning of traditional music, this points to the importance of instructional contexts that support interpretation and expressive depth alongside technical development.

Traditional music learning therefore benefits from instructional structures that encourage interaction, guided practice, and sustained engagement. Whereas approaches such as intelligent teaching models (Zhang, 2024), digital music technologies (Zhang & Sui, 2017), and multimedia-assisted instruction (Ma, 2021) have shown effectiveness in general music education, they often rely on forms of technological mediation that may sit uneasily with the experiential and embodied nature of traditional music practice. This raises the need for instructional models that provide structure without displacing core features of oral transmission. One such approach is the Explicit Instruction Model (Archer & Hughes, 2010; Witzel et al., 2003), also referred to as direct teaching (Putra et al., 2022), which combines explanation, demonstration, guided practice, and collaborative activity. This study examines how this model may be applied to traditional Minangkabau music learning, with particular attention to the role of student creativity in shaping learning outcomes.

Preliminary observations at Universitas Negeri Padang indicated that student achievement in courses on traditional music between 2019 and 2022 were modest, with average scores ranging from 78 to 80. Many students showed limited confidence in performance and creative expression. One possible contributing factor is the limited use of instructional approaches that combine structured guidance with opportunities for creative engagement. As a state university, Universitas Negeri Padang is responsible for sustaining and developing Minangkabau arts and therefore occupies an important position in shaping how traditional music is taught and learned. Within this context, both instructional approach and student creativity are likely to influence outcomes in traditional music learning.

Efforts to sustain local cultural arts are reflected in the inclusion of compulsory traditional music courses in higher education curricula (Hasim et al., 2022; Martha et al., 2013). Against this background, this study examines differences and interactions in what the authors refer to as traditional music abilities (TMA) among students in the Department of Drama, Dance, and Music Arts at Universitas Negeri Padang. Two factors are considered: instructional approach, specifically the Explicit Instruction Model, and students' musical creativity quotient, as operationalised in this study. Creativity is treated as an independent characteristic rather than an outcome of instruction and is examined with regard to how it interacts with instructional approach to influence students' traditional music abilities.

Previous research shows that music education contributes to musical development through both technical learning and emotional engagement (Hallam & Prince, 2003; Després, 2017; Nikolić et al., 2023). Research in culturally specific contexts, including Minangkabau, has linked traditional music learning with coordination, creativity, and appreciation of indigenous art forms (Falma et al., 2021; Md Jais et al., 2023). However, existing scholarship has not examined how instructional approaches interact with differing levels of student creativity to shape outcomes in traditional music learning. This study addresses that gap by exploring the interaction between teaching method and student creativity in relation to traditional music abilities.

Literature Review

Traditional Music Abilities (TMA)

Traditional music abilities (TMA) refer to a broad range of competencies that include cognitive, technical, aesthetic, and socio-cultural dimensions. These abilities go beyond technical proficiency to encompass engagement with, and internalisation of, the cultural meanings and practices embedded in traditional music. TMA contribute to cognitive development, including memory, concentration, and problem-solving (Jarmani, 2024); they also enhance aesthetic and interpretative capacity through the integration of musical skill and cultural understanding (Tao, 2023). In addition, TMA are shaped by performance practices that enable expressive engagement with traditional musical forms (Tan, 2023). Through community participation and shared practice, TMA also shape social and emotional development and contribute to the continuity of musical traditions.

To situate this study-specific framing, it is useful to consider how musical ability has been described more broadly in existing scholarship. Hallam and Prince (2003) describe musical ability as comprising skills such as instrumental performance, singing, listening, appreciation, and musical response, alongside emotional and technical understanding. Musical ability thus involves a range of interconnected musical activities rather than performance alone. Després (2017) defines musical ability as the capacity to comprehend music, typically developed through early and sustained cultural exposure. Nikolić et al. (2023) note that musical development varies among individuals and is shaped by both genetic and

environmental influences, and that formal education plays a role in supporting musical skill development.

Traditional music learning has been shown to play a role in the development of musical abilities and practical skills that are not limited to technical execution. Research in this area shows that engagement with traditional music practices contributes to a range of cognitive, motor, and interpersonal capacities, including aural sensitivity, coordination, and ensemble awareness. These abilities develop through repeated participation in structured musical activities that require attention to timing, interaction, and responsiveness to musical cues.

Studies further suggest that traditional music learning is associated with broader educational outcomes. Md Jais et al. (2023) report that participation in traditional music activities supports the development of coordination skills and collaborative dispositions. Their findings also indicate that traditional music instruction often requires extended time to accommodate performance practice assessment, and planning responsibilities. Sustained engagement in traditional musical activities has additionally been linked to the development of creativity and positive attitudes towards collaboration.

In this study, traditional music abilities (TMA) are assessed using a set of indicators adapted from Hallam and Prince (2003). Aural skills refer to the ability to recognise and reproduce pitch and rhythm by ear and form the foundation of musical engagement. Receptive responses are reflected in students' capacity to respond to instructional cues and to demonstrate understanding of musical structure and style. Generative skills include the performance of musical pieces, the imitation of musical patterns, and improvisation or simple composition. Skill integration is evident in students' ability to combine listening, performance, and adaptation into coherent musical expression. Personal qualities, including focus, motivation, expressiveness, and effort, contribute to levels of engagement and emotional involvement in learning. Finally, musical development is examined through longitudinal evidence of growth in competence and understanding within traditional music learning.

Student Musical Creativity

To examine musical creativity in the context of traditional music learning, this study adopts Webster's (1989) framework, which consists of flexibility, elaboration, originality, and fluency. These dimensions are used to examine how students generate, develop, and evaluate musical ideas within traditional settings. Flexibility refers to the ability to explore multiple musical possibilities, while elaboration involves extending and refining musical ideas. These capacities are particularly relevant in traditional music learning, where improvisation and personal interpretation are often central. Originality refers to the expression of distinctive musical ideas within cultural parameters, while fluency involves decision-making and evaluative processes that sustain musical engagement.

Previous studies indicate that creativity-oriented instruction in traditional music supports students' musical development. Murillo et al. (2021) link collaborative creative work to deeper involvement, while Chien et al. (2018) show

that creative activities, including those supported by technology, play a role in developing musical creativity.

Explicit Instruction Model

Theoretical perspectives in music education recognise that musical learning involves technical skill as well as cognitive, emotional, and cultural engagement (Chen, 2022; Liu & Jirigela, 2023). Foundational approaches emphasise aesthetic development and emotional connection within structured learning environments, as reflected in pedagogical traditions such as the Orff approach (Li, 2021). Music education theory also advocates for the development of musical identity through the interaction of formal and informal learning experiences (Fautley et al., 2019). More recent work has examined adaptive instructional strategies, e.g., project-based and multimodal approaches, that support engagement and musical understanding (Song, 2024).

       The Explicit Instruction Model offers a structured approach to teaching that promotes understanding and skill development through guided learning. Archer and Hughes (2010) describe explicit instruction as a method characterised by clarity in instructional design and delivery. Students are guided step by step through explanation, demonstration, guided practice, and feedback, with instructional scaffolding gradually reduced as proficiency develops. The model also emphasises explaining the purpose of learning activities so that students understand the relevance of the skills being developed.

       Research on explicit instruction in music education remains limited. Sakkal and Martin (2019) demonstrate that explicit instruction can benefit learners with low to moderate musical ability through music-based games, although their study does not address traditional music contexts. Related applications of explicit instruction have been reported in language education (Brevik, 2019; El Soufi & See, 2019; Forey & Cheung, 2019).

       Effective explicit instruction involves organising subject matter into manageable segments that correspond to learners' cognitive capacities, including attention, working memory, and prior knowledge (Archer & Hughes, 2010). Instruction typically proceeds through explanation and demonstration, followed by guided practice with timely feedback. As learners gain confidence and competence, instructional support is gradually withdrawn to enable independent performance.

Purpose of the Study and Research Questions

This study examines differences and interactions in students' traditional music abilities (TMA) in relation to instructional approach and musical creativity among undergraduate students. The study addresses the following research questions:

1. Is there a difference in traditional music abilities between students exposed to an immersion-based learning model incorporating explicit instruction and those receiving conventional classroom-based instruction?
2. Does musical creativity influence students' traditional music abilities?

Methodology

Research Design

This study adopted a quantitative comparative design within a parametric statistical framework (Creswell, 2014). The design was used to examine differences in traditional music abilities (TMA) among students learning Minangkabau traditional music and to explore the interaction between instructional approach and students' levels of musical creativity. Two instructional conditions were involved: an experimental group taught using the Explicit Instruction Model and a control group taught using conventional classroom-based instruction.

Students in both groups were assessed on traditional music abilities and musical creativity. Based on musical creativity scores, students in each instructional condition were categorised into higher and lower creativity groups, resulting in four analytical groups. The analysis examined whether differences in TMA were associated with instructional approach, musical creativity level, and their interaction.

Procedure

Instruction in the experimental group followed the stages of the Explicit Instruction Model outlined by Archer and Hughes (2010), with adaptations made for undergraduate traditional music learning. The instructional stages implemented in the experimental group are presented in Table 1. Instruction in the control group followed conventional classroom procedures, as outlined in Table 2. Data collection was conducted over a six-month period, from January to June 2023.

Table 1. *Explicit instruction stages (experimental group)*

Stage	Activities
Review	• The lecturer reviews students' existing ability in Minangkabau music.
Presentation	• The lecturer states lesson objectives and presents techniques for learning Minangkabau music in a step-by-step manner.
	• Clear language is used, and digressions are avoided.
	• Students are invited to practise selected techniques in front of the class.
Guided practice	• Students practise in groups under lecturer guidance and may ask questions.
	• The lecturer monitors progress to ensure teaching goals are achieved.
	• Practice continues until students demonstrate fluency.
Correction and feedback	• The lecturer repeats instructions and provides corrective feedback to address observed difficulties.
Independent practice	• Students practise independently while the lecturer monitors initial attempts.
	• Practice continues until skills become more automatic.
Weekly reviews	• The lecturer evaluates students' progress in learning Minangkabau music.

Table 2. *Conventional instruction stages (control class)*

Stage	Activities
Introduction	• The lecturer briefly explains lesson objectives and provides basic theoretical or historical background related to Minangkabau music.
Demonstration	• The lecturer performs or plays recordings of traditional music pieces, with limited explanation of playing techniques.
Individual or group practice	• Students practise songs individually or in groups with minimal instructional guidance. • Peer collaboration occurs informally.
Limited feedback	• The lecturer provides general comments or corrections as needed, with limited emphasis on structured feedback.
Final evaluation	• Students perform selected traditional pieces for evaluation, with emphasis placed on final performance outcomes.

Sampling and Instruments

The study population consisted of undergraduate students from the Department of Drama, Dance, and Music Arts at Universitas Negeri Padang, Indonesia. Purposive sampling was used to select students enrolled in the traditional music course during the 2022/2023 academic year. A total of 36 students participated, representing the full cohort enrolled in the course. Participants were divided evenly into two groups: 18 in the experimental group and 18 in the control group. This balanced distribution supported the comparative design and the use of a 2×2 factorial ANOVA.

Musical creativity was measured using a questionnaire adapted from Webster's (1989) musical creativity framework. The questionnaire consisted of 40 Likert-scale items. Table 3 reports the distribution of item numbers across creativity components, and the full item wording is not reproduced in the manuscript. Traditional music abilities (TMA) were assessed using an observation sheet adapted from Hallam and Prince (2003), as shown in Table 4. The TMA assessment focused on students' performance in Minangkabau music. Practical assessment involved two instruments: *talempong pacik*, a hand-held metal idiophone performed in small ensembles, and *gandang tambua*, a large traditional drum commonly used in ceremonial processions. Students were required to learn and perform three traditional pieces: "Cak Din-Din," "Tigo Duo," and "Tupai Bagaluik."

The validity and reliability of the musical creativity instrument were examined statistically. Item analysis of the 40 questionnaire items yielded Pearson correlation values exceeding the r-table threshold of 0.312. Reliability analysis produced a Cronbach's alpha coefficient greater than 0.70, indicating acceptable internal consistency.

Table 3. *Musical creativity assessment instrument (adapted from Webster, 1989)*

Indicator	Webster's (1989) Component	Number of Items
Exploration of varied musical ideas and expressions	Flexibility	4 (Items 3, 11, 18, 40)
Development and expansion of musical ideas	Elaboration	6 (Items 10, 12, 19, 24, 35, 38)
Presentation of original or unconventional musical ideas	Originality	8 (Items 4, 7, 14, 20, 21, 25, 27, 29)
Decision-making and evaluation of musical work	Fluency/originality	6 (Items 2, 8, 13, 17, 23, 34)
Persistence in practising or refining musical material	Elaboration	10 (Items 1, 5, 6, 9, 16, 22, 26, 30, 37, 38)
Selective application of feedback	Flexibility/elaboration	5 (Items 15, 31, 32, 33, 39)

Table 4. *Observation sheet for traditional musical instrument abilities*

Category	Indicators
Aural skills	Recognises and reproduces pitch and rhythm by ear
Receptive responses	Responds to instructional cues and demonstrates understanding of musical structure and style
Generative skills	Performs pieces, imitates patterns, and engages in basic improvisation or simple composition
Integration of skills	Combines listening, performance, and adaptation
Personal qualities	Demonstrates focus, motivation, expressiveness, and effort
Musical development	Shows evidence of progress and reflection over time

Note: *Scores were assigned using a four-point scale: 4 (excellent), 3 (good), 2 (fair), and 1 (needs improvement).*

Data Analysis

Data were analysed using descriptive statistics, box plots, and one-way and two-way analyses of variance (ANOVA) in Jeffreys's Amazing Statistics Program (JASP). Descriptive statistics were used to summarise students' traditional music abilities in each group. Box plots were used to examine score distribution, variability, and potential outliers.

Prior to inferential analysis, assumptions of normality and homogeneity of variance were tested. Data were considered normally distributed when the calculated L-value was lower than the corresponding critical value at a significance level of 0.05. Homogeneity of variance was assumed when the calculated chi-square value was smaller than the critical value at the same significance level. One-way and two-way ANOVA were then conducted to address the research questions, with statistical significance evaluated at $p < 0.05$.

Results

Prerequisite Analysis

Results of the normality and homogeneity tests are presented in Tables 5 and 6. Normality was examined using the Lilliefors-corrected Kolmogorov-Smirnov test across eight TMA datasets: 1) experimental class; 2) conventional class; 3) high creativity group; 4) low creativity group; 5) high creativity with explicit instruction; 6) high creativity with conventional instruction; 7) low creativity with explicit instruction; and 8) low creativity with conventional instruction.

As shown in Table 5, all datasets met the assumption of normality, with observed L values (Lob) lower than the corresponding critical values (Lcv) at $\alpha = 0.05$.

Table 5. *Normality test results*

Dataset	Lob	Lcv ($\alpha = 0.05$)	Assessment
Experimental class	0.205	0.213	Normal
Conventional class	0.173	0.213	Normal
High creativity group	0.211	0.213	Normal
Low creativity group	0.162	0.213	Normal
High creativity group with explicit instruction	0.170	0.300	Normal
High creativity group with conventional instruction	0.291	0.300	Normal
Low creativity group with explicit instruction	0.282	0.300	Normal
Low creativity group with conventional instruction	0.292	0.300	Normal

Note: *Normality was assessed using the Lilliefors (Kolmogorov-Smirnov) test.*

Homogeneity of variance was examined using Bartlett's test on TMA data. As presented in Table 6, all chi-square values were lower than the corresponding critical values at $\alpha = 0.05$, and variances were therefore considered homogeneous across groups.

Table 6. *Homogeneity test results*

Dataset grouping	Chi-Square	Critical Value (alpha = 0.05)	Assessment
Based on learning models	5.05	48.60	Homogenous
Based on musical creativity	1.50	48.60	Homogenous
Based on learning models and musical creativity	6.98	46.19	Homogenous

Note: *Homogeneity was assessed using Bartlett's test.*

As both normality and homogeneity assumptions were met, the data were considered suitable for analysis using ANOVA.

Descriptive Analysis of Traditional Music Abilities (TMA)

Table 7 presents descriptive statistics for students taught using the Explicit Instruction Model, while Table 8 presents corresponding statistics for students taught using the conventional instructional model.

Table 7. *Descriptive statistics of TMA (Explicit Instruction Model)*

Statistic	TMA Group		
	High	Moderate	Low
N	10	3	5
Mean	73.500	61.333	61.200
Median	73.500	60.000	61.000
Mode	72.000	60.000	61.000
SD	2.273	2.309	0.837
Variance	5.167	5.333	0.700
Min	70.000	60.000	60.000
Max	77.000	64.000	62.000

Table 8. *Descriptive statistics of TMA (Conventional Model)*

Description	TMA Group		
	High	Moderate	Low
N	4	9	5
Mean	69.000	63.111	60.400
Median	70.000	64.000	60.000
Mode	70.000	64.000	60.000
SD	2.708	1.764	0.548
Variance	7.333	3.111	0.300
Min	65.000	60.000	60.000
Max	71.000	65.000	61.000

Based on Tables 7 and 8, the distribution of traditional music ability (TMA) categories differs between the two instructional groups. In the class taught using the Explicit Instruction Model (Table 7), 10 students are classified in the high TMA category, compared with four students in the conventional class. Within the explicit instruction group, five students fall into the low category and three into the moderate category. Mean TMA scores in this group are 73.5 for the high category, 61.3 for the moderate category, and 61.2 for the low category. Scores range from a minimum of 60 to a maximum of 77.

In the conventional class (Table 8), nine students are classified in the moderate category, five in the low category, and four in the high category. The mean TMA score for the moderate group is 63.1, compared with 69.0 for the high group and 60.4 for the low group. TMA scores in this class range from 61 to 71. Compared with the explicit instruction group, fewer students in the conventional class fall within the high TMA category, with a larger proportion clustered in the moderate range.

Figures 1 and 2 present box plots of traditional music ability (TMA) scores for students taught using the Explicit Instruction Model and the conventional instructional model, respectively. In Figure 1, the high TMA category shows a relatively compact interquartile range (IQR), which suggests limited variability within the middle 50% of scores. The moderate category displays greater dispersion, with a wider spread across the data range. By contrast, the low TMA category shows an asymmetrical distribution, with uneven dispersion across scores.

In Figure 2, the high TMA category shows a more separated box, indicating greater variability within the IQR compared with the explicit instruction group. The moderate and low categories show more compact distributions, with scores clustered more closely around the median. Differences in box size across categories represent variation in score dispersion rather than differences in sample size.
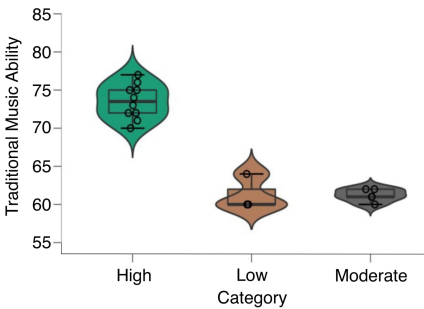

Figure 1. Box plot of TMA in the Explicit Instruction Model
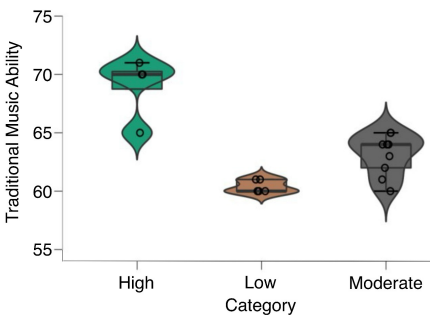

Figure 2. Box plot of TMA in the Conventional Model

To examine the influence of musical creativity on students' traditional music ability (TMA), TMA scores were analysed according to students' levels of musical creativity. Data from both instructional classes were first combined and then divided into two groups: high creativity and low creativity. This grouping was based on the median score of the musical creativity measure. As shown in Table 9, each group consisted of 18 students. Mean TMA scores were subsequently calculated for both groups. The descriptive results indicate that students in the high-creativity group recorded a mean TMA score of 73.333 (SD = 2.345), whereas students in the low-creativity group recorded a lower mean score of 62.778 (SD = 4.764).

Table 9. *Descriptive statistics of TMA based on musical creativity level*

Musical Creativity Level	TMA Mean	SD	N
High	73.333	2.345	18
Low	62.778	4.764	18

Figure 3 presents box plots of TMA scores according to musical creativity level. The box plot for the high-creativity group shows a wider interquartile range, which corresponds to greater dispersion within the middle 50% of the data. By contrast, the box plot for the low-creativity group shows a narrower interquartile range, with scores more closely clustered around the median.
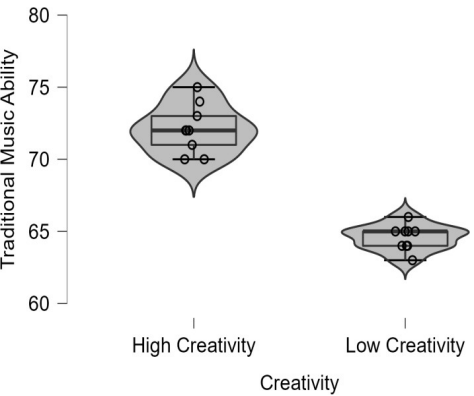

Figure 3. Box plot of TMA based on musical creativity

To test whether differences in TMA between creativity groups were statistically meaningful, a one-way ANOVA was conducted. The results are presented in Table 10. The analysis yielded an F value of 35.567 (p = 0.001), confirming differences in TMA across levels of musical creativity.

Table 10. *One-way ANOVA test results*

Variable	Sum of Squares	df	Mean Square	F	p	η^2	η^2p
Creativity	501.389	1	501.389	35.567	0.001	0.690	0.690
Residuals	225.556	16	14.097				

Note: *Type III Sum of Squares*

Table 11 presents descriptive traditional music ability (TMA) data based on instructional model and musical creativity level. Among students classified as having high creativity, those taught using the conventional instructional model recorded a mean TMA score of 61.000 (SD = 0.707, *N* = 9). In comparison, students with high creativity who were taught using the Explicit Instruction Model recorded a higher mean TMA score of 72.111 (SD = 1.691, *N* = 9). The difference in mean TMA scores between instructional models is therefore evident within the high-creativity group.

Table 11. *Descriptive data of TMA based on learning models and creativity*

Creativity	Learning Model	Mean	SD	N
High	Conventional	61.000	0.707	9
	Explicit Instruction	72.111	1.691	9
Low	Conventional	64.556	0.882	9
	Explicit Instruction	65.333	3.000	9

For students classified as having low creativity, the mean TMA score under the conventional instructional model was 64.556 (SD = 0.882, *N* = 9), while the mean score under the Explicit Instruction Model was 65.333 (SD = 3.000, *N* = 9). The difference in mean TMA scores between instructional models for this group is comparatively small. Across groups, the lowest mean TMA score (61.000) was observed among high-creativity students taught using the conventional model, whereas low-creativity students recorded higher mean scores under both instructional conditions.

Influence of Creativity and Learning Model on Student TMA

Table 12 presents the results of the two-way ANOVA examining the effects of musical creativity, learning model, and their interaction on students' traditional music ability (TMA). Musical creativity shows a statistically significant effect on TMA ($p = 0.012$). The learning model also shows a statistically significant effect on TMA ($p = 0.001$). In addition, the interaction between musical creativity and the learning model is statistically significant ($p = 0.001$), showing that the combined influence of these two variables on TMA is not independent.

Table 12. *Two-way ANOVA test results*

Variable	Sum of Squares	df	Mean Square	F	p	η²	η²p
Creativity	23.361	1	23.361	7.112	0.012	0.034	0.182
Learning Models	318.028	1	318.028	96.82	0.001	0.463	0.752
Creativity × Learning Models	240.25	1	240.25	73.142	0.001	0.35	0.696
Residuals	105.111	32	3.285				

Note: *Type III Sum of Squares*

These results indicate that students' TMA scores vary according to both their level of musical creativity and the instructional model applied. Figure 4 provides a visual representation of the interaction pattern between learning models and musical creativity and illustrates how variation in both factors corresponds to differences in students' TMA scores.
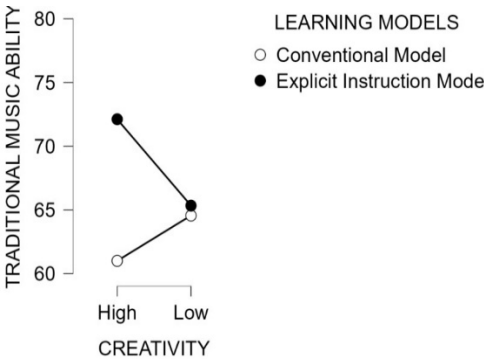

Figure 4. Interaction between creativity and learning models on TMA

Discussion

This study addressed the first research question by identifying a significant difference between students who received explicit instruction and those who experienced conventional instruction. The findings show that explicit instruction is associated with higher traditional music ability (TMA) scores than those observed under the conventional model. This outcome is consistent with earlier studies

reporting positive effects of explicit instruction on student learning outcomes (Firdhani, 2021; Hidayatullah, 2020). Several characteristics of explicit instruction help account for this difference. The approach follows a structured and systematic teaching sequence that includes clearly stated objectives, step-by-step guidance, and precise explanations of musical concepts. Clear communication is a central element of this model. Students are thus able to understand not only how musical techniques are executed, but also the reasoning behind their use. Throughout instruction, students engage in regular practice and receive immediate feedback. This process assists in identifying weaknesses and allows adjustment to take place during learning rather than after performance.

Evidence from related areas of art education reinforces the relevance of these findings. Hera and Elvandari (2021), in their study of traditional dance education, emphasise the importance of explicit instruction within artistic learning contexts. Their work suggests that this approach is not confined to a single discipline and continues to hold relevance for traditional music education. In both music and dance, explicit instruction allows complex elements and techniques to be presented in a systematic manner. Such organisation helps students develop a clearer sense of performance expectations. When students are learning instruments, working with complex rhythmic structures, or engaging with the cultural foundations of traditional music, explicit instruction offers a coherent pathway. Step-by-step demonstration is particularly important in traditional music contexts, where knowledge transmission has historically relied on oral traditions and direct practice. Consistent feedback further contributes to technical development while reinforcing awareness of expressive and cultural dimensions.

The second research question examined the role of musical creativity in students' TMA. The results show that students with higher levels of creativity generally achieved higher TMA scores. Further analysis that considered instructional approach, however, revealed an unexpected pattern. Under normal circumstances, students with high creativity would be expected to outperform those with lower creativity across learning conditions. However, students with high creativity who were taught using the conventional model recorded lower TMA scores than students with lower creativity taught under the same model.

Several factors may account for this outcome. Students with high creativity often demonstrate strong potential for musical expression and innovation. The conventional instructional approach applied in this study, however, may not have provided sufficient structure to support the effective development of these abilities. The model relies heavily on fixed techniques and relatively rigid instructional routines. These conditions may restrict creative exploration among highly creative students. Students with lower creativity may experience fewer difficulties under the same approach, as their learning may depend more strongly on repetition and imitation.

By comparison, the Explicit Instruction Model appears to offer conditions that are more effective for students with high creative capacity. Clear expectations, structured practice, and consistent feedback provide a framework within which creative potential can be directed towards technical and expressive development in traditional music. This pattern points to the importance of considering instructional

approaches based on students' creative characteristics. It also suggests that conventional instruction, as implemented in this study, may require modification in order to better accommodate students whose strengths lie in creative exploration.

Creativity occupies a central position within higher education music programmes. Both musical performance and composition benefit from opportunities for creative engagement, which allow students to explore sound, form, and expression in more flexible ways. Explicit instruction does not inhibit creativity. Instead, it provides a framework that sustains disciplined and purposeful creative work. Structured technical development, guided rehearsal, and close attention to musical detail contribute to creative growth when these elements are combined with opportunities for interpretation and expression (Gunn et al., 2021; Hammond & Moore, 2018). This balance is particularly relevant in traditional music learning contexts.

Creative musical output emerges from imaginative thinking shaped by prior knowledge and experience (Hidayatullah, 2020; Nainggolan & Martin, 2019; Rumapea, 2019). Higher levels of creativity support the production of more developed musical performances and compositions. These outcomes contribute to both artistic and personal development. Emotional experience also plays a role in creative activity. It influences cognition, communication, learning, and decision-making during musical engagement. Emotional involvement, in turn, underpins expressive musical practices, including improvisation (Brodin, 2018).

Cultural context further shapes music learning experiences. In this study, students engaged with instructional materials drawn from Minangkabau traditional music. Cultural grounding contributes to learning by situating musical practice within broader social understanding (Mellizo et al., 2023). At the same time, effective traditional music instruction depends heavily on the educator's role. Lecturers must provide appropriate materials and learning conditions while responding to diverse student backgrounds. This challenge is particularly evident in multicultural classrooms, where students from different regions engage with music rooted in a specific cultural tradition.

Music education in higher education places strong emphasis on the development of student creativity, a priority shared by institutions, societies, and families. This emphasis arises from the recognition that both musical composition and performance benefit from creative exploration. Creative engagement allows students to experiment with ideas, melodies, harmonies, and musical structures while enabling deeper emotional expression. Explicit instruction offers several strategies through which lecturers can cultivate musical creativity. These strategies play an important role in developing traditional music skills and in promoting focused, attentive classroom practice (Gunn et al., 2021; Hammond & Moore, 2018). They include technical skill development, music theory comprehension, and compositional proficiency, all of which contribute to creative growth. Lecturers can also guide students in exploring a range of Minangkabau traditional instruments, as exposure to diverse musical forms allows for stylistic integration and innovation. Musical creativity further involves emotional expression and personal interpretation, which are addressed through performance-focused explicit instruction.

Conclusion and Recommendations

The findings of this study show clear differences in students' traditional music ability (TMA) by instructional method. Students who received explicit instruction achieved TMA scores in the high category, whereas students taught using conventional methods achieved scores in the medium category. Differences were also observed across levels of musical creativity. Students classified as having high creativity achieved higher TMA scores than their low-creativity peers ($p = 0.001$). An interaction between instructional method and creativity level further shaped TMA outcomes ($p = 0.001$). High-creativity students achieved stronger results when taught using explicit instruction than when taught through conventional approaches.

Overall, these findings suggest that strong TMA development is influenced by both students' creative capacity and the appropriateness of instructional design. Continued attention to the development of student creativity is therefore necessary, as are efforts to strengthen lecturers' instructional practices. Music educators should consider how instructional approaches interact with variation in students' creative profiles. Instructional strategies that respond to such variation are likely to lead to more effective and inclusive learning environments. At the same time, structured guidance and consistent feedback continue to play a key role in the development of traditional musical abilities.

Future research may examine which components of explicit instruction contribute most directly to improved TMA outcomes. Further investigation of factors such as motivation, practice habits, and cultural background may help clarify their roles in shaping creativity and traditional music ability. Longitudinal research designs may also offer insight into the longer-term effects of explicit instruction on musical development.

Several limitations in this study should be acknowledged. The sample size limits the extent to which the findings can be generalised to other educational or cultural contexts. Differences in prior musical experience and student maturity may also have influenced instructional outcomes. Although the quantitative design provided clear statistical evidence, it did not capture the depth of students' musical experiences. Future studies may therefore incorporate qualitative methods, including interviews or classroom observations, to develop a deeper understanding of TMA development. In addition, this study did not examine other variables that may influence TMA, such as motivation, practice routines, or levels of cultural engagement. Expanding the range of variables may provide a more complete account of factors shaping traditional music learning.

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