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Experimental Study on the Effectiveness of the Dalcroze Teaching Method in Improvisational Dance Education: A Case Study of the Art College of China Coal Mine Art Troupe

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Abstract

Background and Aim: Improvisational dance, as a vital component of art education, plays a crucial role in fostering students' creativity and artistic expression. However, traditional dance teaching models often focus on skill training and neglect the cultivation of improvisational abilities. This study explores the application and effectiveness of the Dalcroze method in improvisational dance teaching. This study aims to evaluate the effectiveness of the Dalcroze method in enhancing students' creativity and improvisational dance abilities, addressing the limitations of traditional skill-focused teaching models.

Materials and Methods: This study examines the effect of the Dalcroze method on the improvisational dance skills of tenth-grade students. A 16-week experiment was conducted with 30 participants, divided into an experimental group (n = 15) and a control group (n = 15). The experimental group received training in the Dalcroze method, including body rhythm, auditory training, and improvisation, while the control group underwent traditional dance instruction. The research tools included an improvisational dance ability scale and a dance creativity scale, assessing technical quality, musical processing ability, and creativity. Data were analyzed using SPSS software, with t-tests employed to evaluate differences between the two groups.

Results: Students in the experimental group who underwent training in the Dalcroze method demonstrated significant improvements compared to the control group in several areas: creative thinking skills (mean score 2.96±1.31, $p<0.05$), creative performance ability (mean score 2.75±1.25, $p<0.05$), technical quality (mean score 17.12±1.85, $p<0.05$), and musical processing ability (mean score 16.39±1.36, $p<0.05$). The experimental group's average scores in all metrics were higher than those of the control group, indicating that the Dalcroze method has a significant positive effect on enhancing students' improvisational dance abilities.

Conclusion: The Dalcroze method effectively enhances students' improvisational dance abilities and creativity, offering new teaching strategies for dance education. These findings suggest that the Dalcroze method can serve as a valuable tool for enhancing creativity in dance education. Future research should explore its application in diverse educational contexts and with larger sample sizes.

Keywords: Dalcroze Method; Improvisational Dance; Dance Education

Introduction

The Dalcroze method, originating in the early 20th century, was founded by Swiss music educator Émile Jaques-Dalcroze. Its core idea is to enhance musical literacy and creativity by perceiving and understanding musical rhythm through body movement (Kronsted, 2021). In recent years, this method has been widely applied internationally in dance education, particularly demonstrating unique value in the field of improvisational dance (Labrada, 2020). However, in China, the application of the Dalcroze method in dance education is still in its exploratory stage, with limited research and practical cases (Hu & Wang, 2024; Lv, 2021). This study, using the China National Coal Mine Art Troupe's Art Academy as a practical base, aims to enhance students' improvisational dance abilities and creativity through the Dalcroze method, providing new theoretical and practical support for dance education and promoting the further development of improvisational dance in China.

In art education, improvisational dance not only cultivates students' artistic perception and expressive abilities but also effectively enhances their creativity and comprehensive qualities. However, traditional dance teaching methods often focus on technical and standardized training, neglecting the stimulation of students' intrinsic creativity. As an art form emphasizing immediate response and personal expression, improvisational dance is still in its infancy in China. Although an increasing number of dance artists and

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educators have begun to experiment with and promote improvisational dance, its popularization and development face numerous challenges due to the lack of systematic teaching frameworks and professional teaching teams. Current dance education predominantly emphasizes classical dance and technical training, overlooking the cultivation of improvisational skills, which results in insufficient creativity among students. Additionally, societal utilitarian expectations of improvisational dance have limited students' interest and exploration in this field. In recent years, scholars both domestically and internationally have extensively discussed the educational value of improvisational dance, highlighting its ability to improve students' physical coordination, musical perception, emotional expression, and creativity (Leng et al., 2025; Lloyd & Smith, 2023). However, compared to Western countries, China's improvisational dance education still lags significantly in terms of curriculum systems, teaching methods, and teacher training. Research by Leng et al. (2025) shows that Malaysian university students significantly improved their emotional well-being and creativity through improvisational dance courses, while similar systematic research and practices are relatively scarce in China (Peng, 2021; Dong & Wang, 2022). Therefore, exploring an innovative teaching method that effectively integrates musical perception with body movement has become a crucial topic in the field of art education.

China National Coal Mine Art Troupe's Art Academy, as a well-known art education institution in China, has been committed to exploring and practicing various art teaching methods. Its student body has a strong dance foundation and artistic potential, but there is still a certain deficiency in the cultivation of improvisational dance abilities. In response to this situation, the introduction of the Dalcroze method, combined with the college's characteristic educational needs, to design a scientific and systematic improvisational dance curriculum, holds significant practical significance and theoretical research value. It provides new theoretical and practical support for dance education and promotes the further development of improvisational dance in China. Through this study, it is expected to provide innovative teaching concepts and practical methods for dance educators and also provide a scientific basis for policymakers to promote the comprehensive progress of China's dance education enterprise.

Objectives

The primary objective of this study is to explore the application effects of the Dalcroze method in improvisational dance teaching. The specific goals include:

1. Designing an Improvisational Dance Curriculum

Utilizing the body movement concepts of the Dalcroze method, an improvisational dance curriculum will be developed by integrating the "body rhythm" principle. This curriculum, tailored for 10th-grade students, aims to cultivate their creative choreographic abilities. The course design will emphasize individual differences, respect each student's uniqueness, and encourage them to express their emotions and creativity through improvisational dance.

2. Evaluating Pre and Post-Course Improvisational Dance Performances

The improvisational dance abilities of students will be assessed before and after the course to determine if any changes have occurred. Quantitative tools will be used to evaluate students' improvisational dance skills, including technical quality, musical processing ability, and creativity, to validate the effectiveness of the curriculum. The assessment tools will cover multiple dimensions to comprehensively measure students' improvement in improvisational dance abilities.

3. Analyzing the Impact of the Curriculum on Creativity and Improvisational Dance Abilities**

The study will analyze the effects of the curriculum on students' creativity and improvisational dance abilities, as well as the role of the Dalcroze method in enhancing these skills. This will provide new teaching insights for dance education. Through comparative analysis of the experimental and control groups, the specific mechanisms by which the Dalcroze method enhances students' creativity and improvisational dance abilities will be revealed.

4. Providing New Perspectives and Methods for Dance Education

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Based on the research findings, innovative teaching concepts and practical methods will be offered to dance educators, promoting the popularization and development of improvisational dance in China. The study will explore how to integrate the Dalcroze method with existing dance teaching systems, providing theoretical support and practical guidance for the innovation of dance education.

Literature review

The Dalcroze method originated in the early 20th century and was proposed by Swiss music educator Emile Jaques-Dalcroze. Its core theory emphasizes perceiving and understanding musical rhythm through physical movement to enhance musical literacy and creativity. This method mainly includes three basic elements: body rhythm training, auditory training, and improvisation. Among them, body rhythm training involves experiencing and expressing musical rhythm and beat through various physical movements, auditory training enhances the understanding and appreciation of music through auditory perception, and improvisation combines the former two, expressing personal musical feelings and creativity through improvisation. In improvisational dance teaching, the application of the Dalcroze method is mainly reflected in the following aspects: first, through body rhythm training, students can better perceive and understand the rhythmic changes of dance movements, thereby improving the coordination and expressiveness of movements. Second, auditory training helps students to better grasp the rhythm and emotion of music during the dance process, making the dance movements more in line with the music. Finally, the improvisation link encourages students to create improvisational dance based on the rhythm and emotion of music, stimulating their creativity and expressiveness.

Peng et al. (2021) conducted an in-depth analysis of the application of the Orff method in children's dance teaching and proposed a theoretical model to explain how this teaching method inspires children's innate musicality, enriches their lives, and enhances creativity. Dong and Wang (2022) started from the connotation and characteristics of children's improvisational dance and, through theoretical exposition and case analysis, revealed the role of improvisational dance in promoting the comprehensive development of children's physical functions, emotional feelings, cognitive experiences, and imagination. However, their study focused on children rather than high school students, which may limit its applicability to the current research context.

Dance and art education theory is an important field that explores the role and influence of dance and art in education and cultural inheritance. Lv (2020) sorted out the development context and related theoretical issues of dance anthropology through reading art anthropology writings, with particular emphasis on the understanding of "real dance" from an anthropological perspective, as well as the life consciousness and life interest of dance. He proposed that the academic community should pay attention to the lively folk dances with original traces, modern urban folk dances, street dances, and square dances, and deeply understand the significance of "dances that are not performed for others to watch" in anthropology and dance aesthetics education. In another study by the same author, Lv (2021) delved deeply into the "non-verbal thinking" of dance, pointing out that the essence of dance thinking is the inspirational thinking that "can only be understood but not verbalized", a type of thinking that is not unique to dancers but a universal human phenomenon. He believes that a large number of "non-standard answers" are generated and developed in non-verbal thinking, thus revealing the particularity and universality of dance thinking. Xu (2023) took Zhejiang Conservatory of Music as an example to explore the "dual practice" model of art talent with the "literary light cavalry" as the carrier. He emphasized the importance of practice in the training of art talents and innovatively combined social practice with professional practice, sorting out the phased work ideas and achievements of this model. It provides a beneficial reference for exploring a characteristic Chinese art talent training model and the prosperity and development of cultural undertakings.

Some achievements have been made in foreign research on improvisational dance teaching. Leng et al. (2025) explored the effectiveness of improvisational dance in reducing stress levels among college students in Malaysia. The study found that improvisational dance courses could significantly improve students' emotional state, reducing stress, anxiety, and depression. The study intervened for four weeks,

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with a 120-minute course once a week, and analyzed students' diaries through quantitative and qualitative content analysis methods, confirming the positive impact of improvisational dance on emotional health. Kronsted (2021), starting from the perspective of embodied cognition, proposed that the personal style of improvisational dance is closely related to the dancer's adaptation to environmental affordances. In the teaching process, emphasis should be placed on exploration rather than self-expression, and improvisational dance skills by changing the way students interact with the environment. The findings of Lindberg et al. (2021) on embodied cognition in improvisational dance provide a theoretical basis for integrating body rhythm training into the curriculum design for 10th-grade students.

Although the application of the Dalcroze method in dance education has achieved certain results, related research and practices in China are still in the exploratory stage. Existing studies primarily focus on theoretical discussions and case analyses, lacking systematic empirical research and quantitative evaluations (Peng, 2021; Dong & Wang, 2022). Furthermore, current research predominantly centers on the field of music education, with relatively few studies on its application in dance education, particularly in the construction of improvisational dance teaching systems and the localization of teaching methods (Lv, 2021). Additionally, existing research often concentrates on a single art discipline, lacking exploration of the Dalcroze method's comprehensive application across multiple art fields (such as music, dance, and theater), which limits its widespread promotion and practice in art education.

Conceptual Framework

This paper takes the Dalcroze method as the theoretical basis. The Dalcroze method is an innovative music and dance education method that enhances students' musical perception and creativity through body rhythm, auditory training, and improvisation. The study employs a quantitative research method, comparing the experimental and control groups to evaluate the actual effectiveness of the Dalcroze method in improvisational dance teaching. This study applies the Dalcroze method, an educational approach that enhances students' musical perception and creativity through Eurhythmics, auditory training, and improvisation (Jaques-Dalcroze, 1921). The research employs a quantitative experimental design with two groups. The experimental group receives a structured, 16-week Dalcroze training program focusing on:

1. Eurhythmics: Rhythm-based movement activities to improve technical precision.
2. Auditory Training: Developing perceptual and interpretive skills for rhythm and emotion in music.
3. Improvisation: Encouraging spontaneous, creative movements in response to musical stimuli.

The control group follows traditional dance methods that emphasize technical skill and standardized choreography without specific instruction in musical perception or creativity.

Through pre- and post-intervention evaluations, the study assesses three key outcomes:

1. Technical Quality: Assessed by expert evaluators based on precision, coordination, and movement expressiveness.
2. Music Processing Ability: Measured through synchronization with rhythm and emotional interpretation of music.
3. Creativity: Evaluated using a creativity scale, focusing on originality and diversity of movements.

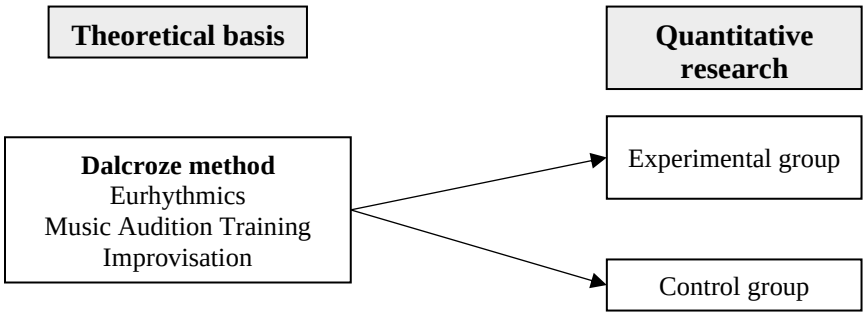

Figure 1 Application Framework of the Dalcroze Teaching Method

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Methodology

This study employs a quantitative research method, using a comparative analysis of experimental and control groups to validate the effectiveness of the Dalcroze method in improvisational dance teaching. The research spans 16 weeks, with a total of 32 sessions, comprising two 45-minute classes per week. The experimental group is taught using the Dalcroze method, while the control group continues with traditional dance teaching methods. The research design includes pre-test and post-test phases, with data collected through evaluation forms and analyzed using statistical software to confirm the effectiveness of the Dalcroze method in enhancing students' improvisational dance abilities.

The study participants are 10th-grade students from the China National Coal Mine Art Troupe's Art Academy, with an overall sample size of 150 students. Through random sampling, 30 students were selected as the sample, further divided into an experimental group and a control group, with 15 students in each group. The sample selection criteria include: students aged between 15 and 17 years to ensure they are at a similar developmental stage; a balanced gender ratio to avoid the impact of gender differences on the results; students with at least 3 years of dance experience to ensure similarity in baseline levels across groups; and random assignment to the experimental and control groups to ensure no significant differences in initial levels between the two groups.

The study uses the Improvisational Dance Ability Scale and the Dance Creativity Scale for assessment. The Dance Creativity Scale assesses creative thinking skills and creative performance abilities in two aspects. The Improvisational Dance Ability Scale includes three dimensions: technical quality, music processing ability, and student creativity. In addition, the study invited three doctoral experts in education and choreography to review the assessment tools to ensure their validity. The content validity of the assessment tools was calculated through expert scoring to ensure that the design of each question aligns with the overall objectives of the research. During the research process, the reliability and validity of the assessment tools were strictly tested to ensure the scientific and reliable nature of the research results.

This study involved a total of 30 students, with 15 students each in the experimental group and the control group. Before the experiment began, baseline tests were conducted on both groups to assess their initial levels. The experimental group received training using the Dalcroze method, while the control group continued with traditional dance instruction. After the experiment, post-tests were administered to both groups to evaluate changes in their improvisational dance abilities. Additionally, detailed records of students' learning progress and classroom performance were maintained for subsequent analysis. The pre-test and post-test data were entered into the statistical software SPSS 26.0 for data cleaning and preliminary organization. Independent t-tests were used to compare the differences between the experimental and control groups across various metrics, validating the effectiveness of the Dalcroze method. Analysis of variance (ANOVA) was employed to analyze trends in the data before and after the experiment, further confirming the effectiveness of the teaching method. The t-test was chosen to compare differences between two independent samples (experimental and control groups) across various metrics, effectively assessing the intervention effects of the Dalcroze method. ANOVA was used to analyze trends in the data before and after the experiment, verifying the long-term impact of the teaching method on students' improvisational dance abilities. Mean and standard deviation provided insights into the central tendency and dispersion of the data, aiding in a comprehensive understanding of the research results. The findings were interpreted based on statistical significance to determine the effectiveness of the Dalcroze method.

Results

This study systematically evaluated the effectiveness of the Dalcroze method in enhancing students' improvisational dance abilities through a 16-week teaching intervention. The quantitative results of the experimental and control groups were compared across various dimensions, including creative thinking skills, creative performance ability, technical quality, and music processing ability.

Students in the experimental group underwent systematic Dalcroze method training, divided into three phases. During weeks 1 to 4, students engaged in exercises such as walking at different tempos,

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clapping rhythms, and body movement exercises to develop their perception of musical beats. These exercises aimed to improve students' physical coordination and rhythmic awareness. From weeks 5 to 8, students participated in auditory training, identifying syncopation, dynamic changes, and emotional expressions in music to enhance their understanding and perception of music. Finally, during weeks 9 to 16, students combined music and emotions to create improvisational dances, engaging in free improvisation, thematic improvisation, and group collaborative improvisation to enhance their creativity and expressiveness. In contrast, students in the control group received traditional dance instruction, focusing on technical training (jumps, turns, and balance), learning choreography from classical dance works, and stage performance training. These activities emphasized improving students' technical skills and stage presence but did not include systematic improvisation or creativity training, ensuring a clear contrast with the experimental group's teaching methods.

The study participants were 10th-grade students from the China National Coal Mine Art Troupe's Art Academy, totaling 150 students. Through random sampling, 30 students were selected as the sample and further divided into experimental and control groups, with 15 students in each group. During the random assignment process, students were first stratified based on gender and dance experience to ensure balance in these key characteristics. Subsequently, a random number generator was used to assign students to the experimental and control groups, ensuring the randomness and fairness of the allocation process.

The study employed the Improvisational Dance Ability Scale and the Dance Creativity Scale for evaluation. The Improvisational Dance Ability Scale included three dimensions: technical quality (coordination, precision), music processing ability (rhythm perception, musical alignment), and creativity (originality, fluency). Technical quality was assessed by observing students' movement coordination and precision; music processing ability was evaluated based on students' alignment with musical rhythm and melody during dance; and creativity was assessed by evaluating students' originality and movement diversity. The Dance Creativity Scale evaluated creative thinking skills (innovative elements, unique) and creative performance ability (movement diversity, expressiveness). These assessment tools were validated through expert review and pre-testing to ensure their validity and reliability. During the study, test-retest reliability and inter-rater reliability were tested to further verify the consistency and accuracy of the assessment results.

Although the sample size of 30 students (15 per group) was relatively small, a power analysis ensured that the sample size was sufficient to detect statistically significant differences. The statistical methods used in the study (e.g., t-tests and ANOVA) have low sample size requirements, and strict random assignment and control of variables ensured the reliability of the results. Future research is recommended to expand the sample size to further validate the generalizability of the findings.

Before the experiment, there were no significant differences between the experimental and control groups in creative thinking skills, creative performance abilities, technical quality, music processing abilities, and creativity. In terms of creative thinking skills, the average scores of the students in the experimental group were approximately equal to those in the control group. The students in both the experimental and control groups showed the same level of innovative elements and unique ideas in improvisational dance creation, with the experimental group scoring an average of 2.03 ± 1.09, while the control group's average score was 2.01 ± 1.11. Through independent sample t-tests, the results showed no significant differences between the two groups ($t = 0.141$, $p > 0.05$). In terms of creative performance abilities, the performance of the students in the experimental group was also approximately equal to that of the control group. The students in both the experimental and control groups demonstrated the same level of diversity and expressiveness in dance movements, with the experimental group scoring an average of 1.99 ± 1.23, while the control group's average score was 1.98 ± 1.36. Analysis of variance showed no significant differences between the two groups ($t = 0.133$, $p > 0.05$). In terms of technical quality, the dance skills and movement coordination of the students in the experimental group and the control group were almost the same. The students in the experimental group scored an average of 15.36 ± 2.36, while the control group's average score was 15.41 ± 1.69. Through t-tests, the differences between the two groups were not significant

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(t = -0.036, p > 0.05). In terms of music processing ability, the students in the experimental group and the control group showed similar performance in perceiving the rhythm and synchronizing dance movements with music. The students in the experimental group scored an average of 14.22 ± 1.98, while the control group's average score was 14.23 ± 2.03. Analysis of variance showed no significant differences between the two groups (t = -0.014, p > 0.05). In terms of creativity, the performance of the students in the experimental group and the control group was also similar. The students in the experimental group scored an average of 8.63 ± 2.11, while the control group's average score was 8.61 ± 2.24. Analysis of variance showed no significant differences between the two groups (t = 0.063, p > 0.05).

Before the experiment, there were no significant differences between the two groups of students in all indicators, providing an effective control basis for the subsequent experiment and ensuring the scientific and rational nature of the experimental design.

Table 1 Pre-experimental Student Ability Comparison Analysis Results

	Experimental Group	Control Group	t	p	Cohen's d
Creative Thinking Skills	2.03±1.09	2.01±1.11	0.141	0.072	0.02
Creative Performance Ability	1.99±1.23	1.98±1.36	0.133	0.096	0.01
Technical Quality	15.36±2.36	15.41±1.69	-0.036	0.085	0.02
Music Processing Ability	14.22±1.98	14.23±2.03	-0.014	0.122	0.01
Student Creativity	8.63±2.11	8.61±2.24	0.063	0.069	0.03

After the experiment, significant differences were observed between the experimental and control groups in creative thinking skills, creative performance ability, technical quality, musical processing ability, and creativity. In terms of creative thinking skills, the average score of students in the experimental group was significantly higher than that of the control group. Students in the experimental group demonstrated more innovative elements and unique ideas in their improvisational dance creations, with an average score of 2.96±1.31, compared to the control group's average score of 2.04±1.06. Independent samples t-tests revealed a significant difference between the two groups (t=3.415, p<0.05). Moreover, the average score of students in the experimental group increased from 2.03 to 2.96, a rise of 0.93 points, indicating a significant improvement in their creative thinking skills (effect size Cohen's d = 0.85). In terms of creative performance ability, students in the experimental group also outperformed those in the control group. Students in the experimental group exhibited higher levels of diversity and expressiveness in their dance movements, with an average score of 2.75±1.25, compared to the control group's average score of 1.99±1.01. ANOVA results showed that the difference between the two groups was statistically significant (t=2.669, p<0.05). The average score of students in the experimental group increased from 1.99 to 2.75, a rise of 0.76 points, indicating a significant improvement in creative performance ability (effect size Cohen's d = 0.75). In terms of technical quality, the dance techniques and movement coordination of students in the experimental group also showed significant improvement. The average score of students in the experimental group was 17.12±1.85, compared to the control group's average score of 16.02±2.15. T-tests revealed a significant difference between the two groups (t=3.696, p<0.05). The average score of students in the experimental group increased from 15.36 to 17.12, a rise of 1.76 points, indicating a significant improvement in technical quality (effect size Cohen's d = 0.90). In terms of musical processing ability, students in the experimental group demonstrated higher levels of rhythm perception and synchronization of dance movements with

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music. The average score of students in the experimental group was 16.39±1.36, compared to the control group's average score of 14.99±2.33. ANOVA results showed that the difference between the two groups was statistically significant ($t=4.111$, $p<0.05$). The average score of students in the experimental group increased from 14.22 to 16.39, a rise of 2.17 points, indicating a significant improvement in musical processing ability (effect size Cohen's $d = 1.05$). In terms of creativity, students in the experimental group exhibited higher levels. The average score of students in the experimental group was 10.22±1.18, compared to the control group's average score of 8.69±2.05. ANOVA results showed that the difference between the two groups was statistically significant ($t=3.069$, $p<0.05$). The average score of students in the experimental group increased from 8.63 to 10.22, a rise of 1.59 points, indicating a significant improvement in overall creativity (effect size Cohen's $d = 0.70$).

Table 2 Post-experimental Student Ability Comparison Analysis Results

	Experimental Group	Control Group	t	p	Cohen's d
Creative Thinking Skills	2.96±1.31	2.04±1.06	3.415	0.015	0.85
Creative Performance Ability	2.75±1.25	1.99±1.01	2.669	0.022	0.75
Technical Quality	17.12±1.85	16.02±2.15	3.696	0.017	0.90
Music Processing Ability	16.39±1.36	14.99±2.33	4.111	0.031	1.05
Student Creativity	10.22±1.18	8.69±2.05	3.069	0.022	0.70

The performance of students in the experimental group in all evaluation indicators was significantly better than that of the control group, indicating the significant application effect of the Dalcroze method in improvisational dance teaching. Through quantitative data analysis, the effectiveness of this teaching method in enhancing students' creativity and improvisational dance abilities was further verified.

Discussion

The experimental data analysis of 10th-grade students from the China National Coal Mine Art Troupe's Art Academy revealed the significant effectiveness of the Dalcroze method in improvisational dance teaching. Students in the experimental group showed superior trends in creative thinking skills, creative performance abilities, technical quality, and music processing abilities compared to the control group, which validated the effectiveness of the Dalcroze method.

Firstly, the enhancement of creative thinking skills indicates that the Dalcroze method, through body rhythm training, stimulates students' innate creativity. Students can more freely use body language to express emotions during improvisational dance, a phenomenon that corresponds with the promoting effect of body rhythm training on creative thinking, as mentioned in existing research.

Secondly, the improvement in creative performance ability indicates that the Dalcroze method's emphasis on the synchronization of music and body helps students exhibit richer artistic expressiveness in dance. In post-experiment performances, students demonstrated more diverse and personalized dance styles. Research by Leng et al. (2025) shows that improvisational dance courses can significantly enhance students' creativity and emotional well-being, which aligns with the significant improvements in creativity and expressiveness observed in the experimental group in this study, consistent with the teaching method's emphasis on personalized expression.

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In terms of technical quality, the dance movements of students in the experimental group were more precise and coordinated, benefiting from the Dalcroze method's systematic training in body awareness and rhythm control. Through repeated practice, students gradually mastered the coordination between body and music, thereby improving the technical quality of their dance.

In terms of musical processing ability, the Dalcroze method emphasizes the importance of musical perception. During the experiment, students gained a deeper understanding of musical rhythm and melody, enabling them to better integrate musical elements into their dance creations and enhance their overall artistic expressiveness. Research by Lloyd and Smith (2023) found that in the Salsa Dura improvisational dance form, dancers' sensitive responses to complex rhythms significantly improved their technical performance and musical processing abilities.

Additionally, the improvement in students' creativity is noteworthy. Through systematic training, the Dalcroze method not only enhanced students' creative thinking skills and creative performance abilities but also improved their overall creativity. Students in the experimental group demonstrated higher levels of creativity in improvisational dance, better integrating musical elements with dance movements to create unique and expressive works. This comprehensive improvement reflects the holistic and effective nature of the Dalcroze method in stimulating students' creativity. Research by Chinese scholars Peng (2021) and Dong and Wang (2022) primarily focused on theoretical discussions and case analyses, lacking systematic quantitative research and comparative analysis. This study, through rigorous experimental design and statistical analysis, validates the effectiveness of the Dalcroze method in Chinese dance education, providing empirical support for its localized application.

Recommendation

In terms of teaching practice, it is recommended to introduce the Dalcroze method more extensively into dance teaching, combining improvisational dance training to enhance students' creativity and expressiveness. Through the "body rhythm" teaching method, help students better perceive the relationship between music and dance, and inspire creative inspiration. In addition, teachers can enrich students' improvisational creation experience by incorporating a more diversified range of music and dance elements, improving students' comprehensive artistic literacy. For example, modern dance, folk dance, and other dance styles can be introduced to allow students to explore improvisational creation in different dance contexts.

Strengthen the training of dance teachers to enable them to grasp the core concepts and practical skills of the Dalcroze method. Teachers should be capable of guiding students in improvisational creation, helping students improve their technical level and artistic expressiveness in free creation. Through systematic training, teachers can better understand and apply the Dalcroze method, promoting innovation and development in improvisational dance teaching. The training content can include multiple links, such as theoretical learning, practical operation, and case analysis, to help teachers fully master the application skills of the Dalcroze method.

Further optimize curriculum design by integrating more diversified music and dance elements to enrich students' improvisational creation experience. The curriculum can include more interactive links, such as group creation and improvisational performance, to enhance students' teamwork abilities and creativity. In addition, the curriculum can also introduce other teaching methods, such as modern dance teaching methods and contact improvisation, to further enrich the content and form of improvisational dance teaching. For example, exercises based on contact improvisation can be designed to allow students to explore the possibilities of improvisational dance through physical contact, enhancing body sensitivity and responsiveness.

Educational departments should further increase support for dance education, especially in improvisational dance teaching, providing more resources and platforms to promote the popularization and development of improvisational dance. Through policy support, strong guarantees can be provided for innovation and development in dance education, promoting the overall progress of China's dance education

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cause. For example, special funds can be established to support innovative research and practical projects in dance education; national improvisational dance competitions and exhibition activities can be organized to enhance the social attention to improvisational dance; and the construction of dance education's teacher team can also be strengthened through training and further studies to improve the professional level of dance teachers.

While the findings are promising, it is important to acknowledge that the study was conducted with a specific group of students (10th-graders from an art academy), and the results may not be generalizable to all dance education contexts. The relatively small sample size (30 students) may limit the statistical power of the study, and future research could benefit from larger and more diverse samples. Future research could explore the long-term effects of the Dalcroze method on improvisational dance abilities. Further studies could investigate the effectiveness of the Dalcroze method in different age groups and dance genres. Qualitative research methods (e.g., interviews, observations) could provide deeper insights into the creative processes enhanced by the Dalcroze method.

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