

Factors affecting college dance teachers' competency in Hainan province

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Abstract: Dance teacher competency is crucial for ensuring high-quality dance education, prompting this study to investigate the factors affecting college dance teacher competency in Hainan Province. Employing a mixed-methods approach, quantitative data from a questionnaire survey of 504 dance teachers across 17 colleges, selected via simple random sampling, were analyzed using mean scores, standard deviations, and stepwise multiple regression to assess the levels and predictive impact of seven factors. Moreover, this study was complemented by qualitative interviews with nine experts to explore challenges and practical implications. Findings indicate all seven factors: practical experience, training experience, teaching experience, self-efficacy, school policy, teaching conditions, and social support. These factors are perceived at high levels (mean range: 3.63–3.87), with social support ($\beta = 0.262$), teaching conditions ($\beta = 0.183$), and teaching experience ($\beta = 0.172$) as the strongest predictors, explaining 51.0% of competency variance. This research offers targeted strategies for enhancing dance teacher competency, contributing to the advancement of regional dance education in Hainan Province.

Keywords: *Dance education, Dance teacher competency, Hainan province, Mixed-methods, Social support.*

1. Introduction

In recent years, China has increasingly emphasized improving the quality of higher education to foster globally competitive institutions and develop skilled professionals who contribute to national economic and social progress. This teacher workforce development reform involves enhancing teacher competency by implementing comprehensive professional development programs, establishing rigorous evaluation systems, and providing strong institutional support. This reform ensures educators possess the expertise and innovation needed to meet high educational standards [1]. In Hainan Province, higher education is experiencing rapid growth as part of efforts to advance the region's economic and cultural development. Dance education is a vital component of this progress and plays a significant role in nurturing artistic talent and preserving cultural identity. Moreover, building a highly qualified teacher workforce in specialized fields like dance is essential to align with national educational goals and address Hainan's regional needs.

Hainan Province's tourism industry, a key economic pillar, has seen significant growth following China's 2020 initiative to establish Hainan as a globally influential international tourism consumption center [2]. In 2024, the province received 97.21 million tourists, an 8% increase from the previous year, including 1.11 million inbound overnight visitors, up 115.6%. Total tourist expenditure reached 204.01 billion RMB, a 12.5% rise, with per capita spending of 2099 RMB, ranking first in China [3]. This thriving tourism sector relies heavily on cultural attractions. Dance (e.g., traditional forms like Hainan's Li ethnic dances) plays a pivotal role in cultural festivals, performances, and tourism events that enhance the province's global appeal. Moreover, dance education plays a critical role in cultivating skilled performers and preserving cultural heritage, necessitating a high-quality teacher workforce capable of delivering technically proficient and culturally resonant instruction to meet the demands of both students and the tourism industry.

The critical role of dance education in Hainan's cultural and educational landscape highlights the need for a competent teacher workforce, yet significant challenges persist [4]. Outdated teaching methods and limited institutional support, including inadequate resources and administrative burdens, hinder instructional quality and student engagement [5]. Current research underscores that teacher competency, encompassing professional expertise, teaching experience, and self-efficacy, significantly shapes student performance, with institutional support enhancing these capabilities [6, 7]. However, studies on dance teacher competency in Hainan's rapidly evolving higher education context remain scarce, leaving a critical gap in addressing its unique demands. This study investigates the factors influencing college dance teacher competency in Hainan Province to provide evidence-based insights for enhancing instructional quality.

This study investigates the factors influencing college dance teacher competency in Hainan Province. The mixed-methods were employed, which analyzes quantitative data from a survey of 504 dance teachers across 17 colleges using mean scores, standard deviations, and stepwise multiple regression. Furthermore, this study complemented qualitative interviews with nine experts to explore contextual challenges and implications. By identifying key determinants of dance teacher competency, this research provides evidence-based insights to enhance pedagogical practices and strengthen the dance education workforce, contributing to the advancement of higher education quality in Hainan Province.

2. Literature Review

2.1. Teacher Competency

Teacher competency integrates a diverse array of attributes, encompassing cognitive capacities, motivational drivers, professional skills, and behavioral tendencies essential for effective role performance [8]. Maruyama [9] conceptualized competency as a cohesive blend of capabilities critical for achieving professional excellence in educational settings. In education, teacher competency refers to the combination of knowledge, pedagogical expertise, and personal attributes that empower educators to foster student learning and development effectively. Research underscores that teacher competency profoundly impacts student engagement, academic success, and holistic growth across various disciplines [10-13]. In contrast, dance teacher competency demands unique attributes due to the embodied nature of dance education. Unlike general educators who primarily rely on disciplinary knowledge and classroom management, dance teachers must combine technical proficiency in movement execution with artistic creativity to nurture students' expressive skills and cultural awareness [4, 14]. This specialized competency requires precise demonstration of dance techniques and the ability to inspire artistic expression, making it pivotal for cultivating skilled performers and aligning with educational goals in dance programs.

2.2. Factors Influencing Dance Teacher Competency

Research on teacher competency highlights several dimensions critical to effective teaching across disciplines [15]. Professional skills, including subject-specific expertise and practical techniques, enable educators to deliver high-quality instruction [9]. Teaching experience enhances classroom management and the ability to address diverse student needs, fostering engagement. Furthermore, school support, such as professional development programs and supportive policies, alongside social support from colleague and school culture, creates an enabling environment for competency growth. Self-efficacy, reflecting confidence in pedagogical capabilities, drives resilience and student motivation [16]. These factors collectively underpin instructional quality and student outcomes in general education settings.

Dance teacher competency, however, demands additional attributes due to the field's embodied and artistic nature. Unlike general educators who primarily rely on disciplinary knowledge, dance teachers must integrate technical proficiency in movement execution with artistic creativity and cultural sensitivity to nurture students' expressive and technical skills [14, 17]. This requires practical

experience in performance and choreography to model advanced techniques, training experience to adopt innovative pedagogical strategies, and teaching experience to provide individualized guidance [4]. Self-efficacy fosters confidence in demonstrating complex movements, while supportive school policies and teaching conditions, such as access to specialized studios, enhance instructional quality. Social support from peers and institutions bolsters resilience, addressing the emotional demands of dance education. Therefore, these seven factors: practical experience, training experience, teaching experience, self-efficacy, school policy, teaching conditions, and social support, form a comprehensive framework for dance teacher competency, addressing the specialized requirements of cultivating skilled and creative performers in higher education.

2.3. Research Gaps in Dance Teacher Competency

Despite extensive research on general teacher competency, studies focusing on dance teacher competency in higher education remain scarce. Dance education's distinct requirements, blending technical expertise, artistic creativity, and pedagogical skill, necessitate targeted investigations beyond general teaching frameworks. Current literature often overlooks specific challenges faced by dance educators. First, outdated teaching methods reduce student engagement. Second, limited institutional support, including inadequate resources and administrative burdens, hinders instructional effectiveness. Third, factors critical to dance teacher competency (e.g., practical experience in performance and choreography, professional training, teaching experience, self-efficacy, supportive school policies, adequate teaching conditions, and social support from colleagues and communities) are underexplored in the context of higher education.

In Hainan Province's rapidly developing higher education landscape, these gaps are particularly pronounced. The region's cultural and educational aspirations require a specialized dance teacher workforce. This study addresses these gaps by investigating the factors affecting college dance teacher competency in Hainan Province, aiming to provide evidence-based insights to enhance instructional quality and support regional educational goals. The research conceptual framework is shown in Figure .

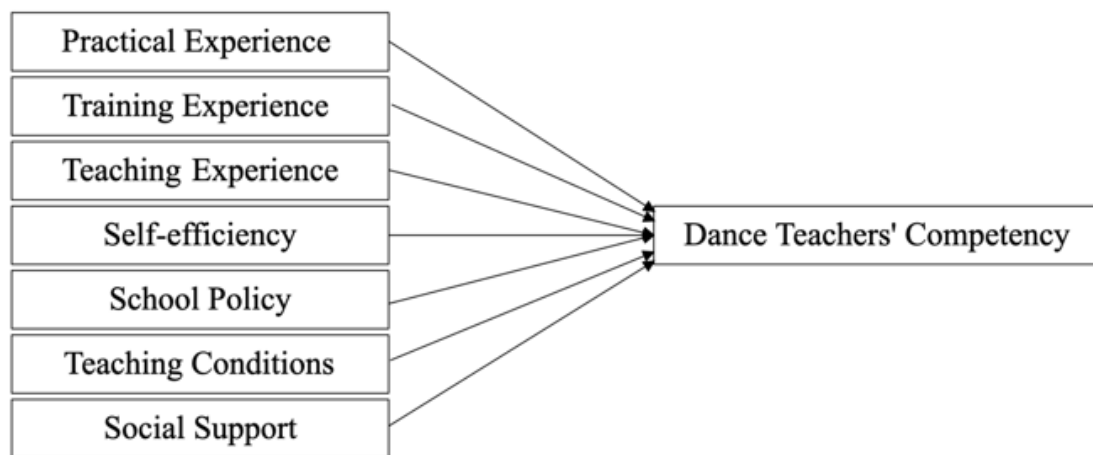


Figure 1.
Research Conceptual Framework.

3. Research Methodology

3.1. Research Design

This study employs a mixed-methods approach to investigate the factors affecting college dance teacher competency in Hainan Province, combining quantitative and qualitative methods to provide a comprehensive understanding of the research objective. The quantitative component assesses the levels and predictive impact of seven factors (practical experience, training experience, teaching experience,

self-efficacy, school policy, teaching conditions, and social support) through a structured survey. The qualitative component, using in-depth interviews, explores contextual challenges and practical implications, enriching the quantitative findings with nuanced perspectives on dance teacher competency.

3.2. Data Collection

Data were collected from 504 dance teachers across 17 colleges in Hainan Province, selected via simple random sampling to ensure representativeness. A questionnaire, designed to measure the seven factors influencing dance teacher competency, was distributed to participants, achieving a 100% response rate. The questionnaire used a 5-point Likert scale (1 = lowest, 5 = highest) to assess factor levels. Additionally, in-depth interviews were conducted with nine experts, including dance educators and administrators, to gain insights into challenges and practical implications of the identified factors. The interviews followed a semi-structured format, allowing for detailed exploration of competency-related issues.

Table 1.

Results of frequency and percentage analysis of the personal status of respondents.

Personal status of the respondent		Quantity (n = 504)	Percentage (%)
1. Gender			
	Male	236	46.80
	Female	268	53.20
2. Age			
	Under 36 years	193	38.30
	36-45 years	176	34.90
	Above 45 years	135	26.80
3. Academic rank			
	Professor	18	3.60
	Associate Professor	108	21.40
	Lecturer	290	57.50
	Teaching Assistant	88	17.50
4. Your highest educational qualification			
	Bachelor's degree or less	138	27.40
	Master's degree	210	41.70
	Doctoral research student	156	31.00
5. Years of working			
	5 years or less	156	31.00
	6-15 years	172	34.10
	Over 15 years	176	34.90
6. You lead a team to compete at the highest level			
	County and district level competitions	136	27.00
	Municipal competitions	207	41.00
	Provincial competitions	94	18.70
	National competitions and international competitions	67	13.30
7. How many dance-related trainings you attend in a year			
	1st order and less	90	17.90
	2-4th order	285	56.50
	5th order and above	129	25.60

The demographics of this study are shown in Table . Key variables, including work experience (31.0% ≤5 years, 34.1% 6–15 years, 34.9% >15 years), annual training frequency (56.5% attending 2–4 sessions), competitive experience (13.3% at national/international levels), and educational qualifications (41.7% master's, 31.0% doctoral), provide a robust sample profile. These demographics inform the analysis of teaching experience, training experience, and practical experience, supporting the study's mixed-methods exploration of dance teacher competency.

3.3. Data Analysis

Quantitative data from the survey of 504 dance teachers were analyzed using statistical software. Descriptive statistics, including mean scores and standard deviations, were computed to evaluate the perceived levels of the seven factors influencing dance teacher competency: practical experience, training experience, teaching experience, self-efficacy, school policy, teaching conditions, and social support. Stepwise multiple regression was employed to determine the predictive impact of these factors on dance teacher competency.

Qualitative data from semi-structured interviews with nine experts were analyzed through thematic analysis. Transcripts were coded to identify recurring themes, such as administrative burdens, resource shortages, limited training channels, and the role of social support. These themes were iteratively refined to ensure alignment with the quantitative factors. The integration of quantitative findings and qualitative insights provides a comprehensive understanding of the factors shaping dance teacher effectiveness in Hainan Province's higher education context.

4. Results and findings

4.1. Levels of Factors Affecting Dance Teacher Competency

The quantitative analysis of factors influencing college dance teacher competency in Hainan Province, based on a survey of 504 dance teachers, revealed high levels across all seven factors, as measured on a 5-point Likert scale (1 = lowest, 5 = highest). Table 4.2 presents the mean scores and standard deviations: teaching conditions scored highest ($M = 3.87$, $SD = 0.86$), followed by training experience ($M = 3.84$, $SD = 0.92$), school policy ($M = 3.81$, $SD = 0.97$), self-efficacy ($M = 3.74$, $SD = 0.96$), social support ($M = 3.71$, $SD = 0.89$), practical experience ($M = 3.68$, $SD = 0.89$), and teaching experience ($M = 3.63$, $SD = 0.92$). The overall mean was 3.75 ($SD = 0.92$), indicating a generally high level of perceived competency factors among dance teachers.

Table 2.

Perceived levels of factors influencing college dance teacher competency in Hainan Province.

Factors affecting colleges dance teacher competency	n = 504		Interpret results
	\bar{x}	SD	
1. Practical experience	3.68	0.89	High
2. Training experience	3.84	0.92	High
3. Teaching experience	3.63	0.92	High
4. Self-efficiency	3.74	0.96	High
5. School policy	3.81	0.97	High
6. Teaching conditions	3.87	0.86	High
7. Social support	3.71	0.89	High
Total average	3.75	0.92	High

4.2. Predictive Impact of Factors on Dance Teacher Competency

Stepwise multiple regression analysis was conducted to determine the predictive impact of the seven factors on dance teacher competency, as shown in Table . The model explained 51.0% of the variance in competency ($R^2 = 0.517$, $F = 75.764$, $p < 0.001$). Social support emerged as the strongest predictor ($\beta = 0.262$, $p < 0.001$), followed by teaching conditions ($\beta = 0.183$, $p < 0.001$) and teaching experience ($\beta = 0.172$, $p < 0.001$). Other significant predictors included practical experience ($\beta = 0.165$, $p < 0.001$), self-efficacy ($\beta = 0.147$, $p < 0.001$), school policy ($\beta = 0.136$, $p < 0.001$), and training experience ($\beta = 0.117$, $p < 0.001$). These findings indicate that social support, teaching conditions, and teaching experience are the most influential factors shaping dance teacher competency in Hainan Province.

Table 3.

Regression analysis of factors predicting college dance teacher competency in Hainan Province.

Factors affecting colleges dance teacher competency	b	SE_b	β	t	Sig.t	Tolerance	VIF
Social support	0.202	0.028	0.262	7.357	<0.001	0.767	1.304
Teaching experience	0.126	0.026	0.172	4.855	<0.001	0.774	1.291
Practical experience	0.125	0.028	0.165	4.531	<0.001	0.736	1.358
Teaching conditions	0.155	0.028	0.183	5.616	<0.001	0.918	1.089
Self-efficacy	0.114	0.028	0.147	4.126	<0.001	0.764	1.308
School policy	0.110	0.029	0.136	3.802	<0.001	0.757	1.321
Training experience	0.094	0.026	0.117	3.589	<0.001	0.925	1.082

4.2.1. Qualitative Insights from Interviews

Qualitative data from in-depth, semi-structured interviews with nine experts, comprising dance educators and administrators from colleges in Hainan Province, provided rich contextual insights into the factors affecting dance teacher competency. Thematic analysis identified seven key themes corresponding to the quantitative factors: practical experience, training experience, teaching experience, self-efficacy, school policy, teaching conditions, and social support, each highlighting specific challenges and facilitators of competency.

Practical experience was critical for effective teaching, with experts emphasizing its role in enhancing demonstration and student engagement. Prof. Dr. Ma Guiping noted, “Practical experience has a significant impact on the competency of dance teachers. It enables teachers to demonstrate and interpret precise movements, such as effectively guiding technical details such as center of gravity control.” This aligns with the high perceived level of practical experience (Table 1, $M = 3.68$) and its predictive role (Table 2, $\beta = 0.165$).

Training experience was identified as essential for updating pedagogical skills. Prof. Dr. Wang Qianqian stated, “Technical training can reconstruct the pedagogical intervention model. The key is to master the analytical tools to turn abstract body dynamics into visual data.” This supports the quantitative finding of training experience’s contribution (Table 1, $M = 3.84$; Table 2, $\beta = 0.117$).

Teaching experience enhanced instructional precision and adaptability. Prof. Dr. Lin Feiyun remarked, “The experience gives teachers insight into individual student differences, such as talents or limitations, to tailor a personalized training plan.” This corresponds to its predictive strength (Table 2, $\beta = 0.172$).

Self-efficacy was crucial for resilience and innovation. Prof. Dr. Chen Fen highlighted, “Teachers confidently demonstrate difficult movements, demonstrating not only professional skills, but also building credibility in teaching.” This reinforces its role in the quantitative results (Table 1, $M = 3.74$; Table 2, $\beta = 0.147$).

School policies shaped professional development opportunities. Prof. Dr. Chen Kangdi noted, “Whether the policy sets up a special training fund for dance teachers determines the possibility of their sustainable growth.” This aligns with the factor’s predictive impact (Table 2, $\beta = 0.136$).

Teaching conditions, particularly studio facilities, were pivotal for instructional quality. Prof. Dr. Zhang Lingrong stated, “Schools provide continuing education grants or workshop resources to help teachers update their skills and maintain the forefront of the industry.” This corroborates the high mean score (Table 1, $M = 3.87$) and predictive strength (Table 2, $\beta = 0.183$).

Social support bolstered motivation and resilience. Prof. Dr. Lin Daosheng asserted, “The public’s emphasis on dance education gives teachers a sense of accomplishment, which translates into a drive for continuous improvement.” This supports its position as the strongest predictor (Table 2, $\beta = 0.262$).

These qualitative insights complement the quantitative findings, elucidating how practical experience, training, teaching expertise, self-efficacy, supportive policies, adequate facilities, and social encouragement address the unique challenges of dance teacher competency in Hainan’s higher education context, paving the way for targeted improvements in instructional quality.

5. Discussion

This study investigated the factors influencing college dance teacher competency in Hainan Province, employing a mixed-methods approach to yield comprehensive insights. Quantitative findings from a survey of 504 dance teachers across 17 colleges revealed high perceived levels for all seven factors: practical experience ($M = 3.68$, $SD = 0.89$), training experience ($M = 3.84$, $SD = 0.92$), teaching experience ($M = 3.63$, $SD = 0.92$), self-efficacy ($M = 3.74$, $SD = 0.96$), school policy ($M = 3.81$, $SD = 0.97$), teaching conditions ($M = 3.87$, $SD = 0.86$), and social support ($M = 3.71$, $SD = 0.89$)—with an overall mean of 3.75 ($SD = 0.92$). Regression analysis indicated that these factors explained 51.0% of the variance in competency ($R^2 = 0.517$, $F = 75.764$, $p < 0.001$), with social support ($\beta = 0.262$), teaching conditions ($\beta = 0.183$), and teaching experience ($\beta = 0.172$) as the strongest predictors. Qualitative interviews with nine experts complemented these results, identifying challenges such as administrative burdens, resource shortages, and limited training channels, while underscoring the critical role of social support in enhancing teacher motivation and resilience.

The seven factors identified in this study provide critical insights into the determinants of dance teacher competency in Hainan Province, each contributing uniquely to instructional effectiveness.

Practical Experience: The high perceived level ($M = 3.68$) and significant predictive impact ($\beta = 0.165$) underscore practical experience's role in enabling precise movement demonstration and fostering student motivation. Interviews highlighted that performance and choreography experience bridge theory and practice, enhancing teaching authenticity. This aligns with literature emphasizing practical expertise as essential for dance education [18].

Training Experience: With a mean of 3.84 and a predictive effect ($\beta = 0.117$), training experience supports pedagogical innovation. Qualitative findings indicated that limited training channels hinder access to modern methods, suggesting a need for enhanced programs. This supports research on professional development in updating interdisciplinary knowledge [9].

Teaching Experience: Despite the lowest mean ($M = 3.63$), teaching experience's strong predictive impact ($\beta = 0.172$) highlights its role in tailoring instruction to diverse student needs. Interviews noted that experienced teachers excel in classroom management, corroborating studies on experience's contribution to pedagogical skills.

Self-Efficacy: With a mean of 3.74 and $\beta = 0.147$, self-efficacy enhances resilience and innovation. Qualitative data emphasized teachers' confidence in demonstrating complex movements, aligning with research on self-efficacy's role in fostering engagement [19].

School Policy: Scoring high ($M = 3.81$, $\beta = 0.136$), supportive policies facilitate professional growth. Interviews revealed that evaluation systems and training funds are critical, supporting literature on institutional policies shaping teacher development [15].

Teaching Conditions: The highest-scoring factor ($M = 3.87$, $\beta = 0.183$) underscores the importance of facilities. Qualitative findings highlighted resource shortages, such as inadequate studios, as barriers to instructional quality, consistent with studies on resource impacts [18].

Social Support: As the strongest predictor ($\beta = 0.262$, $M = 3.71$), social support enhances motivation and resilience. Interviews emphasized peer and institutional support's role in sustaining teaching enthusiasm, resonating with research on social networks' impact on teacher effectiveness [19].

These findings highlight the multifaceted nature of dance teacher competency, with social support, teaching conditions, and teaching experience playing pivotal roles in addressing the unique demands of dance education in Hainan's higher education context.

6. Conclusion

This study investigated the factors influencing college dance teacher competency in Hainan Province using a mixed-methods approach. A survey of 504 dance teachers across 17 colleges assessed seven factors: practical experience, training experience, teaching experience, self-efficacy, school policy, teaching conditions, and social support. The result of this study reveals high perceived levels, with

teaching conditions scoring highest. Regression analysis showed these factors explained 51.0% of competency variance, with social support, teaching conditions, and teaching experience as the strongest predictors. Qualitative interviews with nine experts elucidated challenges, including administrative burdens, resource shortages, and limited training channels, while emphasizing social support's role in enhancing motivation.

The study also has several limitations. First, its focus on Hainan Province may limit generalizability to other regions with different educational contexts. Second, the qualitative sample of nine experts, while insightful, may not fully capture diverse perspectives across all institutions. Fourth, the reliance on self-reported survey data introduces potential response bias. Future research can expand to other provinces to explore regional variations, incorporate larger and more diverse qualitative samples. Moreover, future research can include objective measures, such as student performance outcomes, to validate teacher competency assessments.

This study's significance lies in its identification of key factors shaping dance teacher competency, offering actionable insights for Hainan's higher education institutions. By highlighting the critical roles of social support, teaching conditions, and teaching experience, it informs strategies to enhance instructional quality (e.g., improving studio facilities and fostering peer networks). These findings contribute to national efforts to advance higher education and support Hainan's cultural and educational aspirations, strengthening the dance education workforce.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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