Supplementary Material

A. Expert review and content validity

Table S1

Anonymised Expert Panel

Code	*Role*	*Field*	*Rank*	*Experience*
E1	Dance specialist	Choreography	Professor	21 years
E2	Dance specialist	Choreography	Professor	28 years
E3	Education specialist	Educational psychology	Associate professor	14 years
E4	Education specialist	Curriculum and instruction	Associate professor	15 years
E5	Education specialist	Dance education	Professor	23 years

Table S2

Content Validity Summary for the Researcher-Developed Article Scales

Scale	*Initial items*	*I-CVI ≥ .80*	*Retained*	*S-CVI/Ave*
PIT	11	10	5	.93
PROT	12	11	5	.95

Five experts rated candidate-item relevance on a four-point scale; ratings of 3 or 4 counted as content relevant. Items could be removed despite I-CVI ≥ .80 when the panel identified redundancy or weak construct boundaries. PTS and CSEC underwent linguistic and contextual review rather than item-level CVI calculation.

B. Pilot preparation

A separate pilot involved 120 choreography students who were not part of the N = 368 article sample. Table S3 summarises item discrimination, corrected item-total relationships, internal consistency, sampling adequacy, and preliminary component evidence for PIT and PROT. These diagnostics informed instrument readiness and were not used to test the article hypotheses.

Table S3

Pilot Study Evidence for the Researcher-Developed Article Measures

Measure	*Items*	*Critical-ratio range*	*CITC range*	*α*	*KMO*	*Bartlett χ^2(df)*	*First component: eigenvalue / variance*	*Loading range*
PIT	5	3.909–7.243	.745–.829	.909	.889	244.554 (10)	3.673 / 73.452%	.838–.898
PROT	5	2.552–4.603	.669–.806	.882	.868	196.925 (10)	3.407 / 68.130%	.788–.888

Note. N = 120. All critical-ratio tests were significant at p < .05; both Bartlett tests were significant at p < .001. CITC = corrected item-total correlation. Each scale yielded one preliminary component; these diagnostics were not treated as confirmatory validity evidence.

C. Final bilingual article measures

The Chinese wording is the administered wording. English is supplied for transparent reporting. Within each scale module, item order was randomised during administration; the tables below use analytic variable order.

Table S4

Perceived Improvisational Teaching

Code	*Chinese administered item*	*English reporting translation*
IMP1	教师经常使用具体的身体/感官提示（如“像波浪一样滚动脊柱”）来引导动作探索。	The teacher frequently uses specific bodily or sensory prompts (e.g., “roll your spine like a wave”) to guide movement exploration.
IMP2	教师使用意象和比喻（如“像水一样流动”）来激发动作灵感。	The teacher uses imagery and metaphor (e.g., “move like water”) to stimulate movement ideas.
IMP3	即兴常在明确限制或参数内进行（如指定方向或路径），而非完全自由。	Improvisation usually takes place within explicit constraints or parameters, such as specified directions or pathways, rather than being completely free.
IMP4	我们通过变化力度、节奏和空间层次来探索不同动作质感。	We explore different movement qualities by varying effort, rhythm, and spatial level.
IMP5	我们通过反复尝试、调整、再试的练习来建立即兴的流畅性。	We develop fluency in improvisation through repeated cycles of trying, adjusting, and trying again.

Table S5

Perceived Reflection-Oriented Teaching

Code	*Chinese administered item*	*English reporting translation*
PROT1	我们被要求记录编舞过程和体验（如反思笔记或日志）。	We are required to document the choreographic process and our experiences, for example through reflective notes or journals.
PROT2	我们经常使用作品或视频回顾来分析问题并找出改进方向。	We regularly review works or video recordings to analyse problems and identify directions for improvement.
PROT3	教师通过提问引导我们分析编舞中的结构、节奏和表达问题。	The teacher uses questions to guide our analysis of structural, rhythmic, and expressive issues in choreography.
PROT4	我们被引导解释编舞选择，并概念化可操作的修订原则或策略。	We are guided to explain our choreographic choices and formulate actionable principles or strategies for revision.
PROT5	反思任务通常遵循完整的循环：记录、分析、概念化和修订。	Reflective tasks usually follow a complete cycle: documentation, analysis, conceptualisation, and revision.

Table S6
Perceived Teacher Support

Code	*Chinese administered item*	*English reporting translation*
INS1	**当我需要**编舞学习帮助时，**教**师愿意花时间帮助我。	When I need help with learning choreography, the teacher is willing to spend time helping me.
INS2	**教**师给我提供在编舞课上展示自己的机会。	The teacher provides opportunities for me to present my work in choreography class.
INS3	**教**师组织活动让我与他**人合作学**习编舞。	The teacher organises activities that allow me to learn choreography collaboratively with others.
INS4	**教**师尽力确保我拥有编舞学习所需的资源。	The teacher makes every effort to ensure that I have the resources needed to learn choreography.
INS5	**教**师创造促进我在编舞学习中成长的条件。	The teacher creates conditions that support my growth in learning choreography.
INS6	**教**师为我提供排练空间和创作时间等必要条件。	The teacher provides necessary conditions such as rehearsal space and creative time.
INS7	**教**师为我提供在编舞学习中解决问题所需的支持。	The teacher provides the support I need to solve problems in learning choreography.
ES1	**教**师信任我在编舞方面的能力。	The teacher trusts my capability in choreography.
ES2	**教**师尊重我的编舞选择和创作方向。	The teacher respects my choreographic choices and creative direction.
ES3	**教**师鼓励我在编舞学习中努力学习。	The teacher encourages me to work hard in learning choreography.
ES4	**当我愿意**谈论编舞学习问题时，**教**师乐于倾听。	The teacher is willing to listen when I want to discuss problems in learning choreography.
ES5	**教**师公平对待所有学生的编舞作品。	The teacher treats all students' choreographic works fairly.
ES6	**教**师相信我在编**舞方面有**发展潜力。	The teacher believes that I have the potential to develop in choreography.
INF1	**教**师提供信息帮助我自己解决编舞学习中的问题。	The teacher provides information that helps me solve problems in learning choreography independently.
INF2	**教**师通过示范来教我如何处理编舞问题。	The teacher demonstrates how to address choreographic problems.
INF3	**教**师给我提供编舞学习的具体建议。	The teacher gives me specific advice about learning choreography.
INF4	**教**师向我提供编舞知识和方法论的指导。	The teacher provides guidance on choreographic knowledge and methodology.
INF5	**教**师提供信息帮助我识别编舞**学**习中的优势和不足。	The teacher provides information that helps me identify my strengths and weaknesses in learning choreography.
INF6	**教**师告诉我编舞学习的重点和难点。	The teacher explains the key and difficult aspects of learning choreography.
INF7	**教**师会对我的编舞作品进行评价，**帮助我了解自己的**进步。	The teacher evaluates my choreographic work and helps me understand my progress.
AS1	**当我犯**错时，**教**师会指出我的编舞问题。	When I make a mistake, the teacher identifies the problem in my choreography.
AS2	**教**师对我的编舞学习任务给予反馈。	The teacher provides feedback on my choreography learning tasks.
AS3	**教**师告诉我我在编舞课堂上的表现情况。	The teacher tells me how I am performing in choreography class.
AS4	**教**师对我需要改进的编舞领域给予反馈。	The teacher provides feedback on the areas of choreography that I need to improve.
AS5	**教**师的反馈帮助我明确编舞作品的改进方向。	The teacher's feedback helps me identify directions for improving my choreographic work.

Note. INS = instrumental support; ES = emotional support; INF = informational support; AS = appraisal support. The Chinese expression for teacher was used generically and is not grammatically marked for number. Respondents were not instructed to identify one named teacher; PTS is therefore interpreted as support perceived across choreography learning rather than support from a uniquely identified course instructor.

Table S7
Creative Self-Efficacy in Choreography

Code	*Chinese administered item*	*English reporting translation*	*Source-pool mapping*
CSEC1	**我知道我能有效地解决**编舞中的复杂问题。	I know that I can solve complex problems in choreography effectively.	Dissertation pool G1
CSEC2	**我相信自己在**编舞中的创造能力。	I believe in my creative capability in choreography.	Dissertation pool G2
CSEC3	**我的想象力和独**创性使我与众不同。	My imagination and originality distinguish me from others.	Dissertation pool G3
CSEC4	**很多次**，**我**证明了自己能应对编舞过程中的困难情况。	On many occasions, I have demonstrated that I can handle difficult situations in the choreographic process.	Dissertation pool G7
CSEC5	**我有信心**处理编舞中需要创造性思维的问题。	I am confident in dealing with choreographic problems that require creative thinking.	Dissertation pool G5
CSEC6	**我擅**长为编舞任务中的问题提出原创性解决方案。	I am good at proposing original solutions to problems in choreographic tasks.	Dissertation pool G4

D. Descriptive and measurement evidence

Table S8

Descriptive Statistics for Perceived Teacher Support Dimensions

Construct	*N*	*Mean*	*SD*	*Minimum*	*Maximum*
INS	368	4.960	1.085	1.6	6.7
ES	368	5.036	1.065	1.5	6.8
INF	368	5.016	1.049	1.6	6.7
AS	368	5.050	1.085	1.4	6.8

Table S9

Higher-Order HTMT With 5,000-Bootstrap Percentile Intervals

Pair	*HTMT*	*Bootstrap 95% CI*
PIT-PROT	.524	[.382, .630]
PIT-PTS	.596	[.449, .701]
PIT-CSEC	.457	[.303, .577]
PROT-PTS	.534	[.380, .646]
PROT-CSEC	.490	[.347, .599]
PTS-CSEC	.519	[.366, .633]

E. Robustness analyses

Table S10

Behaviour-Only Latent Model

Association	*β*	*Bootstrap 95% CI*	*p*
PIT → PTS	.428	[.298, .550]	< .001
PROT → PTS	.320	[.191, .438]	< .001
PIT → CSEC	.160	[.015, .293]	.031
PROT → CSEC	.258	[.121, .385]	< .001
PTS → CSEC	.269	[.112, .426]	< .001
PIT → PTS → CSEC	.115	[.044, .201]	< .001
PROT → PTS → CSEC	.086	[.031, .153]	< .001

The behaviour-only model omitted PIT5, PROT4, and PROT5 and fitted well: $\chi^2(655) = 947.963$, CFI = .962, TLI = .959, RMSEA = .035. Its estimates closely matched the primary model.

Table S11

Alternative Model Fit Comparison

Model	*χ²*	*df*	*CFI*	*TLI*	*RMSEA*
Primary indirect-association model	1098.355	769	.962	.959	.034
PTS as parallel predictor	1098.355	769	.962	.959	.034
PTS as antecedent	1119.323	770	.959	.957	.035
Reverse placement of CSEC	1113.705	770	.960	.957	.035

The similar fit of theoretically plausible alternatives indicates that the cross-sectional covariance pattern does not identify temporal direction or uniquely locate PTS between the teaching-practice perceptions and CSEC. The primary model is retained as a theory-specified descriptive arrangement, not as a uniquely established process.