

Original Research Article

Competitive performance: Origin, definition, extension and expansion — Taking competitive aerobics as an example

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Abstract: Competitive performance is endowed with rich connotations and diverse expressive forms. By drawing on the artistic theories of expression, acting and Laban's Effort Theory, combined with sports theories, practical analysis of motor performance and biomechanical knowledge, this paper defines the connotation of competitive performance. It sorts out relevant conceptual categories and explores the logical relationships among competitive performance, expressive competence and competitive spectacle performance. This study deepens the practical understanding of the theoretical system of competitive performance, and aims to promote the in-depth integration of sports theory and art theory in the practice of athletic expression.

Keywords: competitive performance; expressive competence; competitive spectacle performance

1. Introduction

Over the past decade, the term *Performance* has become a core buzzword in international competitive sports and research on human motor learning, attracting widespread academic attention in China. A search on Baidu Library shows that 1,522 academic papers focused on competitive performance were published in 2019. Nevertheless, its theoretical origin and evolutionary mechanism have not been systematically explored. In competitive sports, concepts such as expressive competence and performance are clearly defined in event rules, and artistic sports events have formulated explicit evaluation criteria for competitive performance, which have become decisive factors in competition results.

Existing studies have proven that expressive competence has long been a research hotspot in artistic sports. Meanwhile, the attribute of performance is highly highlighted in the sports industry's competitive spectacle sector. It is necessary to theoretically distinguish and practically apply the internal logical relationships among competitive performance, expressive competence and competitive spectacle performance. Most current studies are discussed from the perspective of individual ability and remain at a perceptual cognitive stage both theoretically and practically. A systematic analysis from the perspectives of etymology, artistic expression theory, acting theory, Laban's Effort Theory, mechanical principles, and motor learning is essential for understanding and training competitive performance, as well as enriching the theoretical research connotation in China. Clarifying these issues is a vital approach to promote the integration of sports theory and art theory.

2. Theoretical origin and definition of competitive performance

Scholars have explored the origin of competitive sports from multiple perspectives. The Complete History of Sports, translated by Yan Shaolu in 1985, systematically elaborated the emergence and development of competitive sports. In 2006, international scholars with natural science backgrounds founded the influential academic journal *Physiology and Performance*. Chinese sports psychology researchers also pointed out that the ultimate goal of sports training is to improve athletes' competitive performance. These studies provide solid theoretical and practical support for follow-up research, while leaving sufficient room for theoretical improvement and practical innovation.

The theoretical origin of performance can be traced to the expression theory of art origin. This theory advocates that human beings are born with emotional instincts, and the inner psychological impulse to convey emotions constitutes the essence of performance. Darwin interpreted emotional expression from an evolutionary perspective, holding that human emotional manifestations derive from innate biological heredity and environmental adaptation, which can be explained by biological stimulus-response mechanisms.

Italian aesthetician Benedetto Croce proposed the classic viewpoint of "intuition is expression", arguing that intuition originates from inner emotion and serves as the essence of art; therefore, art is essentially the presentation of emotion, which further enriches the theoretical connotation of expressionism. Subsequently, R. G. Collingwood further developed this theory and emphasized that artistic creation lies in the expression of subjective imagination and inner emotion, rather than simple reproduction or imitation; only emotion-oriented creation can be regarded as authentic art. Contemporary aesthetician Susanne K. Langer believed that art is a symbolic form for emotional expression. John Dewey put forward the viewpoint of *Art as Experience*, stating that artistic performance relies on two basic prerequisites: Internal psychological impulse and external environmental resistance. A complete experience originates from inner impulse and completes itself through the interaction between subjective behavior and objective environment. Stimulation refers to the external input to organisms, while impulse represents the internal adaptive tendency of organisms toward the external world.

From an etymological perspective, the English words express and expression originally carry the literal meaning of "squeezing out", implying that inner emotions are released and conveyed from within the mind to the external world. In academic discourse, the term expression has two lexical meanings: As a verb, it means to manifest or reveal; as a noun, it refers to outward behaviors and emotional manifestations.

There are obvious cognitive differences between Chinese and Western academic circles in interpreting the connotation of expression. Complete artistic performance requires both internal emotional impulse and external environmental constraints, embodying both behavioral process and presentation outcome. Performance gains the attribute of expressive competence only when interaction occurs between the subject and the external object.

Although expression theory occupies an important position in art research, it focuses merely on subjective inner emotion while neglecting the counteraction of external environment, which constitutes the core difference between art theory and sports theory research. For competitive aerobics athletes, emotional expression must be constrained by official competition rules. Athletes need to interpret routine styles and convey inner emotions through standardized body movements, and all expressive behaviors must comply with rule norms.

Chinese scholar Cai Rui constructed an indicator system and conditional extremum model for competitive performance in his doctoral research on skill-dominated non-measured sports events. Fitness researchers divided performance into three hierarchical levels: Macro overall human performance, mesoscopic physical and competitive performance, and microscopic behavioral performance analysis, among which the mesoscopic level plays a vital connecting role in theoretical research.

Competitive performance is guided and constrained by event rules, and each sport has its own evaluation standards. The referee system of competitive aerobics sets explicit scoring requirements for competitive performance, covering routine choreography, difficulty arrangement, transition design, music application, venue utilization, expressive competence and teamwork coordination (**Table 1**).

Table 1. Scoring criteria for excellent competitive performance.

Score Range	Specific Scoring Contents
2.0-1.9 points	1. Free from rule-prohibited elements, with diverse auxiliary aerobics combinations in the full routine (excluding difficulty movements).
	2. Movements are completed neatly and proficiently, presenting outstanding athletic demeanor matching the artistic style of competitive aerobics.
	3. The routine fully displays physical quality and explosive power with strong audience appeal.
	4. Athletic charm is naturally revealed by physical fitness rather than artificial and exaggerated stage performance.
	5. Maintain stable and consistent performance throughout the entire routine without attention decline.
	6. Athletes show natural self-confidence via facial expressions and professional athletic temperament.

Note: Adapted from Ma Hongtao, *Competitive Aerobics*, 2005.

It is evident that competitive performance is embodied in integrated movement combinations and complete routines, referring to the natural external presentation of movement intensity driven by inner psychological impulse, rather than artificial stage fabrication.

3. Extension of competitive performance: Expressive competence

Liu Zhan summarized seven core factors affecting competitive performance: Athletic ability, specialized

skills, psychological quality, movement pattern, injury prevention and rehabilitation, physical recovery, and sports nutrition. Motor performance refers to the temporary external behavioral presentation during skill execution.

The conceptual scope of performance is broader than expressive competence. All motor behaviors possess natural performative attributes, which evolve into expressive competence only when they produce actual influence on referees and audiences. All expressive competence belongs to performance, but not all performance can be defined as expressive competence. Basic aerobics movements are suitable for ordinary fitness participants, while professional athletes need to cultivate unique expressive competence through systematic training. Motor performance focuses on technical proficiency, while expressive competence emphasizes the integration of movement and emotion to generate external artistic appeal in formal competitions.

Etymologically, expressive competence is a compound concept composed of "expression" and "force". In mechanics, force is defined as the interaction between objects with three basic elements: Magnitude, direction, and action point.

Competitive performance is based on stable motor performance, which is the core component of motor learning and control. Coaches evaluate athletes' skill mastery level mainly by observing real-time motor performance, which can be measured by accuracy, rhythm, amplitude and coordination. Motor performance is susceptible to temporary interference such as motivation, psychological arousal and physical fatigue.

Artistic sports events integrate inner spiritual connotation and external physical presentation, taking movement as the carrier, technology as the core, performance as the means, and rules as the guidance. Competitive events are divided into objective quantitative ranking events and subjective comprehensive scoring events represented by gymnastics and ice sports. Motor performance reflects individual technical level, while expressive competence realizes the unity of subject and object, connecting athletes' presentation with referees' judgment and public aesthetic perception.

Based on kinetic force effect, Laban's Effort Theory proposes that human bodily effort is the symbolic representation of internal force changes, acting as the core intermediary transforming general expression into formal artistic presentation. It represents both individual comprehensive literacy and kinetic impulse, serving as the origin of all human movements (**Table 2**).

Table 2. Basic elements of laban effort.

Elements	Physical Manifestation	Emotional Manifestation	Effort Expression	Effort Qualities
Gravity	Heavy/Light; Strong/Weak	Inner attitude	Tension/Buoyancy	Pressing, Wringing, Impacting
Time	Fast/Slow; Short/Long	Urgency/Leisureliness	Movement texture	Pressing, Slashing, Gliding
Space	Direct/Extended	External connection	Extension / Elasticity	Pressing, Floating, Bouncing
Flow	Tense/Relaxed	Psychological freedom and constraint		

Note: Revised from Liu Qingyi, *A Course of Modern Dance Body Language*, 2011.

Competitive aerobics features rich variations in gravity and rhythm, forming a unique aesthetic of strength and vitality. Its main Effort Qualities include slashing, impacting, pressing, bouncing and wringing. Optimizing the dimension of time, space and gravity can enrich movement texture and enhance expressive competence. The seven basic aerobics steps all contain bouncing characteristics and can be classified into low-impact and high-impact movements. Movement speed reflects temporal and spatial features; intensity embodies gravity attribute; amplitude and orientation reflect spatial layout.

Force can be divided into internal force and external force. Internal force includes inner impulse, motivation, will and emotion; external force consists of rule constraints, coaches' guidance, referees' aesthetics, audience recognition and social influence. The magnitude and direction of resultant force are determined by technical quality and environmental orientation, which must conform to competition rules, referee preferences and training intentions. Laban's Effort Theory mainly analyzes movement styles without involving external reaction force.

Human movement integrates external physical behavior and internal psychological activity, which are inseparable and mutually restrictive. Physical movement serves psychological intention, and psychological activity determines movement form. Hegel pointed out in *Aesthetics* that movement is the embodiment of subjective will, which is purposeful and can react on individual personality. The three core elements of movement include task, purpose and adaptation. International aerobics scoring rules clearly stipulate that artistic evaluation covers both "what athletes perform" and "how they perform". The 2017–2020

FIG Competitive Aerobics Rules define artistic value from five dimensions: Music application, routine complexity and innovation, movement quantity and balance, venue utilization, and artistic expression (Table 3).

Table 3. Requirements for task and adaptation in international aerobics scoring rules.

Artistic Evaluation Content	What to Do	How to Do
Routine Arrangement	Aerobics, difficulty, transition, formation, lifting and dynamic coordination	Balanced layout, smooth transition, diverse and creative design
Music Application	Dynamic, powerful, soft melodious rhythm	Neat, powerful and graceful movement matching musical rhythm
Movement Combination	Basic steps and arm movements	Complex/simple, symmetric/asymmetric, high/low intensity design
Venue Utilization	Center, corner, front, rear, left, right, ground, air	Balanced spatial layout and reasonable frequency
Performance & Coordination	Facial expression and physical presentation	Confident temperament, stable fitness and artistic expression

Scholars have systematically studied the physical movement characteristics of difficulty-beauty events and summarized the multi-dimensional presentation forms and aesthetic connotation of aerobics movements. Only by deeply understanding competition rules and producing effective external influence can motor performance form real expressive competence. Competitive performance focuses on movement amplitude, rhythm and technique for all events, while expressive competence is the core competitiveness of artistic sports events based on subject-object interaction.

4. Expansion of competitive performance: Competitive spectacle performance

Lexically, performance refers to purposefully displaying skills and artistic plots to audiences via dance, acrobatics and demonstration movements.

Derived from competitive performance, the competitive spectacle industry is the core sector of the sports industry, providing ornamental sports products and services. It covers commercial professional events and public welfare amateur competitions. The ornamental, competitive and entertaining attributes of sports events lay the foundation for the development of the competitive spectacle industry.

Performance theories are divided into Stanislavski's Experiential School and Grotowski's Physical Expression School. The experiential school emphasizes inner emotional experience, while the physical expression school focuses on standardized bodily training and efficient expressive system construction. Domestic scholar Lin Hongtong systematically sorted out performance theories in his work *Performance Training Method: From Stanislavski to Tadashi Suzuki*. Teng Shouyao pointed out that inner emotions must be externalized through body movements and facial expressions. Li Zhengtao divided expression into natural expression vs. artistic expression, as well as self-expression vs. symbolic expression. Natural emotional venting belongs to primitive instinct and can be upgraded to artistic performance only after rational artistic processing.

Expressive competence is the core literacy of performers, including observation, simulation, perception, plasticity and emotional passion. Different from stage performance, competitive performance is standardized and evaluated by professional referees under unified competition rules.

Essentially, performance is the external presentation of life experience and inner emotion. The category of expression is broader than performance. Expression conveys personal inner emotion directly, while performance interprets artistic connotation via standardized presentation. All performance relies on physical movement, consisting of three core elements: Movement, emotion and thought.

Distinguishing expression and performance is of great significance to competitive aerobics. Its presentation integrates natural self-expression and artistic symbolic expression, reflecting athletes' personality, temperament and comprehensive artistic literacy. External movement is the carrier, while inner cultural accomplishment constitutes the core connotation of competitive aerobics. Basic aerobics movements are the raw materials of artistic expression, which can form aesthetic appeal only after professional polishing. Many athletes possess skilled techniques but rigid movement presentation, lacking emotional expression and artistic ornamental value. In this sense, competitive spectacle performance is the advanced extension of competitive performance and expressive competence.

5. Conclusion

Current research on competitive performance has made certain progress, while its theoretical system still needs further improvement. Integrating artistic research findings into competitive sports practice is a long-term academic task. Competitive performance, expressive competence and competitive spectacle performance differ in research perspectives but share inherent logical connections. Adopting a holistic and dynamic research perspective helps grasp the practical laws of athlete training and competition presentation, and transforms theoretical achievements into disciplinary construction and competitive promotion.

Applying the theoretical research of competitive performance to general sports events, deepening the research on expressive competence of artistic sports events, and sublimating the theoretical connotation of the competitive spectacle industry will effectively promote the high-quality development of various competitive sports events.

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