Choreography

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Velykholova Bohdan
CEO of the Dance Studio "Dance Life"
Chernivtsi Institute of Trade and Economics of
Kyiv National University of Trade and Economics
ORCID: 0009-0009-2601-7541

PSYCHOLOGICAL ASPECTS OF DANCERS' PREPARATION FOR COMPETITIONS

Summary. *The paper establishes that the psychological preparation of dancers for competitive activity is a system-forming factor in the structure of a complex training process that determines the effectiveness of the implementation of the technical and choreographic potential of athletes in the stressful context of tournament activity. It has been found that the features of psycho-emotional stress during the competitive period correlate with the functional state of the neuropsychic system, determining the dynamics of adaptive reserves and the stability of psychomotor reactions. It has been determined that in the process of preparing for competitions, it is necessary to introduce double periodization of loads, which synchronizes the physical and psychological components of functional readiness. The leading psychophysiological indicators have been determined, in particular, the level of anxiety, stress resistance, concentration endurance and adaptability, which serve as objective markers of the emotional and volitional state of performers. Based on the conducted research, coping strategies that ensure effective mobilization of self-regulation mechanisms in the pre-competitive and competitive periods are systematized, in particular, the importance of developing such competencies as*

emotional self-discipline, the ability to situational focus attention and the formation of adaptive reactivity in conditions of high psycho-emotional pressure is emphasized. It is proven that the intensity of the neuroendocrine reaction, in particular the level of cortisol secretion, can be considered as a biochemical indicator of competitive stress, which reveals gender-related variability and dependence on the individual psychophysiological constitution of athletes. A biopsychosocial model of psychological preparation of dancers for competitions is proposed, which integrates hormonal regulation of stress (cortisol), motivational and emotional characteristics (testosterone profile), cognitive and emotional skills (anxiety-regulation, coping strategies) and social context, where the model provides a holistic approach to optimizing adaptive behavior in high-stress conditions, increasing the effectiveness of performance and psychological growth. The results of the study allow us to state the need to integrate psychological support as a mandatory element of the training process in the dance field, which involves interdisciplinary coordination of the actions of the coach, sports psychologist and medical staff in order to increase the adaptive potential of dancers to the conditions of competitive activity of a high level of complexity.

Key words: *psychological preparation, competitive activity, psycho-emotional state, adaptation, self-regulation, stress resistance.*

Problem statement. In the modern sports environment, dance art occupies an intermediate position between highly coordinated sports and stage forms of performative activity, which puts forward a unique set of psychophysical requirements to the performer. The competitive activity of dancers is characterized by a high level of stress due to a combination of physical exertion, cognitive and emotional stress, the need for instant decision-making, and publicity of the performance. In this context, psychological training becomes crucial in the formation

of sustainable adaptive behavior, ensuring the stability of performance and the realization of the potential of an athlete-artist in critical conditions. The analysis of current approaches in psychology shows a gradual transition from reductionist models that focus exclusively on individual characteristics of the personality to integrative concepts that take into account the multifactorial nature of stress reactions and adaptation. One of the promising paradigms in this context is the biopsychosocial approach, which allows for a comprehensive analysis of psychological training through the interaction of biological, psychological and social variables. In this regard, the need to create a comprehensive model of psychological preparation of dancers for competitions, which would take into account the multidimensional nature of adaptation processes and allow to effectively predict and optimize individual trajectories of psychological stability development, is actualized.

Analysis of the latest research and publications. In the modern scientific literature, there is a growing interest in the psychological training of dancers in the context of competitive activity. Researchers Paris-Delcampo D. et al. [1] presented a case study that analyzed the effectiveness of motivational coaching for dancers in competitive dance. The results of show an improvement in intrinsic motivation, a decrease in anxiety before performances, and an increase in emotional regulation, which is a key factor in successful competitive functioning.

Korobeynikov G. et al. [2] studied the relationship between psychophysiological characteristics and the formation of choreographic skills in young athletes. It was proved that the level of neuropsychological stability, the speed of sensorimotor reactions and the amount of attention are closely related to the effectiveness of teaching technical elements of dance. The study by Zahiu M. et al. [3] focused on the coordination aspects of entry-level formations dances, where psychomotor coherence was closely related to emotional stability and the ability to act under stage pressure, which is especially important in a competitive format.

Yilmaz A.C. [4], based on verbal descriptions, carried out a classification analysis of specialization in dance sport, where among the key indicators of expertise were psychological maturity, self-discipline and the ability to self-assessment in stressful situations. Grigore M.-F. et al. [5] emphasize the peculiarities of planning methodological components in the training of junior dancers, in particular, adaptation to competitive load. The study by A. Lyuboevych and colleagues [7] focuses on proprioceptive qualities and their role in the training process. The authors emphasize that confidence in own body, body consciousness and internal sense of balance have both physiological and psychological components.

Thus, the results of the literature analysis indicate an interdisciplinary approach to the problem of psychological training of dancers. Particular importance is attached to motivational factors, emotional regulation, stress resistance and body-sensory awareness, which requires further study in the context of formation of an integral system of psychological support for competitive training in dance sport.

Formulation of the article's aim. The aim of the article is a systematic study of psychological aspects of dancers' preparation for competitive activity, in particular, analysis of psychological factors influencing adaptation and psycho-emotional state of sportsmen in the process of preparation, analysis of methods of psychological support for increasing stress resistance and motivational orientation, and also determination of the role of cognitive-emotional mechanisms in the formation of optimal competitive behavior.

Summary of the main research material. In the context of growing requirements to competitive activity in sports dance and increase of intensity of competitiveness at high-level tournaments, the necessity of an interdisciplinary approach to training of sportsmen is actualized. In particular, the intensive technical and choreographic complexity, combined with high psycho-emotional stress, necessitates the complex interaction of specialists of different profiles - sports

psychologist, doctor, coach, methodologist, etc. - to ensure a holistic impact on the functional and psychological state of athletes [1-4].

The psychological component of dancers' training, especially in the age categories of younger and middle adolescence, should be flexibly integrated into the general structure of the training process, taking into account such critical factors as physiological characteristics of puberty, sensitive phases of mental development and cognitive readiness for competitive load [5-8]. In this context, the formation of stable adaptation mechanisms capable of ensuring the effective functioning of the neuropsychic system under the stressful effects of the competitive environment is of particular importance.

The methodological complexity of developing a training program lies in the need to comply with the principles of double periodization, which takes into account both physical and psycho-emotional stress. Determining the level of complexity of competitive choreography for each individual dance couple should be carried out taking into account individualized goals, stages of training and functional state of athletes. This approach allows to adapt training modules in accordance with the level of functional fitness and psychological endurance, providing targeted preparation for the performance.

In addition, a deep structural analysis of the training process in sports dance is a prerequisite for optimizing psychophysiological readiness, which in turn ensures the effective integration of key components of performance in the context of achieving maximum results [9; 10]. Therefore, it is worth noting that psychological aspects of training are considered not as an isolated element, but as a system-forming factor that affects the success of stabilizing the emotional state of dancers and increasing the ability to concentrate during a competitive performance.

The sphere of dance sport is characterized by a high level of intensity of training and competitive load, which leads to the formation of a multicomponent

psychophysiological impact on athletes throughout the season of performances. The excessive density of the rehearsal and competition calendar, the demand for technical perfection of performance and choreographic expressiveness significantly actualize the study of psychological mechanisms of dancers' adaptation to the conditions of the competitive environment.

Despite the empirically documented low level of anxiety in professional dancers [11] and the general psychological resistance to stressors inherent in both representatives of dance sport, and athletes of other activities [12], periods of competitive activity are accompanied by an increase in psychoemotional stress, fatigue and a decrease in the adaptive reserves of the nervous system [13]. Compared to the training stages, direct participation in tournaments significantly increases the risk of distress, which, in turn, negatively affects the stability of psychomotor functions.

It is worth noting that psychological stress in the field of dance has been studied only in a limited number of works [14], but the available empirical data confirm its key importance for the professional activity of performers. For example, a high level of psychoemotional stress correlates with the frequency of recurrent injuries in areas of increased biomechanical vulnerability - the knee and cervical spine, especially in flamenco dancers [15]. Amado D., Leo F., Sanchez P., Sanchez D., Garcia T., also emphasize that the day of the performance is a key trigger for the development of situational stress and increased anxiety [16]. These circumstances necessitate the purposeful development of psychological skills aimed at mobilizing self-regulation resources, increasing tolerance to stress and effectively managing one's own emotional state in critical phases of performances [17].

In this regard, dance training, similarly to sports training, requires a comprehensive consideration of emotional and volitional components, in particular

the ability to overcome stress, quickly adapt to changing context and maintain high motor accuracy under psychological pressure during competitions [18].

In the context of training dancers for competitive activity, it is important to systematically outline the list of leading psychological competencies that are subject to targeted development as part of the training process [19]. In particular, it is necessary to identify the most effective coping strategies aimed at optimizing psychological stability and increasing the stability of performance results under competitive pressure [20].

Despite the growing interest of the scientific community in the problem of psychological stress in the field of professional dance, the available literature lacks thorough systematic studies that reveal gender differences in the experience of stressful states [21]. This imbalance is partly explained by the underrepresentation of men in the dance environment, which makes it difficult to generalize the results of this group of performers [22; 23].

Empirical studies focused on a predominantly female sample record a significantly higher intensity of psychological stress due to the need to integrate academic workload with intensive dance training [24]. In addition, an increased level of anxiety in the phase of direct performance of the dance program is a characteristic feature of the female group of subjects [25]. At the same time, some scientific works indicate a tendency to greater emotional discomfort among male dancers, which may be related to both sociocultural factors and internal psychological conflicts arising from role tension within traditionally feminized dance practice [26].

The study of dancers' psychological preparation for competitions is impossible without taking into account the neuroendocrine mechanisms that regulate the body's psychophysiological response to stressful stimuli. At the biochemical level, the main mediator of stress is cortisol (C), a glucocorticoid hormone that initiates the mobilization of energy resources by increasing blood glucose levels, stimulating

regenerative processes and activating the "fight or flight" system [27; 28]. In sports activities, anticipatory (pre-competitive) stress reactions can occur several hours before the start of the competition, and the severity of these reactions is much greater in male athletes, in contrast to women, for whom the hormonal response is less stable [29].

In dance, similarly to sports activities, pronounced neuroendocrine reactions are also observed, but their stability and intensity are largely variable. In particular, cortisol levels fluctuate depending on the style of the dance genre, the level of training of the performer, and the presence or absence of a competitive element during the performance. In addition to cortisol, it is important to study testosterone (T), an androgenic steroid that acts as a neuroendocrine marker of euphoric, dominant, and motivational states, in competitive dance practices. An increase in testosterone levels in dancers during stage performances usually correlates with an increase in self-esteem, competitive drive, and the desire for social influence, with the influence of age and experience being statistically significant [30]. Mazur A. formulated the position that high levels of testosterone determine the formation of assertive expression and a tendency to social dominance, while its decrease leads to a decrease in activity in competitive interactions [31].

Testosterone plays a key role in the biosocial regulation of achievement motivation and the formation of behavior aimed at gaining social status in accordance with the biosocial model of status [32-34]. Studies by Kivligan K., Granger D., Booth A. have shown that men's testosterone levels before competitions increase more significantly than women's, indicating a more pronounced anticipatory hormonal response [35]. Meta-analytic reviews of recent years by Geniol S., Carré J., Jiménez M., Aguillard R., Alvero-Cruz J. confirm that testosterone plays a key role in the regulation of physiological and psychological systems under the influence of competitive stress, reaching a peak before a performance and increasing even more

in the event of a successful outcome [36; 37]. These hormonal fluctuations act as triggers of an affective response to the results of competitions, both in the form of increased euphoria in the case of victory and in the form of emotional exhaustion in the case of failure [38]. A. Mazur interprets these changes as reinforcing biological feedback mechanisms that contribute to the development of adaptive behavioral patterns in response to a successful outcome [31]. A positive performance result strengthens dominant and purposeful behavior, which ensures the dancer's psychological progress in the medium and long term [39]. A study by Murcia C., Bongard S., Kreutz G. showed that tango dancers experienced a decrease in cortisol (C) and a simultaneous increase in testosterone (T) levels after a pair performance, which is probably related to emotional interaction and physical contact between partners [40]. Similarly, Legowska K. and Kapchuk K. suggested that increased testosterone levels in ballerinas may serve as a biological marker of their status in the academic environment [30].

Thus, given the identified patterns, in the process of psychological preparation of dancers for competitions, it is advisable to take into account both the dynamics of stress reactions at the level of cortisol and motivational and emotional components associated with the testosterone profile, which in turn allows to form a biopsychosocial model of training aimed at optimizing the adaptive behavior of the performer in highly stressful conditions - during competitions [41].

Taking into account the identified patterns, the process of psychological preparation of dancers for competitions should be based on a comprehensive approach that integrates three key components: biological, psychological and social. The biological level involves monitoring and regulating stress reactions at the level of hormones, in particular cortisol, which is responsible for physiological adaptation to stress, as well as analyzing motivational and emotional characteristics associated with the testosterone profile, which determines the tendency to assertive behavior

and reactions to social status in a competitive context. The psychological component of the model focuses on the development of key cognitive and emotional skills, such as anxiety management, stress resistance, and effective coping strategies that contribute to the stability of performance. The social level includes taking into account the peculiarities of the dancer's social environment, the influence of interpersonal relationships and the norms of the dance environment, which can modulate stress responses and motivation.

Biopsychosocial model of psychological preparation of dancers for competitions

1. Biological level

- **Hormonal regulation:** Monitoring of cortisol (C) and testosterone (T) levels, which reflect the body's response to stress and motivational readiness for competition.
- **Physiological practices:** Breathing exercises and auto-training to reduce anxiety and optimize hormonal balance.

2. Psychological level

- **Cognitive and emotional regulation:** Learning to manage anxiety and preventing "psychological burnout" before a performance. Development of stress resistance, emotional regulation, concentration and awareness as key psychological skills for a stable performance.
- **Building confidence:** Supporting belief in one's own abilities and in one's partner (or team), which enhances psychological resilience.
- **Emotional regulation:** Emphasis on living and expressing emotions as part of artistry, without panic or stagnation.
- **Visualization:** Mental rehearsals of a performance to build positive expectations and reduce anxiety.
- **Concentration:** Developing the ability to focus on one's own technique and improvisation without being distracted by external factors (judges, competitors, audience).
- **Support methods:** Using motivational conversations with coaches and psychologists, keeping self-observation diaries to analyze the internal state.
- **Coping strategies:** Formation of effective strategies for overcoming stress, reducing anxiety and maintaining an optimal emotional state during competitions.
- **Gender peculiarities:** Taking into account differences in the perception of stress and motivation due to biology and social stereotypes of the dance environment.

3. Social level

- **Social support:** The role of coaches, partners, parents and friends in shaping the dancer's psychological comfort and motivation.
- **Peculiarities of pair work:** Psychological attitude to work together, trust and emotional interaction between partners.
- **Influence of social factors:** The influence of gender roles and norms that modulate behavior, self-esteem and adaptability, especially in the traditionally feminized field of dance. Eliminating excessive expectations, perfectionism, conflicts within the team, and overcoming negative experiences.
- **Interaction with the competitive environment:** The impact of competitive pressure and expectations on motivation and emotional state, which requires the development of social adaptation skills.
- **Post-competition support:** Analysis of performance results as a source of experience without emotional self-condemnation, support of motivation for further development.

Fig. 1. Biopsychosocial model of dancers' psychological preparation for competitions

Source: created by the author on the basis of the source: [41].

The biopsychosocial model assumes that effective training should take into account the dynamic interaction between hormonal reactions, psychological strategies and social context, which together form the dancer's adaptive behavior. Therefore, the proposed biopsychosocial model of psychological training allows for a holistic assessment and optimization of the performer's adaptive behavior in highly stressful conditions during competitions, increasing his/her ability to function effectively and grow psychologically.

Within the modern paradigm of preparation for competitive activity of dancers, systematic psychological support is considered as a key factor in improving performance, integrating the individual psychological characteristics of the athlete with the analysis of the socio-cultural context in which his/her sports activity is formed and realized. On the basis of generalization of theoretical provisions, the structure of psychological means and methods that influence the effectiveness of competitions is developed, which is systematized into three main areas of psychocorrectional work: psychotherapeutic approaches, psychological counseling and psychological training methods. The structure of psychocorrection includes the following key components:

- Psychological counseling - is carried out to diagnose and correct individual cognitive and emotional states of an athlete, increase his or her motivational focus, form constructive coping strategies and reduce the impact of psychotraumatic experience.
- The main psychotherapeutic methods include cognitive-behavioral therapy, Gestalt approaches, body-oriented therapy and emotional decompression methods aimed at overcoming intrapersonal barriers, reducing anxiety, building emotional stability and restoring functional balance.
- Psychological training - integrates methods of self-regulation, visualization, autogenic training, mindfulness, communication skills, and competitive

arousal management. Such training is an effective means of increasing psychophysiological readiness for competitive stress, as well as developing skills of rapid mobilization of the resource state.

The application of these methods in the system of targeted psychological preparation of dancers for competitions contributes to the harmonization of the psycho-emotional sphere of the athlete, increasing the level of adaptability to the conditions of competitive stress, stabilizing internal motivation and improving communication interaction in a dance couple. In turn, this ensures higher results of sports activity at different stages of professional development.

In the context of forming the psychological readiness of dancers for competitive activity, the structural and functional directions of psychocorrectional influence aimed at improving its effectiveness are distinguished, which cover the following key components:

- Psycho-correction of emotional states in the context of competitive activity - involves the targeted modification of emotional reactions to stress and frustration factors accompanying the competition. Methods include emotionally focused therapy, relaxation techniques, visualization, and breathing practices that stabilize autonomic reactions.
- Correction of the level of mental self-regulation of the individual - focused on the development of skills of self-control, self-tuning and actualization of volitional effort in conditions of high emotional and physiological stress. Methods of biofeedback, autogenic training, and neuropsychological activation are used.
- Correction of mental cognitive processes of athletes - includes the development of attention, working memory, speed of sensorimotor response, perceptual sensitivity, which are critical for precise coordination of

movements, synchronization with a partner and adaptation to the competitive rhythm.

- Psycho-correction of interpersonal relationships is especially relevant in the context of pair dance, where the quality of communication interaction, trust and partner empathy determine the consistency and expressiveness of the dance image. The work is aimed at developing effective communication skills, overcoming conflict situations, and forming partner support.
- Correction of the goal-setting system by coaching - consists in the formation of an adequate hierarchy of goals, internal motivation for achievement, as well as the development of a reflective ability to strategically plan sports growth. Authors use personalized coaching, SMART goal modeling, and motivational interviewing.

Thus, the implementation of a comprehensive psycho-correctional approach allows not only to improve the performance of performances, but also promotes a deeper integration of the psychological component into the system of professional training of dancers.

The structure of psychological training of dancers includes a system of methods of psychocorrection that address the specifics of each psychological factor that affects the effectiveness of sports activity (see Table 1). The presented system is based on the adaptation of psychotherapeutic and training techniques that ensure the targeted development or correction of relevant mental processes and characteristics necessary to achieve optimal competitive form.

Table 1

Complexes of methods of psychocorrection of the main psychological factors in the dynamics of dancers' training

№	Psychological factor	Methods of psychocorrection	Nature of corrective influence	Training directions
1	Anticipatory (ability to predict)	Art therapy, neuro-linguistic programming (NLP)	Mostly developmental (acmeological)	Trainings on managing the instinct of self-preservation
2	Intellectual (memory, attention, thinking, etc.)	Gestalt therapy, neuro-linguistic programming	Mostly developmental (personal development)	Acmeological trainings
3	Introspective (awareness, conscious attitude to activities)	Client-centered psychotherapy, psychoanalysis	Corrective and developmental	Emotional and volitional and acmeological trainings
4	Motivational (stimulation to action, intrinsic interest)	Gestalt therapy, body-oriented psychotherapy	Mostly corrective	Self-esteem training and emotional and volitional training
5	Perceptual-targeted (optimism/pessimism)	Existential psychotherapy, Gestalt therapy, psychoanalysis	Corrective or developmental (personal growth)	Trainings to improve self-esteem
6	Psychophysiological (temperament, stress resistance)	Behavioral therapy, suggestive methods	Mostly corrective	Emotional and volitional trainings
7	Strategic (strategist, tactician, creator, destroyer)	Psychoanalysis, body-oriented psychotherapy	Mostly corrective	Trainings for the formation of sports aggression

8	Management (leadership, teacher-student relationships, ideology)	Client-centered psychotherapy, psychodrama, sociodrama, transactional analysis	Mostly developmental	Self-esteem and acmeological trainings
9	Volitional (the ability to randomly mobilize the nervous system, overcome obstacles)	Behavioral therapy, suggestive methods of influence	Mostly corrective	Emotional and volitional trainings

Source: compiled by the author based on the source: [42]

Given the multifactorial nature of dancers' psychological training, the structure of psychocorrection methods is represented by a complex combination of psychotherapeutic approaches and targeted training practices. Each method, in accordance with the content of the psychological factor, is aimed at strengthening personal resources, optimizing the psychoemotional state and forming the functional mobility of the athlete's psyche, which in turn ensures the systematic development of cognitive, emotional and volitional and motivational characteristics that are key to the achievement of high results by dancers in competitive activities.

Conclusions. The results of the study of psychological aspects of dancers' preparation for competitions showed the critical importance of integrating the psychological component into the training process as a fundamental factor in the success of performances in the field of sports dance. It has been established that in conditions of high intensity of physical and psychoemotional stress, characteristic of competitive activity, the effectiveness of performance largely depends on the formation of adaptive mechanisms, stress resistance, and the ability to self-regulation. It has been found that special attention should be paid to working with adolescents, whose psychophysiological characteristics of age development require targeted consideration of sensitive periods during training. It has been found that

important factors of psychological readiness are the ability of dancers to effectively use coping strategies, maintain concentration and control of emotions in critical phases of performance. It has been established that biochemical markers, in particular cortisol and testosterone levels, can act as informative indicators of the psychophysiological state of athletes and serve as the basis for developing adaptive models of training load. Thus, the psychological training of dancers is considered as a systemic element of professional activity, covering not only psycho-emotional stability, but also neurophysiological adaptive reserves that determine the effectiveness of the realization of performance potential in conditions of high competitive load.

The practical significance of the study is that the conclusions and recommendations formulated by the author can be effectively applied to improve the structure of the training process aimed at forming stable adaptive responses to stress factors of the competitive environment. Further research in this direction should be aimed at creating interdisciplinary models of interaction between a coach, psychologist and athlete in order to form an integral system of psychological training in a highly competitive environment.

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