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PSYCHOLOGICAL ASPECTS OF THE INFLUENCE OF BALLROOM DANCING ON THE EMOTIONAL STATE OF ADULTS

Summary. The paper provides a comprehensive analysis of the psychological aspects of the influence of ballroom dancing on the emotional state of adults. It highlights that ballroom dancing, as a form of socio-motor activity, has a comprehensive positive effect on psycho-emotional health, combining physical activity, emotional self-expression, and social interaction.

The results demonstrated that systematic participation in ballroom dancing leads to a significant reduction in psycho-emotional tension, improvement of mood, enhancement of life satisfaction, and activation of cognitive processes. It was also found that dance practices improve body identity, promote self-knowledge, reduce feelings of loneliness, and strengthen interpersonal relationships. Additionally, the positive effect on empathy, coordination, and sensorimotor functions was confirmed.

Ballroom dancing is an effective means of psycho-emotional support, contributing to the psychological well-being of adults, particularly in conditions of social or personal stress. Its adaptability to different ages and functional capabilities, combined with cultural universality and accessibility, provides the potential for its broad use as a resource for enhancing quality of life and mental health in the adult population.

Key words: ballroom dancing, psycho-emotional state, emotional regulation, adults, dance therapy.

Problem statement. In today's conditions of rapid digitalization and hyperurbanization of social life, there is a significant complication of psycho-emotional processes that accompany the daily activities of individuals. Although technological progress greatly facilitates the performance of routine tasks, it also creates new challenges associated with increased stress, psychological overload, and growing social isolation. These factors have a systemic negative impact on the overall state of public health, especially among working-age people, which is accompanied by a decrease in quality of life, deterioration of psycho-emotional balance and cognitive functions.

The urgency of the problem is determined by the need to find effective and sustainable means of supporting psychophysical well-being, which can not only reduce the risks of chronic diseases and emotional burnout, but also promote long-term adaptation to the conditions of the modern socio-cultural environment. With this in mind, special attention is being paid to types of physical activity that combine physiological improvement with social and psychological benefits, integrating into everyday life.

Among the wide range of such activities, ballroom dancing is a promising trend that combines not only physical activity but also elements of socialization, emotional expression, and cognitive stimulation. Despite the lack of popularity in the mass consciousness and scientific discourse, modern research shows that ballroom dancing has a multifaceted positive impact on the somatic, cognitive, and psycho-emotional state of an adult.

Scientific works confirm that ballroom dancing helps improve the quality of life through the development of social skills, emotional regulation, reduction of

anxiety and depressive symptoms, and stimulation of neuroplasticity. At the same time, the mechanisms of influence of ballroom dance activity on the emotional state, especially in the context of age-related peculiarities, remain insufficiently studied, and there is an urgent need for a comprehensive scientific analysis of the psychological aspects of this phenomenon.

Analysis of recent research and publications. In the current scientific literature, there is a growing interest in the psychological impact of ballroom dancing on adult audiences, especially in the context of emotional well-being, cognitive flexibility, and quality of life in later life. Leading research confirms that participation in dance activities helps to reduce anxiety, increase self-esteem, and stabilize the emotional state. Thus, in the study by Wu S. et al. [10] found that ballroom dancing classes correlate with an increased level of empathy and social sensitivity, which is evidenced both at the behavioral and neurophysiological levels. In turn, Vaccaro MG et al. [7] proved the positive impact of dancing on psychosomatic indicators of successful aging, in particular, on hormonal balance and subjective sense of vitality.

The results of studies by Refeld K. et al. [4; 5] have shown that regular dance training significantly improves hippocampal neuroplasticity, which, in addition to the cognitive effect, has a positive effect on emotional stability and reduction of depression symptoms in older people. Kattenstroth J. S. et al. [9] highlight the benefits of long-term dance activity for sensorimotor, cognitive, and psychoemotional spheres in older adults.

The social and psychological dimension of the impact of dancing is revealed by Hui E. et al. [19], who prove that dance classes help to reduce loneliness, increase the sense of social involvement, and form a positive self-identity. Similar conclusions were reached by Alfredsson-Olsson E., Heikkinen S. [22], who analyze the emotional experience of social dance in the elderly, emphasizing its role as a tool for maintaining internal life motivation and "emotional rejuvenation".

Stevens-Ratchford R. [23] within the concept of "serious leisure" describes ballroom dancing as a form of psychological self-realization that allows adults to maintain a holistic identity and a sense of control over life. Pines R., Giles H. [14] also point to ballet and ballroom dancing as a source of emotional uplift and strengthening of body self-esteem in older women. Similar results were obtained by Cooper L., Thomas H. [18], emphasizing that social dancing in the third age is a source of pleasure, maintaining social ties and reducing symptoms of emotional exhaustion.

Thus, the literature analysis demonstrates interdisciplinary interest in ballroom dancing as a means of psycho-emotional stabilization and improving the quality of life of adults. At the same time, despite the availability of significant empirical material, the mechanisms of emotional transformation that are triggered in the process of ballroom dance interaction, in particular in the context of age and gender characteristics, require further research.

Formulation of the article's objectives. The purpose of the article is to comprehensively study the psychological aspects of the impact of ballroom dancing on the emotional state of adults, in particular, to analyze its impact on emotional well-being, cognitive flexibility and quality of life, taking into account age and sociocultural characteristics.

Summary of the main research material. Modern research shows that millions of people in the world are engaged in dancing for both recreational and professional purposes, which leads to a significant impact of dance activity on the psychophysiological state of a person. Regular dance practice promotes the development of various sensorimotor skills, including complex coordination abilities [1], and improves the relationship between perception and action [2]. Compared to other forms of physical activity, dancing not only improves sensorimotor functions [3], but also has a positive effect on the emotional state and higher-order cognitive processes [4].

An analysis of existing scientific sources has shown that dance activity has a complex impact on the physical health and psychological state of different population groups. For example, the works of Refeld K., Lueders A., Göckelmann A., Lessmann V. and others found that systematic dance training contributes to a significant increase in neuroplasticity in older people, which exceeds the effects of traditional monotonous exercise [4]. This conclusion is supported by Refeld K., Müller P., Aye N., Schmicker M., Zohn J. and others, whose research results demonstrate an improvement in cognitive functions, including spatial orientation and balance, due to regular dance practice [5; 6]. The results of the study by Vaccaro M., Izzo G., Ilacqua A., Migliaccio S., Baldari C. and others showed that six months of dance practice improves physical and psycho-emotional well-being in older people [7].

It was found that dancing combines mental and physical components of training, which allows individuals to adjust the intensity of physical activity depending on personal capabilities, while maintaining optimal physical fitness without the risk of overwork. The psycho-emotional effect of dance practice is also significant, as it helps to reduce stress and improve overall mental well-being, which is especially important in today's dynamic lifestyle [7]. Improvement of fine motor skills through dance training stimulates physiological processes, including increased blood circulation, activation of respiratory function, and optimization of neuromuscular coordination, which, in turn, increases the level of self-confidence and reduces the risk of developing psychoemotional disorders [8].

Ballroom dancing is especially valuable because it combines physical activity, emotional expression, and social interaction [9]. Due to this multicomponent structure, ballroom dancing provides a comprehensive impact on the psychoemotional state of adults, significantly exceeding traditional forms of physical activity, such as regular exercise, walking, or music performance. In addition, couples and group dances contribute to the development of socio-emotional competence, including the ability to recognize, understand, and emotionally empathize with the states of others - empathy [10].

The results of numerous empirical studies confirm that ballroom dancing as a specific form of social and motor activity provides a comprehensive impact on the physiological and psychological aspects of human health. In particular, dance practice involves not only mechanical movements and musical and rhythmic interpretation, but also the harmonious involvement of the sensorimotor, vestibular, and cardiorespiratory systems. This process involves the active participation of the main muscle groups, including the muscles of the upper limbs (creating the dance "frame"), lower limbs (realizing the steps), and the core muscles responsible for maintaining balance and posture. Dynamic variability of movements - a combination of fast and slow tempos - additionally optimizes the cardiovascular system, increasing the overall level of physical health and performance.

At the same time, the social component of ballroom dancing is of particular importance in the context of the psychological well-being of adults. Emotionally rich interpersonal communication, which is realized through dance interaction, stimulates the development of empathy, creates an atmosphere of safe social interaction and contributes to the formation of a positive affective background, which is confirmed by both theoretical justifications and the results of practical research. In particular, social experiments conducted among adult participants in dance programs have revealed not only a significant improvement in physical performance, but also a decrease in psychoemotional stress and an increase in mood [11]. Ethnographic studies, such as Wolfe's work on the experience of Paris Opera dancers, have shown that the aging process in professional dancers is associated with negative experiences [12]. Dancers actively try to avoid the manifestations of aging, which is due to the desire to maintain a professional career. However, this contrasts with the positive effects associated with participation in cultural and recreational dance activities among older age groups, which stimulates interest in researching the impact of ballroom dancing on the psychoemotional state of adults.

Research data show that ballet is a fundamental factor in the formation of identity in adults of all ages, acting as a key mechanism of self-expression [13]. The degree to which ballet becomes part of a person's self-identity depends on age and experience: with age and the accumulation of dance experience, people tend to increasingly perceive ballet as an integral part of their personality. It is worth noting that ballet serves as a means of external expression of internal emotions, acting as a kind of non-verbal communication that activates emotional and cognitive processes. In addition, ballet plays the role of a socio-cultural phenomenon that ensures the maintenance and development of social ties, has a positive impact on interpersonal relationships, and creates conditions for constructive aging through the preservation of personal identity. The influence of dance on the physical self is manifested in the increase of psychophysiological well-being, which includes positive changes in the perception of one's own body, improvement of mood and general psychological state [14].

It is worth noting that ballroom dancing is a highly adaptive form of physical activity that can be modified to take into account the age, physiological and functional characteristics of adults [15; 16]. Due to the absence of the need for specialized equipment and the possibility of performing in a variety of spatial and social settings, ballroom dancing becomes accessible to a wide range of participants with different cultural and social backgrounds [17]. Studies have shown that the

participation of older people in dance classes helps to restore an emotional connection with past dance experiences, which, in turn, activates positive emotions and enhances the sense of belonging to a community [18].

The study of the psychological impact of ballroom dancing on the emotional state of adults revealed the presence of two-sided dynamics of effects, which indicates the need for a comprehensive analysis (see Table 1). On the one hand, systematic involvement in dance practice is associated with a significant increase in psychoemotional well-being, which is manifested through an increase in life satisfaction, positive affective reactions, as well as the formation of stable social ties and a sense of belonging to a dance team. This is in line with the modern understanding of dance as a multifaceted psychophysiological phenomenon that promotes the activation of emotional regulation and social adaptation mechanisms.

At the same time, studies point to the importance of individual characteristics and external factors that can affect the effectiveness of dance activity. In particular, physical limitations, deterioration in general health, or social barriers can cause emotional difficulties, such as feelings of frustration, shame, or even isolation. This indicates a complex relationship between how a person perceives themselves and their actual capabilities, which emphasizes the need for an individualized approach in dance therapy and recreational programs.

Table 1

Psychological impact of ballroom dancing on adults: analysis of positive and negative aspects

	Positive psychological effects	Potential psychological risks and limitations
с	Systematic involvement in ballroom dancing contributes to an increase in the overall level of osychological well-being [19].	In the presence of physical or social barriers, negative emotional experiences (disappointment, shame, regret) may be formed.

There is an increase in the level of life satisfaction and subjective quality of life [20; 21].	In case of deterioration of the physical condition, there may be an increase in the feeling of aging or loss of personal resources [26].
Activities in the field of dance art generate strongly positive emotional reactions (joy, pride, admiration) [22].	Vulnerable emotional states can be provoked by social rejection or refusal of partnership [29].
Ballroom dancing leads to increased self- esteem and a stronger sense of social belonging [23].	There is a risk of frustration in case of discrepancies between the expected and achieved results.
Dance practice serves as an emotional expression and a tool for social integration [24].	Participants may experience internal tension due to the need to conform to established aesthetic and social norms.
Emotional flexibility is formed, the ability to transform negative emotions into constructive mental states [25].	Achieving a state of emotional elation (the so- called "flow") often requires significant volitional and cognitive efforts [30].
Participation in dance activity reduces the feeling of chronological age and supports the subjective feeling of youth [26].	There is a possibility of dissonance between physical and subjective self-perception, which can cause psychological discomfort.
Ballroom dancing contributes to the activation of emotional energy and the formation of existential meaning in leisure activities [23].	Cultural and social contexts can significantly modify the perception of dance experience and related emotions.
Ballroom dancing classes stimulate the development of social orientation and the expansion of the communication field [27; 28].	

Source: compiled by the author based on the source: [19-30]

Additionally, it is worth noting that achieving an optimal psychoemotional state, in particular the so-called "flow state," is accompanied by significant cognitive and motivational efforts, which indicates a high level of complexity of adaptation processes in this area. Sociocultural factors and the specifics of group interaction within dance practices also act as important moderators of the effects, emphasizing the cultural determinacy of the perception and experience of emotional experience.

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A summary of the research results presented in Table 2 shows a comprehensive positive impact of ballroom dancing on the psychoemotional state of adults with various somatic and neurological diseases. Ballroom dancing is seen as a complex form of exposure that combines physical activity, cognitive activity, and social interaction, providing important support for psychoemotional well-being. Research results show significant improvements in both physical and psychological parameters: in particular, there is an increase in mobility, improved coordination of movements, stabilization of balance, and improvement of cognitive functions (memory, attention, executive functions). Such changes are accompanied by positive modifications of the emotional state, including a decrease in the level of depressive symptoms, increased life satisfaction and general mood.

It is worth emphasizing that the social aspect of ballroom dancing plays an important role in the formation of interpersonal relationships, which contributes to psychological support and reduces isolation in patients with chronic conditions, as evidenced by qualitative studies that emphasize the importance of the quality of partnerships to maximize the effect of the intervention.

Table 2

Systematization of scientific data on the impact of ballroom dancing on mobility, cognitive function, and emotional state of patients with diseases

Authors	Survey participants	Type of dance	Duratio n of interve ntion	Methods of evaluation	Main results	Conclusions
Kunkel, D., Fitton, S., et al. [31]	Patients with Parkinson's disease (31 in the intervention group, 15 in the control group)	Couples ballroom dances (foxtrot, waltz, tango, rumba, cha- cha-cha, rock and roll)	2 h/t weekly, 10 weeks	Balance tests, posture, "Get up and walk", 6-minute walk	Minimal changes in balance; improved gait; high satisfaction of participants	Ballroom dancing is a feasible intervention to improve mobility and satisfaction in patients with Parkinson's disease
Kunkel D, Robison D, et al. [32]	Patients with Parkinson's disease and their partners (14 couples)	Couple ballroom dancing	Qualitat ive research (intervie ws)	Analysis of experience and satisfaction from classes	Married partners get the most satisfaction, which indicates the importance of personal and emotional compatibility.	The quality of partner relationships significantly affects the satisfaction of dancing
Halbert S., Ashburn A., et al. [33]	Patients with Parkinson's disease (15 in the intervention group, 12 in the control group)	Couple ballroom dancing (foxtrot, waltz, tango, rumba, cha- cha-cha, rock and roll)	2 h/week, 10 weeks	Assessmen t of coordinatio n of movements during 12 turns	Improving coordination of axial and perpendicular body segments	Couple ballroom dancing improves coordination in patients with Parkinson's disease

Ng A, Mandelbau m R, et al. [34; 35]	Patients with multiple sclerosis (8 people)	Salsa	2 h/week, 4 weeks	Gait, balance, self- efficacy, physical activity	Improved gait, balance, physical activity	Salsa is a safe and effective rehabilitation method for people with multiple sclerosis
Ng A, Bunyan S, et al. [34]	Patients with multiple sclerosis (13 people in the intervention group)	Ballroom dancing (rumba, foxtrot, waltz, push- pull)	2 hours/w eek, 6-8 weeks	Quality of life, fatigue, depression, cognitive function, balance	Improved quality of life, cognitive function; tendencies to reduce fatigue and depression	Ballroom dancing improves physical and psychological well-being in MS
Masters B., Kiratli D., et al. [36]	People with spinal cord injuries (wheelchair users, paralysis)	Social ballroom dancing (salsa, tango, rumba)	4 h/week, 6 weeks	Range of motion, strength, coordinatio n, weight, pain, reaction time	Significant improvement in mobility, strength, coordination; reduction of pain and reaction time	Social ballroom dancing is an effective means of rehabilitation for spinal cord injuries
Hackney M., Hall K., et al. [37]	Patient with chronic stroke	Adapted tango	1.5 h/class, 20 classes over 12 weeks	Balance, mobility, gait, endurance, quality of life	Improved balance, gait, mobility; positive effect on mood	Tango can be an effective rehabilitation intervention for patients with chronic stroke
Lazarou I, Parastathid is T, et al. [38]	Patients with mild cognitive impairment (66 people)	Ballroom dancing (tango, waltz, foxtrot, rumba, cha- cha-cha, salsa, etc.)	60 minutes, 2 times a week, 40 weeks	Neuropsyc hological tests (attention, memory, executive functions, speech)	Improvement of cognitive functions in the intervention group, decrease in the control group	Ballroom dancing improves cognitive function and mood

Source: compiled by the author based on the source: [30-38]

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It is worth noting that many of these studies have shown that participants enjoyed dancing classes and would continue to attend them if given the opportunity. Unlike conventional forms of exercise, dance combines movement to music and physical interaction with a partner, which increases emotional engagement and social interaction. Therefore, ballroom dancing can provide an enjoyable form of exercise that improves fitness and encourages a more active lifestyle in individuals who find it difficult to participate in traditional forms of exercise. In addition to being a good workout, dance incorporates emotion, social interaction, sensory stimulation, motor coordination, and music, and is therefore considered more enjoyable and therefore more sustainable over time. All of these benefits of ballroom dancing can make it an excellent form of rehabilitation for people living with chronic neurological or medical disorders/diseases.

Ballroom dancing has a number of advantages over other dance practices, where one of the key features is the obligatory partnership: the effectiveness of dance moves depends on the coordinated actions of both partners. In addition, ballroom dancing covers ten different styles characterized by a wide variety of movement patterns and musical accompaniment, which allows each participant to find a style that suits his or her preferences. Due to the variability of the tempo and intensity of movements, ballroom dancing can be adapted to individual physical abilities, making it accessible to people with different levels of physical fitness.

Ballroom dancing is widely used as a therapeutic intervention among various populations to improve physical and cognitive function, as well as quality of life. This review is a comprehensive study in this area that systematizes the numerous benefits of using ballroom dancing in rehabilitation practice. Particular attention is paid to the potential positive effects of this intervention for people with chronic neurological and other medical disorders. Ballroom dancing combines mental activity and physical activity, while improving emotional state and mood [39].

In populations for whom maintaining physical activity is difficult, including people with chronic diseases, dancing is seen as an enjoyable and therefore more sustainable way to stay active for a long time. In particular, studies have shown that ballroom dancing improves balance and quality of life in various populations [32].

Improved cardiorespiratory function is an important indicator of health and fitness. Regular ballroom dancing has a positive effect on the cardiovascular system, increasing the resting heart rate and improving the cardiac response to exercise. In addition, ballroom dancing is a form of moderate to vigorous physical activity, so it is worth noting that due to its physiological benefits and social aspects, ballroom dancing can be an attractive option for improving cardiovascular health and overall physical condition in people [39].

An analysis of previous quantitative and qualitative studies shows that the aesthetic and creative elements of dance play an important role in the cognitive and social development of adults, contributing to emotional stability and mental wellbeing [40]. At the same time, most studies focus mainly on dance practices with fixed movement patterns that are educational (didactic) in nature [41]. Instead, the results of some studies confirm that the introduction of elements of creativity and freedom in the performance of movements, characterized by the absence of rigid standards, significantly correlates with increased satisfaction from dance activity and improved control of movements over time [42].

Studies show that a flexible approach to organizing ballroom dancing that integrates the main components of physical health - aerobic activity, strength exercises, balance and coordination training - has a positive effect on participants' motivation, helps maintain interpersonal interaction and overall satisfaction with the process of training [43]. This approach is particularly effective in creating a positive emotional state and reducing stress levels in adults, as evidenced by significant improvements in psycho-emotional well-being.

An analysis of the impact of social dancing on psychoemotional well-being indicates positive dynamics in the field of social interaction and self-esteem through creative motor expression [43].

Thus, ballet and ballroom dancing have a multifaceted impact on the emotional state of adults, performing the functions of both emotional expression and support for social identity and physical well-being.

Conclusions. The generalization of the results of the analysis shows that ballroom dancing as a specific form of physical and socio-emotional activity has a multidirectional impact on the emotional state of adults. The combination of physical activity, musical and rhythmic coordination, emotional expression and interpersonal interaction provides a holistic psychophysiological reinforcement of emotional wellbeing. Regular dance practice has been shown to help reduce stress, improve mood, reduce psychoemotional stress, and create a positive affective background. It has been shown that dancing helps to maintain psychophysical activity, improve cognitive function, stimulate neuroplasticity, and restore sensorimotor balance, which is especially important for adults and older people. Thus, the results of the study confirm the expediency of considering ballroom dancing as an effective means of psycho-emotional support, prevention of emotional burnout and improvement of the quality of life of the adult population.

The practical significance of the study is that the conclusions and recommendations formulated by the author can be effectively applied to improve the emotional state of adults by introducing ballroom dancing as an element of psychocorrectional or therapeutic practice. Further research in this area should be aimed at a deeper understanding of the mechanisms of psychological impact of dance practice, as well as the development of interventions that can use ballroom dancing as an effective means of psychosocial support and rehabilitation of adult groups.

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