



## THE ESSENCE AND OBJECTIVES OF ADAPTIVE PHYSICAL CULTURE

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### Abstract

The article examines physical rehabilitation within the framework of adaptive physical culture as a crucial means of restoring motor functions in individuals with disabilities and health limitations. The physiological foundations of motor rehabilitation are revealed, along with the main goals, stages, principles, methods, and means of restoring impaired movements. Special attention is given to the role of the adaptive physical culture specialist in the rehabilitation process, as well as to the expected outcomes of implementing rehabilitation programs. The comprehensive nature of adaptive physical culture is emphasized, as it is aimed not only at physical recovery but also at social integration and improvement of the quality of life of participants.

**Keywords:** Adaptive physical culture, physical rehabilitation, restoration of motor functions, health limitations, disability, neuroplasticity, motor activity, rehabilitation exercises, social integration.

### Objectives and Directions of Adaptive Physical Culture

Adaptive Physical Culture (APC) is a multidisciplinary system aimed at improving health, restoring impaired functions, and promoting social integration among individuals with disabilities.

The main objectives of APC can be classified into four interrelated categories: health-related, rehabilitative, pedagogical, and socio-adaptive.

#### 1. Health-Related Objectives

Health-oriented goals are central to APC, aiming to strengthen physiological systems, increase functional reserves, and prevent disease. Functional reserves are defined as the body's capacity to adapt to physical and psycho-emotional stress while maintaining optimal vital functioning. Systematic physical exercises, adapted to health status, age, and functional abilities, are used to activate the cardiovascular, respiratory, nervous, musculoskeletal, and endocrine systems.





**Key aspects include:**

1. Enhancement of overall physical performance through gradual increases in exercise volume and intensity, targeting strength, endurance, flexibility, and coordination.
2. Improvement of cardiovascular and respiratory function via aerobic and breathing exercises to optimize circulation, oxygen utilization, and blood pressure regulation.
3. Metabolic stimulation, promoting energy balance, digestive efficiency, and body weight management.
4. Development and preservation of motor skills, preventing hypodynamia and secondary complications associated with inactivity.
5. Psycho-emotional well-being, reducing anxiety, improving mood, and supporting psychological resilience.
6. Prevention of chronic disease exacerbations and immune enhancement, increasing resistance to infections and promoting overall health.

**2. Rehabilitative Objectives**

Rehabilitative goals involve restoring motor and psychophysiological functions affected by disease, congenital conditions, trauma, or surgery. APC treats movement as a therapeutic tool for recovery, unlike traditional physical education, which focuses on fitness development in healthy individuals.

Key components include:

1. Recovery of motor functions using targeted exercises to improve strength, joint mobility, coordination, stability, and precision.
2. Development of compensatory mechanisms for irreversible impairments, such as amputation or central nervous system lesions, using alternative movement patterns, orthoses, and prosthetics.
3. Restoration of psychophysiological processes, improving sensory-motor integration, attention, self-regulation, and stress tolerance.
4. Normalization of muscle tone and coordination to address hypo-/hypertonicity and muscle spasms.
5. Gradual adaptation to physical load, ensuring safe reintegration into daily activity.
6. Development of self-care and independence, enhancing daily living and occupational skills.
7. Socio-psychological rehabilitation, fostering perseverance, goal-orientation, and social skills through group activities.



### 3. Pedagogical Objectives

Pedagogical goals focus on developing motor skills, fostering interest in regular physical activity, and cultivating a value-based attitude toward health. Instruction is individualized, considering physical, cognitive, and social characteristics of participants.

#### Key aspects include:

1. Acquisition of motor skills essential for daily life, taught progressively from simple to complex movements.
2. Formation of sustained interest in physical activity through diverse methods, including games, rhythmic exercises, sports competitions, and group tasks.
3. Enhancement of cognitive awareness and self-consciousness, promoting knowledge about bodily functions, safe exercise, and healthy lifestyle principles.
4. Development of moral and volitional qualities, such as discipline, perseverance, and self-reliance.
5. Individualization and humanization of instruction, creating an encouraging environment that supports self-efficacy.
6. Social and communicative skills development through group participation, collaboration, and peer support.

#### 4. Socio-Adaptive Objectives

Socio-adaptive goals aim to integrate individuals with disabilities into active social life, enhance self-confidence, and foster independence. APC encompasses therapeutic physical culture, adaptive sports, recreational activity, and movement therapy.

#### Key aspects include:

1. Social integration, providing opportunities for participation in inclusive sports and community events.
2. Building self-confidence through measurable progress in physical abilities.
3. Development of communication and teamwork skills, facilitating social interaction.
4. Overcoming social isolation and psychological barriers, promoting positive self-image and emotional well-being.
5. Encouraging an active life stance, fostering engagement in professional, creative, and social activities.
6. Promotion of tolerance and social responsibility, advancing inclusive attitudes within the community.





### **Individualized Training Programs**

Personalized training programs are the foundation of APC, ensuring consideration of medical indications, functional capacity, psychological state, and social context. Programs are designed to be safe, progressive, and goal-oriented, targeting specific functional improvements.

Principles include: individualization, gradual progression, safety, comprehensiveness, and continuous feedback. Development stages include diagnosis, goal-setting, method selection, implementation, and monitoring with adjustments as needed. Programs are tailored for specific conditions, including musculoskeletal, sensory, cardiovascular, and nervous system impairments, under professional supervision.

Individualized programs effectively integrate health, rehabilitative, and pedagogical objectives, promoting physical improvement, self-confidence, autonomy, and social participation. This approach embodies the humanistic and evidence-based principles of contemporary adaptive physical culture.

### **Recommendations for Organizing APC Sessions**

1. Begin each session with a warm-up and breathing exercises.
2. Exclude exercises that cause pain, muscle spasms, or dizziness.
3. Gradually increase the load, taking into account the participant's condition and feedback.
4. Conclude each session with relaxation and breathing exercises.
5. Record participants' well-being, heart rate, and fatigue levels on a weekly basis.
6. Conduct post-program assessments, including range of motion, number of repetitions, and endurance indicators.

### **Expected Outcomes of the Program**

1. Increased muscle tone and overall physical performance.
2. Improved joint mobility and motor coordination.
3. Enhanced endurance and strength of the lower limb muscles.
4. Reduced anxiety levels and increased self-confidence.
5. Formation of a habit of regular physical activity and self-monitoring of health.

### **Psychological Support in Adaptive Physical Culture**

Psychological support is a key component of APC, ensuring effective restoration of physical and mental functions, fostering motivation, and promoting successful social integration of individuals with disabilities. Physical activity within APC serves not



only as a health-promoting intervention but also as a psychotherapeutic tool, enhancing self-esteem, confidence, and intrinsic motivation to overcome challenges. Individuals with disabilities often face psychological difficulties such as anxiety, low self-confidence, social isolation, and fear of physical activity or failure. Psychological support in APC aims to maintain emotional well-being, promote positive engagement, and restore personal and social equilibrium.

### **Primary Goals of Psychological Support:**

- 1. Motivational support:** Facilitating recognition of the importance of physical activity, establishing personal goals, and highlighting achievable positive outcomes through consultations, positive reinforcement, and self-monitoring diaries.
- 2. Creating a supportive psychological environment:** Establishing trust and emotional safety during sessions, ensuring acceptance and comfort, regardless of physical limitations. Use of games, music, and team-based activities helps reduce tension and increases engagement.
- 3. Enhancing confidence and self-acceptance:** Targeted exercises emphasizing coordination, balance, and measurable achievement allow participants to experience success, reinforcing body control, self-esteem, and belief in personal capabilities.
- 4. Psychocorrection and relaxation methods:** Techniques such as relaxation exercises, breathing exercises, autogenic training, and visualization help reduce anxiety, improve sleep quality, enhance concentration, and increase emotional stability.
- 5. Group support and communication skill development:** Participation in collective sessions fosters interpersonal relationships, empathy, mutual assistance, and group belonging, enhancing social integration and reducing isolation.
- 6. Continuous psychological monitoring:** Specialists systematically assess emotional state, motivation, and readiness for physical activity at each stage of the program, adjusting the protocol to prevent fatigue, frustration, or loss of engagement.

### **Role of Specialists in Providing Psychological Support in APC**

Psychological support in Adaptive Physical Culture (APC) is implemented through close collaboration among the APC instructor, medical professionals, and psychologists:





1. **APC Instructor:** Creates a positive emotional environment, monitors participants' behavior and mood, and applies verbal encouragement and support techniques.
2. **Psychologist:** Conducts assessments of emotional state, facilitates the development of self-regulation and adaptive skills, and provides guidance on motivation and self-esteem.
3. **Medical Professional:** Monitors physiological responses to exercise, helping to prevent psychophysiological overload.

### **Significance of Psychological Support in APC**

Psychological support is fundamental to the successful adaptation of individuals with disabilities. It assists in overcoming internal barriers, activating personal potential, and developing sustainable motivation for physical activity. Through an integrated approach combining physical and psychological rehabilitation, individuals not only improve health but also gain confidence, emotional balance, and readiness for full social participation.

### **Appendix: Methodological Approaches for Psychological Support in APC**

#### **1. Support for Individuals after Injuries or Surgery**

**Goal:** Reduce anxiety, enhance self-confidence, and foster motivation for motor recovery.

#### **Methods:**

1. Positive reinforcement: verbal encouragement (Well done!, Progress is evident, You did better than yesterday).
2. Gradual demonstration of success: record small improvements (range of motion, repetitions) and discuss progress with participants.
3. Progressive exercises: increasing difficulty to reflect tangible improvement.
4. Psycho-relaxation elements: breathing exercises (inhale through the nose, slow exhale through the mouth) and visualization.

**Recommendations:** Avoid negatively loaded terms (don't, dangerous), maintain calm, confident communication, and emphasize abilities rather than limitations.

#### **2. Support for Individuals with Visual Impairments**

**Goal:** Reduce anxiety, develop spatial orientation confidence, and promote body awareness.



**Methods:**

1. Verbal guidance: detailed explanation of movements (Step forward, feel the floor under your feet).
2. Tactile cues: light touches or auditory signals (bells, music) for spatial orientation.
3. Musical-rhythmic exercises: enhance rhythm, relaxation, and emotional regulation.
4. Breathing and balance exercises: increase confidence and reduce fear of falling.

**Recommendations:** Ensure a safe, predictable environment; maintain calm communication; praise independence and initiative.

**3. Support for Individuals with Musculoskeletal Disorders**

**Goal:** Enhance movement confidence, foster positive attitudes toward physical activity, and prevent feelings of helplessness.

**Methods:**

1. Game-based motivation: integrating exercises into playful contexts (Reach the object, Pass the ball to a partner).
2. Group support: pair or team activities to develop social interaction and cooperation.
3. Stepwise achievement: breaking complex tasks into manageable steps with visible results.
4. Breathing and coordination exercises: relieve tension and develop body control.

**Recommendations:** Avoid sudden or difficult movements; encourage independence; acknowledge every achievement.

**4. Support for Individuals with Chronic Diseases (Cardiovascular, Respiratory, etc.)**

**Goal:** Maintain emotional stability, reduce fear of exertion, and enhance self-efficacy.

**Methods:**

1. Autogenic training: fostering self-regulation (I am calm, my breathing is even, my muscles are relaxed).
2. Visualization: imagining positive scenarios (nature, movement, success).
3. pre-and post-session discussion: review feelings, emotional responses, and progress.

4. Soft musical accompaniment to reduce anxiety. **Recommendations:** Follow a “from easy to complex” principle; monitor breathing and heart rate; maintain a positive, reassuring environment.



## 5. Support in Group Sessions

**Goal:** Develop communication skills, foster group belonging, and prevent social isolation.

### **Methods:**

1. Collective exercises with interaction (relays, team games, pair tasks).
2. Group reflection on session outcomes: sharing experiences and supporting peers.
3. Peer support approach: experienced participants assist newcomers.
4. Shared goals: foster a sense of responsibility for group success.

**Recommendations:** Avoid competitive emphasis; encourage cooperation; periodically conduct reflection circles (“What went well?”, “What helped us not give up?”).

### **Summary**

Psychological support methods in APC aim to maintain emotional balance and develop personal qualities such as confidence, resilience, and motivation for active living. Their application enhances the effectiveness, humaneness, and outcomes of physical rehabilitation, reflecting the core principles of modern Adaptive Physical Culture.

### **Conclusion**

Restoration of motor functions in adaptive physical culture is a complex, multi-stage, and individually oriented process aimed at recovering, compensating, and developing lost or impaired motor abilities. The use of scientifically grounded methods and means of physical rehabilitation contributes to the activation of the body’s compensatory mechanisms, the development of neuroplasticity, and the formation of new motor skills.

A comprehensive approach, including systematic physical exercises, sensory stimulation, psychological support, and social adaptation, significantly enhances the effectiveness of the rehabilitation process. The adaptive physical culture specialist plays a key role in ensuring safety, motivation, and individualization of activities.

Thus, adaptive physical culture serves not only as a means of physical rehabilitation but also as an important factor in restoring the individual, improving self-esteem, and enabling a return to an active and fulfilling life in society.





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