

# A DIDACTIC MODEL FOR THE DEVELOPMENT OF MOTOR ABILITIES WITHIN THE MILITARY PHYSICAL TRAINING SESSIONS

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## **ABSTRACT**

*The military physical education, viewed as main yardstick in the entire process of acquiring a set of desired physical and mental qualities, is an incontestable contributor to the chiseling of military students' complete professional profile. The more developed the motor qualities, the better the body's big physiological functions, particularly respiration and blood circulation, will enhance their potential, and the entire person can acquire a wider range of motor and psychological basic coping skills and abilities to be applied in military environments.*

**KEYWORDS:** volume, intensity, speed, force, stamina

## **1. Introduction**

The importance of physical education, hence of the developing of motor abilities within the general curriculum of military students is primarily revealed by the mere fact that it represents practically the only subject directly aimed at shaping up the entire person, body and spirit, thus achieving good performance levels throughout the entire military education cycle.

The intensive intellectual effort that comes with the schedule of academic training of military students must reasonably be put in balance with the necessity for stress-releasing and energy-unleashing, correctly performed physical exercise (Stănciulescu, 2016a).

In competitions, military students strive hard to achieve goals, and sports are known to build stamina and endurance. Beyond the very physical and personal

advantages, they also enhance a number of positive desired character traits, such as a sense of assumed discipline through abiding by the rules of the game, and also courage, team spirit, friendship and peer support, mutual help and a bundle of affirmative and outgoing attitudes.

When considering the concrete levels at which sport and physical exertion can be of vital importance to the development of military students, a first point can be made in discussing the improvement of motor abilities.

## **2. Ways to Develop Motor Abilities**

All the energy resources engaged in physical exercise will lead to a development of enhanced motor abilities. Both performer and instructor/s will give great care to the adequate dosage of necessary effort for the achievement of general and discrete goals.

To this purpose, a number of variables used to comprise the main characteristics of physical effort, such as volume, intensity and complexity are usually taken into consideration.

Referring to the effort done by the skeleton and muscular system which represents the physical effort of the entire body itself, we can assess the **volume** as the amount of mechanical work achieved within a certain time unit.

The **intensity** of action upon the body in the performance of various movement actions, with precise purposes, aiming at developing certain motor abilities, represents the intensity of effort. It can be expressed in percent figures and represents a certain fraction of the body's capacity to accomplish motoric actions.

**Complexity**, which is the third characteristic of effort, refers to the way in which all components of a motoric action are associated.

The achieving of desired goals depends to a large extent on the way in which these elements are engaged (Stănciulescu, 2016b).

### **3. The Didactic Model within the Stage of Military Physical Education**

#### **3.1. A Correct and Harmonious Physical Development**

The eventual outcome of a body's correct and harmonious physical development, expressed in a quantified manner through morphological (somatic) features measured in comparison to values of reference, is an overall cumulative result of hereditary factors and elements of the natural and social environment. The influence of physical exercise on an individual are focused in three main directions:

##### **A. Predominant emphasis on the enhancement of muscular groups**

With approximately 40 – 50% of the total body weight, muscles play a very

important role in the vital functions. The human body has approximately 650 muscles. They have the ability to contract and relax, controlling posture and movements of the entire body, as well as of many of the internal organs.

##### **B. Achieving a correct posture and reflex of a normal bearing of the body**

The human body reveals harmony in the development of its various segments and tissues, as well as in the movements it makes. Our movements ought to be precise and well coordinated in response to external stimuli and to internal necessities. In this context, the specialists' preoccupation in finding ways to achieve an esthetic posture, especially a correct position of the spine is of great importance. The gymnastics exercises included in the military physical education are meant to help students in correcting posture and adopting and maintaining a straight upright position.

##### **C. Enhancing basic motor abilities**

Currently, in the process of military students' physical training, the development of motor abilities continues to represent merely a secondary priority for many instructors. Although in sports, there is focus on forming and consolidating some basic motor abilities or skills required by specific sports; unfortunately, the achieving of such skills is very often hampered by the very low level of basic motor abilities. Even more surprising is that although for some years there has been introduced a clear and precise system of assessment for the military students' physical training, based on which also instructors and teachers' work is being evaluated, their preoccupations are still lingering in efforts to cultivate and consolidate motor skills (Mitra & Mogoș, 1977)

### **3.2. Enhancing and Maintaining a Good State of Health**

In promoting a sense of respect for one's own, as well as for other people's health, the field of physical education and sports comprises various forms of true education for health. Humans are primarily biological beings, whose structural and functional components can be influenced through physical education and sports. The optimization of the biological potential represents a starting point for a long line of positive enhancers and influencers over a human organism.

Research has shown that physical exercise practiced over a long time improves the individual's physical and mental health, with a most positive outcome on learning processes, and other mental and psychological abilities, also alleviating a lot of possible physical and psychological health hazards inherent to a modern lifestyle.

It is well-known that a lack of physical exercise leads to excess weight and the installment of chronic coronary or metabolic diseases that worsen the quality and length of life, placing unnecessary burdens on the economy and budget.

Under these circumstances, the field of physical education and sports must assume a more audacious role as promoter of healthy habits and lifestyle, resulting in enhanced indicators of people's overall health and well-being.

### **3.3. Development of Motor Capacity**

The motor abilities are a body's inherent qualities that enable a person to perform various motoric actions as part of daily life or sports performing. Within the teaching process there is a constant preoccupation to finding most efficient methods and means to ensure the acquisition and improvement of these abilities.

Motor abilities are partly inborn, their initial manifestations depend on the inherited genetic qualities. Their subsequent development, and the forming of motor

skills come with the advance of age and maturity, in direct relation with the activities performed, the conditions of living and the geographical and climate environment that the individual has been part of in all this time. Much of these influences happen during the academy years, where this development can be continued and improved.

The four basic motor abilities are **speed, force, stamina and agility.**

**Speed** is a person's capacity to perform motions in short time and high frequency. Speed is a very important motor ability which is more or less present in quasi all motor actions, especially in the field of sports.

One individual's capacity to achieve speed depends to a large extent on his/her inherited potential. However, it can be relatively enhanced from very early on. Most attention is granted to the development of this ability around the age of 12, which is considered to be the ideal moment for most important qualitative progress in this respect (Lixandru, 1974).

For best efficiency in acquiring this ability, such exercises aimed at achieving speed are recommended to be practiced at the beginning of a training session, right after the warming-up phase, when the students are best prepared to make such intense physical efforts. In these conditions it is possible to apply a prolonged maximum-intensity effort. The instructor has to be aware of the fact that too many repetitions of short time efforts (involving speed) may cause early exhaustion and thus compromise the rest of the training. Therefore, such exercises can be continued only in coordination with a concern for stamina or resistance, in form of practice on homogenous small groups, with appropriate intervals for resting (Stănciulescu, 2016b).

**Force** is the neuro-muscular system's capacity to defeat an opposing resistance by means of muscular contractions. It is one motoric ability very much required in any

physical activity. It is the foundation for the simplest skills, and its importance increases in relation with the purpose of each development level of basic motor skills or of specific skills characteristic to certain sport types.

The quality of force can increase quickly, but unfortunately a lack of continuous preoccupation for its cultivation may lead to a visible decrease in parameters. Developing an individual's physical force can start in early childhood if there is enough care for the gradual increase of difficulty. Military students are recommended to practice climbing and traction exercises to overcome their own weight, by using gradually sized objects, as well as practice in pairs.

The dosage of force exercises will be done by the instructor according to the students' age and level of expertise. Before starting these exercises, the instructor must ensure a proper analytical warming up of articulations and main muscular groups engaged in the exercises.

The manifestation forms of force are the general, the specific, the absolute, the explosive force, the force in conjunction with stamina and the dynamic force. Previously to exercising, the locomotor system has to be prepared. Force exercises will be alternated with exercises of versatility and agility. For the development of force, we must select only those exercises that the students can perform correctly. The selection of muscular groups engaged in the exercises should be in accordance with the purpose of the body's general development. Depending on the students' age and level of experience, there must be a rational distribution of workload and progression of difficulty (Stănciulescu, 2016b).

**Stamina** is the body's capacity to perform a certain activity over a longer period of time and with constant levels of efficiency. Stamina is a motor ability that is easy to improve as a result of continuous and systematic performance of specific

training exercises, and can be maintained at the same level over a longer period of time.

Stamina is therefore an improvable motor ability that can survive for a longer time. In order to do this, it must have continuity. This is a rule of utmost importance, hence requiring a few ground rules to observe: a semester or annual planning of actions that contribute to the enhancement of stamina; a continuous increase of time and distance and an ongoing assessment of progress. Running is recommended to be long time and through rugged terrain.

In a physical training session, whenever there are no set up goals of training and development of motor abilities, we can still act on these through the way in which we are adjusting the volume, intensity and complexity of effort, and by emphasizing certain dominant motor skills that are specific to the followed motor ability.

The main methodical procedures to increase stamina are the repetition of efforts with uniform intensity, the repetition of efforts with changes in intensity and the variable efforts. These specific methods and procedures for the building up of stamina are tightly connected to three extremely important components of efforts, the duration and intensity of effort and the necessary recovery of the organism. Like in procedures used for the development of the other motor abilities, added to these are the peculiarities of sports disciplines and even the criterion of distance between evaluations (Lixandru, 1974)

**Agility** is the body's capacity to touch points and execute movements that are correct, fast and appropriate to the given situation. Agility is a motor ability with a large area of application in both the sports as well as in the daily routine activities.

Although not an inborn quality, agility is improvable if acted upon selectively, continually and as often as possible. Agility is a sum of skills, a complex motor ability that interferes with all other abilities. It has its root in a good

ability of coordination, which is a vital process led by the central nervous system.

Being a complex quality and a component of all exercises for the development of motor skills or technical and tactical procedures, agility has no particular teaching methods or procedures or any exercises attached, like the other abilities. Any procedure used to practice can become a system of acting to the purpose of honing an individual's agility. Key to it is the learning of as many motor actions as possible. The nurturing condition to obtain agility is complexity. Actions do not have to be drilled until they become automatic. The training of agility can happen in any moment of the training session.

#### 4. Conclusions

The level of the development of basic motor abilities represents an essential condition for the consolidation and improvement of basic and military relevant

applicative motor abilities and skills and has particular contributions to ensuring a good state of health. Military physical education and sports, if well designed and applied, can also exert positive influences over other facets of human personality, such as

- Cognitive: the students will acquire knowledge on physiology, anatomy and hygiene of sports;
- Moral: sports can encourage the appropriation of desirable skills and attitudes to be applied in sports competitions, as well as to be transferred over into daily life circumstances;
- Technical and professional: it produces an increase of motor abilities necessary to the military of various branches and specialties, translated into an enhancement of fighting qualities and skills with military application.

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