

ABSTRACT

OPTIMIZING THE SPECIAL FORCES FIGHTERS' TRAINING WITH MEANS TAKEN FROM PERFORMANCE PHYSICAL TRAINING AND SPORT

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The active engagement in the process to provide security by promoting democracy, the fight against terrorism and counteracting the proliferation of the weapons of mass destruction is a must for Romania's security policy.

Once Romania joined the European Union, its internal frontiers have been abolished, the consequence of this fact being the free circulation of people, goods and capitals. Starting February 25th, 2007, Romania has become part of a whole (Andreescu A., Radu N., 2008), and the issues related to illegal migration, drug trafficking, organized crime are matters of analysis within the Council of Justice and Home Affairs from Brussels.

This paper is not, from several perspectives, a pioneering work, yet it has the advantage of a pertinent argumentation based on the thoroughness of the management logics, but we intend for this paper to join the other scientific approaches that have dealt so far with aspects concerning a more efficient specific training in the special intervention units, and not only. Starting from the principle that there is always at least one better solution than the other, capable to better achieve an established objective, the theory of increased efficiency has also been implemented in this field of activity, with the aim of obtaining maximum efficiency with minimum effort. Analyzing the experts' opinions, we may consider that in the field of public order and national security, increased efficiency means obtaining the most favorable behavior between the efforts made in the training and the results obtained during the missions. Actually, along with the development of the criminal phenomenon taking up violent forms, the management of all activities in countering such phenomena is permanently referring to the term "efficient". This term is naturally related to the specific actions taken in order to achieve success in the

missions, and for that, it is compulsory to approach, harmonize and improve, in an optimum balance of all means of training, which may ensure a high level of motion and abilities, skills, focused on solving the encountered situations, bearing in mind also the individual and group particularities of the combatants.

Without a thorough knowledge of the typology and degree of requirements specific for such professions, of the necessary human qualities for real missions, it is not possible to plan, organize and carry out an efficient activity. Irrespective of the progress made in the fields of technology, equipment and armament, the experts believe that the individual is the mission and the mission is the individual, compulsorily present in the dispute, in both camps and sides, with all his physical, psychological, moral and will qualities and flaws.

In order to render more efficient the activities that may lead to an increased human potential, under the coordination of the National University for Physical Education and Sports, we will attempt to carry out this paper, its central theme being related to projecting and evaluating a training program that is based on means adapted from the field of physical education and sports training.

Through our experimental approach, we have achieved an extrapolation of the researches made in the field of formative requirements imposed by the specificity and the constraints of the personnel dedicated to special missions, as the means borrowed from the two fields of activity may improve the educational contents to higher values in the professional and social development.

The aim of this research is to point out the concepts, the systems, and the particularities in training of the Special Forces' fighters, both at the international and national levels, but also the possibilities to optimize the training process. The applicability scope of this research is given by the capitalization and the increased efficiency of the training activity, by the use of means adapted from the sports training, from various disciplines. The novelty character of the theme is in the increased efficiency and the optimization of the professional behavior of the personnel dedicated to special missions by the use, during the training and recovery sessions, of some contents taken from the physical education and sports training. In our opinion, the increased efficiency of the personnel may not be achieved without applying training methods that have been consecrated and validated by theory and practice in the field, and what has been left in our responsibility was to adjust the specific contents to the physical activities and to the formative educational requirements, as part of the training process of the special structures.

The fact that I have been working and I am still working in this field of activity has allowed me access to the subjects involved in the research and has made easier the analysis and the data interpretation.

Regarding the elementary aspects of theory and methodology, we have succeeded to collect data from several specialty publications and works that refer to this field and we believe that we have originally connected the aspects related to specific training of the anti-terror fighters to those from the field of the physical education and sports training which, adjusted to the specific requirements, have positive effects on the increased efficiency of training and achieving the maximum potential and proficiency, which are so necessary in the special missions.

Knowing the human potential and the conditions provided by the institution where I was educated and shaped, and also having been extremely close to the demands and requirements which are entailed by the training and the tasks of a special forces group, I have envisaged the theory part bearing in mind the fact that applying in practice some new means that would support the psychological and motion activity within the training and recovery sessions, may have as a result an increased efficiency of the shaping and the automation of the resolute behaviors, but also an improvement of the social life.

From the three basic hypotheses I have taken an adjacent hypothesis which points out the effect entailed by the applicative intervention.

Through the adjacent hypothesis I have validated the idea according to which *introducing in the training of the experiment group of special forces fighters, for 6 months, an extra program, may lead to the improvements of the body weight indicator, in comparison with the one obtained by the members of the control group.*

The carrying out of the research has been structured in six stages/phases in which the specific activities were achieved.

Phase I, carried out from June 1st to June 15th, 2014, was meant for the documentation based on the study of the bibliography material and the web information sources, but also for drafting the design of the research.

Phase II, carried out from June 15th to June 30th, 2014, and was meant for the initial evaluation of the subjects from the perspective of their motion training level and their level of adjustment to effort.

Phase III, carried out from July 1st to July 15th, 2014, and was meant for the drafting of the applicative intervention.

Phase IV, carried out from July 15th 2014 to January 15th 2015, and was meant for the implementation of the applicative intervention.

Phase V, carried out from January 15th to January 30th, 2015, and was meant for the final evaluation of the subjects from the perspective of their physical training and their level of adjustment to effort.

Phase VI, carried out from February 1st to February 28th, 2015, and was meant for the centralization, the processing and the analysis of the data obtained.

The experimental research was carried out on a number of **40** subjects, aged from 34 to 43, working in the Protection and Guard Service for several years; the subjects have been randomly grouped in two working groups: the control group which underwent the standard physical training program, according to the old, traditional methodology, and the experiment group, to which, besides the standard program, other means of physical training and sports education have been added.

The study *was carried out for six months*. The place of the research was in the sports facilities from and outside Bucharest.

The assessment of the anthropometric development was achieved through the following measurements: height, weight, and based on these, calculation of the body mass index.

The assessment of the general physical training with the fundamental objective of the balanced development of the motion qualities has been evaluated through the following trials: push-ups, crunches, chin-ups and endurance running. The quantification of the trails from the perspective of the force and endurance has been made in accordance with the set of points established and applied in the annual testing evaluation of the Special Forces fighters (unclassified).

The assessment of the endurance capacity and of the adjustment capacity of the body to effort was achieved by means of Ruffier test, endurance running on 2.400 m and rowing ergo-meter for 2.000 m.

The applicative intervention, which aimed at the subjects' physical training from the control group, was achieved according to the requirements in the Regulation on military physical training on the activity of training for military personnel. In the experiment group, the Special Forces fighters' physical training included all the aspects necessary for achieving a good physical condition. The training of the Special Forces fighters aimed at maximizing the performance in achieving the missions. The principle according to which we must train as we fight has also been valid for the physical education training.

The callisthenic exercises were a traditional category, integral part of the SEAL training program, as they needed minimum amount of equipment and were carried out in any location. Since these exercises, according to the way they are executed, may contribute in the development of flexibility, of muscle force and muscle endurance, they have been majorly used as means of training.

The applicative value of this paper is given by the novelty element from the perspective of the optimization of the training of an important structure belonging to the national System of public order and national

security. The novelty element is also given by the system of appreciation and assessment based on the specific trials and norms, but also by introducing the ergo-meter as training and assessment tool. This component is the one related to the initial and continuous shaping, a constant element which is to be found during the entire professional development and path of the personnel, irrespective of their rank, position, gender or age.

The novelty element is also provided by the assessment strategy in the comparative development by two non-parameter tests: Mann-Whitney U and Wilcoxon.

The validity of the results in this research might lead to reconsidering the current training system of the personnel dedicated to special missions, and in this context, it submits to the public attention a model of training and recovery rationalized by various means and methods, borrowed especially from the specific of some foreign elite troops, but also from the training program of certain sports disciplines, meant to achieve high performance, adjusted obviously to our own human and material circumstances.

The analysis of the results, following the carrying out of the experiment we initiated, points out certain aspects related to the evolution and development of the two groups.

With respect to ***age and somatic development*** it has come out that:

- age – according to the non-parameter test Mann-Whitney U, between the two groups, the final results of the testing have not pointed out statistically significant differences;

- the results of the body mass index and also the qualifications obtained by the two groups show an advantage reported in favor of the experiment group, which confirms the adjacent hypothesis that: “*the general physical training program achieved for six months with a frequency of 2 times per week in the experiment group, leads to an improvement of the value of the body mass index, in comparison with the control group*”.

With regards to the ***general physical training*** it has come out that:

- in all three tests, one may reject the null hypothesis and may accept the research hypothesis according to which the average increase of the number of repetitions executed per 1 minute is significant.

- the comparative statistical results of the two groups, for the tests that assess the general physical training allow us to state that the hypothesis according to which *the training of the Special Forces fighters for six months, by use of callisthenic exercises determines a better progress in the level of the general physical training of the experiment group, in comparison with the control group*, is confirmed.

Regarding the ***endurance capacity*** it has come out that:

- in the *2.400 m running trial*, according to the non-parameter test Mann-Whitney U, between the two groups, in the final tests, there are statistically significant differences, an aspect which is also pointed out by the

effect size index, which is 0.33, an index which shows that there is an average towards high difference between the two groups;

- the points assigned for the results in the 2.400 m running trial show that in the experiment group 65% have a score of 9.6-10, and in the control group only 40%. Thus, one may reject the hypothesis of null, and accept the hypothesis according to which the difference between the two groups in this trial is significant, and the *training of the Special Forces fighters for six months, by use of the ergo-meter as an element of extra training, generates the fact that the experiment groups has a higher improvement of the endurance motion capacity in the 2.400 m running trials, as compared to the control group.*

- the average value of time in the *effort trial – ergo meter for 2.000 m*, according to the non-parameter test Mann-Whitney U, between the two groups, in the final testing, there are statistically significant differences, and the size effect index is 0.33, which shows that there is an average towards high difference between the two groups. One may reject the null hypothesis and confirm the hypothesis according to which *training of the Special Forces fighters made in the experiment group with means taken from the sports training, has an increased efficiency in improving the endurance capacity, assessed by the 2.000 m ergo meter trial, in comparison with the control group.*

With respect to the *capacity of adjustment of the human body to effort* it has come out that:

- the average value of the Ruffier index has decreased from the initial testing to the final testing, for the experiment group, by 1.26 and for the control group by 0.70. The non-parameter test Wilcoxon shows that the size effect index is 0.62 in the experiment group and 0.59 in the control group, which indicates a high towards very high difference between the two tests. One may reject the null hypothesis, and accept the research hypothesis according to which the average decrease of the Ruffier index is significant;

- the qualifications granted to the Ruffier indexes determined in the two groups show that in the experiment group the qualification “Good” is 40% and “Average” is 60%, while in the control group the qualification “Good” is only 15%, and “Average” is 85%. These results confirm the second adjacent hypothesis according to which *the training of the Special Forces fighters for 6 months generates an improvement of the capacity of adjustment to effort, assessed through the Ruffier tests, higher in the case of the experiment group, in comparison with the control group.*

- in the ***Ruffier test, for 2.400 m endurance running test and 2.000 m ergo meter test***, applying the non-parameter Mann-Whitney U and Wilcoxon tests points out the fact that, between the two groups, in the final tests, there are statistically significant differences, and the size effect index is 0.33, which shows there is an average towards high difference between the two groups;

- the use of means taken from physical education and training contributes in optimizing the training of the Special Forces fighters, which is an essential element in their activity.

The conclusions of the research may be synthetically presented as follows:

The violent phenomenon, interpreted by the experts, may take up a wide variety of functional, symbolic or systemic terms. Various forms of violence occur in various places and at various times in history, and for this reason the concept seems to undergo a permanent “modernization and upgrading” process, taking up various, increasingly complex forms.

Personnel selection, in order to occupy positions in various places which are seen as being high-risk positions, is much more complex than in the case of other assignments, as those particular positions are not only defined by inner features needed for that job, but also by the social relationships that have a special character and which must be developed, considering also the unconditional subordination that an employee must obey, and so on and so forth.

The actions carried out by various terrorist groups have a general purpose of dismantling and destabilizing the society, of creating certain centers of influence of a criminal nature, bearing pathological factors with a high propagation potential. The objectives of terrorism may be included in a wide array ranging from aiming at state bodies, such as Parliaments, governments, unions, courts, law enforcement and national security structures, major facilities of the national economy (banks, industrial trusts, companies).

The national security is a whole, which cannot be divided, and providing the national security must be ensured through permanent international cooperation. In this respect, Romania has made great efforts in maintaining peace and security, in countering asymmetric risks and threats, unconventional risks that the humanity has to cope with, taking part in the management of the global challenges which may lead to achieving the national and European fundamental values.

In order to establish the necessary measures to counteract the terrorist actions, one must underline the need to establish certain legal limits, which would not allow any country to become aggressor or oppressor. In this context, there is also the need for the thorough analysis of the anti/counter terrorist actions, which may lead to the identification and the quantification of the potential gap between the theoretical target of the measures and its real effects.

The achievement of the level of operational efficiency in the training of the Special Forces fighters must have as final result the providing of a homogenous body of personnel, characterized by intelligence, professional dedication, special physical and psychological abilities, spirit of initiative,

ability to operate in stress conditions, both individually and as part of a groups, which also entails the identification of new training possibilities.

The military physical training is characterized by higher volume, intensity and complexity, to which are added the special circumstances and conditions of operation. These programs aim at motion qualities (such as speed, proficiency, strength and endurance), basic motion skills and utilitarian-applicative skills (such as, walking, running, grasping, jumping, climbing, weight lifting and carrying), motion skills taken from gymnastics, self defense, skiing, swimming, sports games.

The profile of the anti-terror fighter includes the following elements: psychological resistance and stability, presence of spirit and combatant character, and all these must be supported by high level physical training.

Based on the information collected from the specialty literature and from the personal experience, there comes the need to achieve further researches on the training of the Special Forces in our country, in the following directions:

- Knowledge of the working techniques and means used in the training of the Special Forces fighters;
- Knowledge of the training level of the Special Forces fighters;
- Knowledge of the optimization of the Special Forces fighters training by means of physical education and sports training.

Conceived as a circuit with an accent on the specific activities of the Special Forces fighters, associated to strength and flexibility exercises, the physical training programs will generate higher results in the intended direction. In this framework, the physical training programs are extremely versatile, and yet complete from the perspective of the comprehensive nature of the physical training.

In these circumstances, we believe that the change in the approach of the physical training for the Special Forces fighters points out the presence of an aspect which must be solved. In this respect, we believe it is necessary to change the physical training of the Special Forces fighters, and we also believe that the most relevant assessment form may be the one of a standardized circuit.