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A STUDY WITH REGARD OF METHODOLOGY TO LEARNING PARAGLIDING IN PHYSICAL EDUCATION AND MOUNTAIN SPORTS FACULTY

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Abstract: *The present study aimed to determine and compare individual behaves with regard to learning paragliding by different kind of students (age, gender, social environment) in faculty.*
Paragliding is perceived as a fastest growing activity and tuned out to be an immense opportunity for all students.
Because there is little documentation of the factors that leads to the success of sustainable paragliding our faculty offers students many possibilities to study more than they could do through individual preparation.
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Keywords: *Flying, students, behave, classes, knowledge.*

1. Introduction

The man always watched the bird flight and wished to be high in the air as they were. (Policec A., Stinghe I.D., 1990)

Paragliding flight is same as that of birds, man and wing ensemble become a single being and the flight is no longer a fight with the forces of nature, but game with them, where the air is used for travel through it. Paragliding is one of the most spectacular flying sports and it can be performed every season. Flight is a pleasure which implies the acknowledgement basic rules which reduce the risks to minimum. A paraglide is a flexible wing, inflatable, which allows a person to float on the air flow after launch just like a bird.

Using the most advanced materials, it combines the safety of a parachute with the design of a modern wing and comes to a flying aircraft easy to launch, to run and to land. Paragliding is a new branch of the air sports and it offers the easiest and probably the most attractive method for anyone to reach the ancient dream of flying via personal wings. The basic rules are easy to learn. The gear is simple, easy and quite cheap comparing it to any other flying means. Soliciting more physical efforts than, for instance, the flight by plane, paragliding is at the same time less soliciting than many other sports, for

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example the flight by deltaplane (hang glider). (Policec A., Stinghe I.D., 1990)

In fact, both have a takeoff via self forcing from the peak of a hill or of a mountain, but it does not have any connection with their capacity to hold themselves floating in the air.

The paraglide performer launches himself getting down a hill steep running, in opposition to the steep flow until material inflates over his head and it raises him above the ground.

Just as deltaplane performance, paragliding is non power flight, without implying any complication induced by the existence of an engine.

As well as deltaplane performance, paragliding offers more, in the afternoon "active" air, an experienced paraglide performer and with a good training can throw himself into the open space reaching much higher than the starting point and he can float hours on end. (Policec A., Stinghe I.D., 1990)

One of the most important point of attraction in paragliding is its simplicity, starting with the equipment and ending with flying technique.

The "wing" of the paraglide is made of a nylon fabric or dacron, weighing up to 15 kg, with a series of inflated parallel cells, to which a series of thin threads are set in order to sustain the performer; they are set to its harness. (Dragomir C, Kabos Ş., 1999)

The performer only needs a light helmet and some other protection mechanisms to take off. Of course, few things are that easy as they seem at first sight, and building a paraglide is a very subtle and complex activity. The aerodynamic subtlety of a paraglide, even the safety of the performer depends on each aspect of the plan, construction and maintenance. A slight planning mistake or building mistake or an incorrect fixing made maybe in order to transform a secure paraglide into an extremely dangerous object. The performer must, because of this, be conscious of the intricate nature of paraglide planning and of the extreme importance of correct maintenance. As well, while the first levels of flying by paraglide are easy to reach, the flight when going up in conditions of safety asks much more possession over the advanced flight techniques and aerial navigation and meteorology knowledge, at the same time with paraglide operation limit acknowledgement in taking off conditions. But, with all these precautions, the paraglide is, as a final product, a very simple and elegant equipment for the performer in order to reach such a high purpose as self means flight.

That is why paragliding remains, for now, the easiest way to reach this purpose, of a "flying man".

The reason for choosing this theme is due to fascination and satisfaction which are offered by the paraglide flight, although nowadays there are few studies on learning paraglide performing, being a sport in full development process.

The present paper renders aspects concerning teaching-learning paraglide flight (starter) for students, people with a very good physical and psychical condition.

2. Argument for theme choice

I chose this theme wanting to have a considerable contribution for the development of this field, knowing the fact that there are not enough references concerning this subject, and to improve the didactic process.

3. Purpose

The purpose of the research is to make an operational model, suitable for teaching-learning paraglide flight, description and acquisition of selective technical procedures, taking into consideration the subjects' features so the

process of training could be as effective as possible.

The research purpose generates the following **tasks:**

- analysis of specific theoretic-methodical content;
- analysis of equipment features used in paraglide flight;
- study and analysis of the training plan (yearly, seasonal, training);
- study the specific regulation of paraglide flight as competing activity;
- attending training and observing the studied group;
- registering and handling results, followed by data synthesis in chart form;
- developing and performing the training schedule for the student groups;
- collecting, handling and interpreting the research data.

4. Hypothesis

The hypothesis of the research starts from the point that the use of this program adapted to the students' skills can facilitate the learning of paraglide flight (starter level).

"The proper issue of a methodological content for the paraglide flight generates the effectiveness of the acquisition process of theoretical information and of basic technical procedures selected for the performance of this sport in minimal conditions."

5. Organising research

The research was performed carefully and under the guidance of a specialized teacher and of paraglide trainers, and the subjects of the pedagogical experiment were the students of Physical Education and Sport Faculty.

The check up of the experiment is made on account of the results in the assessment tests.

The experiment took place during October 2007-May 2008.

For the present paper I used 12 starter students. The subjects were divided in two groups:

- experienced group (of 12 students)
- control group (of 12 students – amateurs from different educational institutions). Both groups worked on Lempes hill in Sampetru village.

The subjects had the same physical training and knowledge over the flying notions. The number of trainings during one weekly cycle varied in point of period and syllabus.

The number of trainings was established in point of morph-functional features and they had as fundamental purpose the enforcement of subject performances and of physical abilities: force, handling and endurance. In the case of the experienced group two weekly trainings were performed, from 120 minutes to 240 minutes.

The experienced group trainings differed from those of control group through intensity and volume in general and specific physical training, in a bigger variety and a very correct use of handling and force drills included in the syllabus by using complex exercises.

During all the trainings the trainer registered pleasing somatic and functional development which does not come in contradiction with the paragliding flight.

During trainings the results grew consistently, more for the experienced group due to, first of all, various methods of general specific physical training on ground.

6. Research Methods

Analysis method and theory generalization of literature review data and documentary papers.

It is a compulsory activity of outmost importance because people admit social experience gathered in different fields of reality. (Feşteu D., 1999)

This is an individual personal activity which has to know the basics of the subject in discussion but also the new data, the recent ones and those in continuous movement which are offered by the monographs and periodicals. The researcher must master the usual techniques of documentation, to be the very certified "researcher" on his specialization.

So, I searched through references the necessary information, although low in number but presently, out of specialization sources coming from different authors who treated the issue in their papers.

Out of the information pile, I selected and made syntheses for those which represent the basis in research activity so as to make the study as close as possible to the existent conditions.

7. Observation and registration method

The used observation was systematic proper to scientific research. It is known that in observation we can find sense processes of this method but also logical ones. Hence, there are also situations in which other analyzers have a part, their participation being conditioned by the followed phenomena features. (Turcu I, 2007)

Observation is an active process involving interest, attention and purpose even if it has not formed a clear basis. Observation of motor acts and actions is achieved by methods and techniques for the intended purpose. Information obtained by observation and analytical in nature because they must correlate with information obtained by other methods fails to achieve an image as real as the time of flight or flight in general.

During this time I participated in team workouts at Wings Extreme - Brasov, following the themes set out in planning documents made by the coach to be present during the practical training of the team. I also watched several competitions with the participation of research subjects, seeking the progress and the degree of assimilation of techniques, the travelled distance and time-keeping in the air.

8. Survey and Questionnaire Method

Sociometric method is based on the questionnaire technique, the particular ways in which this questionnaire is different from "normal" are methodological questions concerning the content, method of administration and response processing module. Questionnaires have been developed to be applied to subjects. (Turcu I., 2007)

These questionnaires contain questions of aviation legislation, operating procedures, principles of flight, flight performance and flight planning, knowledge about the paraglide, human performance, meteorology, aero navigation. Following the results from these surveys we could see the importance of theoretical training, the physical and mental ones inside the faculty.

9. Statistical-mathematical method

This method is most important for processing the collected data. Statistics drawn from the study of basic principles, connections and correlations and significance of results obtained on samples. It also anticipates some of the parameters being used widely and study related quality of things and phenomena

that it covers every area. Mathematics leads to qualitative and quantitative study of them. (Feşteu D., 1999)

It is higher stage of superior abstraction which, by using the concepts of assumptions and rules of mathematical deduction, acquires precision in formulating conclusions and superior predictive ability.

10. Educational Experiment Method

Group teaching experiment used in training, planning and resources listed below:

a) Develop training plan,

b) The principal means used.

10.1. Issuing the Training Plan

Judicious planning of a program on a season is about guidelines for activity all year round just on a physiological concept. This planning period before the season is absolutely necessary and must include all the concepts and principles of training.

In planning the development plan document of micro cycle we have complied with a series of general requirements of which we mention consistency with the planning documents prepared by the Ministry of Education Youth and Sports Research and Romanian Aeronautical Federation, the particular age, gender and education, opportunities, concrete materials, and knowledge of the development trends of domestic and international flight.

10.2. Objectives

- Learning the theoretical concepts of meteorology, aerodynamics, law, navigation.
- Learning basic ground techniques (equipment, inflatable items, recovery of asymmetric lifting, folding and unfolding of the paraglide).
- Learning the flat flight to maintain direct connection.

10.3. Training

- Learning-paragliding primary objective to address a fundamental training volume and intensity increased.
- Making a special skill-specific handling of the paraglide.
- Creating a general and specific resistance.
- Improving employment scapular girdle, abdomen, upper and lower limbs and back.

10.4. Period Scaling

We tried a good planning cycle of training period. What provided basic training phase, lasted from 7:00, theoretical and 10 hours, practical training.

10.5. The Main Means and Methods of Preparation

Evidence - Professor and log book of the subject, include:

- training program
- the results obtained in training
- self-control chart (FC, the work mood, appetite, sleep).

10.6. **Training indicators**:

- timing;
- forms of training;
- medical-control;
- control test.

10.7. Percentage of training and content

- 25% theoretical - for the principle of conscious participation, films were watched with flight technique,

knowledge of law, meteorology, navigation, operational procedures, principles of flight, flight performance and flight planning, knowledge of the paraglide, human performance;
- 10% physical training – and we have used various means selected from gymnastics, traditional movements and exercises on the muscle groups: medicine ball exercises, weight lifters, elastic ropes. As method we used especially the circuit;
- 15% psychological training - aimed to getting used to working independently, developing moral and volitional qualities;
- 50% technical training - training for the flight, paraglide deployment on the ground, loosen the level ropes, first-grade inflatable exercises, taking off, flying initiation, landing.

Suggested Evaluation System

- Current evaluation (at the end of each meeting we shall verify the degree of assimilation of knowledge and skills training)
- Summative evaluation (at completion of training forms: theoretical and practical)
- Final evaluation - colloquium - (at the end of the course there will be: - a written test, multiple choice, with topics of: principles of flight, operational procedures, navigation, meteorology, human performance, flight performance and flight planning, knowledge of ultra light aircraft, law aviation and regulations
- A practical test with the following evidence to assess:
  - take off
  - accurate flight
  - landing.

11. Results

The results indicated that while individual fly (89.56%) is the top of all flying activities that males who wanted to fly for gliding and the most flying activities for females is initial flying (78.1%).

Ground-handling (75.5%) is the most frequently listed of all preparing activities that the students would like to do a wide range of all activities.

They were interest by meteorology (11.3%) and physics phenomena (13.2%).

12. Conclusions

As a result, it can be concluded that participants would like to act at activities of flying, in different manners: men want to fly single, but women want to fly with a supervisor.

Besides this, I could affirm that approximate 99% of students have many skills to practice this sport.

Finally, I consider that this program was great, more efficient than a classical one and participants have now good knowledge about paragliding.

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