

MINISTRY OF NATIONAL EDUCATION
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METHODS OF DESIGN AND APPLICATION OF
INDIVIDUALISED PROGRAMMES OF BODYBUILDING AND
FITNESS EXERCISES FOR SEDENTARY PERSONS

DOCTORAL DISSERTATION ABSTRACT

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Both worldwide and at national level we assist to a phenomenon in a continuous development and namely: practicing physical exercises at leisure sports level by a continuously growing number of persons, of both gender, of all age and social categories. People realize the fact that physical effort is a key element in keeping healthy status and due to the fact that the present conditions of work and life exclude sometimes completely this element, people are obliged to direct towards activities presuming physical effort, during their leisure, in different locations, some specially arranged for this purpose. The range is very varied including all forms of movement from different sports branches such as: gymnastics, athletics, swimming, dance sport, tennis, team sports, wrestling etc.

Among all these, the present work proposes to approach the problems of bodybuilding and fitness exercises practiced at level of leisure sports, in view of improving physical conditions, physical appearance, health state, important elements that contribute to the increase of life quality. We specify that the topic refers especially to work exercises and methods specific to the body building sport branch that may be used successfully by any person, either sedentary or not, for the purpose of improving physical condition (fitness level) and physical appearance.

The topic shows a **high degree of good opportunities** having in view the fact that at present, both at national and worldwide level, the bodybuilding and fitness exercises enjoy a high popularity among all categories of persons. The multitude of open gyms, from the most select endowed with up to date equipment, apparatus and facilities until the most modest endowed with a minimum needed to function, emphasize this. Bodybuilding and fitness gyms may be found both in large cities and sometimes in smaller and insignificant localities.

The amplitude of the phenomenon results also from the fact that during time, a strong and real industry have developed in this field, addressing especially to public at large and which is making huge profits from goods (materials, installations, apparatus, sports equipment, dietary supplements, etc) marketing.

Consequently, the offer is large because of the market demands, respectively the interest of people in connection with this form of physical activity is also large. More and more persons become aware of the fact that these exercises are on the one hand accessible and on the other efficient as concerns attaining certain objectives which belong to bodybuilding and improvement of physical condition.

In this context, the study of the methods of design and application of certain efficient exercises programmes represents an especially important aspect. The information resulted may be thus capitalised in many directions, both by specialist (instructors, trainers) as well as by the self educated sport practicing people, these last representing in fact the large majority of the sport practicing people.

The importance of the topic results first of all from the need to elaborate certain efficient work programmes, in view of obtaining the best results. The

importance is the higher the more the presented solutions have a large area of applicability and proved to be efficient. Thus, in the present work it is showed that under the conditions the programmes are structured accordingly, the body building and fitness exercises may be practiced successfully at the leisure sports level by: teenagers and young adults, adults, elderly persons, persons with different deficiencies, persons included in different recovery programmes, persons with different health problems, etc.

The reason of choosing the topic results from the above-showed and namely: the high degree of interest of the topic, the high degree of good opportunities of the topic, its large area of applicability expressed by numerous potential beneficiaries etc.

Thus, having as source of inspiration the high performance sport, we consider that at leisure sports level, in order to obtain the best results, the training programme must be individualised. This presumes an individualised programme of exercises, individualised dietary programme, etc. However, in order to achieve these, *reference factors* must be considered, depending on which individualised programmes of exercises may be designed (and then applied).

As concerns the present stage of knowledge resulted from the studied specialty literature, it has been found out that there is no work or study to describe in detail (with explanations and examples), a systematisation of certain reference factors depending on which individualised programmes of body building and fitness exercises at the leisure sports level may be elaborated.

Thus, the novelty element of the work is not represented by the factors as such, because they are logic and may be intuit, but by:

- *Systematizing these reference factors in an original structure, considered logic, simple, efficient and easy to use;*

- *The original method of use (with explanations and examples) of this set of factors, in designing and applying certain individualised programmes of exercises.*

The studied specialty literature, shows in detail information in connection with the elaboration of programmes of exercises, depending only on the objective and somatic type (factors of first importance otherwise), presuming that the person who is practicing has no medical problems, physical deficiencies, has access to a gym endowed with complete work equipment, has time and a daily programme which allows him/her sufficient training during the week, etc. If, may be for a high performance sportsman/sportswoman all these do not represent a problem, in case of many sport practicing people, these conditions are not always fulfilled in reality. *Hence, at the leisure sports level, the problem is to find the most efficient solutions to obtain the best results, under the given data, which are not exactly ideal.*

The present work proposes thus to meet the needs of those who are at the beginning of the road (instructors, trainers but also the self educated sport practicing people) without a rich experience in practice, in view of obtaining the best results and avoiding certain errors that may lead sometimes to regrettable situations (lack of results, accidents, etc)

The purpose of the research is to verify in practice, if the enunciated hypothesis is confirmed, if the established reference factors may be designed and applied to sedentary persons, respectively, programmes of bodybuilding and fitness exercises that lead to obtain the desired results. .

The dissertation is structured in three *parts*.

The first part includes theoretical substantiation, where problems such as: conceptual delimitations, peculiarities of bodybuilding and fitness exercises, accessibility and utility of bodybuilding and fitness exercises etc. are approached. In this part it is ***proposed a systematisation (synthesis) of reference factors*** in elaborating certain individualised programmes of exercises.

In the *second part* a preliminary research concerning design and application of certain individualised programmes of bodybuilding and fitness at the level of leisure sports, in case of sedentary persons is described, based on the proposed factors.

The third part includes a more ample final research followed by final conclusions, as concerns the design and application of certain individualised programmes of bodybuilding and fitness exercises, in case of sedentary persons, based on the described set of factors. A series of case where certain persons began to practice these exercises under supervision, in view of obtaining some results, are largely detailed. For each many details are also presented: established objectives, elaborated programmes of exercises, the method of work, the situations with problems occurred during training, the adjustments made upon the programmes of exercises and upon the method of work depending on the situations with problems, the results obtained and of course, the conclusions of the research.

It is very important to specify that the present work does not provide universally valid “recipes” to settle certain situations with problems or to attain certain objectives. **Each person is unique, he/she has his/her own characteristics and hence, he/she needs to a certain extent an individualised training programme, since the very beginning.** Only certain directions are suggested, guidelines in elaborating an efficient programme of work.

The present work has at its basis the idea of an individualised programme of exercises that must be structured based on certain very clear reference elements. It has been found out, from the studied specialty literature, that there is no systematisation of such elements, at the level of leisure sports. Consequently, the

following *reference factors* are proposed in view of elaborating individualised programmes of exercises:

1. *Objective*
2. *Health state*
3. *Somatic type*
4. *Individual peculiarities and the possible physical deficiencies*
5. *Physical conditions*
6. *Training period*
7. *Available material conditions (equipment of gym)*
8. *Frequency of training*

The research starts from the following **premises**:

1. The body building and fitness specific exercises are ***accessible*** because:
 - a) They are simple movement– hence everybody can learn them;
 - b) Difficulty may be easily and finely adjusted from a very small value to a very high one –so everybody can make them;
 - c) They are safe exercises, they do not present risks of accident– so everybody can practice them
2. The specific bodybuilding and fitness exercises are efficient exercises as concerns both the improvement of the general physical condition (at the level of physical fitness, by improving all its components), as well as bodybuilding (physical appearance change).

Research hypothesis:

Based on the described factors, individualised programmes of bodybuilding and fitness may be designed and applied to sedentary persons, which lead to the level of physical fitness (general physical conditions) and the change of physical appearance (body building).

The research has been carried out under the conditions where a series of persons (subjects) have requested guidance and specialty assistance (personal trainer) in view of obtaining results by practicing the exercises of bodybuilding and fitness.

Thus, after a preliminary anamnesis, each person benefited of:

- A programme of an individualised programme of exercises structured depending on **the described reference factors**;

-A series of general recommendations concerning structuring the proper dietary programme;

- A series of general recommendations concerning creating a proper relaxation programme.

The stages of the research have been the following:

1. Period of adjustment – where the subjects learn to execute correctly the exercises and they get used with the specific effort.

2. Initial testing –and registration of data.

3. Basic period –effective work in view of obtaining the desired results

4. Final testing – and registration of data.

5. Data analysis and interpreting.

6. Elaborating conclusions.

Research methods used:

I. Observation Method.

II. Conversation Method.

III. Anamnesis.

IV. Case Study.

V. Statistic Method.

Conclusions concerning research:

The obtained results confirm the hypothesis of the research. Thus, based on the described factors, individualised programmes of bodybuilding and fitness exercises may be designed and applied to sedentary persons that lead to the improvement of the fitness physical level (general physical condition) and to the change of physical appearance (body building).

The good results obtained by the subjects show that the programmes of exercises have been correctly designed and applied. Consequently the reference factors which stood at the basis if these programmes have been correctly systematised.

Both in the studied specialty literature which content laid at the basis of theoretical substantiating the work as well as by the research carried out, a series of conclusions with theoretical character may be worded:

1. Basic elements of a physical training and bodybuilding programme are:

- Training programme
- Dietary programme
- Relaxation programme
- Mental attitude (positive)

2. The best results as concerns attaining the objectives (improvement of physical condition, body building etc) are obtained under the conditions where:

a) – The training programme is individualised (selection of exercises, form of execution, dosing etc.);

b) –The dietary programme is individualised (the number of meals, their content, the number of calories etc.);

c) – The relaxation programme is adequate (sleeping programme especially during the night time, control of the stress level during daytime etc.);

d) – The mental attitude is adequate (positive thinking, winner mentality, etc.).

Based on the theoretical conclusions and of those resulted from the carried out research, we consider needed and opportune to word the following ***recommendations***:

1.Using the described set of factors in elaborating the programmes of bodybuilding and fitness exercises for the sedentary persons. Due to the fact that this is easy to understand and use, it may be used successfully both by bodybuilding and fitness instructors and trainers and by the self educated sport exercises practicing persons.

2. Using the described set of factors in elaborating the programmes of body building and fitness exercises for the active persons, not only in case of the sedentary persons. Both from the studied specialty literature, as well as from the practical-applicative research made, no aspects to suggest limiting of using these factors in case of sedentary persons only have been emphasised.

3. At the end of the work a series of general type methodical recommendations are made, as guidance concerning the elaboration of the programmes of exercises:

1. *For the development of muscular mass*
2. *For keeping and maintaining physical appearance*
3. *For diminishing the adipose tissue*