INTRODUCTION
In the scientific and educational-methodological literature up to now there is no uniform approach for the definition of coordination abilities. According to some authors (Hadjiiev, Andonov, Dobrev & Petrov (Хаджиев, Андонов, Добрев & Петров), 2011; Jelyazkov & Dashova (Желязков & Дашова), 2006) they are relatively specific automated flow management processes and variability of movement. For other (Bakulev (Бакулов), 2006; Lyah (Лях), 2010; Kleshtev (Клещев), 1997) presence of motor-coordination abilities results in fast, accurate, appropriate and effective solution motor tasks. Some researchers identify them with quality agility. They define agility as the ability of man to reconcile (coordinate) his movements and actions in time, space and effort. Coordination abilities in gymnastics as specialists’ (Hadjiiev (Хаджиев), et al., 2011; Nikolaeva (Николаева), 2006) include optimal combination of kinematic and dynamic parameters of gymnastic exercise, which is the basis of perfection and competitive results in the sport. That is why they are identified as necessary talent in the forecasting model of gymnastics. As the level thereof is high, so the ability to achieve high performance is higher. This determines the need for the selection of children with coordination in the groups for initial training in gymnastics. The aim of our study was to identify the components of coordination abilities that are crucial in the initial selection. Gymnastics is a sport in which the level of technical training is directly related to sport skills and the competition results. In the selection should be aimed toward establishing the level of these components of the coordination abilities which is genetically dependent. They will not change significantly under the influence of phenotypic factors, but they are important for gymnastics.

METHODS
Object of the study are specific coordination abilities of gymnastics and are subject to tests to determine their initial level. In the course of the work were the methods of analysis, comparative analysis and evaluation.

RESULTS AND DISCUSSION
Within the literature it’s been found that some authors divide the coordination abilities on three groups:
- First group - the ability to precisely control the spatial, temporal and dynamic motion parameters;
- The second group - the ability to maintain static and dynamic balance;
- A third group - the ability to perform motor operation without unnecessary muscle tension.

Coordination abilities included in the first group depend on the so-called sense of space, time and the effort applied. In the second group the coordination abilities are connected with maintaining a stable position in a pose and the other one with the coordination of muscle groups involved in the implementation of the engine operation. We believe that the components of this group developed in the course of training process and have mostly phenotypic character.

Abstract
Coordination skills in gymnastics by professionals include the optimal combination of kinematic and dynamic parameters of gymnastic exercise. This is the basis of perfection and competitive result in the sport. The aim of our study was to identify the components of coordination abilities that are crucial in the initial selection. Gymnastics is a sport in which the level of technical training is directly related to sport skills and the competition results. In the selection should be aimed toward establishing the level of these components of the coordination abilities which is genetically dependent. They will not change significantly under the influence of phenotypic factors, but they are important for gymnastics.

Keywords: kinematic and dynamic parameters of gymnastic, motor tests, expert rating, sport pedagogues, heredity coefficient

COORDINATION ABILITIES AND SELECTION IN GYMNASTICS
(Research note)

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INTRODUCTION

METHODS

RESULTS AND DISCUSSION
level of other physical properties;
- The age;
- The overall level of physical preparedness and others.

The sports teacher must comply with these factors within the selection and evaluation of motor-coordination abilities.

Kleshtev (Клещев) (1997) identifies four components of coordination abilities - mastery of new exercises, the ability to distinguish and manage fluctuations, the ability to improvise and mix in the process of motor control and originality of the decision of various motor tasks. For sport gymnastics, a particular attention should be given to the first two. Gymnastics is a sport in which the level of technical training is directly related to sport skills and success in competitions. As the volume of exercise is greater, the coordination more complex, the result will be higher, ranking will be better. Therefore, some authors consider that the most important for gymnastics is the ability to quick explore new increasingly difficult exercises, as well as the ability to properly assess the range of motion and muscle effort.

Figure 1 presents the components that according to the expert assessment of gymnastics specialists are essential for the realization of gymnastics. Each of the five has its leading position according to the stage in the multi-annual training. For the initial period of particular importance will be the ability for precision movements, orientation in space and equilibrium stability. In the early years of sports training, they will be leaders in motor learning and development of the components of coordination in general. Analysis of important gymnastics coordination abilities showed that coordination of movements of the individual has a degree of heredity of 55% (Table 1). This opens up a great opportunity for their development under the influence of phenotypic factors.

<table>
<thead>
<tr>
<th>Coordination abilities</th>
<th>Hereditary coefficient - H</th>
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<tbody>
<tr>
<td>Coordination precision movements</td>
<td>55%</td>
</tr>
<tr>
<td>muscle coordination</td>
<td>43-79%</td>
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Analyzing the results of this test revealed the genetic resources of the child to reproduce exactly the specified motor action. In fact, only this component of the coordination abilities we can establish the implementation of generally developing exercise, but it is genetically dependent and particularly important for the sports talent.

Toward selection optimization it would be appropriate to explore other elements of the coordination structure. The balance is important for gymnastics as one of the main coordination qualities (Nazarenko (Назаренко), 2000). It is the ability of an individual to keep the resistance of the body and its parts within the supportive and non-supportive phase of the motor operation. Sergienko & Ribakov (Сергиенко & Рыбаков) (1984) explore the genetic preconditions for the development of balance and found that the dynamic balance is influenced less by hereditary factors than the static balance. Therefore, it’s proposed toward the test of coordination to add test for establishing the level of static

![Fig. 1 Coordination abilities](image-url)
balance resistance – in a relative time frame. The duration has been measured in seconds. It can be performed also with closed eyes. Thus, through optimization of the test for establishing of the level of motor-coordination of the individual, the preconditions will increase toward the possibility of finding the young gymnasts who have reached the top of the sport skills.

CONCLUSIONS
1. Analysis of the literature confirmed complicated structure of coordination abilities.
2. Analysis of the components of coordination and evaluation specialists allow to single out the most important ones within the initial selection in gymnastics.
3. Improving the test to determine the level of motor-coordination preconditions of the individual will assist in the selection of talented gymnasts.

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