

TOPIC: ANTHROPOMETRIC (BODY-FORMING) FEATURES IN ALBANIAN ATHLETES IN ACCORDANCE WITH THE RESPECTIVE COMPETITIONS AND RESULTS

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Abstract

The anthropometry, composition, and body structure of elite athletes varied according to the type of discipline they performed. Selection criteria, training hours, and specific sporting physiological requirements during competition may explain the differences observed.

The results showed that anthropometric measurements of professional athletes of different disciplines differ between them, paying attention to the realization of the training session in different ways and programs. These measurements helped us to understand whether the coaches conducted the selection of the athletes correctly according to the respective disciplines.

According to this study, athletic disciplines have different requirements for anthropometric indicators, which are specific to each professional athlete. Therefore, for these variety of results, coaches need to create training programs according to the specifics of the sport and of each athlete on the field to succeed.

Keywords: orientation selection athlete racing

1. Purpose of the study

- To identify and determine some physical parameters in Albanian athletes in athletic disciplines, through anthropometric measurements
- To compare the measurements taken in our athletes with data from world athletes of the respective competitions to highlight the criteria of orientation and selection in these athletes.
- To specify the data collected for different age groups of our male and female athletes by determining the validity of the selection made by their coaches in the respective competitions.
- The physiological aspects, which wears this study has been given a large space not by chance, but we have mastered them with the claim that every athlete has an anatomical and physiological construction adapted according to the discipline where he competes.
- After the selection, systematization, and review of the literature, depending on the conditions we had we selected the test to be used in this study / experiment as well as the appropriate terrain to make measurements for groups of athletes in the disciplines of long runs, short runs, throws and jumps.
- Some anthropometric tests were performed to determine these physical parameters.
- Through measurements and detailed analysis of these measurements (via excel program) we aimed to achieve concrete results on the level of physical parameters in athletes of different disciplines and to specify their selection in the discipline.
- The data obtained from the measurements were put into a database and subjected to statistical processing to obtain accurate results regarding their physical parameters.

- The analysis and study of these measurements gave an accurate conclusion on the focus of the study highlighting those anthropometric parameters despite being part of the same sport are different, which are specified according to the disciplines which are selected by the coaches. The mathematical equations set in excel were the ones that gave us an accurate picture of our hypotheses.

2. Methodology

The method used for this study is the experimental method by means of physical testing. Data for the study were obtained from 100 athletes of different disciplines. The age group of the subjects in the study is 14 years old-27 years old. The data we obtained for the study are 14 anthropometric parameters. Our aim was to compare the parameters of the athletes according to the disciplines and to find out if the selection was done in the right way by the coach.

Data comparison was performed based on contemporary literature.

To carry out this study, these steps were followed:

- Research and tabulation of a large amount of Albanian and foreign language literature. The study and acquisition of this literature was mainly used for the analysis of physical parameters, their relation to the change of parameters according to athletic disciplines and the selection criteria for these disciplines.
- The physiological aspects, which wears this study has been given a large space not by chance, but we have mastered them with the claim that every athlete has an anatomical and physiological construction adapted according to the discipline where he competes.
- After the selection, systematization, and review of the literature, depending on the conditions we had we selected the test to be used in this study / experiment as well as the appropriate terrain to make measurements for groups of athletes in the disciplines of long runs, short runs, throws and jumps.

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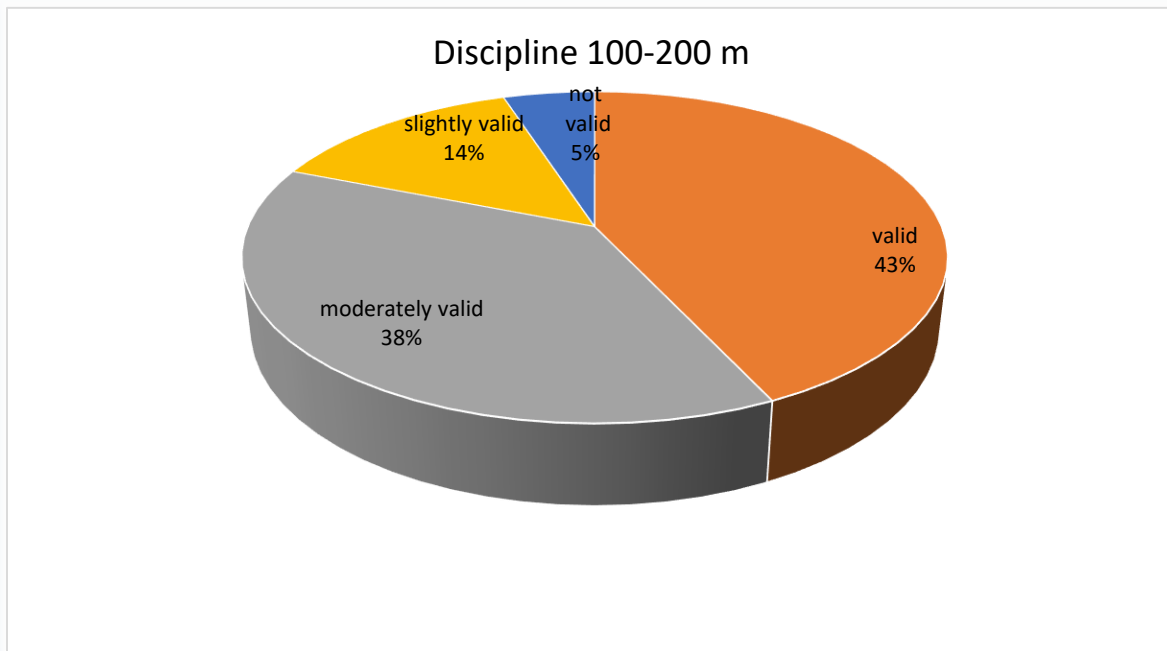
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3. The experiment

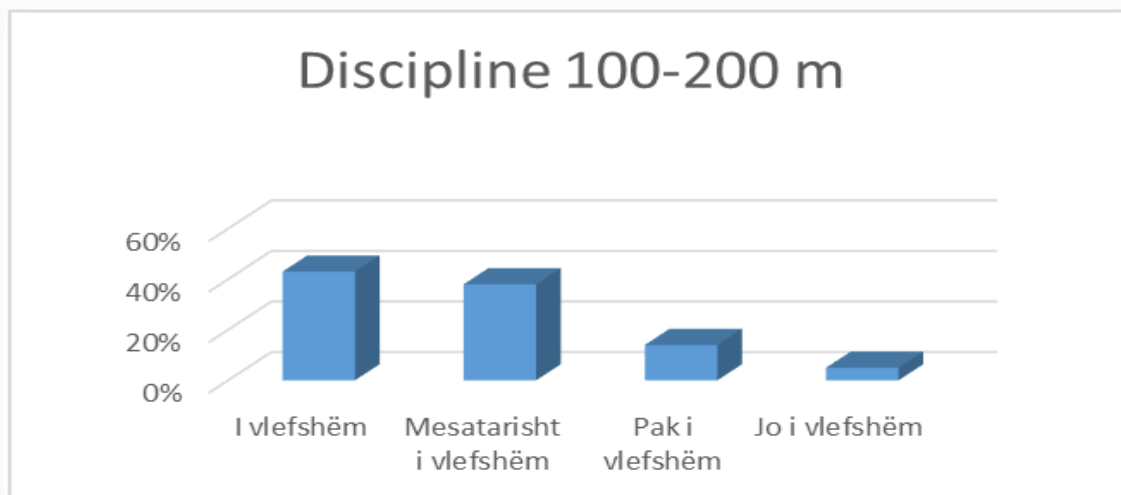
To do the test, 100 athletes were randomly selected, of which 36 were athletes of the Skanderbeg team and 64 athletes of the Tirana team. The test for the group of athletes of the Skanderbeg team was performed in the stadium of the city of Korça where their training sessions took place, while for the athletes of the Tirana team the measurements were performed in the gym of the "University of Sports of Tirana" in the city of Tirana. We performed the measurements of the 14 anthropometric parameters we had chosen. The test was performed in the afternoon before the training session. Measurements were performed with tape, scales, anthropometer. At the end of the measurements, the data for each athlete were put into the database and their analysis was performed.

In the tables below we have the presentation of the data obtained in percentage in the respective disciplines

after statistical processing, and we have defined as valid from (80% -100%), moderately valid from (60% - 80%), slightly valid from (40 % -60%) and not valid from (0% - 40%). And we have calculated an overall average of these parameter matches by deriving a percentage value in terms of the suitability of this athlete with the discipline. Reference and comparison were made with the study tables of: Athletics Selection Criteria. V. Zelichenov. Vnikitushin



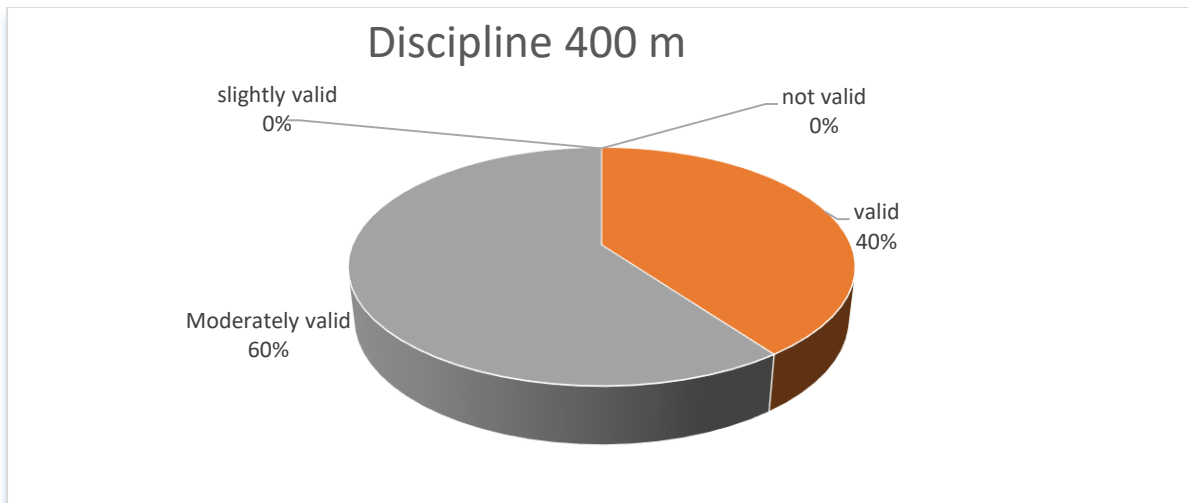
Graph 3.4.1



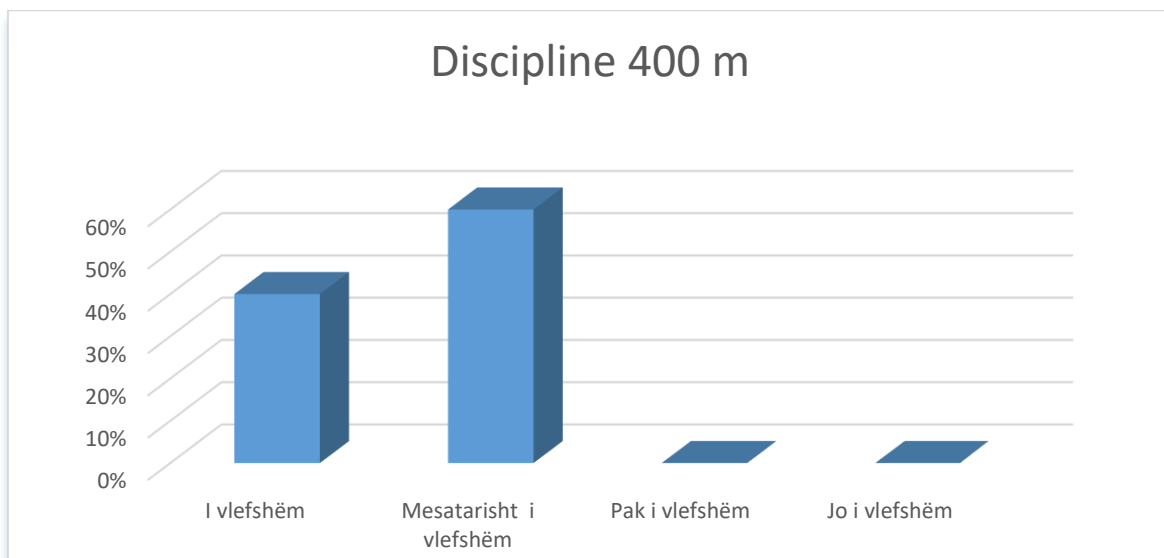
Graph 3.4.2

Graph 3.4.1 and 3,4,2 gives a percentage of the results obtained and helps to understand the validity of the athletes of the discipline 100-200 m.

We note that 5% of them are not valid, 14% are slightly valid, 38% moderately valid and 43% valid. From the analysis of these values, we understand that most athletes of the discipline 100-200 m are chosen correctly by the coach and their results are relatively good.

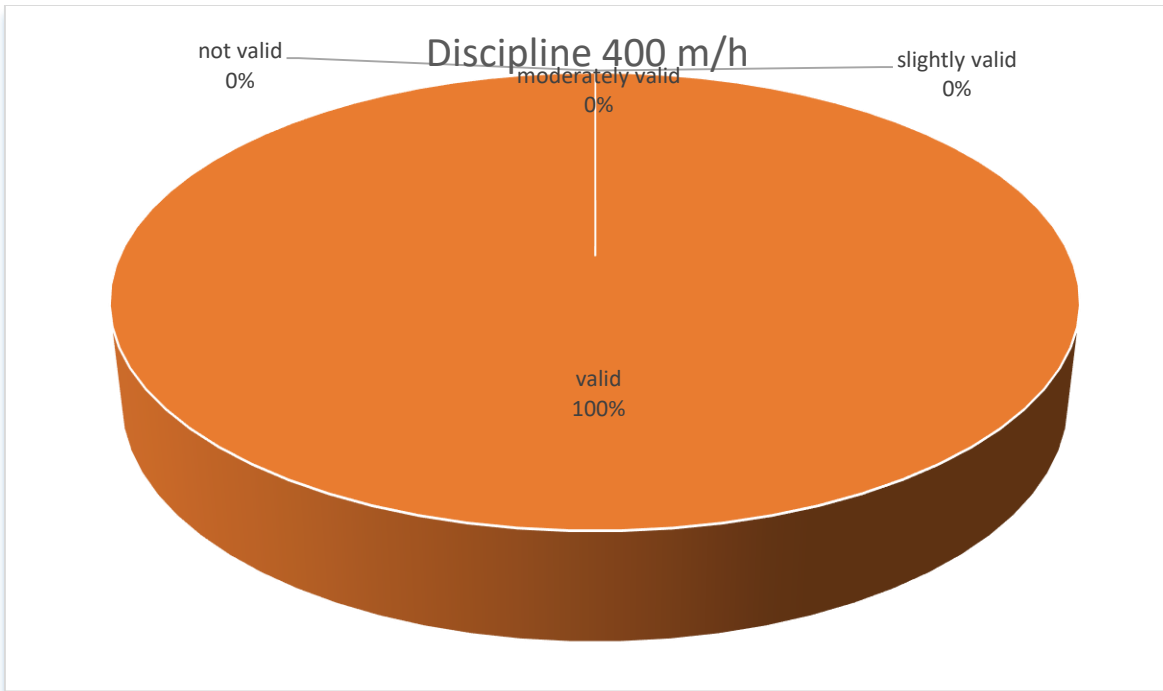


Graph 3.4.3

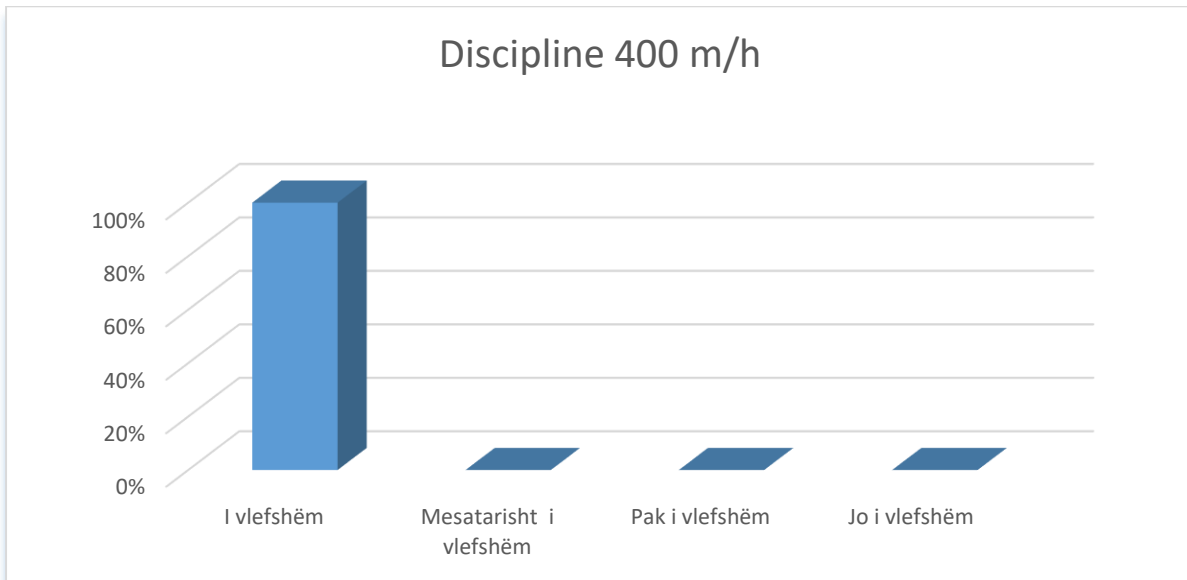


Graph 3.4.4

In the graph of 3.4.3 and 3.4.4 we have the percentage presentation of the results of the athletes in the 400 m discipline. The results 40% valid, 60% moderately valid, 0% slightly valid and 0% invalid prove that the selection of athletes for this discipline was carried out in the right way.

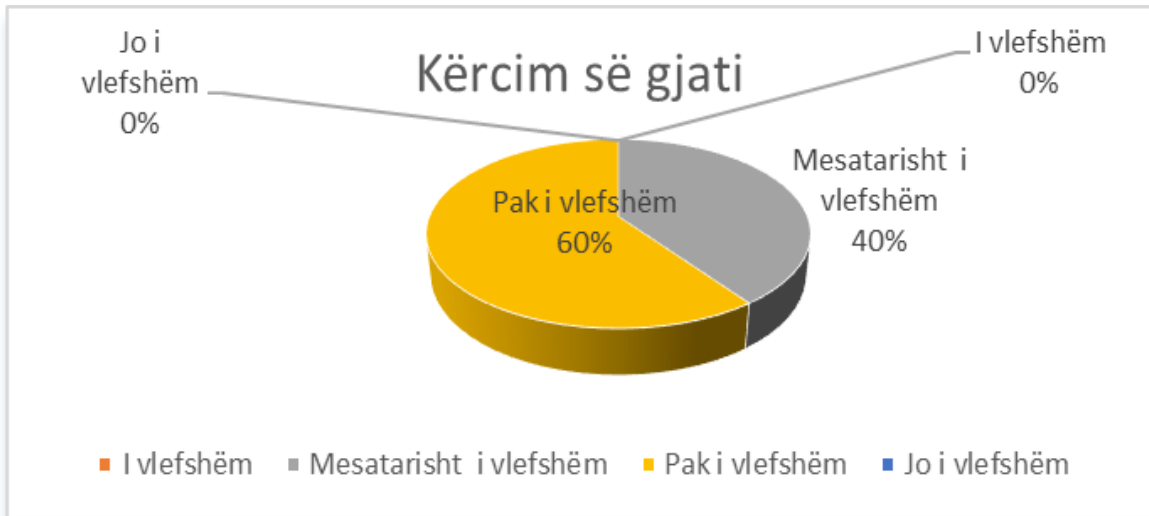


Graph 3.4.5

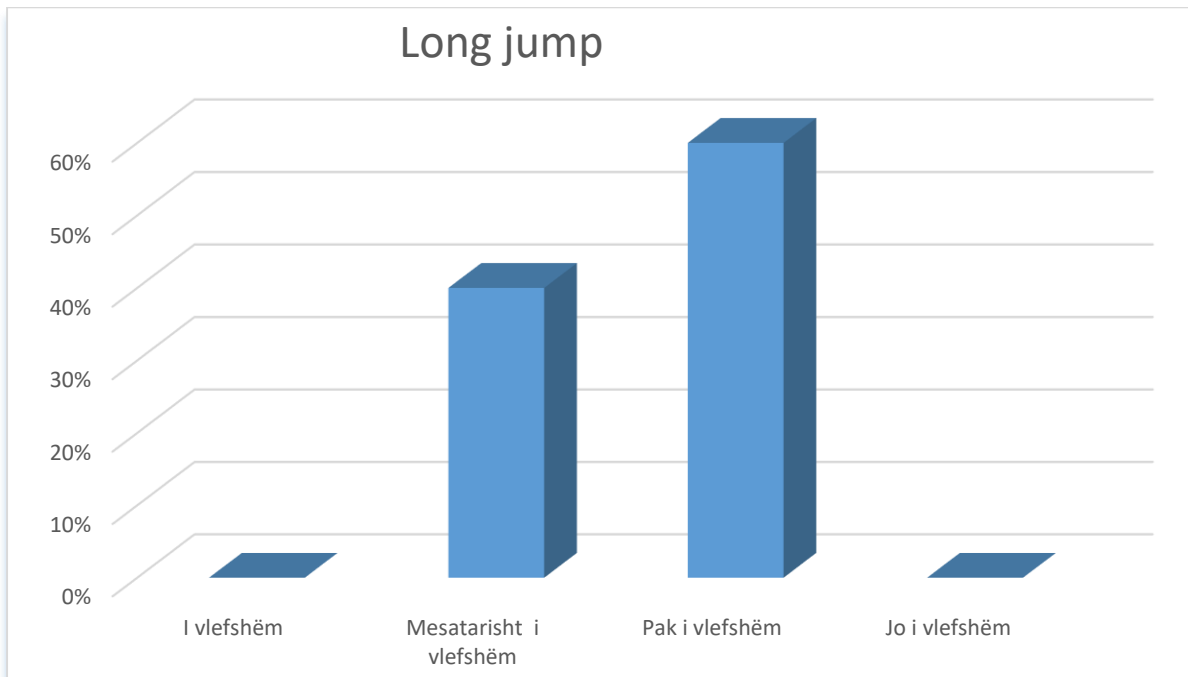


Graph 3.4.6

In the graphs 3.4.5 and 3.4.6 we have the percentage presentation of the results of the athletes in the discipline 400 m / h. We can say that all athletes of this discipline have been properly selected by the coach. This result is evidenced by the graph above where 100% of them are valid.

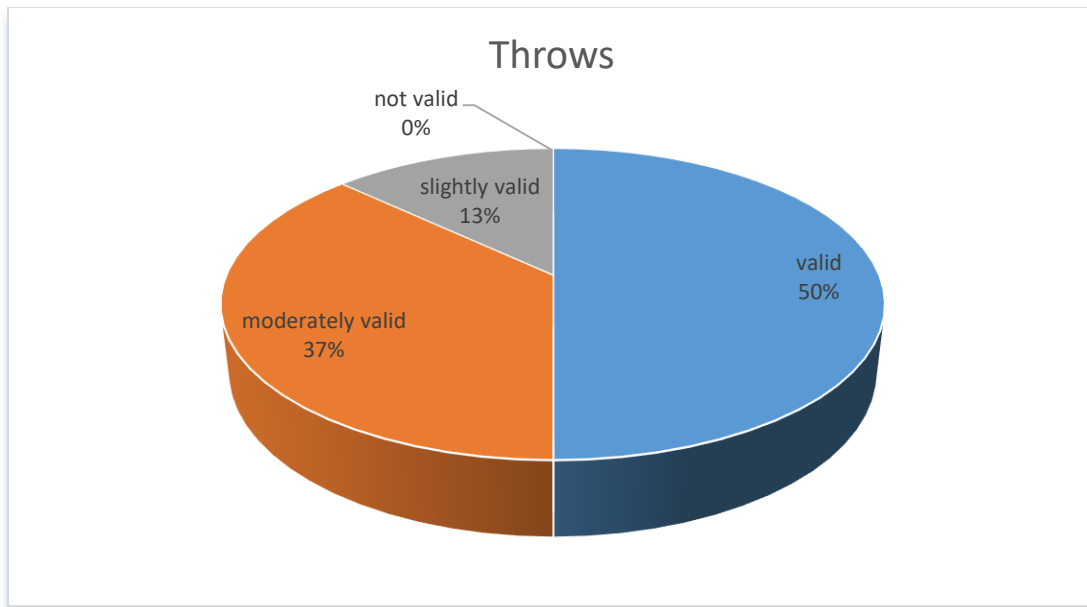


Graph 3.4.7

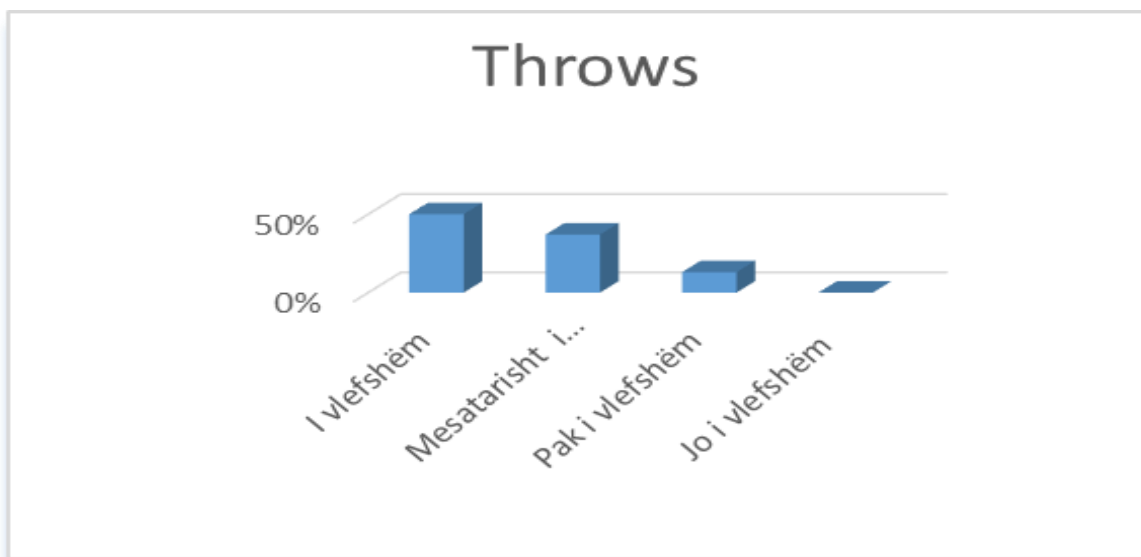


Graph 3.4.8

In the graph 3.4.7 and Graph 3.4.8 we have the percentage presentation of the results of the athletes in the long jump discipline. The results 0% valid, 40% moderately valid, 60% slightly valid and 0% not valid, show us another picture because 60% of them who are not suitable for this discipline can be more successful if they choose another discipline that may be more appropriate. If they continue in this discipline they will face failure, not success and will continue to think that they are not doing the right training, while in another specialty they can achieve a higher result.



Graph 3.4.9



Graph 3.4.10

In the graph above 3.4.9 and 3.4.10 we have the percentage presentation of the throwers' results. Their data are analyzed according to the tools in which they compete: shot put, hammer, disc, javelin. According to the results 50% of them are valid, 37% moderately valid, 13% slightly valid, 0% not valid. We can say that their selection by the coach is done on average in the right way but 13% of them need directed at the respective discipline for them.

4. Conclusions

Based on the experimentation, the study and results obtained from anthropometric measurements we have reached the following conclusions:

1. Proper selection and orientation of the discipline by the coach is very important and decisive for the results and career of the athlete.

2. Through this experiment we proved and concluded that more than 70% of athletes according to different age groups and genders that were part of this study had the same physical parameters with the optimal ones from contemporary references. Our athletes are selected and oriented directly by the coach according to the respective disciplines.
3. This study showed us that perfecting the system of selecting prospective athletes is an important process and will help increase results. Coordinating sports selection with the individualization of sports training in the stages of initial specialization will give the desired result.

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