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Original Article

Interest in VO_2max capacity: comparing Norwegian and Italian training

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Abstract:
The research talk about the difference of perceiving training method in Norway and Italy. After personally experience I noticed that Norwegians who practice routinely sport have a great Vo2 max capacity this is probably also due to every day training that they do for come back at home in hill territory. The research was carry out with survey for a group of 12 Italians sport people and 12 Norwegians one. The results are that Norwegians practice are more interested in VO2 max capacity than Italian people. After the result It's important to understand how this capacity can improve physical fitness and performance and more in general every day life.
Key words: training methodology, international training, Norwegian sport, VO_2 max capacity.

Introduction

VO2 max capacity is considered as one of the fundamental elements of training. High intensity training, even if carried out in a few seconds, accustoms the body to ATP synthesis in an aerobic and anaerobic way. In many endurance sports having a good ability to resynthesize the ATP could be a major element to ensure good performance (Tabata, Miyachi, & Ogita, 1996). The focus on VO2 max capacity has been triggered by the reflection: Norwegians practice a lot of skiing at an amateur level and at a competitive level. At an amateur or recreational level, training lasts from 30' to a few hours, when you go on to focus on the competitive level, it follows that training becomes very short starting from 3' up to a maximum of 30', when it comes to competitive training so skiing is considered an anaerobic sport (Gaetano, 2016, Gaetano, Rago, 2014). Since skiing is therefore a predominantly endurance sport of short duration, the ability to resynthesize ATP in a short time can help to prolong the workouts without suffering fatigue (D'Isanto,2019). The interest shown by the Norwegians in increasing and concentrating the maximum consumption of oxygen load to idea that this element is the secret of Norwegian elite sport training (D'Isanto et al., 2019, Raiola, d'Isanto, 2016,). Obviously, performance at a competitive level, such as a competition during the Olympics, was not affected only by VO2 max capacity, but also by other factors that may affect the use of this capacity, such as personal motivation and external influences (Invernizzi et al.,2019).

Material & methods

The research was carried out through a Google questionnaire administered to a population of children aged between 16 and 30 years who have previously played or regularly play sports at both competitive and amateur level. The questionnaire in duplicate in Italian and English was administered to a population of 12 people respecting the same characteristics as those mentioned above.

	Gender	Age	Sport level	Practice sport
Norwegian subjects	7 female and 5 male	7 subjects of +25 years old 5 subjects 22-25 years old	10 amateur 2 agonistic	7 people practice sport now 5 people have previously practiced
Italian subjects	6 female and 6 male	4 subjects of + 25 years old 5 subjects 22-25 years old 3 subjects 18-21 years old	9 amateur 3 agonistic	3 people practice sport now 7 people have previously practiced 2 people never practice sport

The people who carried out the questionnaire are students of at least one year of motor sciences both in Italy and Norway.

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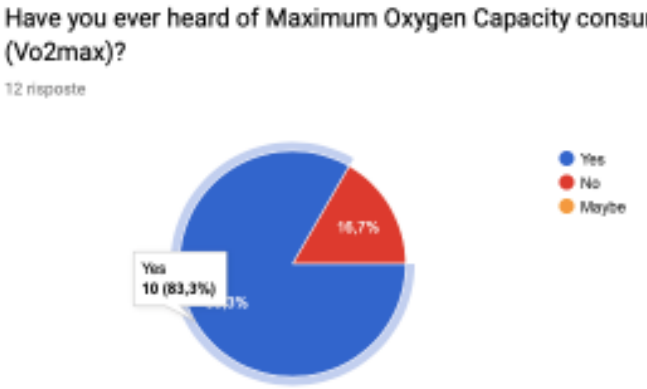
Among the interviewed Italian people, although they are all people who study sport, there are two people who have never practiced sport, nor do they currently practice sport, for these people the questionnaire ended after this question not allowing you to select the options for the section "think about my training" (Valentini M. et al.,2018).

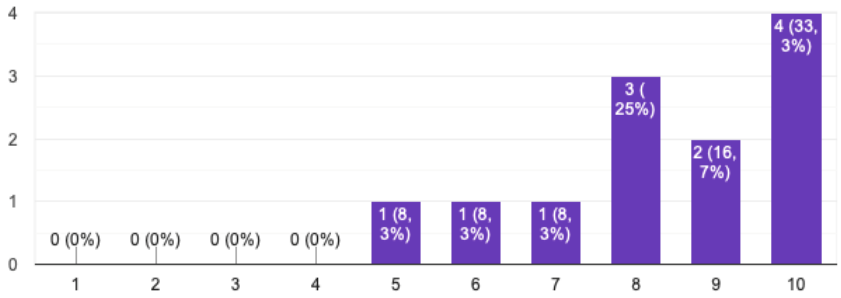
Results

The research showed that 83.3% of Norwegians interviewed had at least once in their lives heard of Vo2max capacity against only 16.7% who had never heard of it, the same results for the Italian sample are very different 40% of subjects had heard of VO2 max capacity against 60% who did not know what it is.

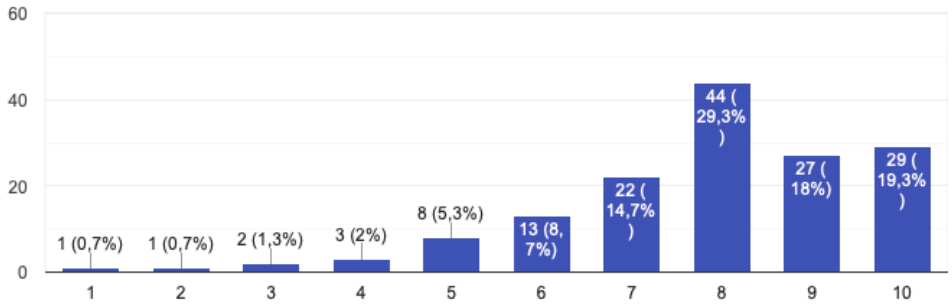


A very important factor that emerged from the survey is that most of the Italian subjects who knew or had heard of VO2 max capacity corresponded perfectly with people who practiced sports at a competitive level, while the Norwegians who indicated that they knew what was the Vo2max capacity were also people who played sports at an amateur level (Di Tore P.A., 2017).

The second very important aspect found is that 50% of the Norwegians have answered increasing Vo2max capacity is more important than 5 (on a scale from 1 to 10).



As far as the Italian sample is concerned, at the same time the results obtained were very varied, so it was necessary to enlarge the number of subjects interviewed in order to have a certain figure. After collecting 12 Italian surveys to compare them with the Norwegian ones, the questionnaire was opened to a higher number of subjects who had to respect the selection criteria.



The result was that 4.7% of the population (150 Italians subjects) responded that training the Vo2max ability is of little importance.

Discussion

All subjects are in contact with academic circles (Norwegian University of Science and Technology, University of Salerno, University of Rome Foro Italico, University of Catanzaro). From the analysis it emerged that Norwegian subjects who practiced sport at amateur level mostly knew what VO2max was while the same Italian subjects were not aware of it, this load to think that even in Norwegian academic circles the spread of knowledge of this ability is more in question, and is a fundamental requirement for the body knowledge (Raiola,2013) and of sport activities .

The answers also showed that 50% of the Norwegian population at least once in their lifetime measured oxygen capacity, this means that even people who do not play sports at competitive level have made the measurement of their ability, from this correction could emerge that probably the measurement of this capacity can be a selection criterion for the transition from amateur to competitive level, considering that the capacity VO2 max can be improved by no more than 10%. (CERG, 2017)

Conclusions

In conclusion, it could be said that the success of Norwegian sports teams can be given not only by their physical predisposition and their frequent training, in addition to personal motivation, but also by the VO2 max capacity which is given attention even at a theoretical level as well as practical at both competitive and amateur level.

The prestige of the Norwegian sports teams, which have as their secret the use of the maximum performance efficiency of the competitive functional organic system ensures the athlete to mobilize all or part of his body to achieve the result (Myakinchenko, Kryuchkov, Volkov, & Khramov, 2017); this means that during anaerobic training the threshold of lactate production must be trained and increased thanks to greater absorption and use of oxygen. In the absence of fatigue, the body is more focused on recruiting the muscles necessary for movement than on relieving pain.

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