



APLICATION OF POLAR IN FOOTBALL (SISTEMATIC REVIEW)

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INTRODUCTION

-Football as a sports game, within a wide area of the physical culture movement, represents both physical and mental activity that has been irresistibly imposed on people across the meridian (Aleksić & Janković, 2006).

-Today, a modern football player must respond to the set tasks both in the defense phase and in the attack phase, so it is extremely important that in the preparatory period, every motor skill important for football is raised to the highest possible level.

-The aim of this review study was to analyze the prevalence of the use of heart rate monitor brand & POLAR in football, regardless of the type of tests and gender of respondents.

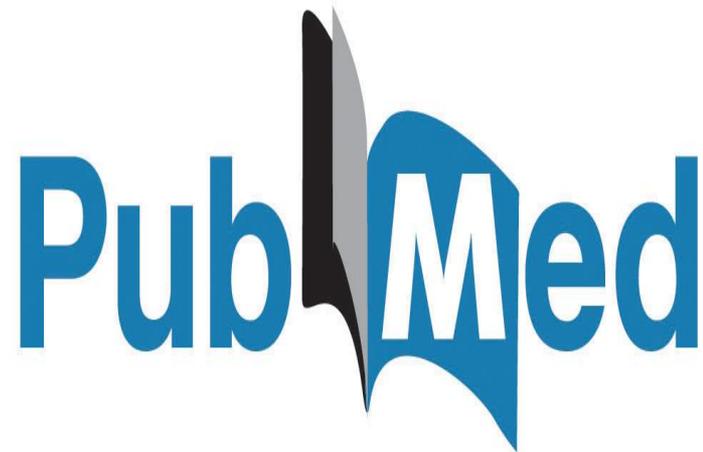
RESEARCH METHODS

PubMed, PEDro, J-GATE, SCIndes, DOAJ and Google Scholar.

Period from 2000 to 2019 were searched.

The following keywords were used in the database search: football, motor abilities, female and male football players, Polar and Heart rates.

The found research titles, abstracts and full texts were then read and analyzed.



INCLUSION & EXCLUSION CRITERIA

- That the experimental research included people who played football regardless of age, level of competition or gender; that the subjects were tested using a pulse monitoring device of the POLAR brand was used; that the research is written in English or Serbian.
- The criteria for excluding research were: research conducted using a pulse monitoring device from another manufacturer; that the experimental research was conducted on respondents who do not play football; if the works were of an overview type; papers not published in English or Serbian.

RESULTS

A search of electronic databases found 1,200 research studies with relevant topics. Further Analysis and application of the set criteria, in accordance with the aim of this study, included 20 experimental studies. In 7 papers respondents consisted only of women (112 womens).

In 10 papers testing consisted of YoYo intermittent recovery test level 1.

In 2 papers, testing consisted of YoYo intermittent recovery test level 2.

In 6 papers, testing consisted of the Yo-Yo Intermittent Endurance Test

RESULTS

- In 5 papers a heart rate monitor was used to determine loads during a game, training or when performing football-specific exercises.
- In 13 papers the heart rate monitor used during testing was clearly defined.
- Polar Vantage NV heart rate monitor was most often used in the works in which the heart rate monitor was defined.
- In 10 papers the interval between the measurement of the heart frequency was given.
- In all these works, the interval between measurements is 5 seconds, except in one work where it is 15 seconds.

DISCUSSION

- Based on the papers analyzed in this review study, it can be concluded that Polar is very often used when evaluating heart rate in athletes who play football regardless of gender, level of competition or age.
- However, based on the works that we had an insight into in this review study, we can conclude that heart rate monitoring in football is much more practiced in men than in women.
- The fact that it gives accurate data almost identical to the results of electrocardiograms – ECG can be confirmed by the results obtained for the values of the time interval, where all values are 5 seconds, except for one in which the heart rate measurement interval is 15 seconds.

DISCUSSION

- Another great advantage of Polar in its application in football is that it has developed the Polar Team Sport System which allows coaches to monitor a larger number of players at the same time.
- Since football is a contact sport and the range of accessories is limited, Polar has introduced the use of receivers that are worn around the chest and send data directly to a computer.
- This greatly facilitates load monitoring during training or matches.

CONCLUSION

- By processing the selected papers it can be concluded that the application of Polar is not uniform when it comes to males and females, but is therefore uniform when it comes to the degree of competition and the age of the respondents.
- Due to the possibility of wearing it as a watch or a belt around the chest, Polar is used much more often during field tests than during laboratory tests.
- The advantage of Polar is the possibility of tracking several players at the same time, whether the tracking is aimed at monitoring the intensity of training or the degree of load during the game.
- The significance of this research is that it shows the extent to which the use of Polar is represented in football during training, matches or testing of players.

HVALA NA PAŽNJI!

