

# Military Pentathlon, which discipline is decisive in the final result?

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## INTRODUCTION

The Military Pentathlon is a sport composed of five disciplines: Shooting with standard rifle, Obstacle Run, Obstacle Swimming, Throwing and Cross-Country (CISM, 2019). The objective of this study was to identify which disciplines were correlated to the final result of the modality in the last annual World Military Pentathlon Championship (2019).

## METHODS

The data were taken from the official result of the VII Military World Games held in Wuhan – China, in 2019 (n=90). The five disciplines were analyzed separately, taking into account the slow and rapid fires in the shooting discipline and the precision and distance phases in throwing discipline. We registered the results in pentathlon points, as stated in Military Pentathlon rules (the highest values represent the best performances). To verify the correlation between athletes' performances and final result, we used Spearman correlation tests, with the following coefficient (rho) classification (CALLEGARI-JACQUES, 2009): very strong -  $\rho \geq 0.90$ ; strong -  $0.6 \leq \rho < 0.9$ ; regular -  $0.3 \leq \rho < 0.6$ ; weak -  $0 < \rho < 0.3$  ( $p < 0.05$ ).

## RESULTS

Table 1 presents athletes' results from each discipline in pentathlon points.

## DISCUSSION AND CONCLUSION

It shows that the shooting test, for example, has the least relative influence on the final result, which is somehow explained by the technological advances in weapons and equipments that bring the results of this discipline very close to the maximum possible score. There are strong correlations with obstacle swimming and obstacle run, disciplines where the physical condition imposes itself more decisively.

## PRACTICAL IMPLICATIONS

The results present a possibility for a better selection of athletes in the military pentathlon, by member countries, and also for a more efficient direction to the training plan, since reconciling five modalities simultaneously is a challenge to athletes and coaches.

## REFERENCES

Callegari-Jacques S. Bioestatística: princípios e aplicações. Porto Alegre: ArtmedEditora; 2009 CISM - Conseil International du Sport Militaire. Military Pentathlon Regulations, 2020. Available at: <http://www.milsports.one/sports/military-pentathlon>. Accessed: march 17, 2021.

## FIGURES AND TABLES

Table 1 – Military Pentathlon Disciplines' results and their correlations to final championship standing.

Military Pentathlon Disciplines	Median 1 <sup>st</sup> – 3 <sup>rd</sup> quartile	Correlation coefficient*	Correlation strength
Shooting – slow fire (points)	96 95-98	-0.31	Regular
Shooting – rapid fire (points)	93 89-96	-0.39	Regular
Shooting (PP)	1064.55 1035.23-1088.25	-0.42	Regular
Obstacle run (PP)	1085.05 1027.48-1118.993	-0.65	Strong
Obstacle swimming (PP)	1082.80 1040.20-1122.40	-0.62	Strong
Throwing – precision (points)	116 108-124	-0.53	Regular
Throwing – distance (points)	54.85 50.80-59.83	-0.40	Regular
Throwing (PP)	1005.80 963.50-1053.20	-0.59	Regular
Cross country (PP)	1041.60 972.85-1080.48	-0.58	Regular

PP – Pentathlon points

\*Spearman correlation test

## CONFLICT OF INTEREST

The authors have no conflict of interest to declare.