

Abstract

Based on a search of available resources, I report on racing skialpinism and training at higher altitudes.

The aim of this work is to compare the performance of the representation of Czech Republic, Slovakia and Poland in skialpinism at the World Cup, World and Europe Championships three years before and three years after the Central European Cup (SEP) (2016). And to find out if SEP really contributed to increasing success at these international races.

I have analyzed the numbers of competitors and the success of the countries participating in SEP in the World Cup, the European and World Championships before and after the introduction of SEP.

I also compared the altitude profile of the World Cup races in skialpinism and compared it to the Central European Cup (SEP). I focused on the average altitude of the race, track length, elevation and the highest peak.

According to the findings, Czech competitors were more successful in skiing before the SEP, either in the World Cup or in the European and World Championships.

SEP races compare to the World Cup are laid down below, shorter and lacking a technical passage. On the other hand, the competitors get more meters over them.

Based on these results, I suggest that races in skialpinism within SEP should be more similar to the World Cup, at least in terms of length, time and technical difficulty, and so serve as a good preparation for world races.

Also, in this work I point out deficiencies in systematic training in the hypoxic environment and propose possible training methods that would improve the performance of skialp representation.

The results can be used to teach skialpinism coaches in the outdoor sports specialisation

Key words: skialpinism, altitude, training, European and world championships