Abstract

Title: Risks of Alpine Hiking on Protected Climbing Routes

Aims: The aim of this thesis was to assess the risk factors of alpine hiking on protected climbing routes based on a current literature review.

Methods: The primary sources were articles from the Web of Science and EBSCO databases. **Results and conclusions:** The total accident rate on protected climbing routes in Austria amounted to 1684 cases from 2008 to 2018. It was found that great progress has been made in terms of equipment and safety on protected climbing routes together with technical advancements in gear. The current equipment represents groundbreaking technology that significantly reduces the occurrence of serious injuries during this activity. However, when using fall absorbers, younger and lighter climbers are still at a higher risk of injury.

Keywords: Via ferrata, alpine hiking, klettersteig, equipment, safety, trekking