

# Pro Safe Sport

## Practice examples

This factsheet is intended to gather information on practice examples which promote a healthy and safe sport environment.

Basic data	
<b>Title</b>	Talent development and injury prevention in youth alpine ski racers of a ski boarding school
<b>Organisation</b>	Department of Sport Science & Olympic Training Centre, University of Innsbruck, Austria
<b>Link</b>	<a href="http://uibk.ac.at/isw">http://uibk.ac.at/isw</a> <a href="http://olympiazentrum-tirol.at">http://olympiazentrum-tirol.at</a>
<b>Country</b>	Austria
<b>What kind of initiative? (E.g. policy, law/ act, campaign, education...)</b>	Research Education Clinical tests
<b>PSS intervention area</b>	<u>Physical well-being</u> Psychological well-being Social well-being Fair play Governance/ policy

Qualitative facts	
<b>Description</b>	Alpine skiing is one of the most popular sports in several countries, one of which is Austria. For several years Austria was the most successful country in alpine ski racing, but during the last years the dominance has become less. Thousands of Austrian children used to start to learn alpine ski racing at an early age with hopes of becoming a professional and successful athlete. The number of those children has decreased in the last years. However, simultaneously the number of young Austrian alpine ski racers, who have dropped out of sport, because of missing success has increased. Additionally injuries are also referred to as one of the leading reason to drop out of alpine ski

	<p>racing at young age. Therefore the aim of our study is twofold: on the one hand to optimize the talent selection process in alpine skiing by investigating the influence of the biological age as a possible mechanism for the creation of relative age effects in alpine skiing in order to reduce this phenomenon in future. We want to find out the importance of considering the biological maturity stage in the talent development and selection process in alpine skiing. On the other hand we will create an injury and trainings database for the coaches of the ski boarding school "Neustift" as a possible tool to quantify the variation in training load and the occurrence of injuries. In order to prevent injuries in young athletes we want to investigate possible, sport specific risk factors associated with young alpine ski racers of the ski boarding school performing additionally different anthropometric and functional measurements and physical performance tests.</p>
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Workshops with coaches of the ski boarding school</li> <li>• Testing (physical fitness, anthropometric and functional measurements)</li> <li>• X-ray of left wrist to identify biological age</li> <li>• Developing a webbased database for coaches</li> <li>• Physical Fitness tests and functional measurements 2x per year; anthropometric measurements every 3 months</li> </ul>
<b>Thematic priorities</b>	<ul style="list-style-type: none"> <li>• Injury prevention</li> <li>• Overtraining</li> <li>• Talent development</li> </ul>
<b>Target group</b>	<ul style="list-style-type: none"> <li>• Athletes</li> <li>• Coaches</li> <li>• Sport organisations</li> <li>• Parents</li> </ul>
<b>Results/ products</b>	<ul style="list-style-type: none"> <li>• Webbased database;</li> <li>• Creation of age and gender specific norm data of physical fitness</li> <li>• Handbook with norm data for coaches and parents</li> <li>• Information workshops and handouts for coaches, ski federations and parents regarding training load and training contents according to maturity status of the young ski racers months</li> </ul>
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• Leading example for other ski boarding schools</li> <li>• Cooperation with the Austrian ski federation</li> <li>• Optimizing talent development and selection process in alpine ski racing to reduce dropout rate</li> <li>• Reducing traumatic and overuse injuries in young ski racers</li> </ul>

### Quantitative facts

**Budget**

<b>Number of people working for this initiative</b>	4
<b>Number of people reached</b>	500
<b>Timeframe (start/ end)</b>	

### **Observations**

The official project start was on 1st of January 2014. We have already done a lot of preparation work, literature research etc. in 2013. This project is financially supported by the Tyrolean State Government with about 10.000 Euros, which covers only a small part of the total costs of the project. To realize all our aims of the project, we have to look for additional sponsors. We would appreciate any advices from the ISF regarding possibilities for additional support for this project.