



BALANCE TRAINING FOR DOWNHILL SKIING

How much does Balance Training actually improve downhill skiing?

Study

3 different interventions with a total of 44 probands (3 Beginners; 16 Advanced and 25 Profis) complete a 6 week program with 3x15 min per week

1 SKIA Program



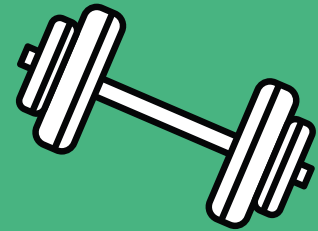
skispecific balance program with plates underneath the ski boots

2 Tennis ball Program



skispecific balance program with tennisballs underneath the shoes

3 Control Program

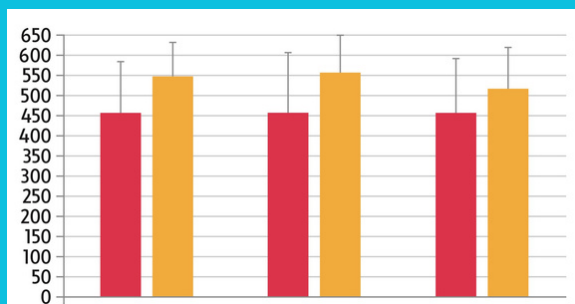


trainingsprogram without specific balance training

Test 1: Balance Test with Posturomed



Pre-Test → Intervention → Post-Test



SKIA-Group 20% Improvement Tennis ball-Group 21% Improvement Control-Group 13% Improvement

Test 2: Downhill skiing a blue route

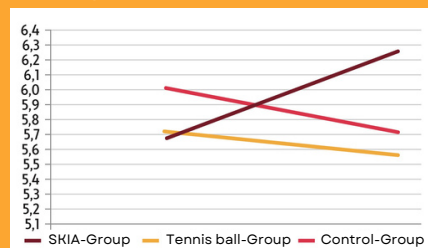


Intervention → Pre-Test → Ski course → Post-Test

Ski Instructors evaluate four criterias:

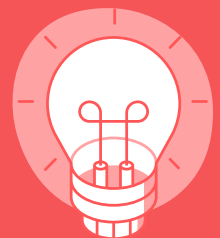
- Curve control
- Turn changes
- COM shift
- Overall Impression

→ The Index, which is seen in the Diagram is the mean value of these four criterias



Conclusion

- SKIA- and Tennis ball-Group had a significant improvement at the balance test
- SKIA-Group had an improvement in downhill skiing compared to the other two groups



→ Balance training before Skiing can have a positive impact on the learning prozess