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Training Monitoring for Resistance Exercise: Theory and Applications

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<http://link.springer.com/article/10.1007/s40279-015-0454-0>
Note that access to this version may require subscription.

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Subjective Strategies

RPE Load

0	Rest
1	
2	
3	Moderate
4	
5	Hard
6	
7	Very Hard
8	
9	
10	Maximal

Questionnaires

Wellness		5	4	3	2	1
Fatigue			✓			
Sleep	✓					
Soreness					✓	
Stress				✓		
Mood	✓					

Advantages:

- Easily collected and calculated
- Can be integrated with other types of training

Disadvantages:

- Responses should be recorded alone to limit bias
- There is a potential for dishonesty if athletes are not educated

Suitable for:


- All athletes

Monitoring timing:

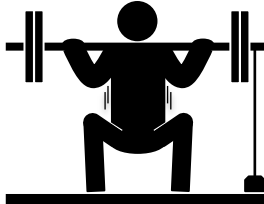
- sRPE: following each training session
- Brief questionnaires: prior to each training day

Objective Strategies

Volume Load



Velocity Monitoring



Advantages:

- Can quantify the actual performance of exercises
- Can motivate athletes to achieve optimum performance (particularly for velocity monitoring)

Disadvantages:

- Can be extremely time consuming to collect and analyze
- Not practical for some sporting contexts (e.g. large groups)

Suitable for:

- Volume loads: all key strength training exercises
- Velocity: athletes training for maximum strength or muscular power

Monitoring timing:

- Volume loads: calculated during/following training
- Velocity: during sets of key strength/power exercises