

Enhancing Deadlift and Squat Form: Integrating Coaching Philosophies for Optimal Performance

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Slide 2: Introduction

- As head coach, I will outline a 3-session training block designed to enhance technique and performance in these key powerlifting movements.
- (the group is experienced in lifting but want to improve technique as poor form is highlighted when weight is added)

Slide 3: Aims and Objectives

- Aims:
 - Enhance deadlift and squat form.
 - Improve lifting technique to optimize performance and reduce injury risk.
- Objectives:
 - Apply a blend of coaching philosophies to address individual athlete needs and preferences.
 - Incorporate elements of cue-based coaching, athlete centred coaching, and technical model coaching.

Slide 4: Session 1: Technique Assessment and Correction

- Aim: Identify and correct technical flaws in deadlift and back squat.
- Objectives:
- Conduct video analysis of athletes' lifting technique.
- Utilise cue-based coaching to provide specific feedback and correction cues based on individual movement patterns.
- Empower athletes to take ownership of their technique by involving them in the analysis process.

Slide 5: Coaching Philosophy: Cue-Based Coaching

- Utilises external cues to guide movement and enhance performance (Wulf, 2007).
- Research suggests that external focus cues (e.g., "push the floor away") are more effective than internal cues (e.g., "contract your quadriceps") in improving motor skill performance (Wulf et al., 2010).

Slide 6: Session 2: Strengthening Weak Areas

- Aim: Strengthen key muscle groups involved in deadlift and back squat.
- Objectives:
- Implement a variety of exercises targeting muscle imbalances and weaknesses identified in Session 1. for example RDL's to strengthen the glutes to aid in stabilising the lower body through out the movement.
- Emphasise athlete-centred coaching by allowing athletes to choose exercises that address their specific needs and preferences, whilst pointing out faults and ideas to improve them.
- Provide opportunities for athletes to explore different training modalities (e.g., barbell, kettlebell, bosu ball, bodyweight, pistol squats).

Slide 7: Coaching Philosophy: Athlete-Centred Coaching

- Focuses on individual athlete needs, preferences, and goals (Gilbert & Côté, 2016).
- Research shows that athlete-centred coaching leads to increased athlete motivation, autonomy, and satisfaction (Bortoli et al., 2012).
- Let the athlete develop their own training by pairing up and filming each other and comparing their technique in the video to a step by step checklist.

Slide 8: Session 3: Technique Refinement and Practice

- Aim: Reinforce proper lifting technique and provide opportunities for practice.
- Objectives:
- Review cues and corrections from Sessions 1 and 2.
- Implement technical model coaching to refine movement patterns and reinforce correct technique.
- Encourage athletes to experiment with different strategies for optimizing performance. such as adding resistance bands.

Slide 9: Coaching Philosophy: Technical Model Coaching

- Emphasise the use of ideal movement models to guide coaching and performance (Lyle, 2003). For example movement cards with a clear instructions check list. So the athletes can check and improve form making sure they know the movement pattern.
- Research suggests that providing clear technical models and feedback enhances skill acquisition and performance.
- This can also go along side the video analysis to serve as a reminder to the athletes to refer back to.

Session 1

1)

Introduction to the session + warm up: 10 minutes

Raise: light cardio (e.g., jogging, skipping) to increase heart rate and blood flow.

Activate: Perform dynamic mobility exercises targeting key muscle groups involved in squats and deadlifts, such as hip flexors, glutes, hamstrings, and lower back. Examples include leg swings, hip circles, and inchworms.

Mobilize: Incorporate foam rolling techniques to address tight or restricted areas, focusing on the hips, thighs, and upper back.

3)

Reinforcement of basics: (15 minutes)

Integrate functional movement exercises that mimic powerlifting movements, such as lunges, step-ups, and kettlebell swings, to improve overall strength, balance, and coordination.

Encourage athletes to focus on proper technique and range of motion, paying attention to alignment and muscle activation.

Use Bosu balls and water bags to add instability and challenge core stability during functional exercises.

4)

15 minutes

In small groups Conduct video analysis of athletes' lifting technique.

Utilise cue-based coaching to provide specific feedback and correction cues based on individual movement patterns.

2)

10 minutes, 5 minutes on each movement

Showing different angles of the movements eg, side profile and rear profile

Coach led demonstrations of the squat and deadlift, focusing on the key coaching points such as knees over toes, chest up and push the floor away.

5)

Cool down + reflection (10 minutes)

Stretching and Mobility (5 minutes)

Guide athletes through a series of static stretches targeting major muscle groups involved in squats and deadlifts, including hamstrings, quadriceps, hip flexors, and lower back.

Emphasize deep breathing and relaxation to promote muscle recovery and reduce post-workout tension.

Reflection and Feedback (5 minutes)

Provide athletes with the opportunity to reflect on their performance during the session.

Use video analysis to review key takeaways and areas for improvement.

Encourage open communication and feedback from athletes to inform future coaching strategies and session plans.

Session 2**

1)

Introduction to the session + warm up: 10 minutes

Raise: light cardio (e.g., jogging, skipping) to increase heart rate and blood flow.

Activate: Perform dynamic mobility exercises targeting key muscle groups involved in squats and deadlifts, such as hip flexors, glutes, hamstrings, and lower back. Examples include leg swings, hip circles, and inchworms.

Mobilize: Incorporate foam rolling techniques to address tight or restricted areas, focusing on the hips, thighs, and upper back.

2/3)

Deadlift Technique (20 minutes)

Incorporate buso balls as an unstable surface for deadlift variations, such as stiff leg deadlifts, and trap bar deadlifts to challenge stability and core strength.

In pairs / small groups Use video analysis and a check list to peer assess deadlift form, emphasising hip hinge mechanics, back alignment, and grip strength.

Provide cues for maintaining a flat back, bracing the core, and driving through the heels while lifting.

2/3)

Squat Technique (20 minutes)

Using video analysis and a check list/ que cards let participants self analyse each others technique, to discover how to perform the movement correctly and get used to the movement pattern. provide real-time feedback on squat form, focusing on depth, alignment, and bar path.

Coach athletes to maintain a neutral spine, engage the core, and drive through the heels during the squat movement.

4)

Cool down + reflection (10 minutes)

Stretching and Mobility (5 minutes)

Guide athletes through a series of static stretches targeting major muscle groups involved in squats and deadlifts, including hamstrings, quadriceps, hip flexors, and lower back.

Emphasize deep breathing and relaxation to promote muscle recovery and reduce post-workout tension.

Reflection and Feedback (5 minutes)

Provide athletes with the opportunity to reflect on their performance during the session.

Use video analysis to review key takeaways and areas for improvement.

Encourage open communication and feedback from athletes to inform future coaching strategies and session plans.

Session 3

1)

Introduction to the session + warm up: 10 minutes

Raise: light cardio (e.g., jogging, skipping) to increase heart rate and blood flow.

Activate: Perform dynamic mobility exercises targeting key muscle groups involved in squats and deadlifts, such as hip flexors, glutes, hamstrings, and lower back. Examples include leg swings, hip circles, and inchworms.

Mobilize: Incorporate foam rolling techniques to address tight or restricted areas, focusing on the hips, thighs, and upper back.

2)

25 minutes

In small groups work on further developing confidence, whilst adding weight using pointer cards and verbal feedback to further optimise performance and increase competency both the athlete performing the movement and the spectating participant..

3)

15 minutes

Incorporate video analysis to evaluate and compare performance from session 1 - 3 highlighting improvements and giving praise

4)

Cool down + reflection (10 minutes)

Stretching and Mobility (5 minutes)

Guide athletes through a series of static stretches targeting major muscle groups involved in squats and deadlifts, including hamstrings, quadriceps, hip flexors, and lower back.

Emphasize deep breathing and relaxation to promote muscle recovery and reduce post-workout tension.

Reflection and Feedback (5 minutes)

Provide athletes with the opportunity to reflect on their performance during the session.

Use video analysis to review key takeaways and areas for improvement.

Encourage open communication and feedback from athletes to inform future coaching strategies and session plans.

Reference list:

Bortoli, L., Bertollo, M., Hanin, Y., & Robazza, C. 2012. Striving for excellence: A multi-action plan intervention model for shooters. *Psychology of Sport and Exercise*, 13(6), pp. 693-701.

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