

How Can Strength & Conditioning Sessions Improve Athlete Motivation and Performance? A Comparison of Strongman Session Design



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INTRODUCTION

- The purpose of a strength and conditioning (S&C) coach is to plan, deliver, and review the physical and physiological preparation of athletes, resulting in sports-specific performance outcomes (Haff 2015).
- To achieve physiological outcomes, S&C coaching normally entails a diverse range of skills, including the effective planning, delivery, observation, evaluation, adaptation, and recording of training to support an effective motivational climate (Jeffreys 2010).
- Recent studies (e.g., Abdullah 2016, Gillet 2009, Gómez-López 2013) have shown motivation to be linked to sport performance.
- In fact, as Clancy et al. (2016) reported in their review, motivation is a fundamental construct for the precise analysis of the athlete's behaviour, training process, and performance.
- Therefore, establishing methods that enhance the motivational climate for athletes is important for coaches (Weakley 2017).

A repeated measures design involving five differing session task designs

- working as an individual
- working as a pair
- working as a prescribed pair
- working towards a leader board with no feedback
- working towards a leader board with full transparency).

During each training session, athletes undertook a modified strongman training (MST) session and were evaluated on the number of repetitions completed for 60 seconds in two exercises (i.e., sledgehammer strike, keg swing). Furthermore, subjects completed an athlete self-reporting measures questionnaire prior to each session, a differential rate of perceived exertion (dRPE) scale post session, and a motivation for the session survey pre and post training.

METHODS

RESULTS

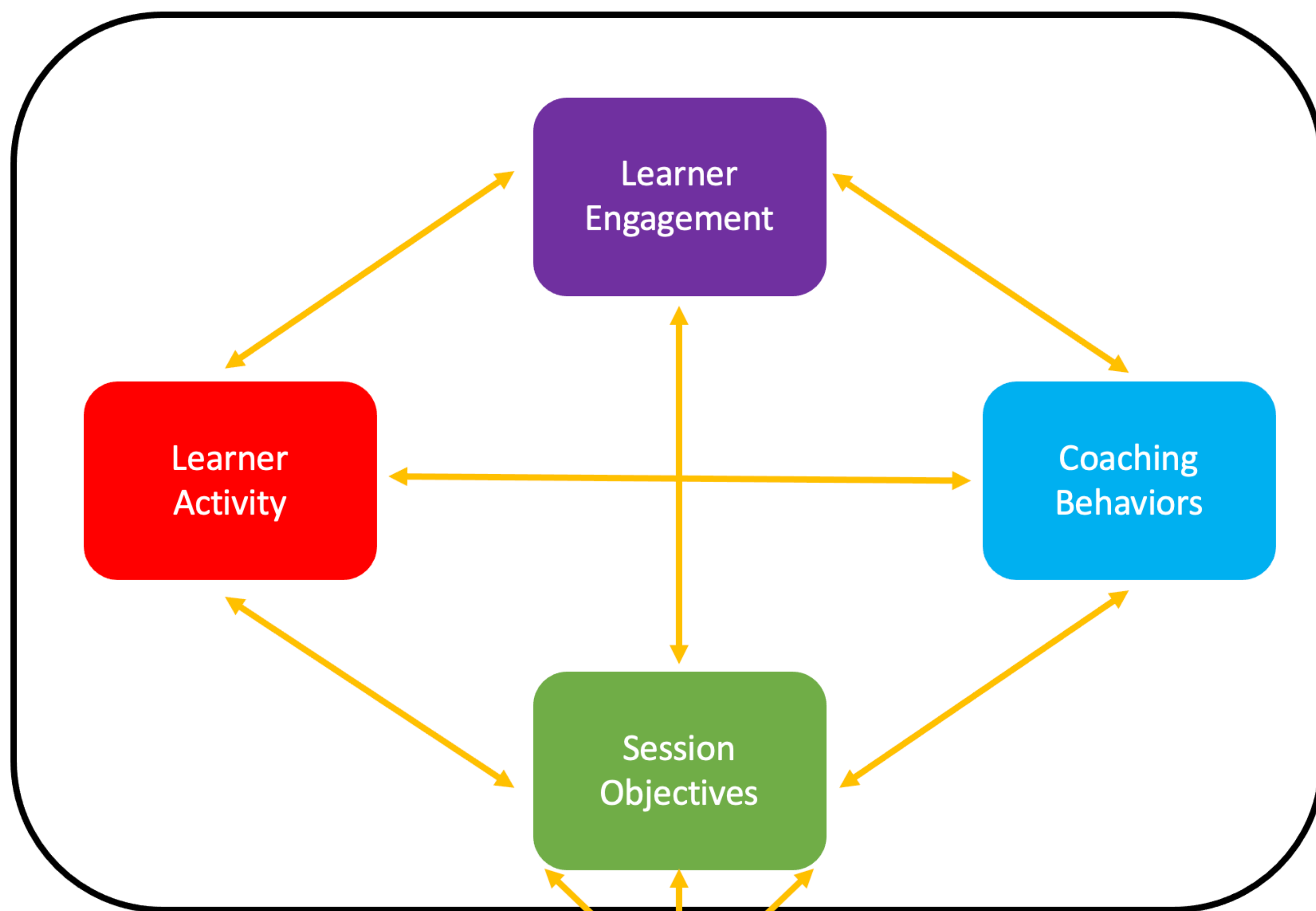
Session	Sledgehammer Strikes		Keg Swings		Motivation Score		
	Repetitions (Mean & SD)	Effect Size (Versus Session 1)	Repetitions (Mean & SD)	Effect Size (Versus Session 1)	Pre Session (Mean & SD)	Post Session (Mean & SD)	Effect Size (Versus Session 1)
1	40.3 ± 3.0		34.3 ± 1.1		5.9 ± 0.8	5.9 ± 0.7	
2	43.0 ± 2.9	Moderate	36.8 ± 1.0	Very Large	5.9 ± 0.6	7.1 ± 0.7	Very Large
3	45.2 ± 2.4	Large	38.6 ± 1.3	Very Large	6.0 ± 0.6	7.4 ± 0.6	Very Large
4	44.2 ± 1.8	Large	37.6 ± 1.6	Very Large	6.3 ± 0.6	5.8 ± 0.7	Moderate
5	48.3 ± 3.0	Very Large	40.9 ± 1.9	Very Large	6.3 ± 0.6	7.8 ± 0.7	Very Large

CONCLUSIONS

- Manipulation of task design with an emphasis on feedback and competition leads to an improvement in athlete motivation and performance.
- This research should inform practitioners on the worthiness of planning, delivering, and reflecting upon the psychosocial impacts of the training environment on individual and group performance and motivation.
- Such planning and delivery considerations include;
 - The use of performance feedback
 - Peer to peer interaction / Group and peer organisation
 - Provide autonomy support through task purpose, and feedback that drives performance
 - Cultivate group competition within sessions
 - Make individual performance within group sessions identifiable
 - Offer a range of methodologies to suit individual and group motivations

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1 2 3 4 **Micro Cycles** 5 6 7 8

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