

The Effect of Sport-Specific Resistance Training on Athletic Performance Outcomes of College Rodeo Athletes

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Introduction

significant yields training Resistance athletic performance improvements multiple sports. A outcomes among approach for resistance sport-specific produces greater adaptation and transfer to various sports. However, few studies have examined the benefit potential of sport-specific resistance training for cnort of rodeo

Purpose Statement

The aim of the current investigation was to assess the effect of sport-specific resistance training on athletic performance outcomes of rodeo athletes.

Method

Seventeen college rodeo athletes (12 females; 5 males) participated in an 8-week, 3-days per week, sport-specific resistance training programand Post-testing was administered to assess effect of sport specific training program.

Pre- and Post-Testing Procedures

Sessions 1:

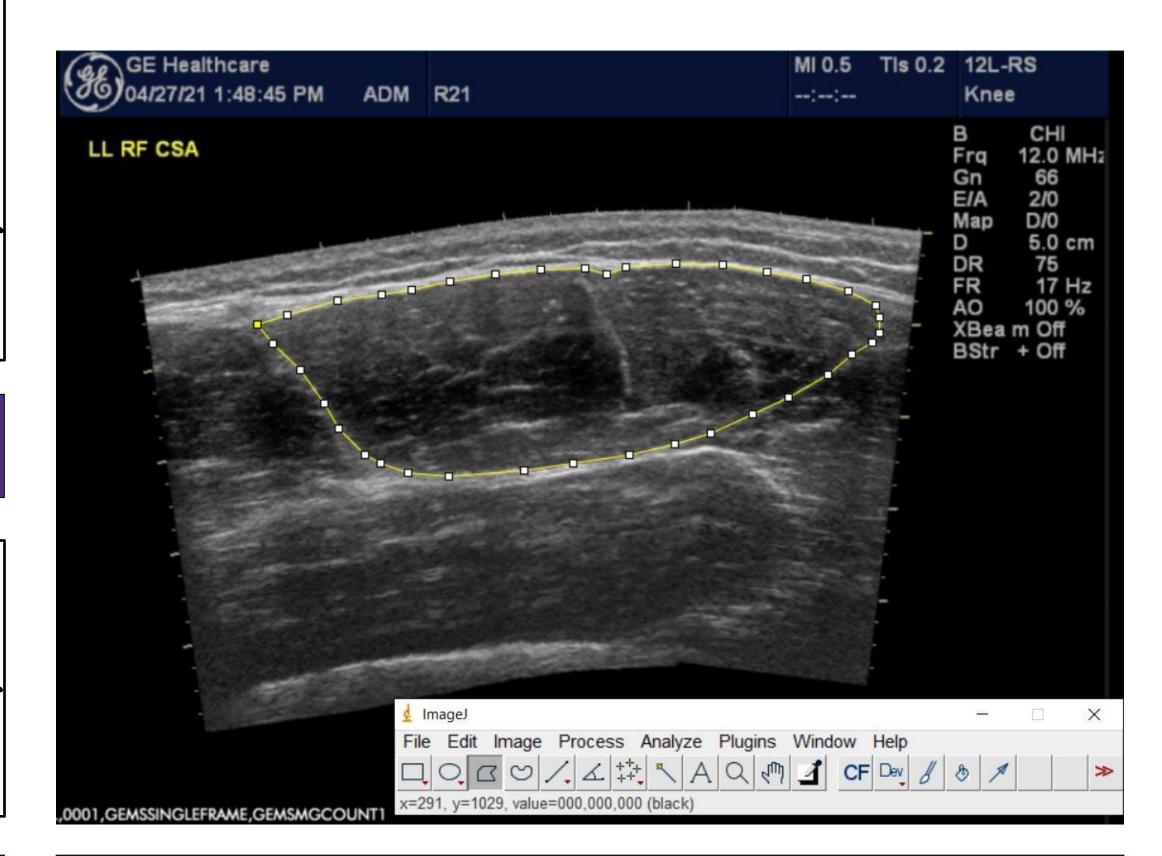
- Muscle Cross Sectional Area (CSA) utilizing b-mode ultrasonography.
- Mid Thigh Pull utilizing a bar with a load cell attached.
- Body Composition (Height, Weight, Body Fat)

Session 2:

1 RM: Squat (SQ), Bench Press (BP), and Deadlift (DL).

Statistical Analysis

A paired sample t-test (p < .05) was employed to assess differences between pre- and post-test of athletic performance outcomes.



Results

Analysis of data indicated significant differences between:

 $SQ (r = .952, p < .001, Pre=198.83\pm87.28, Post=256.25\pm104.14),$

BP (r = .985, p = .046, Pre= 136.58±70.3, Post= 144.58±69.36),

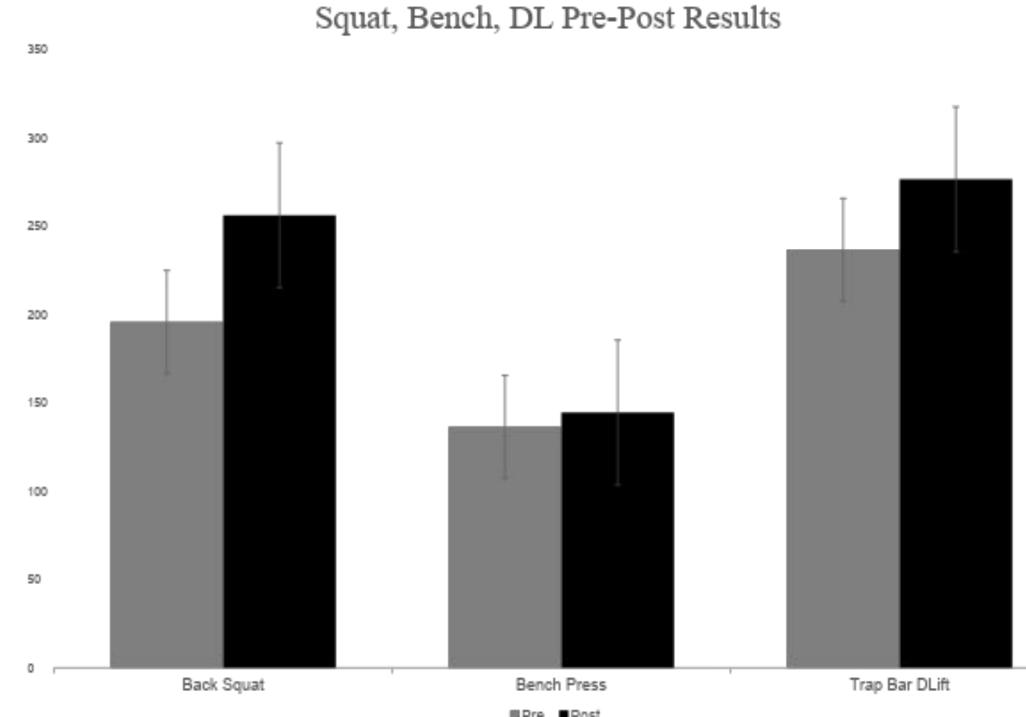
DL (r = .937, p = .005, Pre=236.25 \pm 113.059, Post=276.66 \pm 114.22).

 $CSA (r = .581, p = .046, Pre= 60.17\pm6.73, Post=72.19\pm8.69)$

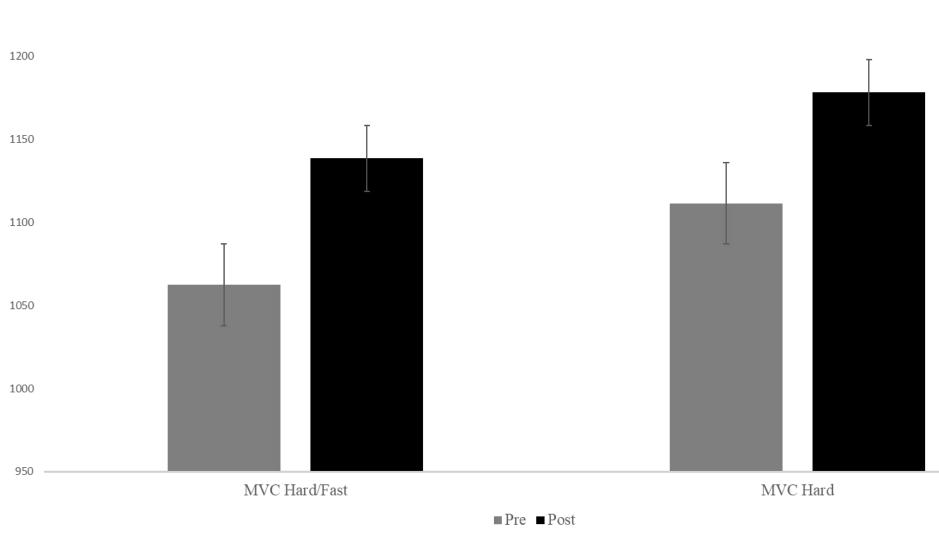


																4		
BASE	LOAD	LOAD	LOAD	LOAD	DEMOAD	BASEI	LOAD	LOAD	LOAD	LOAD	DELOAD	BASE	LOAD	LOAD	LOAD	LOAD	OFLOAD	
Neuro Prep - LATERAL							Neuro Prep - Linear						Neuro Prep - Linear					
SL ISO SQT w/ MB Anti ROT.							BOSU ISO SQT w/ MB Anti ROT.						A1 - Tik Tak Swoop Pass					
2x600	2x860	3х6оа	ЭхВол	3x10aa	2x10qa	2x60a	2х8еа	Зибов	3x800	3x10ea	2x10ea	2x6ea	2x6ea	3x4ea	3x5ea	Зибов	2/600	
St. Depth Jump with Lat. Leap						Depth Drop to Broad Jump						A2 - Hanging Leg Raise w/ Rot.						
2хбоа	2/500	3x4ea	3x5ea	3x60a	2x600	2x5	2x6	3x4	3x5	3x6	2x6	2x8	2x10	3x8	3x8	3x10	2x10	
50		LAT. PARTNE	IER LEG THROW			CRACK THE EGG					Hang High Pull							
2x60a	2x8ea	3x8ea	3x80a	3x10ea	2x10ea	2x8	2x10	3/8	348	3x10	2x10	2x5	2x6	3x6	3/5	3x4	3x4	
PRIMARY & SECONDARY BLOCK						PRIMARY & SECONDARY BLOCK						PRIMARY & SECONDARY BLOCK						
Back Squat						Bench Press						TrapBar Deadlift						
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MPAP #85%	AMRAP @85%	AMRAP #85%	AMPAP @85%	AMRAP @85%	AMRAP @B5%	AMRAP @85%	AMPAP @85%	AMPAP @85%	AMRAP @85%	AMRAP @85%	AMPAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMPAP @85%	AMPAP @85%	AMRAP @85%	
d AMRAP	Adj AMRAP	Adj AMRAP	Adj AMRAP	Adj AMRAP	Adj AMRAP	Adj AMRAP	Adj AMRAP	Ad AMRAP	Adj AMRAP	Adj AMRAP	Adj AMRAP	Adj AMRAP	Adj AMRAP	Ad AMRAP	Ad AMRAP	Adj AMRAP	Adj AMRAP	
Goblet Lateral Lunge (Sildes)						KB RDL						KB Swing						
werled Row Same as Lateral Lunge					Landmine Press Same as R					Same as RDL	Single Arm Band Pulldown/Alt Pull Up							
Arm Farmers Walk			wk 1-3 D/B x2 wk4-6 D/Bx3			Harristning slides ki			1 Leg Hamstring Slide (Eccentric) x3ea			OH MB Toss to Spr	int					
8 Body weight	£ 8	10	10	12	2	8	8	10	12	-12	98	30sec	30sec	45sec	45500	e 60sec	30:	
8 Body weight	ć E	10	10	12	2 8	8	8	10	12	12	00	30sec	30sec	45sec	45sec	60sec	30	
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		ENERGY SYSTE	M DEVELOPMENT			ENERGY SYSTEM DEVELOPMENT						ENERGY SYSTEM DEVELOPMENT						
Change Of Direction						Alactic (Red Zone)					o	Active Recovery (Long Stretch)						
						60n/540ff	60n/540ff	80/920ff	8on/52of	1001/50011	100n/50off		S.			(0)		
						60n/540ff	6on/54off	8on/52off	8on/52of	10on/50off	10on/50off				100			
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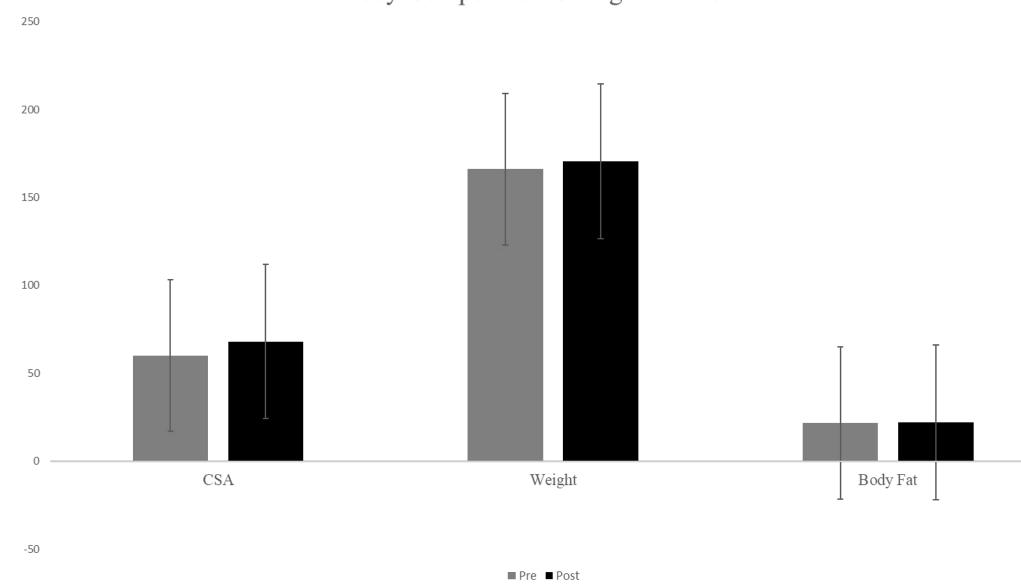
Results Cont.



Maximal Voluntary Contraction Overtime



Body Composition Changes Pre-Post



Discussion

Comparison of pre- and post-test data indicated that an 8-week rodeo-specific resistance exercise program elicited improvements in 1RM and overall muscle quality. While there was no significant difference in MVC, a practical increase was indicated between pre- (1062.35 ± 468.15 N/m) and post-test (1138.49 ± 329.24 N/m). These results suggest a sports-specific resistance training approach should be employed to improve the athletic performance and potential competition performance of rodeo athletes.

References

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