

# REFLEXIVE PERFORMANCE RESET® AND THE SHORT-TERM EFFECTS ON POWER, SPEED, AND AGILITY IN COLLEGIATE ATHLETES

The Power of **AND**

University of Wisconsin  
**Eau Claire**

Alyssa Arnold, Tyler McFadzen, & Robert Stow, PhD, LAT, CSCS | Department of Kinesiology

## INTRODUCTION

Reflexive Performance Reset® (RPR®) is a manual therapy that utilizes special reflex points that reset your body out of harmful compensation patterns and dysfunctional breathing habits created by your body in times of stress. The website states that it has been designed as a treatment that can reduce pain, increase flexibility, aid in injury prevention, and increase sport performance (Reflexive Performance Reset®, n.d.). These compensation patterns and breathing habits can in turn, alter biomechanics of joints during activity and contribute to non-contact injuries in sport and musculoskeletal pain. There are twelve wake-up drills™ can be combined with to address each reflex point for a full body treatment. These wake-up drills™ only take a few minutes to perform and can be done by the athlete themselves so they can “take control of their own health and performance” (Reflexive Performance Reset®, n.d.). Although it is a technique that has been increasing in popularity over the past decade in the strength and conditioning and sports medicine world, there is virtually zero evidence told in the literature.

## METHODS

### PARTICIPANTS

The research participants (n=14) consisted of postseason collegiate athletes from the football (4), wrestling (3), men’s and women’s swimming and diving (4), women’s hockey (1), and women’s soccer teams (1). Of the participants, 4 were female and 10 were male, ranging between 19-21.75 years old (mean age 20.38). Inclusion criteria for this study entailed being a healthy postseason collegiate athlete to not interfere with the competition season. Athletes were excluded from being able to participate in the study if they were currently in season or if they had a physical or mental illness/injury that was currently limiting participation in sport..

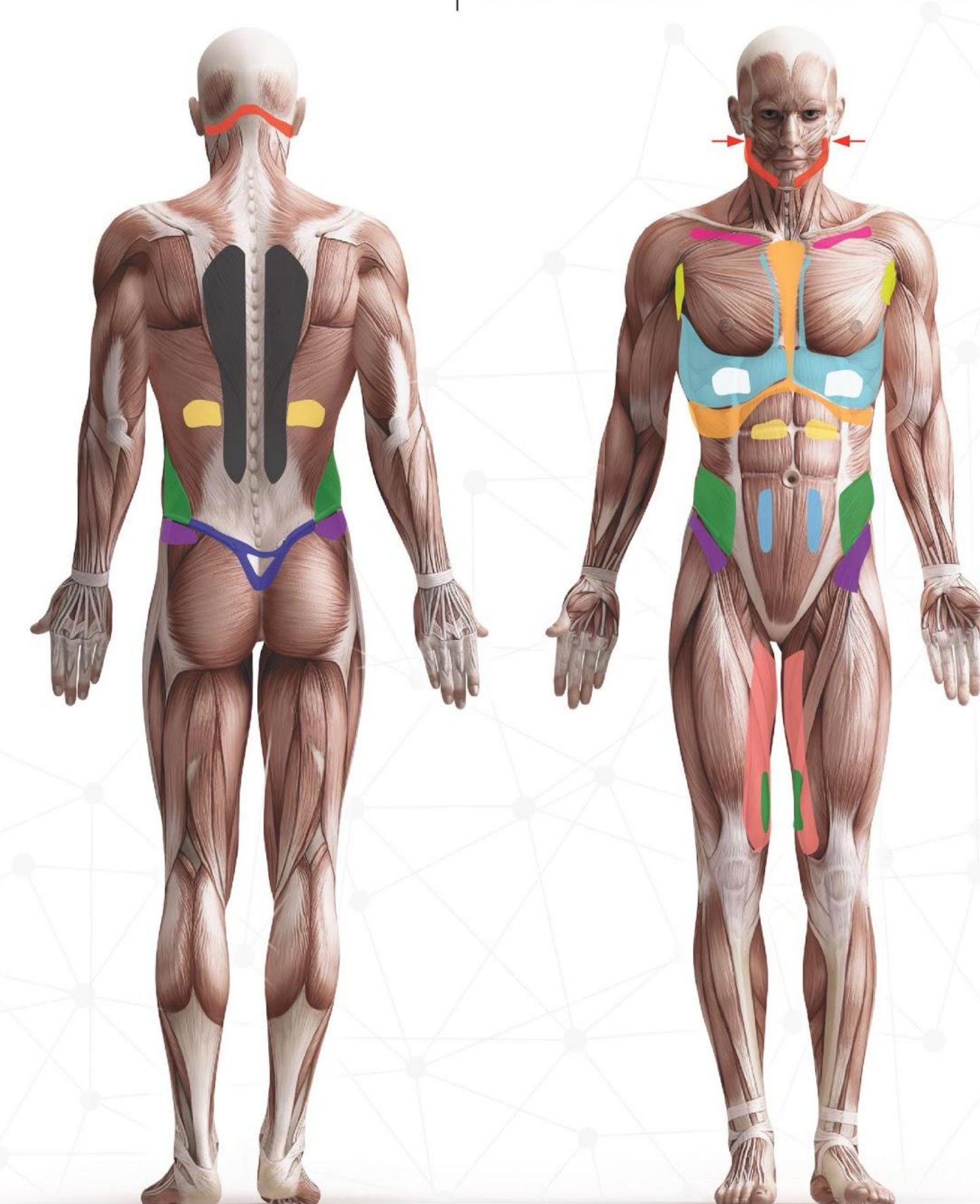
### INSTRUMENTATION

- Stopwatches
- Laptop
- Scale
- Measuring Tape
- Cones
- Tape

### EXPERIMENTAL DESIGN

After a brief introduction to the study’s purpose and goals, each participant was assigned a random number (1-14) and their birth-sex, age, height, weight, and BMI were recorded in an Excel spreadsheet. Participants were split into two groups, 1-7 were sorted into the No-RPR® group and 8-14 into the RPR® group. Their and height was measured using a tape measure and weight was recorded with an electronic scale. From there they each performed the broad jump, T-test, and 40 yard dash. Broad jump was assessed using a tape measure and both T-Test and the 40 yard dash were measured with stop watches. They were given a practice session and then performed each test three times, with their best scores recorded. After these initial tests, the No-RPR® group was taught and then performed the NSCA standardized dynamic warm-up. The RPR® group was taught and then performed self-administered RPR® and the NSCA standardized dynamic warm-up. The tests were then repeated. A 90 second rest period was given to the participants between each trial and test.

REFLEXIVE PERFORMANCE RESET **RPR**



### WAKE UP DRILLS™

<b>BREATHING</b> Rub bottom of ribs and front of sternum.	<b>HAMSTRINGS</b> Rub outer edge of sacral bone.	<b>LATS</b> Locate 2nd rib from the bottom of ribcage, rub front and back.
<b>PSOAS</b> Over an inch and down one inch from belly button on both sides.	<b>HIPS</b> Find hip bone and rub front and top edge all the way around to the back of the hip.	<b>ABDOMINALS</b> Karate Chop inner thighs, from knee to high on inner thigh, 3 times, then rub area vigorously.
<b>GLUTES</b> Rub back of the base of the skull where the tissue and the skull meet. Also find the point right under the earlobe and on the jawline. Press the jawline forward but only for a few seconds. Rub down jaw from under ear.	<b>CALF</b> Start at bellybutton and trace 45° up to ribcage. Just an inch below ribs along that line rub. 2nd calf point - the same spot as on the front but directly through the body on the back side.	<b>NECK</b> Rub space just below the collarbone.
<b>QUADS</b> Use 2-3 fingers to rub the place between the bottom of ribcage and top and top of hip. Also use pressure to separate overlapping muscles in quad.	<b>ROTATION/ ANTI-ROTATION</b> Rub in circular motion with heel of palm around area 3x. Then pat vigorously with heel of palm 3x around.	<b>SUPRASPINATUS</b> Find the place where the arm is connected to the torso. Use a hand as if a saw to rub.
		<b>SHOULDER</b> Scrub the front of the ribcage below the pectoral with claw shaped fingers. Rub down pec, across just under pec, up to armpit and back down side.

ReflexivePerformance.com

### Broad Jump No RPR Example Data Sheet

Athlete #	Pre (in)	Post (in)	% increase pre - post
Athlete 1	90.50	90.50	0.00%
Athlete 2	96.50	97.50	1.04%
Athlete 3	101.50	102.75	1.23%
Athlete 4	78.13	80.00	2.40%
Athlete 5	101.50	100.00	-1.48%
Athlete 6	82.50	86.00	4.24%
Athlete 7	87.00	87.50	0.57%
<b>Mean Performance % Increase :</b>		<b>0.80%</b>	

### Broad Jump RPR Group Example Data Sheet

Athlete #	Pre (in)	Post (in)	% increase pre - post
Athlete 8	107.00	112.00	4.67%
Athlete 9	76.00	77.50	1.97%
Athlete 10	62.25	61.75	-0.80%
Athlete 11	110.00	111.00	0.91%
Athlete 12	104.00	110.00	5.77%
Athlete 13	85.50	89.00	4.09%
Athlete 14	96.00	98.50	2.60%
<b>Mean Performance % Increase :</b>		<b>2.75%</b>	

## STATISTICAL ANALYSIS

Statistical analysis for this study will be performed using SPSS version 1.0.0-2843. We will use a paired sample t-test to determine whether there was a significant difference in scores between the two groups for all three tests, and the average score increase of the three tests together. A p-value at less than 0.05 was considered statistically significant. A Pearson’s correlation test will also be performed to determine a correlation.

## DISCUSSION

The study initially consisted of 16 individuals, however, we lost contact with two of them for unknown reasons. We found that on average the RPR® group performed 1.8% better than the group that did not perform RPR®. The RPR® group performed 0.48% better in the 40 yard dash, 0.85% better in the T-Test, and 1.95% better in the broad jump. This leads us to believe RPR® may be more beneficial in power sports such as football, wrestling, and weight lifting. Statistical analysis has yet to be computed. With no published literature of the effects of RPR® it is tough to infer what the significance of these data is. The RPR® website tells us that these wake-up drills™ reset the body out of survival mode (stress induced compensation patterns) and into performance mode. Whether or not a 1.8% overall increase in performance is a significant difference is up to the athlete performing RPR®. However, there were several limitations to this study. The first being a small group. This lowers the significance and reliability of our study. The second limitation of our study is time. It would have proven to be much more reliable if time constraints were removed and the effects of daily RPR® could be studied for at least 4-6 weeks to see if long-term performance changes occurred. In addition, it would be beneficial to see if RPR® helps with the other claims the founders made, as well as look at the effects of self-administered versus clinician-administered RPR®. A few athletes had decreases in performance in both groups, which could be due to fatigue from the amount of physical exertion performed.

## CONCLUSION

It is seen that self-administered RPR® can increase power outputs in athletes by 1.95% compared to just dynamic warm-up. Statistical analysis has yet to be done to prove the level of significance and correlation this study has. However, more research has to be done in order to determine the true effects of RPR®. Either way, it is seen that RPR® does not have any negative effects on power, speed, and agility. Until more research is done, we believe that no harm will come out of performing RPR® correctly.