

# Journal of Sports Medicine and Allied Health Sciences: Official Journal of the Ohio Athletic Trainers Association

---

Volume 3  
Issue 1 *Ohio Athletic Trainers' Association*  
*Special Edition*

Article 19

---

May 2017

## Effect of Kinesio Tape, Rock Tape, and a Sham tape on Upper Extremity Reaction Time

Cody Cummins  
*Wright State University*, linkfreak13@gmail.com

Brooke Kidd  
*Wright State University*, kidd.33@wright.edu

Jasmin Harvey  
*Wright State University*, harvey.jasmin@yahoo.com

Siobhan Fagan  
*Wright State University*, siobhan.fagan@wright.edu

Scott L. Bruce  
*Wright State University*, scott.bruce@wright.edu

Follow this and additional works at: <https://scholarworks.bgsu.edu/jsmahs>



Part of the [Biomechanics Commons](#), [Exercise Science Commons](#), [Motor Control Commons](#), [Other Kinesiology Commons](#), [Rehabilitation and Therapy Commons](#), [Sports Medicine Commons](#), and the [Sports Sciences Commons](#)

---

### Recommended Citation

Cummins, Cody; Kidd, Brooke; Harvey, Jasmin; Fagan, Siobhan; and Bruce, Scott L. (2017) "Effect of Kinesio Tape, Rock Tape, and a Sham tape on Upper Extremity Reaction Time," *Journal of Sports Medicine and Allied Health Sciences: Official Journal of the Ohio Athletic Trainers Association*: Vol. 3 : Iss. 1 , Article 19.

DOI: 10.25035/jsmahs.03.01.19

Available at: <https://scholarworks.bgsu.edu/jsmahs/vol3/iss1/19>

This Undergraduate Student Abstract is brought to you for free and open access by the Journals at ScholarWorks@BGSU. It has been accepted for inclusion in *Journal of Sports Medicine and Allied Health Sciences: Official Journal of the Ohio Athletic Trainers Association* by an authorized editor of ScholarWorks@BGSU.

## ***Effect of Kinesio Tape, Rock Tape, and a Sham Tape on Upper Extremity Reaction Time***

Cody Cummins, AT, ATC, Brooke Kidd, AT, ATC, Jasmin Harvey, ATC, Siobhan Fagan, MEd, AT, ATC, CSCS, Scott L. Bruce, EdD, AT, ATC

Department of Kinesiology & Health, Wright State University

---

### **CONTEXT**

In the literature of Athletic Training, there are no current studies that have been published involving a comparison of therapeutic tapes on the shoulder and its effect on reaction time using the Dynavision D2™. There can be clinical relevance to athletes in overhead sports such as baseball, softball, and volleyball.

### **OBJECTIVE**

The purpose of this study is to determine whether therapeutic tape has an effect on Dynavision reaction time (RT).

### **DESIGN**

Randomized Control Study.

### **SETTING**

Midwestern NCAA, “mid-major” Division I institution.

### **PATIENTS**

56 healthy, physically active, college-aged individuals were subjects in this study. Subjects (23 males and 33 females with overall mean age of 21.25 [± 2.80]) who had not suffered a shoulder injury within the past six months or were an “overhead sport” student-athletes were excluded from participation.

### **INTERVENTIONS**

Baseline data using the Dynavision D2 were gathered for all subjects. The “slowest” shoulder was then taped with one of

randomly selected tapes (Kinesio Tape, RockTape, and a Sham Tape). Dynavision testing was repeated and comparisons between baseline and taped condition were made.

### **MAIN OUTCOME MEASURE**

A  $\chi^2$  test and paired t-test were used to analyze the data in the study.

### **RESULTS**

The  $\chi^2$  testing found no statistical differences across the three tape groups ( $\chi^2 = 0.426$ ,  $p = 0.808$ ). For 5 of the 6 conditions, RockTape taped subjects had faster reaction times. Statistical significance from paired t-tests was achieved for only 3 of the 6 conditions.

### **CONCLUSION**

RockTape appears to aid in upper extremity reaction time as tested on the Dynavision. There were no differences between Kinesio Tape and Sham Tape conditions. The presence or absence of statistical significance does not always equate to clinical significance.

### **REFERENCES**

1. Experience the proven power of Dynavision! Available at: <http://www.dynavisioninternational.com/>. Accessed April 7, 2016.
2. Wells AJ, Hoffman JR, Beyer KS, et al. Reliability of the Dynavision™ D2 for assessing reaction time performance. *J Sport Sci Med*. 2014; 13:145 - 150.
3. Kinesio Taping Association International. About Kinesio. Available at: <https://kinesiotaping.com/about/>. Accessed March 21, 2016.

Cummins, Kidd, Harvey, Fagan, Bruce  
Effect of Kinesio Tape, Rock Tape, Sham Tape on  
UE Reaction Time.  
JSMahS. 2017;3(1). UG Abstract

4. RockTape USA. RockTape: Go stronger, go longer. Available at: <http://www.rocktape.com/>. Accessed March 21, 2016.
5. Mueller Sports Medicine, Inc. MTape<sup>®</sup> Athletic Tape. Available at: <http://www.muellersportsmed.com/>. Accessed April 9, 2016
6. 8 Tips for Excellent Adhesion | KT TAPE. *KT TAPE*. Available at: <http://www.kttape.com/8-tips-for-excellent-adhesion/>. Accessed April 11, 2016

**KEY WORDS:** *evidence base research, Kinesio Tape, Rock Tape, Sham tape, Dynavision, reaction time.*