

The Effects of Dry Cupping on Overhead College Athletes

By: Kayleigh Nicholson

Department of Exercise Science, Gardner-Webb University

This project does not attempt to produce generalizable knowledge. It is dedicated to the practice of developing skills and demonstrating understanding of the research process.



Purpose Statement

The purpose of this study aimed to determine the effects of dry cupping on overhead college athletes range of motion and pain symptoms.

Abstract

- ❖ This study look at the effects of dry cupping on range of motion and pain symptoms in forty overhead athletes involved in sports such as softball, baseball, and volleyball.
- ❖ Two groups were tested during this study, a control group and an experimental group.
- ❖ Both groups were tested before the treatment and after the treatment using a visual analog scale for pain symptoms and a goniometer for range of motion changes (Yim et al., 2017).
- ❖ A dry cupping therapy treatment was applied the shoulder muscles, lattimus dorsi, rotator cuff muscles, and the muscles around the scapular for ten minutes each session (Gregory et al., 2020).
- ❖ A manual suction and ten plastic circular cups of different sizes were used on the subjects with a lubricant to allow the cups to slide and/or stick.

Introduction

- ❖ Dry cupping is the process of applying plastic or glass cups on the skin and then the air inside the cup is suctioned or vacuumed out (Pesut, 2021).
- ❖ Cupping therapy increases blood circulation at the point of the injury and the increased blood circulation can reduce tension or spasms (Pesut, 2021).
- ❖ Dry cupping is mainly used in treatment settings and is considered a treatment methods to help with range of motion, reductions of pain, and can be specifically used with overhead athletes (Pesut, 2021).

Methods

Participants

- ❖ Forty overhead college athletes
- ❖ Recruited via email and consent form attached with the flyer

Criteria

- ❖ Aged 18-22 college athletes
- ❖ Participant in an overhead collegiate sport
- ❖ No prior history of injury or previous issues with the shoulder

Instruments

- ❖ A visual analog scale for pain symptoms
- ❖ A goniometer for range of motion
- ❖ A manual suction and plastic 12 plastic cups of different sizes

Data Analysis

- ❖ Independent sample t-tests were used
- ❖ ANOVA
- ❖ Pre and post test assessment data was compared for each participant



<https://www.google.com/url?sa=i&url=https://www.pinterest.com/2Fmssportsinjuryclinic.co.uk/2Fservices/2Falternative-medicine/2Fdry-cupping/2F&psig=AOvVaw15yhRLOE7Z58sqjD9%ZV&ust=1649100408978000&source=images&ved=0CagQjRsqFwoTCj5y4HQ-PYCFQAAAAAAdAAAAABAD>

Operational Definitions

- ❖ Dry cupping is a process used in traditional treatments and therapies that uses plastic or glass cups that are applied to the skin to suction or vacuum air (Pesut, 2021).
- ❖ Overhead athletes can be consisted of multiple sports and the majority of the sport has a certain part where there are overhead motions.
- ❖ A visual analog scale is a tool to help a person describe how they are feeling on different on different scale based on pain symptoms.
- ❖ A goniometer is a device that measures an angle or permits the rotation of an object to a definite position (Gandbhir & Cunha, 2021).

INCREASING RANGE OF MOTION
Adam S. Maurer, DC - Move Clinic



<https://www.google.com/url?sa=i&url=https://www.pinterest.com/2Fmssportsinjuryclinic.co.uk/2Fservices/2Falternative-medicine/2Fdry-cupping/2F&psig=AOvVaw15yhRLOE7Z58sqjD9%ZV&ust=1649100408978000&source=images&ved=0CagQjRsqFwoTCj5y4HQ-PYCFQAAAAAAdAAAAABAD>

Acknowledgements

I would like to thank the participants that were involved in this study. I would also like to thank Dr. Hartman and my writing fellow, Allyson Butts, on their aid with the research. .

REFERENCES

- Gandbhir, V. N. & Cunha, B. (2021). Goniometer. *StatPearls*. <https://www.ncbi.nlm.nih.gov/books/NBK558985/>.
- Gregory, C., Powers, M. E., & Gildard, M. (2017). A comparison of instrument – assisted soft tissue mobilization and dry cupping and their effect on shoulder range of motion. *Journal of Athletic Training*, 52(6), S96-S97, Retrieved from <https://ezproxy.gardner-webb.edu/login?url=https://www.proquest.com/scholarly-journals/comparison-instrument-assisted-soft-tissue/docview/1914567959/se-2?accountid=11041>
- Pesut, S. 2021. Dry cupping therapy: Does it really help? <https://www.uhhospitals.org/Healthy-at-UH/articles/2021/02/dry-cupping-therapy-does-it-really-help>.
- Yim, J., Park, J., Kim, H., Woo, J., Joo, S., Lee, S., & Song, J. (2017). Comparison of the effects of muscle stretching exercises and cupping therapy on pain thresholds, cervical range of motion and angle: a cross-over study. *Physical Therapy Rehabilitation Science*. 6, 83-9, doi: 10.14474/ptrs.2017.6.2.83.