

2011

# The effect of shifting between internal and external foci of attention on throwing accuracy

Lowen, J.

Lowen, J. (2011) 'The effect of shifting between internal and external foci of attention on throwing accuracy', *The Plymouth Student Scientist*, 4(2), p. 83-103.

<http://hdl.handle.net/10026.1/13951>

---

The Plymouth Student Scientist  
University of Plymouth

---

*All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.*

## **Appendix A**

### **University of Plymouth**

#### **Faculty of Science and Technology**

##### **Research Project Information Sheet**

###### **Name of Principle investigator**

Jeremy Lowen

###### **Project Tutor**

Patric Bach

###### **Title**

An experiment investigating the accuracy of throwing in students

###### **Aim of research**

The research aims to test the effect of an external or internal focus of attention on throwing accuracy.

###### **Procedure**

After signing the consent form you will be asked to read a short extract. You will then be asked to throw the tennis ball towards the centre of the target with your non – dominant hand i.e. if you are right handed, throw with your left. There will be 6 sets of 15 throws. Between each set you will be asked to read another extract.

###### **Risks**

There are no known risks with this experimental procedure and similar target throwing experiments have been conducted with no harmful effects being reported.

###### **Benefits of research**

Implications of this research extend to sports performance and other tasks which involve basic motor skills such as throwing.

You will be awarded 1 credit for this study, which should last no longer than 30 minutes.

###### **Right to withdraw**

You can withdraw your data at any time and any of your data collected may be removed if you wish.

###### **Contact email**

Jeremy Lowen - xxxxxxxxxxxx

Patric Bach – xxxxxxxxxxxx

## Appendix B

### University of Plymouth

#### Faculty of Science and Technology

Human Ethics Committee Consent Form

Consent to participate in psychology research project

**Name of experimenter** – Jeremy Lowen

**Project Leader** – Patric Bach

#### Brief statement of proposed work

This experiment will investigate the accuracy of throwing among students. You will be asked to throw a tennis ball towards a target and your success rate will be recorded.

I have read the information sheet.

The aims of the experiment have been explained to me.

I understand that I have the right to withdraw at any time and that any data I provide may be removed if I wish.

I am aware that my data will remain totally anonymous, unless otherwise stated.

Under these conditions, I agree to participate in the experiment.

Sign .....

Student ID .....

Date .....



## **Appendix D**

### Internal Focus throwing description

Using your non-dominant hand, throw the tennis ball as accurately as you can towards the centre of the target. You must be standing while you throw and all throws must be over arm. You will have 15 throwing attempts in this set.

Visually focus on the target whilst mentally focusing on the movement of your arm. When you're off target think about how you can correct the mistake by changing the motion of your arm. Each time you throw, focus on your arm and think about how you are moving.

Focus on the motion of your arm while being as accurate as possible.

## **Appendix E**

### External Focus throwing description

Using your non-dominant hand, throw the tennis ball as accurately as you can towards the centre of the target. You must be standing while you throw and all throws must be over arm. You will have 15 throwing attempts in this set.

Visually focus on the target whilst mentally focusing on the flight of the ball. When you're off target think about how you can correct the mistake by changing the flight of the ball. Each time you throw, focus on the ball and think about how it flies.

Focus on the flight of the ball while being as accurate as possible.