

Are Women More Agile than Men?

Teacher Instructions

Materials: a small box, approximately the size of a “plenty” pack of gum

The box should be placed on the floor so it is standing upright, not lying down. (see diagram)

Procedure:

- 1) Each person in the group will do the activity in turn.
- 2) When it is your turn, kneel on the floor as upright as you can. Put your hands behind your back.
- 3) Your partner will place a small box on the floor in front of you. It should be the length of your forearm away from your knees.
- 4) Bend forward and knock the box over with your nose.
- 5) Start over and have your partner try the same activity.

Questions to answer:

- 1) Why can women knock the box over without falling and men cannot?
- 2) What is the difference in the basic skeletal build of women compared to men?
- 3) Where do women carry a lot of their weight?
- 4) Where do men carry a lot of their weight?
- 5) Where is the centre of gravity of women located? Where is it located in men?
- 6) Are women actually more agile than men, on average?

Explanation:

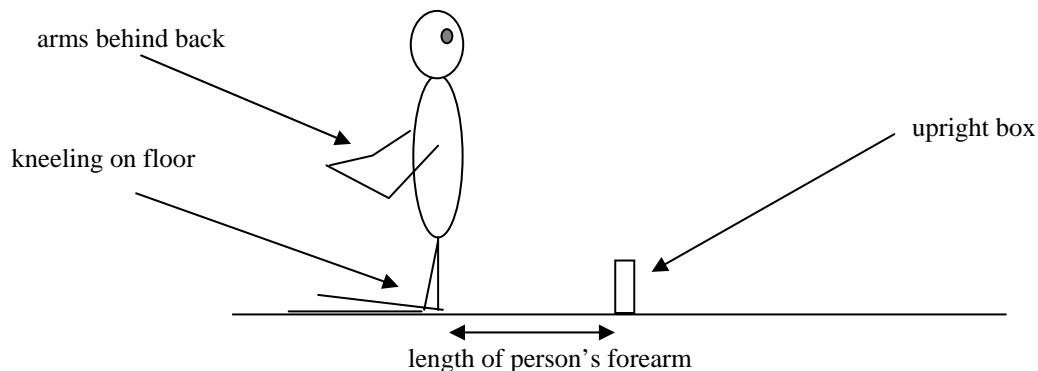
The body structure of women generally has a lower centre of gravity. Women tend to have wider hips and heavier bone structure in the lower abdominal area of the skeleton compared to the body structure of men. Similarly, men have wider shoulders and narrower hips compared to women.

This makes the centre of gravity for men’s bodies higher than women’s.

The lower centre of gravity enables women to lean forward in the kneeling position. When men try to bend forward, they fall forward because of their higher centre of gravity. When a man’s centre of gravity passes beyond his knees, his body will fall forward, off balance.

Adapted from the activity:

17.26 Are Women More Agile Than Men?, page 456,
Invitations to Science Inquiry, 2nd ed.,
Tik L. Liem,
Ginn Press, 1987



Are Women More Agile than Men?

Student Instructions

Materials: a small box, approximately the size of a “plenty” pack of gum

The box should be placed on the floor so it is standing upright, not lying down. (see diagram)

Procedure:

- 1) Each person in the group will do the activity in turn.
- 2) When it is your turn, kneel on the floor as upright as you can. Put your hands behind your back.
- 3) Your partner will place a small box on the floor in front of you. It should be the length of your forearm away from your knees.
- 4) Bend forward and knock the box over with your nose.
- 5) Start over and have your partner try the same activity.

Questions to answer:

- 1) Why is it easier for women to knock the box over without falling?
- 2) What is the difference in the basic skeletal build of women compared to men?
- 3) Where do women carry much of their body weight?
- 4) Where do men carry much of their body weight?
- 5) Where is the centre of gravity of women located? Where is it located in men?
- 6) Are women actually more agile than men, on average?

