

Biology

Left and right dominance

(Switzerland)

Background

The majority of humans are right-handed. Many are also right-sided in general (that is, they prefer to use their right eye, right foot and right ear if forced to make a choice between the two). The reasons for this are not fully understood, but it is thought that because the left cerebral hemisphere of the brain controls the right side of the body, the right body side is generally stronger. It is suggested that the left cerebral hemisphere is dominant over the right in most humans because in 90-92% of all humans, the left hemisphere is the language hemisphere.

You will need...

- ✓ A volunteer
- ✓ A notepad to record your findings

Follow these steps

1. Test to see which hand you use to scratch your back.
2. Fold your hands (praying)! Which thumb is on top?
3. Bring one hand down to the other to make a clapping sound. Which hand comes from above?
4. Test to see which eye you use to wink.
5. If you clasp your hand behind your back with one hand on the other, which hand is the clasping one?
6. Which ear do you use with your mobile phone? Which hand do you put behind an ear in order to hear more clearly?
7. Using your index finger, count to the number three on the other hand. Which index finger do you use?
8. Tilt your head sideways to your shoulder. Which shoulder does your head touch?

9. Cross your arms. Which forearm is on top?
10. Fix a small distant object with both eyes. With your stretched arm make a circle between your finger and thumb and enclose the distant object with this circle. Close one eye and then close the other one instead. Which eye was open when the object was circled correctly? This is the dominant eye.

So what happened?

Could you determine whether you are right-handed, left-handed or have crossed dominance?

What next?

Try using right and left handed scissors and other tools. This will give you an understanding of the difficulties of being left-handed in a world dominated by right-handed people!



Image: <https://en.wikipedia.org/wiki/Hand>