

Overview of the right hemisphere's role in communication and cognition

There are two sides (hemispheres) to the brain - the left and right. They are similar but not mirror images. The hemispheres are the same in the way each side controls the muscles on the opposite side of the body (left controls right). How the sides differ relates to your **thinking and communication**. When we communicate, we use both our left and right hemispheres of the brain. The left hemisphere manages our language or words and sentences, but it is the right hemisphere that decides when and how to use these building blocks of language.

The right hemisphere allows you to interpret **what needs to be said in a particular moment, and the best way to say it**. Some people might say a lot more after a right hemisphere stroke, while others might speak less – this is part of the communication difficulty caused by the stroke.

The right hemisphere of the brain helps you **understand emotions and recognize faces**. After a stroke in the right side of the brain it might be difficult to understanding the feelings or attitudes of others based on their facial expressions and how they use their voices when talking. It might also be difficult for you to use your voice and facial expressions as you used to. People might misinterpret how you are feeling or think that you are not interested in them or what they are saying.

When you know that someone is feeling sad just by the way their voice sounds over the phone, you are likely using your right hemisphere of the brain.

Being able to pay attention to more than one person speaking at the same time is also helped by the right side of your brain. This side of the brain also helps you to **interpret deeper or alternate meanings** in what people say, such as when they make a joke or when they are being sarcastic.



Communication is more than words.

Eye contact, gestures, physical touch, facial expressions, loudness and speed of our voices, choosing to remain silent, laughing and sighing are all ways in which we communicate what we are thinking, feeling, and planning to do next. A right hemisphere stroke might affect one or many of these ways of communicating.

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It also plays an important role in our ability to **pay attention to sounds and things we see** in our environment, especially when the sound or object is on our left. This means that it can be difficult to read as you might not be seeing words on the left of the page. Without realising it, you might also ignore someone who is speaking to you if they are sitting on your left-hand side. The right hemisphere brings all the information that we hear and see together to give us a bigger picture of what is happening, rather than focusing only on the details of what we read, hear, or see. Without this bigger picture we **might say or do things that seems out of character**.

The right hemisphere of the brain influences many **cognitive or thinking skills**. Cognition refers to how our brain processes information, interprets the world, plans, and makes decisions. It is about how we think, take information in, and learn new things. To learn, understand and create meaning there are several cognitive processes involved including attention, memory, problem-solving, and decision-making. We use cognitive skills in all parts of our lives. You use cognitive skills such as problem-solving and decision-making to make choices, find your way in a new town, or solve that 1000-piece jigsaw.

The right hemisphere of the brain is particularly important for us to **evaluate different options**. It is also important for us to be able to make sense of not only words that we hear but at the same time pay attention to someone's facial expressions, the way in which they are using their voices, and what we already know about them and the situation. We call this **integration of contextual information**.

If we have changes in our ability to pay attention to, remember and evaluate all these different ingredients of communication then we might not **understand the whole picture** of what is said.



A stroke affects everyone differently.

Communication and cognitive changes after a right hemisphere stroke can make it difficult to return to work and hobbies. Many people experience fatigue, struggle with difficult tasks and when in noisy places such as family gatherings and restaurants.