

Part 3

Read the article on Left-handed vs Right-handed and answer Questions 26 - 45.

Left-handed vs Right-handed

Humans are the only animals that show a clear left- or right-handedness. Psychologists refer to it as "lateral asymmetry," and it's not seen in any of our closest ape-related ancestors. But it seems that 90% of all human populations have been right-handed. Research on left-handedness by Professor Bryan Turner at Deakin University has discovered that handedness is linked to sidedness. That means that nine in every ten persons have right-handedness, and eight have right-footedness. He pointed out that the human population has a pronounced asymmetry. Black and white, left and right, up and down are only some of how humans think." This system of indicators enhances our ability to classify fundamentally confusing occurrences.

Handedness seems to be a heritable trait, according to recent studies. Even though left-handedness runs in families, children born to right-handed parents are just 6 percent more likely to be left-handed than those born to left-handed parents. Only around 40% of the children born to two left-handed parents will likewise be so. Approximately 15% to 20% of the kids of a right-handed and a left-handed parent will be left-handed. One in every six pairs of identical twins, who share the same genes, will have a different handedness.

If left-handedness isn't only a hereditary trait, what is it? Researchers have looked to the brain for clues as to what else is going on. He discovered that patients who had lost their ability to speak due to stroke (a blood clot in the brain) were paralyzed on the right side of their bodies. This discovery was made in the 1860s by French surgeon Dr. Paul Broca. Considering that the right half of the body is controlled by the brain's left hemisphere and vice versa, he deduced that the injury must have occurred in the left. According to recent research by psychologists, approximately 95% of right-handed persons have their language center in the left hemisphere, whereas just 5% have a right-sided language center. However, the majority of left-handers do not demonstrate the reversal pattern. But instead, their language is located in the left hemisphere. Some 30 percent of the population has a right-hemisphere language.

Dr. Brinkman, a Canberra-based brain researcher, believes that the history of speech has paralleled the evolution of right-handedness. When it comes to language production, Brinkman claims that the growth of the brain has resulted in the development of a bias for the right hand. A large majority of left-handers, according to Brinkman, are mostly left-hemispheric but also possess some right-hemispheric ability. A left-handed person's speech recovery is frequently better when the brain's left hemisphere is injured. This is because left-handers have a more bidirectional speaking function.

It seems that primates (monkeys) develop a hand preference from their mother in the first year of life. After that, however, it might be one hand or another. Anatomical distinctions due to human specialization

in the junction of the two hemispheres result in left-to-right variances in regions involved in speech production. Brinkman says he has observed a tendency in monkey brains toward the asymmetry seen in human brains, even though monkeys have not yet mastered the ability to communicate.

After studying the brains of human embryos, Geschwind and Galaburda found evidence of asymmetry even before birth. However, as the brain matures, various factors might have an impact on it. Until the male foetus releases hormones, every brain is a female brain in its organizational structure. Geschwind and Galaburda were aware that the brain's right hemisphere matures first, followed by the left. In addition, the brain development of a female is considerably quicker than a boy's. As a result, a male's brain is more likely to be impacted during pregnancy, and the left hemisphere is more likely to be implicated. Left-handedness and the development of left-hemispheric talents such as logic, reasoning, and abstraction may arise from the less lateralized brain. The fact that mathematicians and architects are disproportionately male and left-handed should be no surprise.

These findings may provide some solace to left-handed persons after decades of living in a society created for righties. According to Charles Moore, a journalist, and writer, the term "right" encourages its goodness, disturbing. Language, he claims, subconsciously encourages individuals to believe that everything on the right is trustworthy, while anything on the left is harmful or even diabolical. It's no coincidence that left-handed youngsters, who are compelled to use their right hand, typically acquire a stutter since they are deprived of their freedom of speech," says Moore. But as more study is done into the reasons for left-handedness, views towards left-handed persons are steadily improving. For example, Ivan Lendl, a renowned tennis player, has said that he would want to become a left-handed player to better his game.

Questions 26 - 30

Read the statements below. Decide whether they are TRUE, FALSE or NOT GIVEN according to the text.

Mark a cross for the correct answer ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

		True	False	Not Given
26	Apart from humans, certain apes show left-handedness and right-handedness.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> (1)
27	Handedness in humans has a direct correlation with sidedness.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (1)
28	Handedness is found to be something that could be passed on between generations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (1)
29	The majority of left-handers can also write on their right hands.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> (1)
30	Monkeys learn how to use certain hand from their mother.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (1)

(Total for Questions 26 - 30 = 5 marks)

Questions 31 - 40

Complete the following sentences using no more than THREE words that must be taken from one point in the text.

31	According to the study, it shows that ...90% (percent)..... of humans are right-handed (1)
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32	Despite the heritable traits,one in six..... of identical twins can have different handedness <p style="text-align: right;">(1)</p>
33	In order to see whether handedness is hereditary or not, the scientists would have to studythe brain..... To see its activity. <p style="text-align: right;">(1)</p>
34	The scientist, Dr. Paul Broca, discovered that the right body is controlled by left hemisphere of the brain in ...the 1860s..... . <p style="text-align: right;">(1)</p>
35	Based on thelanguage production..... , it is discovered that human brains would prefer the right hand <p style="text-align: right;">(1)</p>
36	Due to a betterbidirectional speaking function..... That the left-handers possess, they would recover from the speech faster than the right-handers. <p style="text-align: right;">(1)</p>
37	Geschwind and Galaburda discovered the evidence of asymmetry by an experiment on the brain ofhuman embryos..... <p style="text-align: right;">(1)</p>
38	Geschwind and Galaburda found that the brain development of a girl is ...(considerably) quicker than..... that of a boy. <p style="text-align: right;">(1)</p>
39	It is found that ...Mathematics and architects..... would mostly be male and left-handers <p style="text-align: right;">(1)</p>
40	Subconsciously, people would consider things on the right to betrustworthy..... while anything on the opposite is perceived to be harmful. <p style="text-align: right;">(1)</p>

(Total for Questions 31 - 40 = 10 marks)

Questions 41 - 45

Complete this summary of the text using words from the box below. Each word may be used once or not used at all

According to Charles Moore, the term “right” is **(41)** ...subconsciously..... related to goodness as people would feel that it is good while the “left” is thought to be **(42)** ...diabolical.....

It is not a **(43)**coincidence..... that we can see the left-handed kids suffer from stuttering merely because they cannot have a full command of their **(44)**speech...

Ivan Lendl, a famous tennis player wishes he could be a left-hander so he could **(45)** ...ebetter... his career.

diabolical improving subconsciously typically speech

coincidence acquire freedom better evidence

(Total for Questions 41 - 45 = 5 marks)

TOTAL FOR PART 3 = 20 MARKS