## The brain is divided into two hemispheres



Cerebral dominance: the tendency of each brain hemisphere to exert control over different functions, such as language or perception of spatial relationships (Zimbardo, Johnson, and Weber 77). The human brain has three major parts: the cerebellum, the brain stem, and the cerebrum. The cerebrum is the largest sector of the brain; therefore, it is split vertically into the left hemisphere and the right hemisphere ("Brain" 6946). How one would know which side of the brain functions for what depends when we use the left and the right brain, when performing certain tasks.

The left half of the cerebrum is known to control the right side of the body ("Brain" 6946). In fact, in a general population, 95 percent of people are right-handed, which means that the left hemisphere is dominant (Johnson, para. 13). Moreover, the main function of the left hemisphere is that it controls the production of speech, and written language (Wood 55).

The left brain is associated with many things, in terms of what the left hemisphere works with, its specific tasks, and even the effects of injuring it. The left brain is associated with analytical and mathematical ability (Miller and Levine 901). It analyzes information collected by the right brain (Johnson, para. 8). In addition, the left side of the brain deals more with language (Johnson, para. 10), which involves all language skills, skilled movement, and analytical time sequence processing (Morris). Accordingly, the left brain works with logic, words, parts and specifics, analysis (breaking apart), and sequential thinking. It is also time-bound; it has a sense of time and goals and one's position in relation to those goals. And as mentioned before, the left brain governs the right side of one's body. Moreover, tasks specific to the left hemisphere including anything dealing that's logical,

sequential, analytical, with an objective, focus and details, and numbers ("
THE WAY OUR MIND WORKS – The Nature of Thinking and How to Manage
It"). With all this in mind, injuring of the left brain can make one unable to
solve complex problems, or just any sort of complex activity. Also, one would
tend to be more depressed (Johnson, para. 10) because the left side of the
brain is known to be good with positive emotions (Morris). Furthermore,
there would be, of course, more organizational problems for the person, and
he or she will have problems of using language (Johnson, para. 10). This
explains the fact that "brain-damaged patients suffering paralysis on the
right side of their bodies often develop speech disturbances, suggesting that
speech production involves the frontal lobe, usually in the left hemisphere"
(Zimbardo, Johnson, and Weber 77).

To sum up the functioning of the left hemisphere, it "handles most of the language functions, including speaking, writing, reading, and understanding the spoken word" (Wood 55). The left hemisphere is also specialized for mathematical abilities, particularly calculation, and it processes information in an analytical and sequential manner (Wood 55). This explains the two styles of thinking if one is left-hemisphere dominant: analytical thinking and sequential thinking. Keywords to analytical thinking would be: logical, factual, critical, technical, and quantities. Preferred activities for an analytical thinker would be: collecting data, listening to informational lectures, reading textbooks, judging ideas based on facts, criteria, and by logical thinking (Morris). Keywords to sequential thinking would be: conservative, structured, organized, detailed, and planned. Preferred activities for a sequential thinker

would be: following directions, repetitive detailed homework problems, time management, and following a schedule (Morris).

The right half of the cerebrum is known to control the left side of the body ("Brain" 6946). As for the remaining percent of left-handers in this world, the right hemisphere is dominant (Johnson, para. 13). Moreover, the main function of the right hemisphere is that it is specialized for visual-spatial perception and for interpreting nonverbal behavior (Wood 56).

The right brain is also associated with many things, like the left brain, in terms of what the right hemisphere works with, its specific tasks, and even the effects of injuring it. The right brain is associated with creativity and artistic ability (Miller and Levine 902). It deals with more of visual activities, and plays a role in putting things together (Johnson, para. 8). In addition, the right side of the brain is better at: copying of designs, discrimination of shapes e. g. picking out a camouflaged object, understanding geometric properties, reading faces and emotions i. e. expressing emotions, anything relating to music, and understanding of metaphors (Morris). Accordingly, the right brain works with emotions, pictures, wholes and relationships among the parts of any given situation, synthesis (putting together), and simultaneous and holistic thinking. It is also not time-bound like the left brain; it is in fact time-free. Therefore, a right hemisphere dominant person would likely lose a sense of time altogether. And as mentioned before, the right brain governs the left side of one's body. Moreover, tasks specific to the right hemisphere including anything dealing that's random, intuitive, colors, rhythms (in relation to music, as mentioned earlier), big pictures (rather than focus and details in the left brain), and pictures (visual things, rather than https://assignbuster.com/the-brain-is-divided-into-two-hemispheres/

numbers) ("THE WAY OUR MIND WORKS – The Nature of Thinking and How to Manage It"). With all this in mind, injuring of the right brain can make one fail to process important information. This can lead to a denial syndrome, and say things like "there's nothing wrong with me". Because it had failed to collect information, the brain would not even realize that something is missing; therefore, leading to a denial syndrome (Johnson, para. 9). Furthermore, the right side of the brain functions to make a person more understanding when he or she is dealing with a person who has been "going through a lot." This is because the right hemisphere is good with negative emotions. Therefore, injuring of the right brain can make one "fearful of mourning feelings" (Morris).

To sum up the functioning of the right half of the cerebrum, it is generally considered to be the hemisphere more adept at visual-spatial relations, as mentioned before. For example, artists, sculptors, and architects have strong visual-spatial skills. One can conclude that this group of people is right hemisphere dominant. In fact, when anyone puts together a jigsaw puzzle, draws a picture, or assembles a piece of furniture according to instructions, he or she is primarily calling on his or her right hemisphere. The right hemisphere processes information holistically rather than part by part or piece by piece, as the left hemisphere does (Wood 56). In addition, the right hemisphere has its role in emotions, that is, recognizing and expressing emotion. This includes reading and interpreting nonverbal behavior, such as gestures and facial expressions, which is primarily a right hemisphere task (Wood 57). Consequently, these right brain functions explain the two styles of thinking if one is right-hemisphere dominant: interpersonal thinking and

imaginative thinking. Keywords to interpersonal thinking would be: kinesthetic emotional, spiritual, sensory, and feeling. Preferred activities for an interpersonal thinker would be: listening to and sharing ideas, looking for a personal meaning, sensory input, and group studying (Morris). Keywords to imaginative thinking would be: visual, holistic, intuitive, innovative, and conceptual. Preferred activities for a imaginative thinker would be: looking at the big picture, taking initiative, simulations (what-if questions), visual aids, appreciate beauty of a problem, and brain-storming (Morris).

In conclusion, research indicates that "the brain is divided into two hemispheres, the left and the right, and [that] each hemisphere specializes in different functions, processes, different kinds of information, and deals with different kinds of problems" ("THE WAY OUR MIND WORKS – The Nature of Thinking and How to Manage It"). The two cerebral hemispheres make different but complementary contributions to our mental and emotional lives (Wood 55). In fact, research has shown that some lateralization of the hemispheres exist, yet functions are usually not handles exclusively by one hemisphere; the two hemispheres always work together (Wood 55). Therefore, this leads to the idea of cerebral dominance. "While some processes are more under the control of the left hemisphere, and others are predominantly right-hemisphere tasks, both hemispheres work together to produce our thoughts, feelings, and behaviors" (Zimbardo, Johnson, and Weber 77).