

THE INFLUENCE OF LEFT-HANDEDNESS ON LEARNING STYLES AND ACADEMIC PERFORMANCE

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Abstract: Left-handed individuals make up approximately 10% of the global population. The assumption that individuals might differ in their cognitive style according to the dominant hemisphere has given rise to tendencies to apply the theory to teaching methods. Studies on occupational choice suggest that more "left brain thinking" might be involved in students' preferences for language and literature and more "right brain thinking" in preferences for graphic arts, artistic skills and architecture. As some studies on brain lateralization have lent support to the hypothesis that left-handed people may reflect a right-brain dominance, and as differences in dominance could have implications about cognitive functioning, the present study aims at investigating whether this difference is reflected in the learning-style and, therefore, learning-strategy differences between left-handed and right-handed EFL students. Though they live in a world designed for right-handed people, research shows that left-handedness can influence how students learn, process information, and perform academically. This article explores how being left-handed affects learning styles and academic success.

Key words: left-handedness, influence, learning style, academic performance, education, challenges.

Learning style differences: Studies suggest that left-handed people may process information more holistically and creatively. This is linked to the brain's right hemisphere, which is often more dominant in left-handers. As a result, many left-handed students prefer visual-spatial learning, pattern recognition, and intuitive thinking. They may excel in subjects like art, music, and geometry, where creative and visual skills are crucial. A person who is left-handed primarily uses his or her left hand, more so than the right hand; a left-hander will probably use the left hand for tasks such as personal care, cooking, and so on.

A widespread idea exists that left-handed individuals are more intelligent and creative than right-handed people. The supporting data for cognitive skills performance of left-handers are intricate. In a study it was found that on average the left-handers show lower performance in high school. While other studies have established the contrary results that left-handers are significantly more intelligent than the right-handers.

Left-handers learn foreign languages better and quicker, have stronger spatial perception, are more creative, their visual memory is more developed and they often exhibit fighting. They are somehow more flexible than right-handers. They appear to be capable of switching over their hand for performing tasks more easily than right-handed people. They think more quickly when playing computer games or sports, which is the reason they are considered better player than right-handers. Left-handed people are likely to be more visual than language-based, making them ideal for artistic pursuits.

Research has shown that university students are more likely to major in visually-based, as opposed to language-based, subjects when they are left-handed. While another study — not comprehensive at only 103 students — showed that within the sample, 47% of art students were left or mixed-handed.

Classroom challenges: Despite their unique strengths, left-handed students often face physical and cognitive challenges in traditional learning environments. Many school tools—like scissors, desks, and writing materials—are designed for right-handed use, which can lead to discomfort and slower task performance. In writing, left-handed students may struggle with smudging ink or poor handwriting, especially in languages written left to right. Furthermore, the handles are often molded in a way that is very difficult for a left-hander to hold, and extensive use causes severe discomfort and pain. Computer mice are also very frequently shaped to fit the right hand. Rulers as well are difficult to use, resulting in upside down measurements.

Writing is difficult to learn for a left-handed child if, as is usually the case, the writing teacher is right-handed. This is because, when properly done, left-handed writing is a mirror image to that of the right hander, making the learning process confusing for the left-handed student.

The result is, the majority of left-handed people write with their hand curled around the pen so that it can meet the paper at the same angle as the right hander, rather than simply tilt the paper the opposite way. Once this habit is formed, it is difficult to break.

Academic performance: There is no clear evidence that left-handedness leads to lower or higher academic performance overall. However, left-handed students may perform better in tasks that require divergent thinking and creativity. On the other hand, they might underperform in standardized testing environments that do not accommodate their needs.

-Positive Findings:

Some left-handed students have been found to excel in mathematics, architecture, and creative fields, possibly due to right-brain strengths in spatial awareness and creativity.

Studies like one by Coren (1995) suggest that left-handers may outperform right-handers in certain problem-solving tasks.

-Negative Findings or Challenges:

Left-handed students may face challenges in standardized classrooms, especially when tools and instructions favor right-handed norms.

Older studies sometimes showed slightly lower average academic performance, but this is often attributed to environmental factors, not handedness itself.

-Neutral Findings: Large-scale studies (e.g., in the UK and Australia) have shown no significant difference in average academic achievement between left- and right-handed students.

Left-handers as being particular: Left-handedness distinguishes left-handed population as unique and different in a way, for the majority of handedness are categorized as right-handed population. Based on the finding this uniqueness brought various feeling to left-handed individuals that is caused by both internal and external influences. The feeling ensued the belief, value and thought of left-handedness.

-Positive feeling of being left-handed

Some of the participants express their positive feeling and distinctiveness for being left-handed. These positive feelings mentioned in the finding includes feeling of uniqueness, happy, proud, feeling different, advantageous etc.

-Negative feeling of being left-handed

While others left-hander participants explain the negative feeling they experience as a result of their left handedness. For some, this feeling resulted from internal and external pressure like social influence that rose from the religious and cultural value that left-handedness has. These negative feelings stated in this finding include feeling of isolation, sadness, vulnerable.

Conclusion

Left-handedness influences the way students learn and engage with academic tasks. Recognizing these differences is important in creating inclusive educational settings. With proper support and awareness, left-handed students can thrive and use their unique strengths to their academic advantage.

Left-handed students are ready and able to adapt to a right-handed world. They can blend in a world intended for right-handed people. They may experience challenges along the way yet these do not hinder them from performing what is expected of them. They get used to the daily challenges posed on them and are able to overcome them through the process of adaptation. Hence, they may experience difficulties in a right-handed world but they are able to fit in and accomplish with ease the tasks.

Addressing learning styles is a dual responsibility. Teachers need to determine student's learning style preferences and present instruction, supply materials and provide assessment options that address students' learning style needs. Students must

be taught about their learning style strengths so they can be empowered to study in ways that will help them concentrate process and retain new and difficult information. Students and teachers alike need to be respectful of learning style differences.

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