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Spatial Dyscalculia

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Definition

Impaired arithmetical problem-solving due to difficulties handling the two-dimensional or spatial arrangement of the numbers, especially when multi-digit figures are involved. In performing certain mathematical operations involving multi-digit numbers, where one starts from the rightmost column and works leftward, it is essential that the positions of the numbers be respected with regard to their columnar arrangement. Thus, solving such problems requires precise spatial organization and

meticulous alignment. This applies not only to written problems but to purely mental calculations as well, as these are also vulnerable to spatial disruption. An additional problem can occur in cases of left-sided neglect where numbers on the left side of the equation are ignored. Such disturbances are typically the result of right hemispheric lesions, particularly these involving the parietal-occipital cortices.

References and Readings

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