Abstract

This paper examines the role of inner speech in the domains of the central executive and default mode network. Studies of inner speech have repeatedly indicated its role and use in a variety of cognitive tasks, regardless of the verbal or non-verbal nature of the procedure employed in their execution. These studies have primarily focused on the domains of the central executive network; no such study has yet been conducted for the default mode network. The aim of the present work is to design an fMRI study that could approximate the role of inner speech in a selected domain of the default mode network - the retrieval of content from long-term, episodic memory.

The theoretical section provides a definition of inner speech, describes the neural correlates of different types of speech, and compares a number of studies and their approaches to studying inner speech. In addition, the thesis emphasizes neurodevelopmental and neurobiological aspects, which the thesis places in the context of significant developmental leaps, particularly between the ages of 5 and 10 years. The given facts are also developed in the context of autism spectrum disorders, schizophrenia, deaf-mute individuals and individuals with aphasia.

Key words