Monotonia Correlates upon Implementation of Bimanual Movements in the Context of Visual Attention Strain and In People with Distinguishing Characteristics of Cognitive Performance.

- **Author(s):** Natalia A. Raspopova ,Pavel V. Tkachenko ,Nadezhda I. Belousova ,Andrey V. Prusachenko ,Sergei Yu. Mironov
- **Abstract:** At present time the problem of monotonia remains quite crucial since it influences the effectiveness of various activities in the working place, sports and training. The emergence of this condition depends on a series of causes and is primarily determined by the properties of the central nervous system and the peculiarities of cognitive activity. The levels of bimanual coordination of test males and females, their belonging to the pole of cognitive style field dependence-field independence are determined, the features of the sensory system functioning based on the analysis of amplitude-time indicators of the components of visually evoked potentials on flashing light are identified. The article goes on to analyze monotonia manifestations in the implementation of voluntary targeted bimanual movements and the implementation of psychomotor activity in the conditions of visual attention strain in individuals with various types of cognitive style and gender. The patterns of monotonia development have been established, which are expressed in characteristics changes of voluntary motor activity of combined movements of the hands when implementing a number of coordination samples and the implementation of psychomotor activity. Males are most resistant to monotony regardless of cognitive style, which is manifested by the stability of visual attention and keeping up the pace of conducted activities.
- **Keywords:** monotonia, training, emergence, cognitive, amplitude-time, bimanual, psychomotor.