Individual differences in cognition

Aim of the course

The course aims to provide an overview of individual differences in cognitive abilities. It integrates standard topics in individual differences, such as the nature-nurture issue, sex differences, and ageing. Besides, we will survey statistical models of the structure of abilities as well as explanations of the main findings. The emphasis will be on cognitive theories in general and the role of working memory and executive functions in particular.

Learning outcome, competences

knowledge:
- human cognitive abilities
- individual differences
- the basics of psychometrics and latent variable modeling

attitude:
- interdisciplinary approach
- sensitivity toward the nature/nurture debate
- sensitivity toward gender differences képesség:
- analytic thinking
- understanding of statistical models of the structure of abilities

Autonomy, responsibility
- Self-employed implementation of knowledge and skills according to ethical standards

Content of the course

Topics of the course

- Introduction & history: Why are individual differences the „abandoned child” of cognitive/experimental psychology
- Psychometrics
- The structure of cognitive abilities 1.: the general factor
- The structure of cognitive abilities 2.: specific abilities · The neuroscience of cognitive abilities · Theories of individual differences 1.
- Theories of individual differences 2.
- Sex differences in cognitive abilities
- The heritability of intelligence
- Environmental effects on cognitive abilities
- The Flynn effect: intergenerational gains in IQ
- Age effects on cognitive abilities

Learning activities, learning methods

- lectures
- group discussions
- written assignment
- student presentations (optional)
Számonkérési és értékelési rendszere Evaluation of the course

Learning requirements, mode of evaluation, criteria of evaluation:

requirements: kollokvium
Written exam (60%)
• Essay or applied project or research plan (40%)

mode of evaluation: kollokvium
• aggregated score based on the above panels

criteria of evaluation
• the level of acquired knowledge
• methodological sensitivity

Reading list

Compulsory reading list

Recommended reading list

• Kamphaus, R. W., Pierce Winsor, A., Rowe, E. W., & Kim, S.