

# The ALOUD Study:

## Adult Learning Open University Determinants Study

Influence of biological and psychological determinants on study success in formal lifelong learning in adults

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# Overview

- Introduction
- Determinants
- Methods
- Procedures
- Ultimate goal



# Problem definition

- Relation between cognitive neuroscience and education is strengthening
- No insights are gained with the adult education
- OU serves this group of learners, therefore this is the goal of the project



# Background

- Cognitive functions develop until late adolescence
- Cognitive decline begins in early adulthood
- However, the ability to learn hardly declines until far into old age



# Limitations previous research

- Implementation of new neuroscientific insights in primary and secondary education
- Implementation only in children and adolescents
- Research not oriented towards adults and elderly



# Research questions

- What characterizes persons participating in formal lifelong learning?
- Which factors are age and sex dependent?
- What are the associations between the respective determinants?
- Which factors determine study success?



# Independent variables

<b>BIOLOGICAL DETERMINANTS</b>	<b>PSYCHOLOGICAL DETERMINANTS</b>		
<ul style="list-style-type: none"><li>• Nutrition</li><li>• Sleep</li><li>• Vitality</li><li>• Physical activity</li><li>• Correlates such as weight, height, etc.</li></ul>	<u>COGNITIVE</u> <ul style="list-style-type: none"><li>• Learning strategies</li><li>• Cognitive abilities</li><li>• Self-regulation</li><li>• Self-directed learning</li></ul>	<u>MOTIVATIONAL / AFFECTIVE</u> <ul style="list-style-type: none"><li>• Affect</li><li>• Anxiety</li><li>• Goal orientation</li><li>• Implicit beliefs</li><li>• Intent to persist</li><li>• Self-efficacy</li><li>• Self-worth</li><li>• Stress</li><li>• Coping behavior</li></ul>	<u>SOCIAL</u> <ul style="list-style-type: none"><li>• Social support</li><li>• Social climate</li></ul>



# Outcome variables

- Study success
- Successful vs. drop-outs
- Quality of life
- Life satisfaction
- Long-term efficacy (promotion, salary raise)





# Covariates

- Age
- Sex
- Weight
- Height
- Level of education
- Ethnicity
- Previous GPA
- Current working hours
- Computer skills



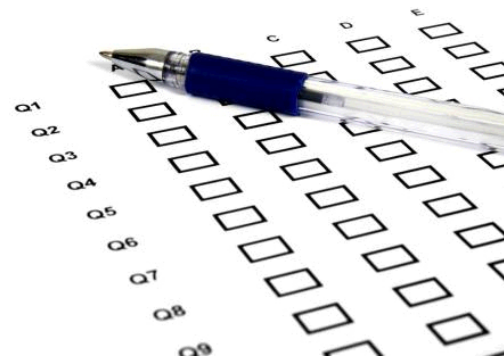
# Methods

- Cross-sectional observational study (pilot)
- Longitudinal observational study
- 2000 OU students
- Master course Psychology and Learning Sciences



# Procedures

- Psychological determinants:
  - Questionnaires
  - Neuropsychological tests
- Biological determinants:
  - Accelerometers
  - Questionnaires
- In general:
  - Self-report medical data
  - Study success
  - Specific study performance



# Ultimate goal

- Developing an intervention which leads to a better study performance and overall long-term efficacy



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