

ALoud biological: Adult Learning Open University Determinants study - Association of biological determinants with study success in formal lifelong learners

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ALoud biological:
Adult Learning Open University Determinants study

Association of biological determinants
with study success in formal lifelong
learners

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Overview

- Problem definition
- Research questions
- Factors & Variables
 - Biological factors
 - Other variables
 - Covariates
 - Dependent variables
- Methods
- Ultimate goal

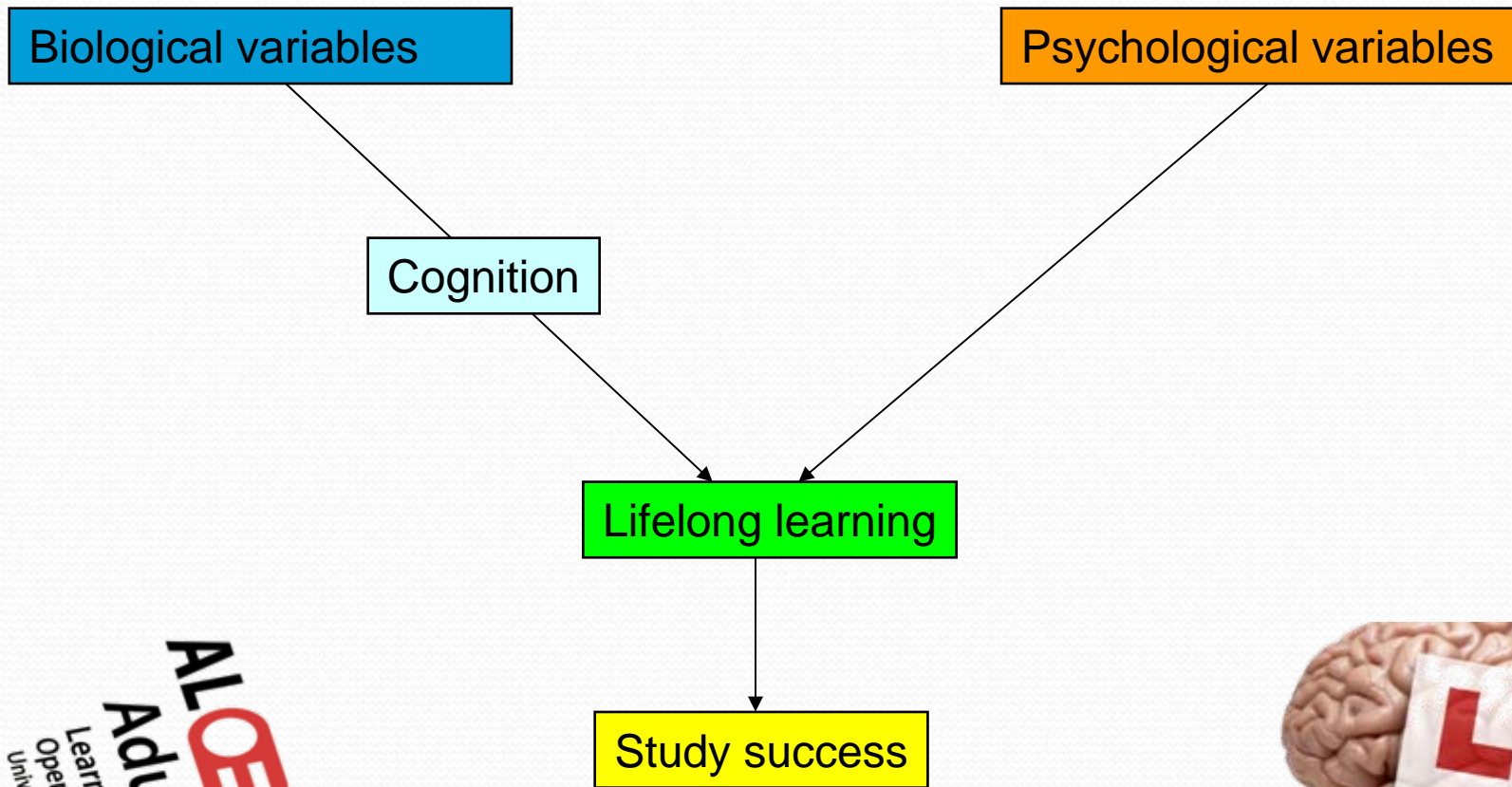
Problem definition

- Previous research focused on:
 - Children & adolescents
 - Academic achievement
 - Traditional education
 - Single factors or even specific variables
- Research in adults is lacking!

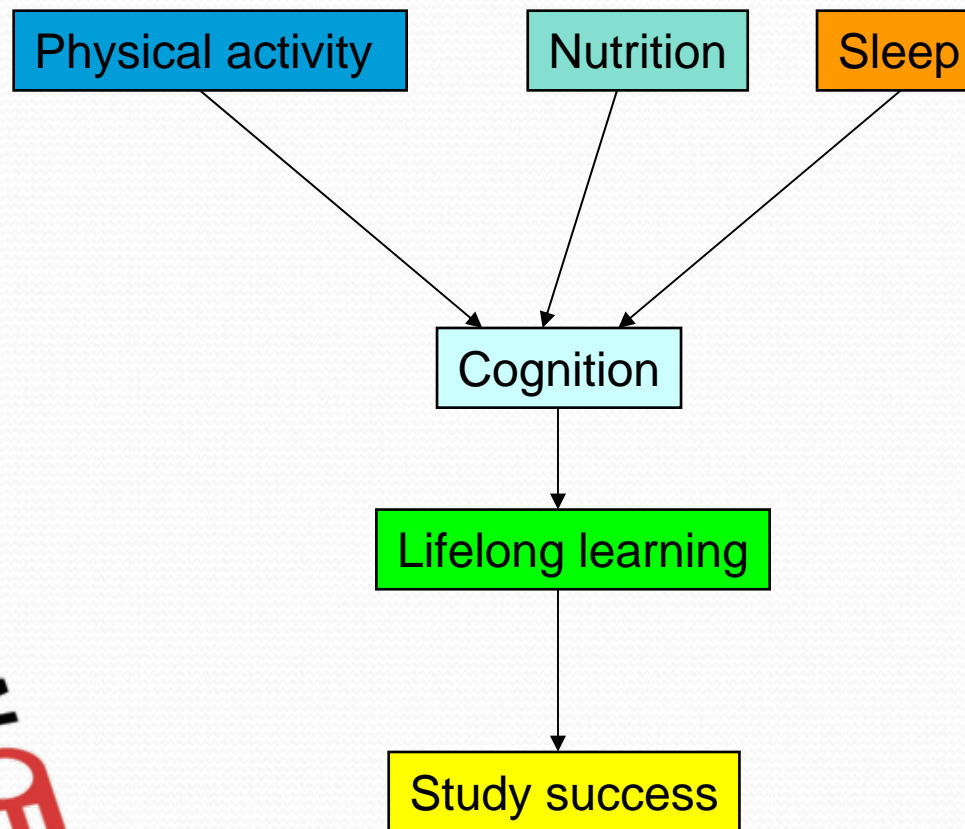
Research questions

- What characterizes persons participating in formal lifelong learning?
- Which differences are apparent between successful and non-successful students?
- Which factors determine study success?
- Which factors are age and sex dependent?
 - What are the associations between the respective variables?

ALoud (full project)



ALoud (biological part)





Physical activity

- Different domains:
 - Sport
 - Leisure
 - Transport
 - Work-related
 - Domestic
 - Sitting



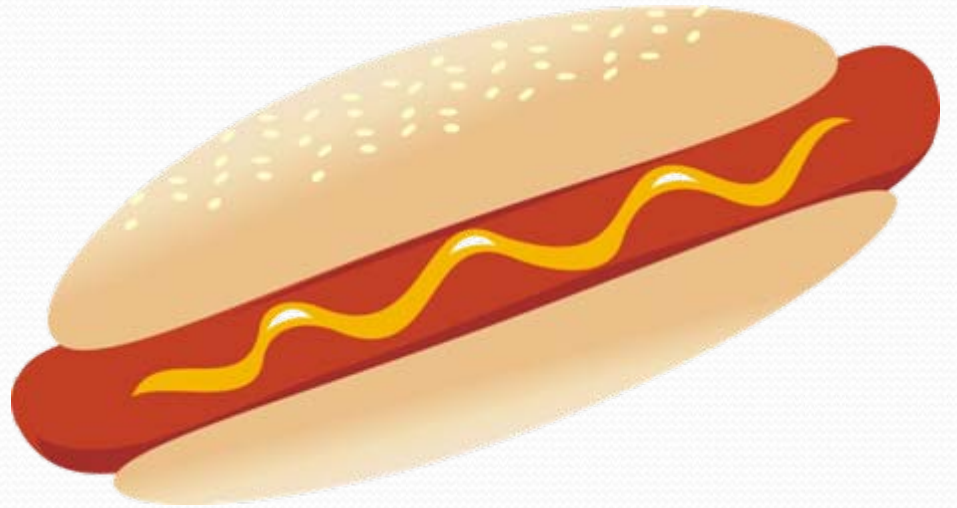
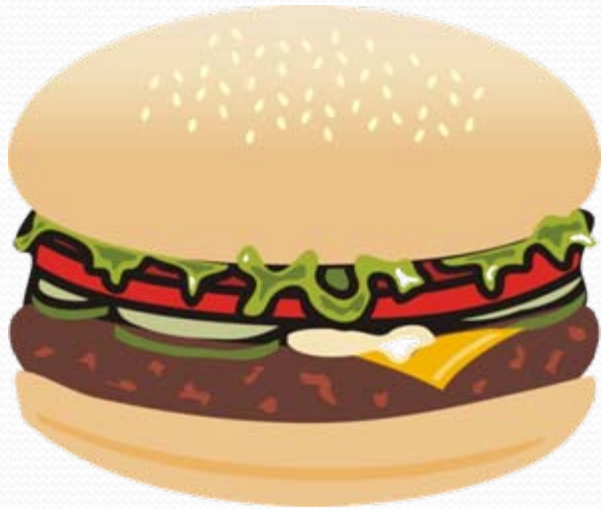
Physical activity in children

(Hillman, Erickson & Kramer, 2008)



Physical activity in older adults

(Hillman, Erickson & Kramer, 2008)



Nutrition

- Breakfast
- Fish consumption
- B-vitamins
 - Folic acid & folate
 - B6 & B12
- Caffeine



Breakfast in adolescents

(Troickel, Barnes & Egget, 2000)

Breakfast in adolescents



(Troickel, Barnes & Egget, 2000)



Sleep

- Duration
- Wake-up time and bedtime
- Quality of sleep
- Chronotype
 - Morning type
 - Evening type
- Amplitude
- Fatigue

Sleep in first-year students

(Troczel, Barnes & Egget, 2000)

Sleep in first-year students



(Trockel, Barnes & Egget, 2000)

Other variables

- BMI
- Vitality
- Health status
- Covariates



Other variables

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Other variables

- BMI
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Other variables

- BMI
- Vitality
- Health status
- Covariates
 - Age
 - Sex
 - Mood
 - Job information
 - Computer skills
 - Composition household
 - Educational level
 - Mother tongue

Dependent variables

- Cognitive performance
- Study success
 - Successful vs. non-successful
 - Study pace
 - Grades
- Additional subjective measure
 - Life satisfaction



Methods & procedures

- 2000 OU students
- Observational study
- Computer-based questionnaires
- Computer-based neuropsychological tests
- Accelerometers in a subsample
- Exam registration system
- Multiple regression analyses



Ultimate goal

- Creating a knowledge base for the development of an intervention which leads to better study success and overall long-term efficacy



Thank you for your attention!



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