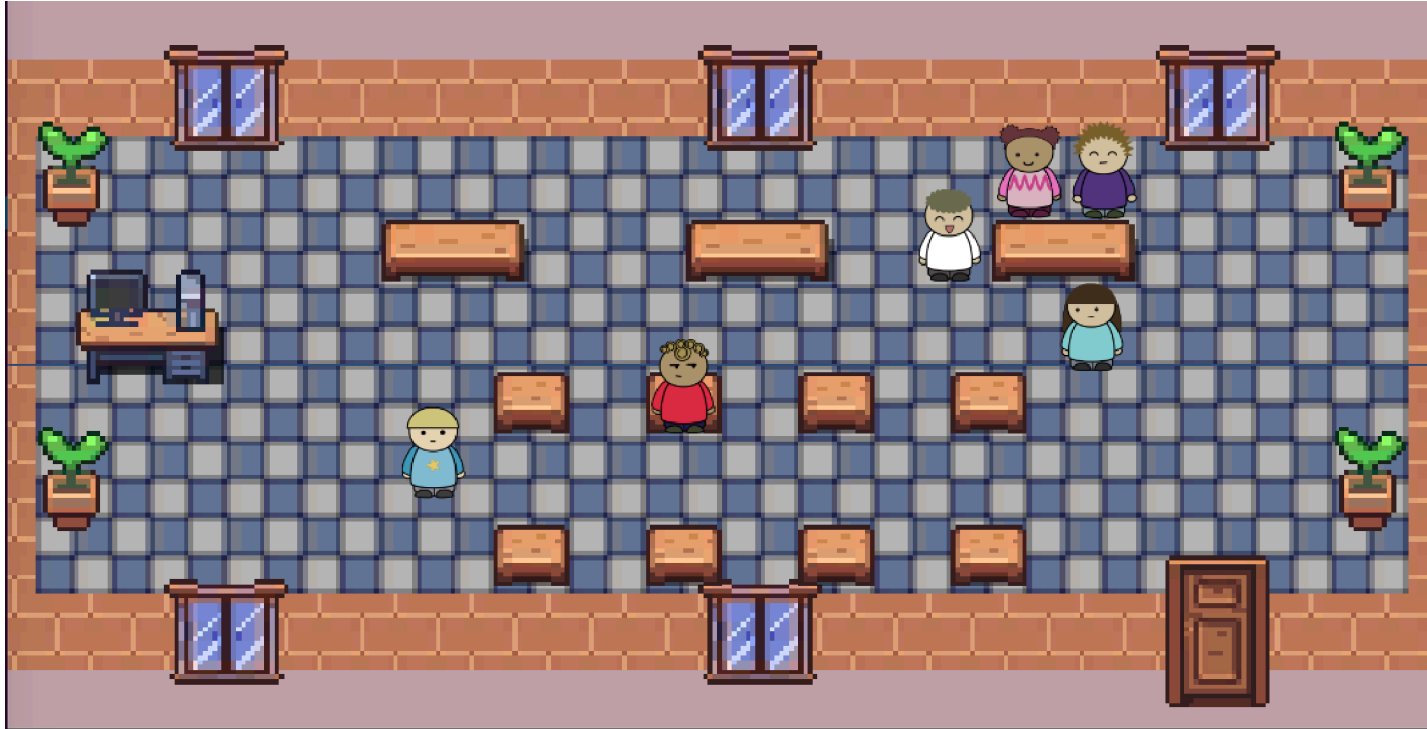# Breakfastclub

A Multi-agent based classroom simulator

manuel.pasieka@protonmail.ch

How different personalities effect classroom attention and happiness?

Breakfastclub

- Unity3D based multi-agent simulation
- Agent behavior is based on OCEAN (Big Five) Personality Trait model
- Model attention, happiness and motivation
- Different personality profiles are compared to each other

The Agents

Behavior

- Chat
- Take a break
- Study alone
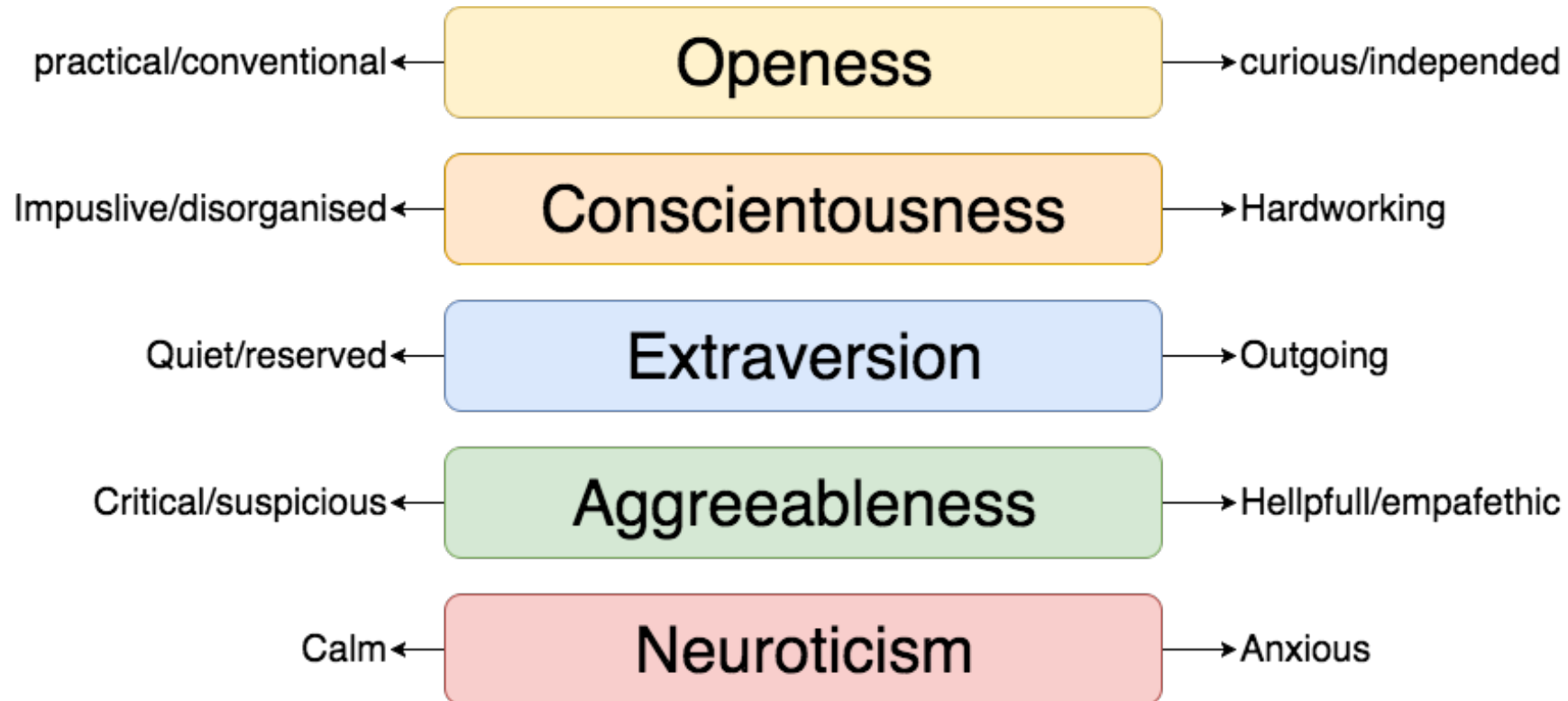- Study in groups
- Quarrel/Argue

Internal States
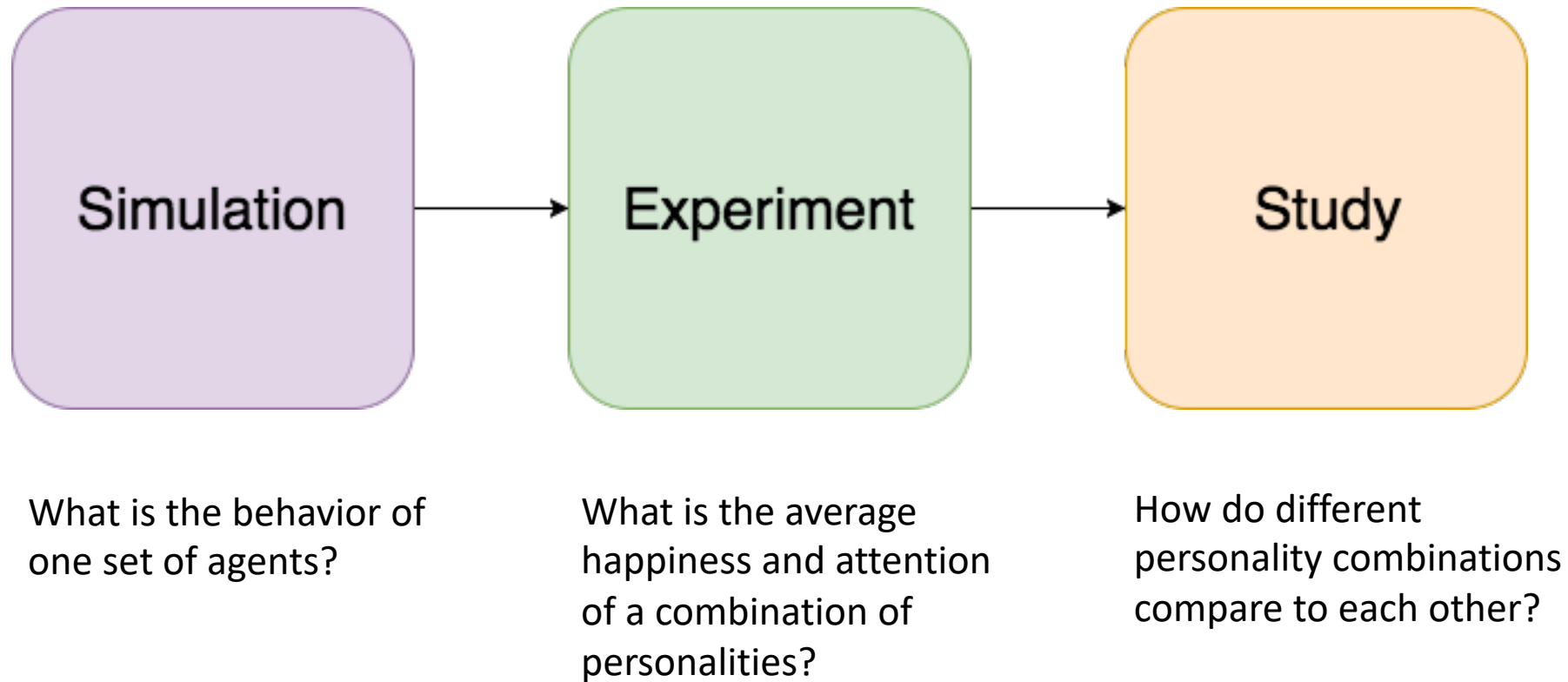
- Motivation
- Happiness
- Attention

Personality

- Openness
- Conscientiousness
- Extraversion
- Agreeableness
- Neuroticism

OCEAN – Personality Trait Model

practical/conventional ← **Openess** → curious/independed

Impuslive/disorganised ← **Conscientousness** → Hardworking

Quiet/reserved ← **Extraversion** → Outgoing

Critical/suspicious ← **Aggreeableness** → Hellpfull/empafethic

Calm ← **Neuroticism** → Anxious
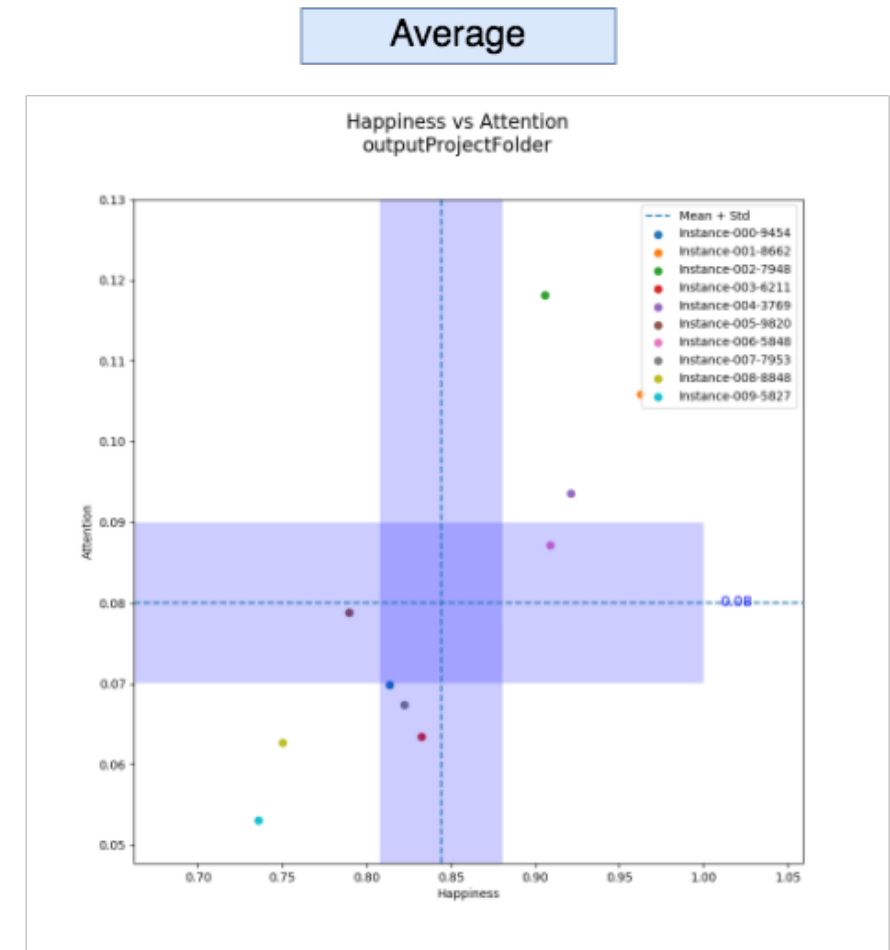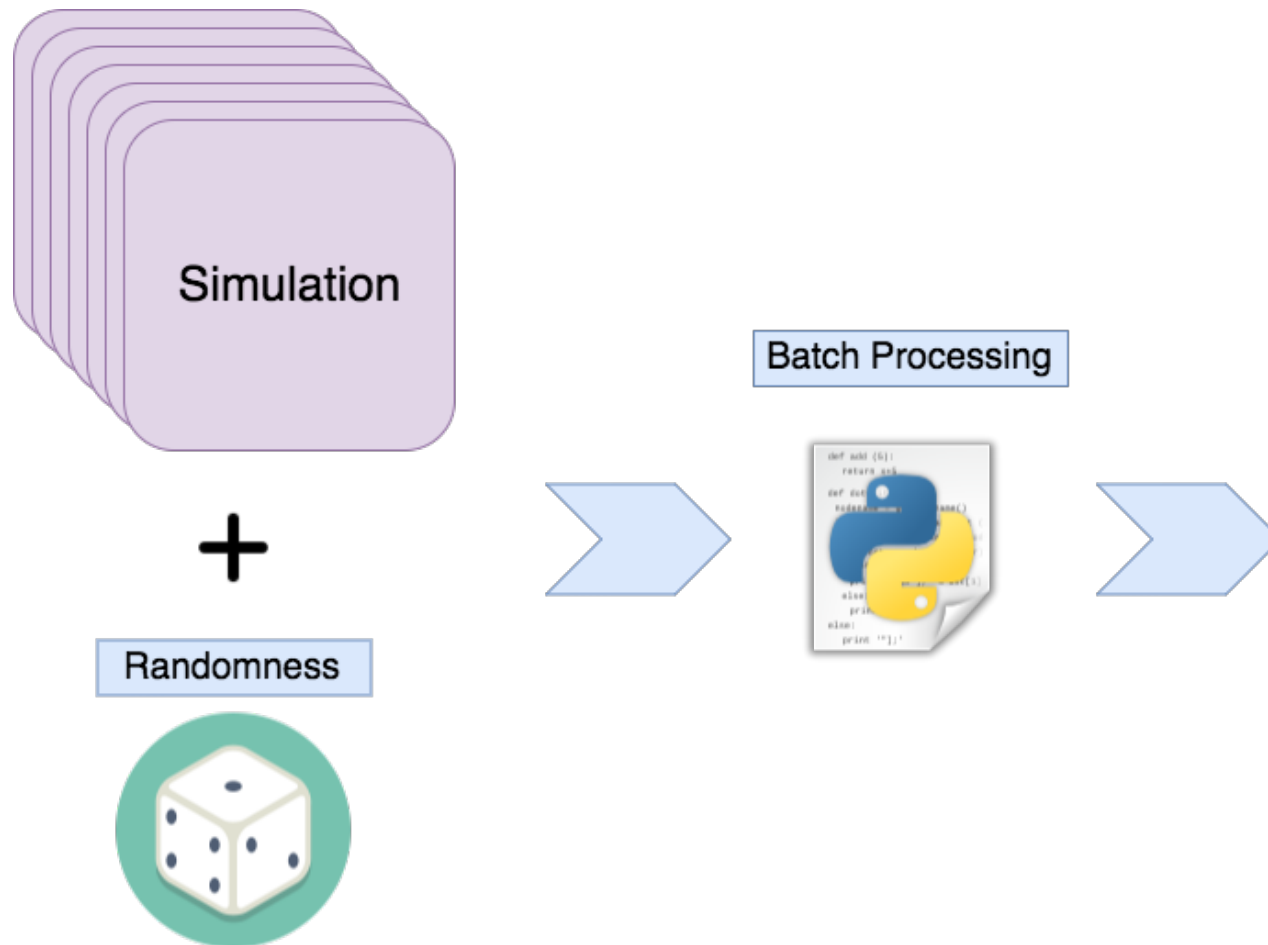
Three phase Analysis

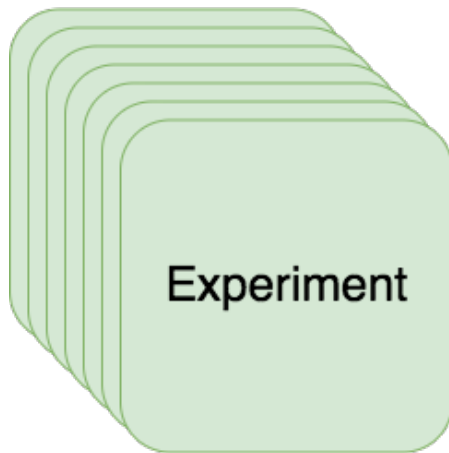Simulation → Experiment → Study

What is the behavior of one set of agents?

What is the average happiness and attention of a combination of personalities?

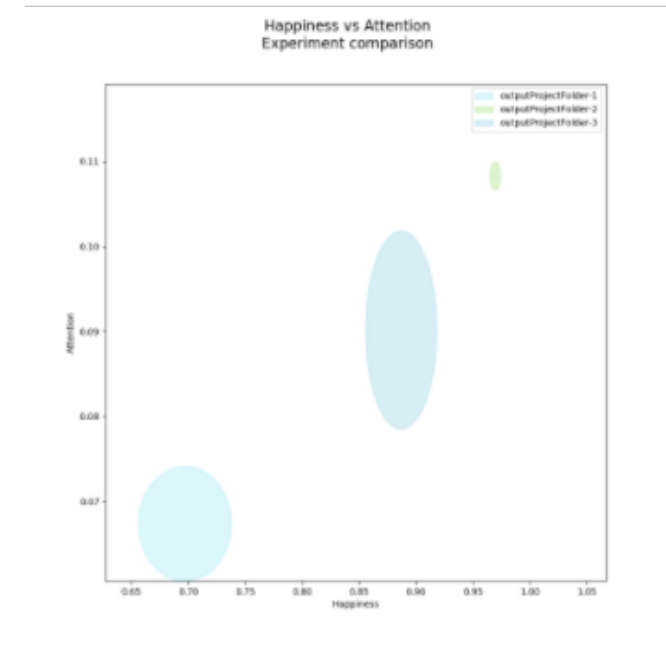How do different personality combinations compare to each other?

Simulation

Experiment

Study

Results

Outlook

Máster Universitario en Inteligencia Artificial

Prof. Dr. Michael Kickmeier-Rust
(Supervisor)

Thank you