

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Big Data in Behavioural Psycology

2021-2-F9101Q030-F9101Q031M

Aims

The laboratory aims to introduce the student to the investigation of questions of psychological importance through the methods and tools of data science.

Contents

Human behavior is extremely complex, as it is affected by many factors. Many psychological experiments measure 2-7 variables in cross-sectional studies with small datasets.

The use of large datasets, with many variables and/or longitudinal designs, is sporadic. However, the research conducted so far with "Big Psychological Data" demonstrates that the use of machine learning methods, such as clustering and deep learning, can be applied to solve complex psychological problems.

We will address several problems of applied psychological interest, with case studies.

Detailed program

We will cover psychological aspects related to consumer and costumer behavior, with particular attention to naturally occurring datasets (I.e., digital traces of behavior and cognition).

Examples of psychological addressed in the laboratory are:

- determinants of pro-environmental consumption
- cognitive bias in purchasing behavior

Prerequisites

Basic knowledge of R (https://www.r-project.org) or other statistical software.

Teaching form

We will analyze several case studies:

- the research question;
- how it has been addressed and with which results;
- spaces for improvements.

Textbook and teaching resource

Slides and scientific papers will be made available on the e-learning page.

Semester

Second Semester

Assessment method

• Computerized written examination on the theoretical concepts (with open and closed questions)

and

Office hours