

Figure 1.A.U.Th. logo. Retrieved from https://www.auth.gr/en/logo

Research Methods

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Research Methods

Overview

- Data gathering, e.g. surveying, pools, observationm research, etc.
- Data analysis
- Predictions

Terms and Definitions

Survey

• "an investigation of the opinions, behaviour, etc. of a particular group of people, which is usually done by asking them questions" source:Oxforddictionaries online from Wikipedia

Data Analysis

• "is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data. From office for Research Integrity [ORI]m

Sources of information

http://libguides.mit.edu/ssds

Data.gov: Datasets generated by the executive branch of the US government http://www.data.gov/

- IPUMS: censuses from the US and many more! https://www.ipums.org/
- International IPUMS https://international.ipums.org/international/
- ICPSR http://www.icpsr.umich.edu/icpsrweb/ICPSR/: A data repository with many data sets on lots of subjects
- Harvard-MIT Data center and Harvard Data verse https://dataverse.harvard.edu/ where many researchers archive their data
- Amazon dataverse http://aws.amazon.com/public-data-sets/

Source edx.org

Tools

R Stata SPSS Mathematical statistics Python



- Oxford Dictionaries Online. Survey. Retrieved from https://www.oxfordlearnersdictionaries.com/us/definition/english/survey_1
- 2. Office of Research Integrity. Data Analysis. Retrieved from https://ori.hhs.gov/
- 3. Edx.org. Retrieved from

 $\frac{\text{https://courses.edx.org/assets/courseware/v1/fd388540140a77a52c31ad8bb8db46d5/asset-v1:MITx+14.310x+1T2020+type@asset+block/14310x Lecture4 New ToUpload.pdf}$