**Research Methods Module**

* Research is the search for knowledge. It is an objective and systematic search for releveant information on a particular subject. It aims at finding answers to questions by implementing scientific procedures.
  + Most exciting phrase to hear in science is not “Eureka”, that’s funny?, when things not happens the way you expect, discovery comes then.
  + Master degree: broaden the field, PhD: create new knowledge.
* Academic research: “... comprise creative and **systematic work** undertaken in order to **increase the stock of knowledge**-including new knowledge of humankind, culture and society-and devise new applications of that knowledge.” OECD, 2015, p.28
* **Elements of research**: framework as expressed in Oxford Handbook of qual research, 2014, 2-3
  + **Philosophical paradigms**
    - Ontology: philosophy of reality
      * Objectivism is ontological position that implies that social phenomena confront us as external facts. Bryman, 29
      * Constructionism is ontological position that asserts that social phenomena and their meanings are continually being accomplished by social actors.
    - Epistemology relates how we know that reality.
      * Positivism is an epistemological position that advocates the application of the methods of the natural sciences to the study of social reality.
      * Main principles:
        + only phenomena and hence knowledge confirmed by senses can genuinely be warranted as knowledge.
        + The purpose of the theory is to generate hypothesis that can be tested-deductivism
      * Interpretivism argues that subject matter of social sciences is different, so knowledge can be obtained with other methods than natural science methods ie positivism.
  + **Praxis:** doing the research, the practice of research.
    - Genre: overarching category, field research, grounded theory, mixed method
    - Methods: tools for data collection
    - Theory: is an account of social reality that is grounded in emprical data.
    - Methodology:
      * relates to philosophical issues around whether it is “possible or advisable to use such tools in the first place”.
      * identifies specific practices used to gain knowledge.
      * Plan for how research will proceed. Combining methods and theory.
      * Informed by philosophical beliefs and selection of research methods
      * Social science methodologies:
        + Quantitative methodology, associated with positivist epistemology.
        + Qualitative methodology, associated with interpretivist epistemology.

A screenshot of a research problem

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* Methods
  + are concerned with technical problems to do with research tools and their proper usage to ensure best practice.
  + include **scientific approaches to collecting data, and ways of analysing data.**
  + includes ways to approach **literature systematically.**

Assumptions are translated into explicit methodological strategies delivered by appropriate methods.

Research design is “the logic that links the data to be collected (and conclusions to be drawn) to the initial questions of study”. Yin, 1994:18