

# Research Methods in Health Psychology

Dr Howard Fine  
The Royal London Hospital

1

## Research Methods in Health $\Psi$

- Focus on the types of studies and experimental methods that are used to address the questions of Health Psychologists.



2

## Key Questions for Health $\Psi$

- What are the different methods use in H $\Psi$ ?
- How much control can researchers actually exert over situations when conducting studies in H $\Psi$ ?
- What terminology must I learn to be able to understand H $\Psi$  research?
- What challenges do H $\Psi$  researchers face, and what would it be like to conduct this research?
- When I read studies in H $\Psi$ , what do I need to know to evaluate them intelligently?



3

## Important Issues in Research

- Operational definitions
- Measurement issues (qualitative v. quantitative)
- Access
- \$\$\$\$\$\$\$\$
- Demand characteristics
- Placebo effect
- Experimenter bias
- Sampling Bias
- Ethics

4

## Sample Study

- Design a research to study to investigate of the efficacy of a talking therapy on the outcome of chronic pain.
  - Consider:
    - Who/how would you recruit?
    - How would you assess?
    - Over what period?
    - What ethical issues might you address?

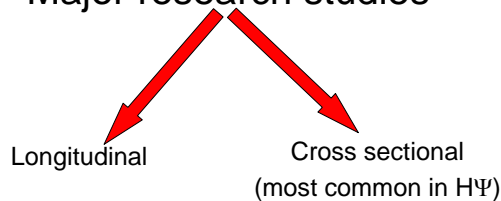
5

## Basic Vs. Applied Research

- **Applied research**
  - Designed to solve real-world problems
    - HIV Needle sharing
- **Basic research**
  - Designed to learn about fundamental psychological processes
    - Stages of change

6

## Major research studies



7

## Cross-sectional Studies

- A study in which separate groups of subjects at different stages are compared.
  - E.g. a study comparing onset of depression in childhood against adulthood.
- **Pit-falls:** Since performance is being tested in two separate groups, it is hard to determine the cause of any difference in performance that might be found. There may be hidden differences between the two groups, aside from their age, that are the cause of the behavioural differences.



8

## Longitudinal Studies



- A study in which changes over time in the performance of a single group of subjects is studied.
  - E.g. a study comparing depression on the same group at different stages / ages.
  - **Advantages:** Controlling for some of the potentially confounding factors mentioned above for the simple reason that each individual can be directly compared with himself or herself at an earlier age.
  - **Disadvantages:** Cost, time, effort. Often very difficult, for practical reasons, to implement longitudinal studies: subjects may move to different geographical areas or decide that they are no longer interested in participating (attrition).
- In addition to the division between cross-sectional and longitudinal studies, two further divisions can be made...<sup>9</sup>

## Experimental Studies

- A study in which one variable is **manipulated** (the independent variable, e.g. an environmental condition) and its effect on another variable (the dependent variable, e.g. effect on learning and recall) is observed.
- **Ethical dilemmas:** Not able to manipulate variables of Maternal Care vs. No Maternal Care.



10

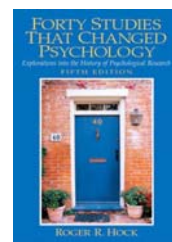
## Observational Studies

- A study in which the variables of interest are observed, rather than manipulated.
- Harder to interpret than an experimental study because other, unmeasured factors, may be the cause of any observed relationship between the variables of interest.



11

## References



- Bowling, A. (2002). *Research Methods in Health Care: Investigating health and health services*. Buckingham: OUP.
- Hock, R.R. (2004) *Forty studies that changed psychology - explorations into the history of psychological research*. (5<sup>th</sup> Ed.) Prentice-Hall.

12