

COMPARING METHODOLOGIES

1) METHODS OF INVESTIGATION

| BIOLOGICAL PERSPECTIVE | COGNITIVE PERSPECTIVE | LEARNING PERSPECTIVE |
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| <ul style="list-style-type: none"> ❖ Laboratory experimentation – e.g. stimulating, giving drugs to, or removing parts of the brain to see what effects it will have on behaviour; ❖ Laboratory observations – controlled observations of physical processes, e.g. sleep or the scanning of the structure and activity of the brain; ❖ Correlations – e.g. between twins and adopted family members to discover the genetic influence on intelligence or mental disorder; | <ul style="list-style-type: none"> ❖ Experimentation – usually conducted in the laboratory, e.g. memory experiments conducted under strictly controlled conditions, where IVs (such as time delay before recall) are manipulated to find the effect on the amount of information retained; ❖ Case studies – e.g. the study of brain damaged patients such as those with anterograde amnesia in memory research; | <ul style="list-style-type: none"> ❖ The behaviourists adopted a very scientific approach, using strict laboratory experimentation; ❖ They usually conducted their experiments on animals such as rats or pigeons; ❖ Animals were tested because the behaviourists believed that the laws of learning were universal, there was only a quantitative difference between animals and humans, and animals are practically and ethically more convenient to test; |

2) ISSUES TO COMPARE WHEN COMPARING METHODOLOGIES

- ❖ **the degree of control over variables** – e.g. it is usually higher in cognitive and learning perspective (lab-experimentation with one IV manipulated) than in biological perspective (where random selection of samples and their assignment to conditions cannot always be ensured);
- ❖ the degree of control over variables is connected with **internal validity**, which is high when nothing but the IV affects the DV – high internal validity means gaining control over the situation;
- ❖ **external validity** – the extent to which the results of a study can be generalized to other situations (mundane realism, psychological realism) and to other people – the ultimate test of external validity is replication of a study, also cross-cultural replicating can be a measure;
- ❖ **ecological validity** – the validity that a principle observed in a laboratory setting has outside of the setting, OR whether what is measured is representative of naturally occurring behaviour – it is usually considered that models (:the concept of information) in cognitive psychology has low ecological validity, as well as cognitive methods: apparatus (tachistoscope, computer, headphones - artificial), artificial situations created in the lab (priming, nonsense syllables, shadowing), very indirect ways of measurement (e.g. Implicit Association Tests – Greenwald, Banaji);
- ❖ **the degree of reliance on quantitative methods** – it is usually high in learning perspective (strict experimentation), and also in cognitive perspective (e.g. experiments of memory or attention); on the other hand, cognitive studies on reconstructive memory and schemas often base on verbal report (Loftus) or on narratives (Hermans – analyzing people’s life stories), and Newell and Simon studied problem solving and constructed their GPS basing on verbal protocols; the biological perspective can be both – e.g. measuring hormone levels (-quantitative) vs. brain damaged patients case studies;
- ❖ **AOB.**

SOME PROBLEMS ENCOUNTERED WITH CROSS-CULTURAL REPLICATIONS OF STUDIES

- ❖ **Etic** (-theoretical bias, ethnocentric approach) vs. **emic** (-studying a culture from within) analyses;
- ❖ Problem of **operationalizing variables** - (how to operationalize happiness, insult, obedience, helpful behaviour);
- ❖ Problem of **translation** – how to exactly render the meaning of a test, survey, questionnaire, instruction (is literate translation always appropriate?);
- ❖ Problem of **participants** – e.g. students in Paris and students in Calcutta might not be comparable, and have completely different social backgrounds and experiences;
- ❖ Problems connected with **(lack of) research tradition** – e.g. some potential participants might fear about their data being really safe and confidential;
- ❖ Problem of **apparatus** – how acquainted one is with a computer / a pen!
- ❖ Problem of **self-presentation** – boasting vs. modest cultures;
- ❖ Problem of **interpreting data** – risk of researcher bias (e.g. stereotypical, oversimplified, evaluative approach);
- ❖ Problem of **imposing values** (scientific colonialism) – e.g. survival of the fittest vs. survival of the tribe, competition vs. cooperation, independence vs. interdependence;
- ❖ Problem of **use of results** – e.g. as a tool of oppression and dominance (eugenics);

- ❖ **Examples** –
Cross-cultural studies on perception, problem solving, decision making, attributions, helping behaviour, prejudice, obedience.