UNIVERSITY OF KHEMIS MILIANA

Level : 3rd Year Counseling & Guidance

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SUBJECT :ENGLISH **Prof :D.MEZAINI**

Revision Summaries

Experimental design	Types of experiment	Sampling
Types of design **Independent groups** Participants in each condition of an experiment are different. **Repeated measures** All participants take part in all conditions. **Matched pairs** Similar participants put in pairs and allocated to different experimental conditions. **Evaluation** **Independent groups** Less economical. No order effects. Participant variables not controlled. **Repeated measures** Order effects. Demand characteristics. No participant variable problems. More economical. **Matched pairs** No order effects. Cannot match participants exactly. Time-consuming.	**Lab experiments** IV is manipulated in a controlled setting. **Field experiments** IV is manipulated in a natural setting. **Natural experiments** IV has been manipulated naturally, effect on DV is recorded. **Quasi-experiments** IV based on an existing difference between people, effect on DV is recorded. **Evaluation** **Lab experiments** High internal validity (control). Low external validity (low realism). Cause and effect. Replication. Demand characteristics. **Field experiments** Lower internal validity. Higher external validity (realism). Ethical issues. **Natural experiments** Low internal validity (no random allocation). High external validity. Unique research. Opportunities may be rare. **Quasi-experiments** Low internal validity (no random allocation). High external validity.	**Populations and samples** **Random sampling** All members of the population have an equal chance of selection. **Systematic sampling** Selecting every nth person from a list. **Stratified sampling** Sample reflects the proportion of people within different population strata. **Opportunity sampling** Choosing whoever is available. **Volunteer sampling** Participants 'self-select'. **Snowball sample** people difficult to access **Evaluation** **Random sampling** No researcher bias. Time-consuming. May end up with biased sample. **Systematic sampling** No researcher bias. Usually fairly representative. May end up with biased sample. **Stratified sampling** No researcher bias. Representative. Cannot account for all sub-groups. **Opportunity sampling** Convenient. Researcher bias. Unrepresentative. **Volunteer sampling** Less time-consuming. Attracts a certain profile of person. **Snowball sample** unlikely to be a good cross-section from the population
Variables	**Control of variables**	**Experimental method**

Vs and DVs IV is manipulated, DV is measured. **Levels of the IV** Experimental and control conditions. **Operationalisation** 'De-fuzzying' variables.	**Extraneous variables** Nuisance variables but randomly distributed. **Confounding variables** Vary systematically with the IV. **Demand characteristics** Participants second guess the aims and alter their behaviour. **Investigator effects** The unconscious in uence of the researcher on the research situation. **Randomisation** The use of chance to reduce the researcher's influence. **Standardisation** Ensuring all participants are subject to the same experience	*Aims, hypotheses and variables* **Aims** The purpose of the investigation. **Hypotheses** The formulation of a testable statement. **Directional or non-directional** Identifying a difference/correlation or not. One-tailed and two-tailed predictions.