Research Methods

Types of Methods
1. Laboratory experiments
2. Quasi-experimental (correlational)
3. Survey
4. Others

Experiments → Only methodology that allows cause-effect statements, but has low external validity (it doesn’t necessarily apply in the real world).

4 requirements
1) Random Selection of Subjects
2) Random Assignment of Subjects to conditions (controls for individual differences).
   → these two needed for a representative sample
3) Manipulation → experimenter must be responsible for changes in the independent variable.
4) Control → achieve through standardization---make
everything the same for everyone except the independent variable

→ These last 3 components all ensure there are no systematic differences between groups (except the Ind. Var.).

**Independent variable** – the variable in an experiment that we think will cause changes in the dependent variable.
--the variable we think will have some effect (cause a change)
--varies depending on condition
(EXAMPLE - TYPE OF NEWS CAST)

**Dependent variable** – the variable in an experiment that we measure. What we think will be changed by the independent variable
----everyone gets the same dependent variable
(EXAMPLE – MOOD).

Dependent variable depends on the independent variable.
Quasi-Experimental Designs (Correlational) → when a required element of an experiment is missing.

(Field/Observation/Correlation study) → no cause-effect statements, only that a relationship exists, but tend to have more external validity than experiments.

Survey - questionnaires....polls... opinion polls. Most results strictly correlational. ----volunteer samples are bad....
Other - computer simulations/ meta analysis (combining many past studies into one analysis)

Validity – something if valid if it does what you intent.
External Validity – how well our experimental results transfer to real-world situations.----experiments have low external validity, field studies would high external Validity.