# 2. Single Case Experiments

**Single-case experimental designs (SCED)** are experimental designs aiming at testing the effect of an intervention using a small number of patients (typically one to three), using repeated measurements.

**Or**

Single-case experimental design has a distinct tradition in the behavioral sciences. It emphasizes intensive repeated observations of a particular subject in order to demonstrate precise control over targeted behavior.

## ➢ Internal Validity of Single-Case Experiments:

The essential goal of an experiment is to make valid decisions about causal relations between the variables of interest. When the results of an experiment provide clear evidence that change of **the independent variable caused the changes measured in the dependent variable, the experiment is said to have internal validity**.

- ❖ There were several type of one case experiments one of them **Reversal Designs**

**A reversal design** collects behavioral or biological outcome data in at least two phases: a baseline or no-treatment phase (labeled as ‘A’) and the experimental or treatment phase (labeled as ‘B’). The design is called a reversal design because there must be reversals or replications of phases for each individual; for example, in an ABA design, the baseline phase is

replicated. Ideally, three replications of treatment effects are used to demonstrate experimental control.