Statistics

Categorical (qualitative) : Involves the classification of data into categories or characteristics which have no order.
Eg. Colour of cars, colour of eyes, mode of transport to university, quality of services, types of hand-splints.

Numerical (quantitative): involves counting numbers
-Discrete: Whole numbers Eg. Number of children in a therapy group Note: think cannot have a half!
-Continuous: Part numbers (decimals fraction) Eg. Hours of practice of therapy

Population: Includes everyone in the entire population.

Sample: is like a window to the population and takes a selection of participants that reflect the entire population.

Probalistic sampling
-Simple random sampling: everyone has an equal chance of being selected, e.g. use a table of random numbers or computer generated random numbers.
-Systematic random sampling: take every 10th person from a sample, but remember to start at a random place and not the beginning.
Stratified random sampling: divide the population into strata (or sub-groups e.g. Levels of classification of severity for CP) then take a simple random sample from each sub-group.

Non Probalistic sampling
-Convenience: opportunity sample, sample is drawn from the population that is accessible
-Snowball sampling: existing subjects are used to recruit more

Independent variable: does not depend on the value of another (what influenced the outcome)
Dependent variable: does depend on the value of another, changes because of another variable. (The outcome)
Confounding variable: alternative explanation for the cause of the outcome

Interval: the size of the difference between two values on the scale

has a consistent meaning.
• e.g. the difference in temperature, measurements on a ruler
Ordinal: Observations are ordered but the differences may not have meaning. • e.g. Anxiety is often measured using sets of questions with the number of positive answers giving the anxiety scale. Which could be converted to “none,” “mild,” “moderate,” and “severe,” – but the difference between mild and moderate may not be the same as moderate to severe
Nominal or categorical: individuals are grouped but not necessarily in any order. • e.g. eye colour, 1 = blue, 2 = brown, 3 = green etc
Ratio: Same properties as interval data and in addition have an absolute zero (i.e. zero = absence of the attribute, e.g. tape measure – zero metres = no distance)