A screenshot of a cell phone

Description automatically generated

1. How many individuals are in the data set?

Ans: 124 individuals.

2. How many variables are in this data set?

Ans: 40 variables.

3. Can you tell if any of the variables are categorical (i.e. qualitative)? Identify specific ones.

Ans: In this data frame, such as the first column called “ID” is a categorical variable because ID is fixed, each row has its ID respectively. We cannot see the same ID in this data frame. Also, although ID is a number, it cannot be calculated so it is not a qualitative variable.

Two important variables that were studied were (1) MAXFT = the number of finger-wrist taps in the dominant hand (a measure of neurological function) and (2) IQF = the Wechsler full-scale IQ score. You will explore the relationship of lead exposure to one of these two outcome variables.

4. Is this an observational study or a randomized experiment? Explain why.

Ans:

5. How many individuals have MAXFT scores measured? How many have IQF scores measured?

Ans: 99 individuals have MAXFT scores measured, 124 individuals have IQF scores measured.

6. Pick one of MAXFT or IQF of interest to you. We are primarily interested in comparing the

distribution of the outcome of interest (MAXFT or IQF) for the two different groups of children (GROUPS 1 and 2, those children with elevated blood-lead levels > 40 g/ml and those with lower levels, < 40 g/ml, respectively.)