Type of variable

1. Categorical variable (Qualitative Variable)

a- Nominal

DEF: counting the No. of individuals (frequency) in each group

(1) Data do not have any unit

(2) ordering of the categories is completely subjective الترتيب مش مهم

EX: (11) في السلايد

b- ordinal

DEF: The difference between any adjacent two grades is not necessarily be the same (equal)

1-the data are not properly measures but assessed in some way

2-these data are not real numbers

3-we cannot apply any arithmetic's roles no adding, no subtracting. no multiply or no divide

4- Data do not have any unit

5- ordering of the categories is not subjective the order category in a meaningful way

- Have no interval property

2 Metric variable (Quantitative Variable)

Continuous

Example: Height ,Weight, B.P. Hb Blood sugar

1-usually comes from measuring Can be properly measured

2- they are a real numbers

3- we can apply all mathematics' operations

4- All have units of measurement attached to them

5-The difference between any pairs of adjacent values are exactly the same (equal) this is known as the interval property

❖may assume any value along a continuum .

❖The value of a C.V. is not limited to the set of integers .Height :158,160,157.9 , 16o.6 160.8

❖dose not possess a gap or interruptions.

Discrete

usually comes from counting such as No. of death.

No. of students

No. of patients

❖It is real numbers So It can be counted

❖It have a unit of measurements

❖ It is integer, measurement or values are integers

❖They have the same interval and ratio properties as the continues variables

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