# Lecture 3A: Levels of Measurement

### Investigating Police Stop and Search EXAMPLE

Stop and Search Powers

- UK police officers can stop and search an individual if reasonable grounds to suspect that you have illegal drugs, a weapon, stolen property
- Can stop and search without reasonable grounds if approved by senior police officer and suspect unit: a serious crime could take place; you are carrying a weapon or have used one
- April 2018-March 2019 375,588 stop and searches in England in Wales -4 in 1000 white people and 38 in 1000 black people

Categorical Variable: variable where cases are merely placed into independent, desperate categories

Measured variable: variable where cases measured on it are placed on some sort of scale that The DV is 'categorical', no concept of soft - When data is collected in distance Advantages: easy

possible i.e. mode, pie graph, percentage Disadvanti g s very little math's

## **Ordinal Data**

DV is on a scale but each point on the scale is not necessarily equal

- When data is collected in sequent format

Advantages: can tell greater or lesser, some math's operations available i.e. bar graph Disadvantages: does not tell greater or lesser by how much

## Interval/Ratio Data

DV is on a scale and each point on the scale has an equal interval **Interval=** scale but no true zero (e.g. Celsius)

When the gap between measurements point is identical/same/equal Advantages: most math's operations possible, mean, median mode and all graphs Disadvantages: difficult in psychology due to emotion

Ratio= scale and true zero