

Data Types

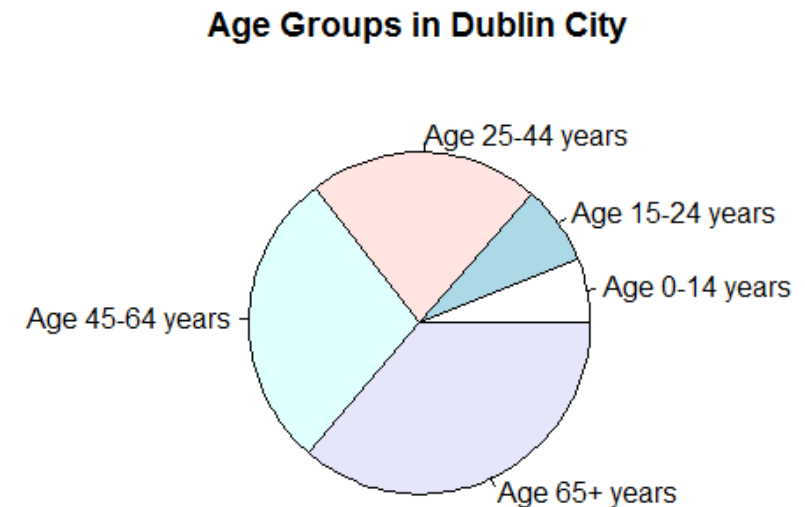
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Types of Data

1. Categorical
2. Ordinal
3. Interval
4. Ratio

Categorical Data

- Puts people and things in categories
- EG Age group
- Each person is only in one age group



<http://www.jstatsoft.org/v53/io7/paper>

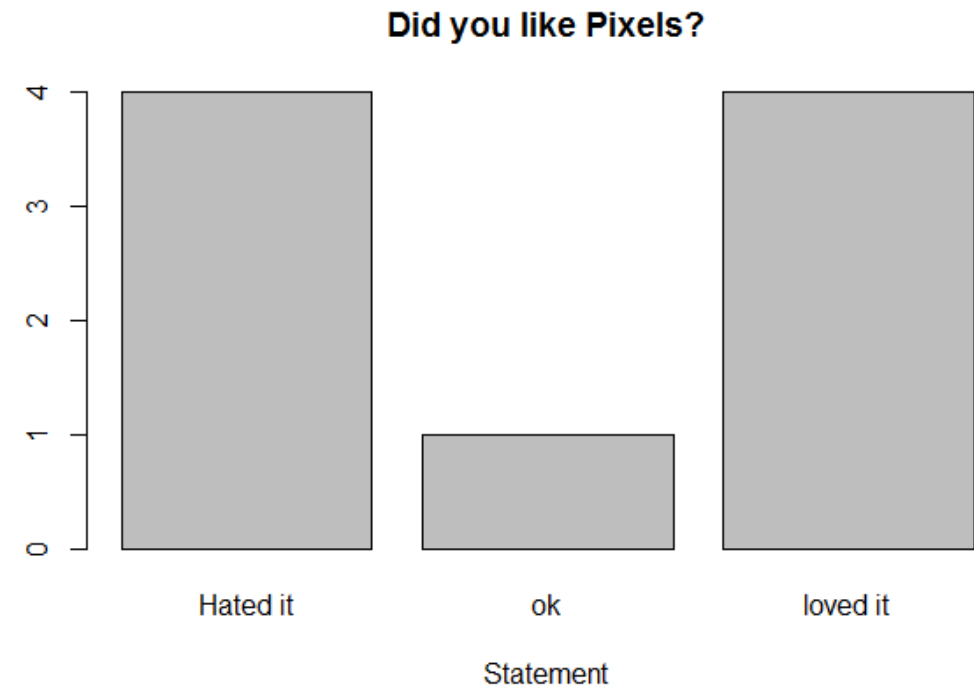
<http://cran.us.r-project.org/web/packages/vcdExtra/vignettes/vcd-tutorial.pdf>

Ordinal Data

- Allows ranking of information
- E.G. Do you like Marmite

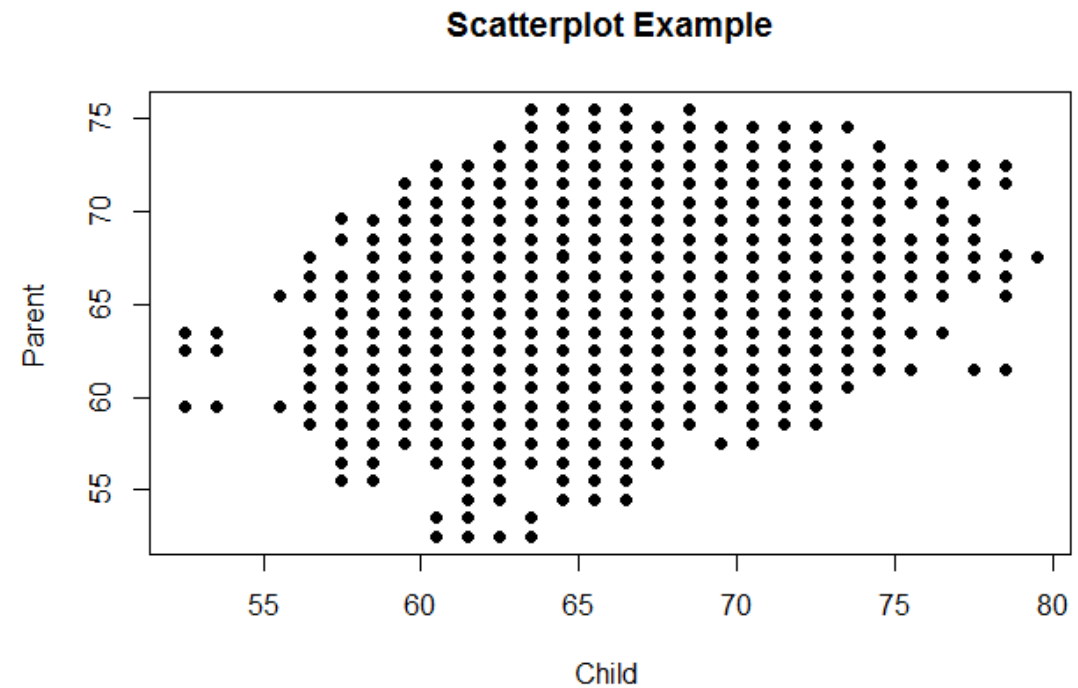
HATED IT	OK	LOVED IT
1	2	3

- There is a highly subjective nature



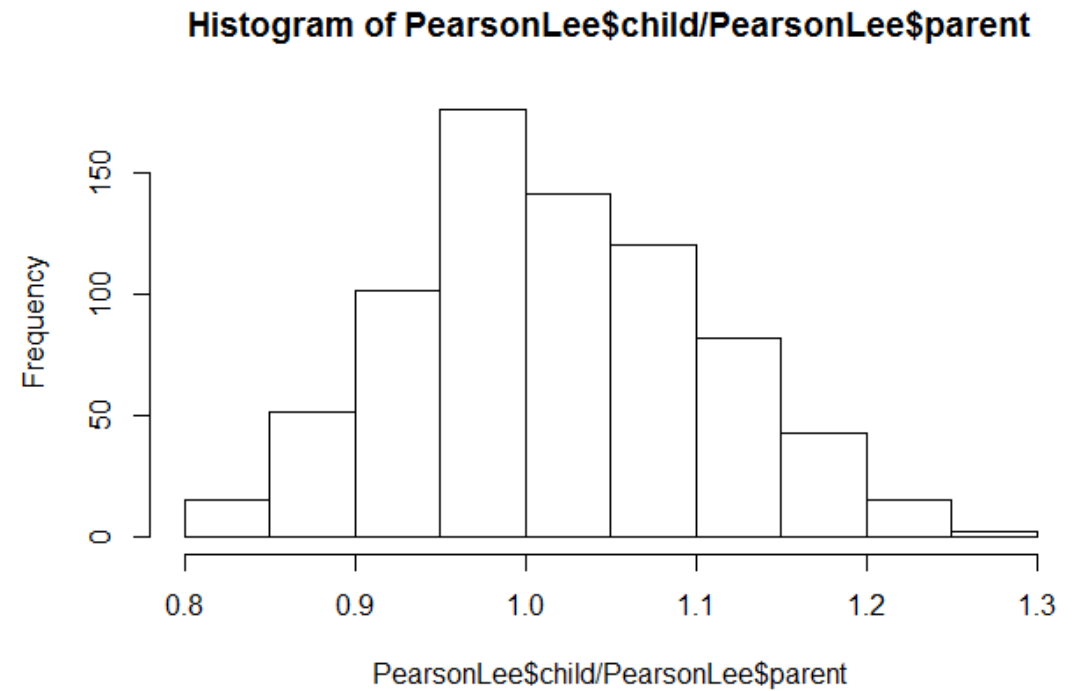
Interval Data

- Ordered Scale differences between numbers are meaningful
- Height of child with respect to height of parent



Ratio Data

- Ratio data is the same as interval data but it has been transformed



Data Sets

- Data sets consist of Variables and Records (Observations)
- Variables: Recorded attributes of experimental units in the data set
- Record (observation): A collection of variables that refer to one experimental unit in the data set which generally is given in rows

Example

	child	parent	gp	par	chl
1	59.5	62.5	fs	Father	Son
2	59.5	63.5	fs	Father	Son
3	59.5	64.5	fs	Father	Son
4	60.5	62.5	fs	Father	Son
5	60.5	66.5	fs	Father	Son
6	61.5	59.5	fs	Father	Son
7	61.5	60.5	fs	Father	Son
8	61.5	62.5	fs	Father	Son
9	61.5	63.5	fs	Father	Son
10	61.5	64.5	fs	Father	Son

Types of Distributions

A picture is worth a thousand numbers

