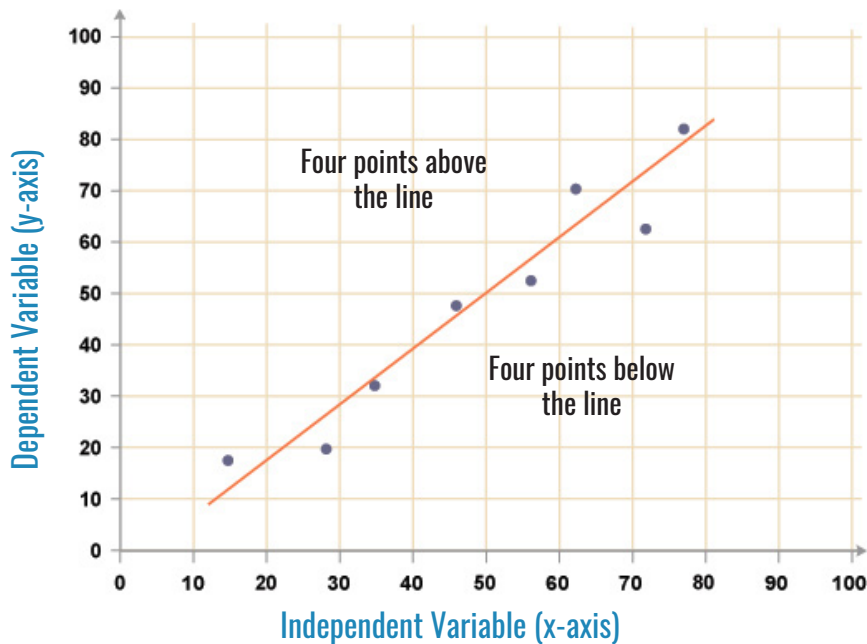


Scatterplot Overview and Activity Solutions

Scatterplots

Scatterplots are charts or graphs where the values of two variables are plotted along a horizontal and vertical axis. The patterns of the data points are used to identify trends or correlations in data sets.



The Independent variable (e.g. time) is plotted on the x-axis (horizontal) while the dependent variables is plotted on the y-axis (vertical).

Each coordinate of the scatterplot is plotted against both variables.

All coordinates on the chart are then used to approximate a trend (e.g. increasing, decreasing).

A line of best fit can also be placed to represent this trend. These are drawn approximately through the centre of the data, attempting to have an equal number of points above and below the line.

Image source: http://www.bbc.co.uk/bitesize/ks3/maths/handling_data/representing_data/revision/9/

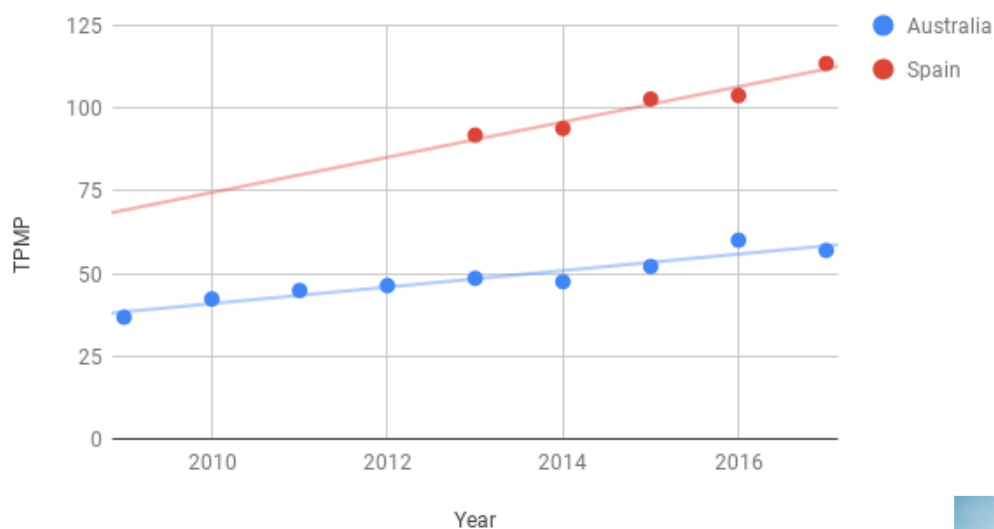
Number of TRANSPLANTS in Australia (solutions)

Year	Number of Transplants	Population (in millions)	Transplants per Million of the Population (TPMP) Number of donors/population in millions
2009	799	21.7	36.8
2010	931	22	42.3
2011	1001	22.3	44.9
2012	1052	22.7	46.3
2013	1122	23.1	48.6
2014	1117	23.5	47.5
2015	1241	23.8	52.1
2016	1448	24.1	60.11
2017	1402	24.6	57

Number of TRANSPLANTS in Spain (solutions)

Year	Number of Transplants	Population (in millions)	Transplants per Million of the Population (TPMP) Number of donors/population in millions
2013	4279	46.59	91.8
2014	4360	46.46	93.8
2015	4769	46.41	102.8
2016	4818	46.4	103.8
2017	5259	46.33	113.5

Organ Transplant Rates for Australia and Spain

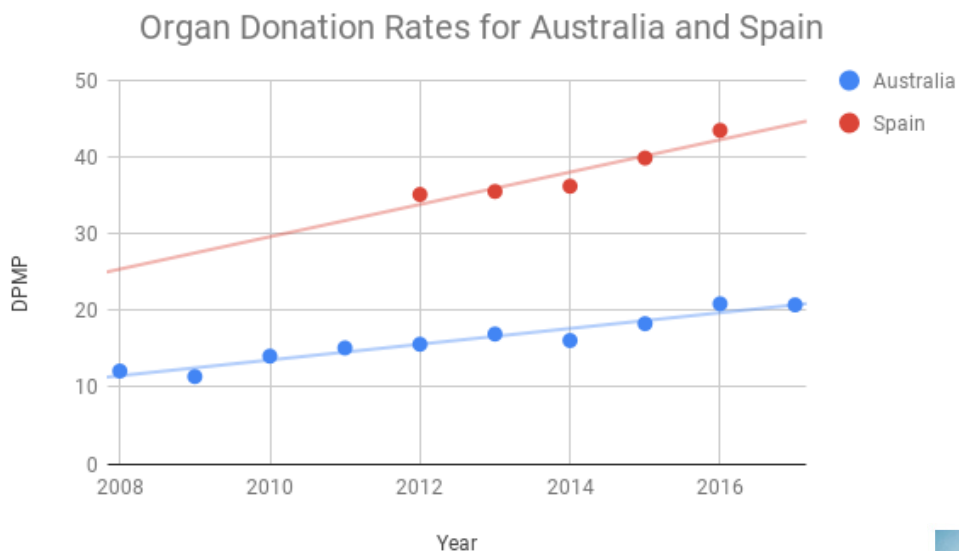


Number of DONATIONS in Australia (solutions)

Year	Number of Donations	Population (in millions)	Donations per Million of the Population (DPMP) Number of donors/population in millions
2008	259	21.4	12.1
2009	247	21.7	11.4
2010	309	22	14
2011	337	22.3	15.1
2012	354	22.7	15.6
2013	391	23.1	16.9
2014	378	23.5	16.1
2015	435	23.8	18.3
2016	503	24.1	20.9
2017	510	24.6	20.7

Number of DONATIONS in Spain (solutions)

Year	Number of Donations	Population (in millions)	Donations per Million of the Population (DPMP) Number of donors/population in millions
2012	1643	46.77	35.1
2013	1655	46.59	35.5
2014	1682	46.46	36.2
2015	1851	46.41	39.9
2016	2018	46.4	43.5



Sources for Australian Data

Australian Transplant & Donation Data

<http://www.sharelife.org.au/australian-organ-donation-performance>

Sources for Spanish Data

Transplant Data – Spain

2013: <https://www.thelocal.es/20140113/world-leader-spain-notches-up-organ-transplant-record>

2014: <http://www.sharelife.org.au/announcements/record-organ-donation-and-transplantation-in-spain>

2015: <https://www.thelocal.es/20170915/how-spain-became-world-leader-at-organ-transplants>

2016 & 2017: <https://www.thelocal.es/20180111/spain-is-the-undisputed-world-leader-in-organ-transplants>

Donation Data – Spain

<https://www.statista.com/statistics/761322/organ-donors-in-spain/>

Population Data – Spain

<https://www.statista.com/statistics/263751/total-population-of-spain/>