

Module 1: Social Psychology

Social psychology: the study of how people influence others' behaviour, beliefs and attitudes.

Evolutionary background- humans as a social species:

- Dunbar said 150 is the approx. size of human groups. He related size of social groups to relative size of cortex.
- According to Baumeister & Leary's theory we have a biologically based need for interpersonal connections (need-to-belong theory)
- Schater (1959) found this need for connection in a small pilot study where 5 people were isolated, most couldn't continue
- Social isolation can lead to self-destruction and impaired mental functioning.
- Twenge found students who were told they would live a lonely life were more likely to engage in unhealthy behaviours. The same feedback could also impair IQ performance.
- Williams ball toss game- isolation activates same parts of the brain (activation in the cingulate cortex) as physical pain. Pain killers might even blunt the action of the cingulate cortex following social rejection.
- Cacioppo found loneliness can have negative effects on psychological adjustment, could increase Alzheimer's and contribute to cognitive decline it is also linked to heightened depression (mostly correlational)
- Social influence is mostly adaptive, it is only maladaptive when it is totally blind and unquestioning. Generally social influence processes help regulate cultural practices and have served us well over the course of evolution.

Social comparison theory: we seek to evaluate our abilities and beliefs by comparing them with those of others (Festinger, 1954)

- Upward social comparison: comparisons with those who are superior to us in some way
- Downward social comparison: with those who seem inferior to us in some way.
- They can both boost our self-concepts

Social contagion:

- We turn to others to understand ambiguous situations, this is mostly adaptive but can lead to mass hysteria.
- Mass hysteria is an outbreak of irrational behaviour that is spread by social contagion
- It can lead to collective delusions when many people become convinced of bizarre things that are false.
- Another form of social contagion is urban legends these are false stories repeated so many times people believe they are true. Allport & Postman found as stories get repeated they become oversimplified. They often tug on negative emotions especially disgust.

Measures of central tendency

Central tendency: aim is to determine a single score that defines the centre of the sample and that is most typical.

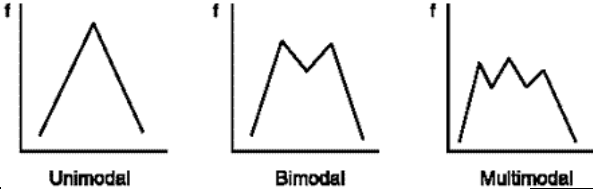
Mean: most commonly used for interval or ratio scales.

Sample Mean	Population Mean
$\bar{x} = \frac{\sum X}{n}$	$\mu = \frac{\sum X}{N}$

where $\sum X$ is sum of all data values
 N is number of data items in population
 n is number of data items in sample

Median: score that divides the distribution in half. Used when extreme scores would confound the mean.

Mode: score with the highest frequency, often used for non-numerical data. If a distribution has two peaks it is bimodal, or if it has many multimodal.



Measures of variability

Variance: measures variability by computing average squared distance from the mean. i.e. average degree to which each point varies from the mean.

Standard deviation (used when mean is the measure of central tendency). Standard deviation is the square root of the variance. It describes the standard distance from the mean.

$$\text{variance} = \sigma^2 = \frac{\sum (x_T - \mu)^2}{n}$$

$$\text{standard deviation } \sigma = \sqrt{\frac{\sum (x_T - \mu)^2}{n}}$$

$\mu = \text{mean}$

For a sample it is n-1 (degrees of freedom)

$$\left(\text{Standard Deviation} \right) = \sqrt{\text{Variance}}$$

$$\sigma = \sqrt{\sigma^2}$$

Sum of squares (SS) can be calculated by:

1. Compute deviation of each score (distance from mean)
2. Square each score
3. Add together the squared scores