



# Research methods 5: statistics - representing data

**Module**

**PSYB2**

**PSYB1**

**Sections A, B & C**

**Section C**

**Important:** this material is examined on **both AS modules**. On **PSYB2** it is examined through the social psychology (social influence), cognitive psychology (remembering and forgetting) and individual differences (anxiety disorders) topics. On your PSYB2 paper, **one** of the three topics (you cannot predict which) will contain questions that test your knowledge and understanding of research methods, to the value of **6 marks** (10% of the marks available). On your **PSYB1** paper, there is an entire section on research methods, to the value of **20 marks** (33% of the marks available).

## What we will be learning about

In this topic we will learn about using statistics to summarise data from experiments. Most of what we cover will not be new to you; rather you will be using existing skills in a new context. We will be revisiting a range of research from the social, cognitive and individual differences topics.

## What you could be tested on

	A01 – knowledge & understanding	A02 – application, analysis & evaluation	A03 – methods, statistics & ethics (how science works)
<b>You must be able to...</b>	<b>Define</b> central tendency and dispersion. <b>Explain</b> the procedure for calculating mean, median and mode. <b>Explain</b> the procedure for obtaining the range.	<b>Calculate</b> mean, median and mode and range for small data sets. <b>Calculate</b> standard deviation with instructions. <b>Interpret</b> experimental data in terms of central tendencies. <b>State</b> advantages and disadvantages of each statistic.	<b>Demonstrate</b> these knowledge, understanding and skills in the context of material drawn from the PSYB2 topics (social, cognitive, individual differences).
<b>You should be able to...</b>	<b>Describe</b> situations where it is inappropriate to use each statistic. <b>Explain</b> what dispersion measures indicate about data sets.	<b>Distinguish</b> between measures of central tendency and dispersion. <b>Interpret</b> experimental data in terms of central tendency and dispersion. <b>Analyse</b> examples to identify whether appropriate statistics have been used. <b>Justify</b> choices of statistics in given examples.	As above.
<b>You could be able to...</b>	<b>Explain</b> what the standard deviation indicates about a sample/population.	<b>Select</b> and justify appropriate statistics for unfamiliar examples.	As above.