

A LEVEL
Guide

PSYCHOLOGY

H567
For first teaching in 2015

Report writing guide for students

Version 1



A LEVEL PSYCHOLOGY

This guide introduces you to the world of psychological report writing. As part of the specification you should have knowledge of the conventions of reporting research in a practical report and demonstrate understanding of the role and purpose of each of the main sections and sub-sections.

The sections and sub-sections that you will be learning about are: abstract, introduction, method (design, sample, materials/apparatus, procedure), results, discussion, references and appendices. As part of this, you should also have a familiarity with citing academic research using the Harvard system of referencing.

The guide begins by setting the scene of psychological report writing by comparing the essential ingredients of report writing to Natural Sciences writing of lab reports. The writing of lab reports in Science lessons was probably the first taste of report writing that you experienced.

The guide then looks at how you may have encountered psychological report writing in the form of studies presented to you by in psychology lessons and seeks to build on these foundations. Next, essential ingredients in psychological report writing will be highlighted with some activities.

Hopefully you will find this guide digestible, easy to follow and, most importantly, it will help you conduct your own lab experiments confidently and unlock the best aspect of psychology – using psychological tools to explore the human world.

Aims and Objectives

- To examine psychological report writing.
- To understand the wider connection of psychological report writing.
- To understand the essential ingredients of psychological report writing.
- To consolidate and make connections of learning in of content in other parts of the AS/A Level course.
- To be able to apply understanding of novel situations to assist in the process of psychological report writing.

Formative Assessment

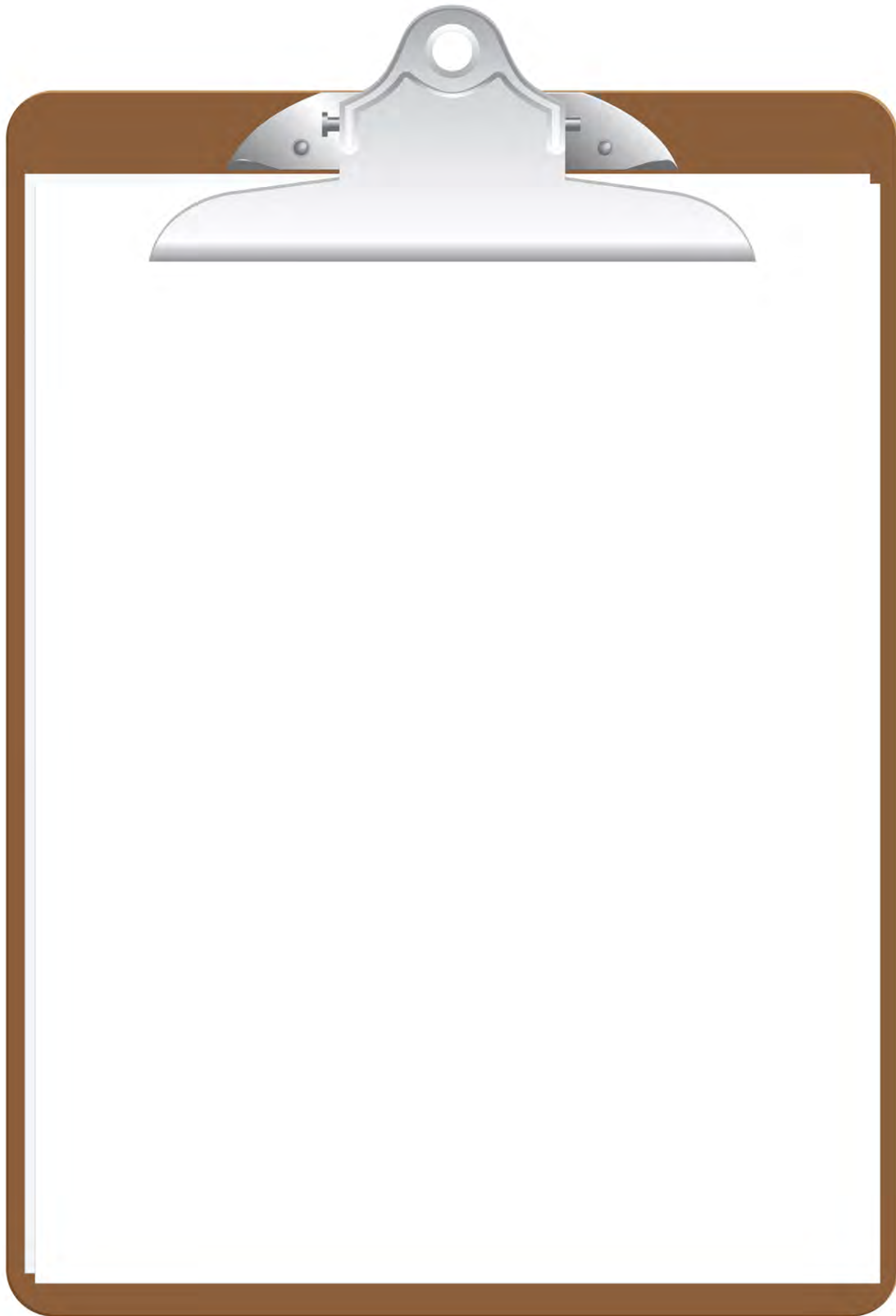
Activities in the guide are designed to regularly check, build and consolidate knowledge in all aspects of AS/A Level Psychology course.

Summative Assessment

To assist with the practical activities feature all students are expected to conduct and write about in examination conditions.

Setting the Scene

Activity – Thinking back to your time of writing lab reports in science lessons, write a list of the key elements or headings you used to write in your reports on the below clipboard image.

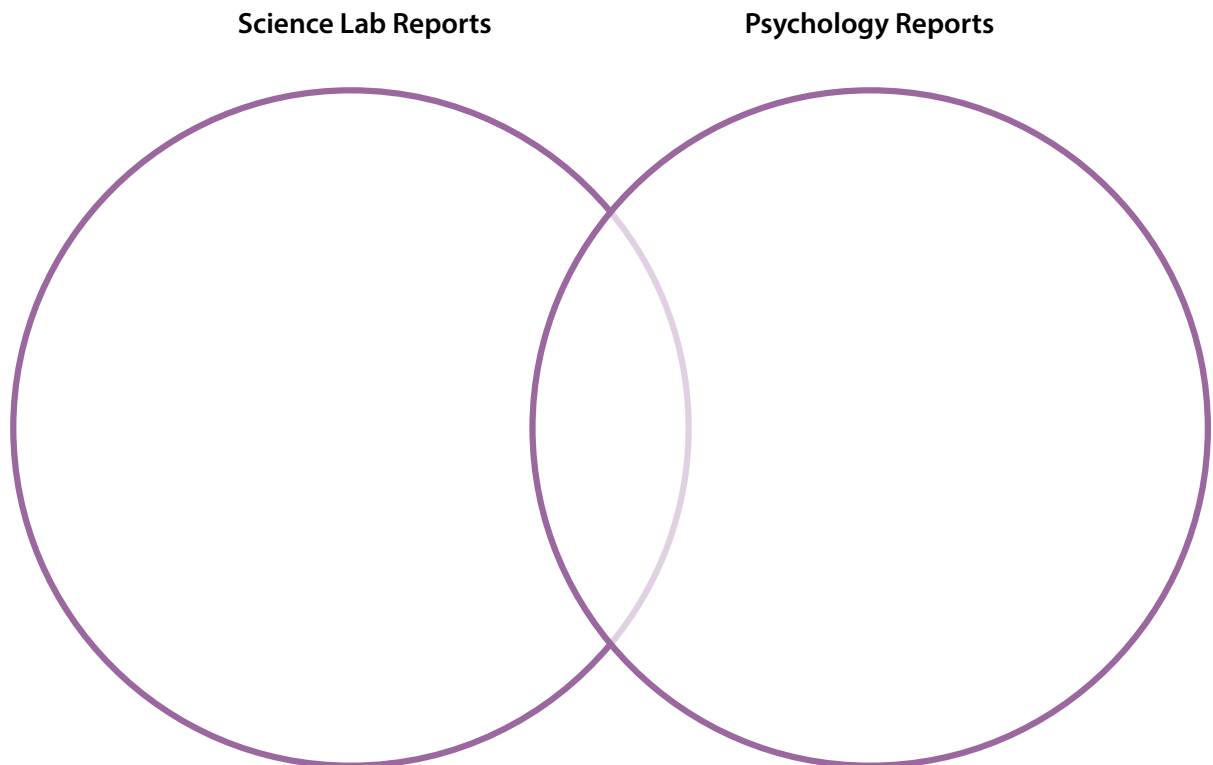


Question: Knowing what you know so far in Psychology, do you think these elements in Science lab report writing are similar to psychological report writing?

Imagine – a bar of chocolate and all of the ingredients used to make this splendid bar of chocolate are related to psychological report writing. The main ingredients would appear in the creation of the “chocolate of psychological reports”.



Activity – Using the Venn Diagram below, which elements of psychological report writing are similar or different to Science lab report writing.



Why is psychological report writing important?

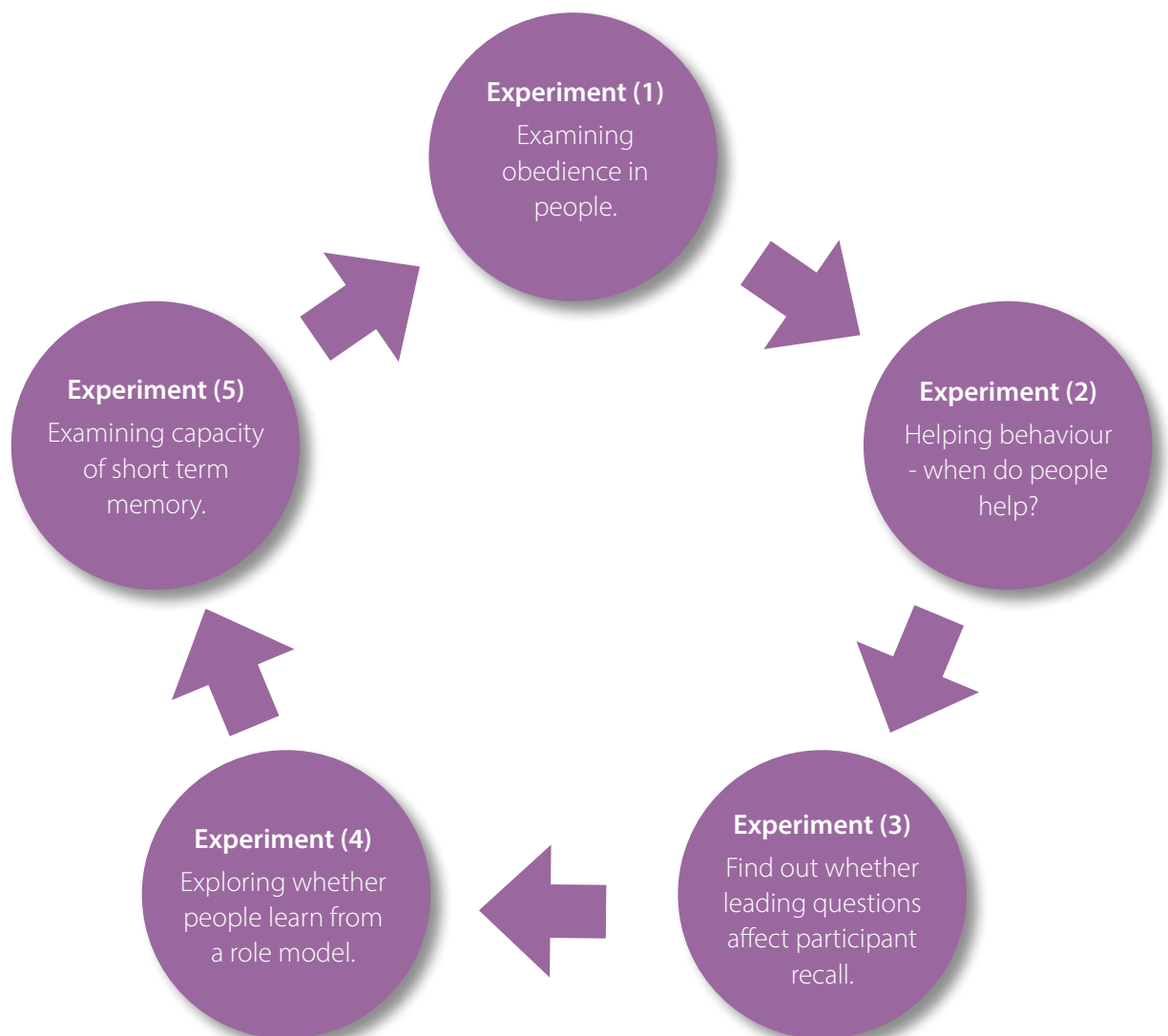
It is a chance for Psychologists/members of the Psychology academic community to show case their findings of important and ground breaking human or animal research. Most commonly, articles are written in Psychological journals (there are hundreds of different types) which allow readers to examine all components of the lab experiment or other research methods conducted. It is important for Psychologists to detail all of their ingredients used (from materials used, to results to what theory or area and supporting studies build on the new or old research question and hypothesis).

Another reason why Psychologists spend a lot of time detailing all sections of their study is so that other Psychologists or Psychology students can replicate the study conducted. Some of the journal articles can detail research in 50 pages or more pages.

However, at AS/A Level, you may not need to access these reports – though they commonly appear in the form of a study in textbooks which outline the background, method; design, sample, materials, procedure, results and conclusions.

The next part of the guide aims to examine each section of psychological report writing in detail. In order to understand how each section unfolds, it is vital to put each section into context. **Therefore, in order to guide you through this process, it is recommended that you pick a research topic/area that they would like to conduct an investigation on, which will both assist and help contextualise the activities throughout the sections.**

Activity - Choose one experiment below that you would like to conduct, or alternatively you can come up with your own idea.



Activity – With the chosen research aim, some important questions follow:

- Which study that you have explored is it similar to? What research/approach is the aim built on?
- What would be the IV/DV of your experiment?
- What would be your hypothesis?
- Which materials would you design to test your hypothesis?
- How would you conduct your investigation? You would need to think of your step by step procedure?
- How many participants would you need?
- What experimental design would you use?
- On the basis of the data your experiment produces – what inferential statistic test would you conduct?

Below is a checklist to aid you through this process. This process is essential to assist you in the final write up of your lab experiment.

Research Checklist to consider	Completed
Topic	
Which research/study does your experiment relate to?	
Are you replicating a study?	
Aims and Hypothesis	
Aim of your study	
Alternative Hypothesis	
Null Hypothesis	
Research method, you will be using?	
Experimental Design	
Type of data to expect	
Statistical test to conduct	
Variables	
What is your independent variable?	
What is your dependent variable?	
How many conditions will there be on the basis of your IV?	
Which extraneous variables will need to be controlled?	
Apparatus/Equipment	
What materials will you designing/using to test your hypothesis?	
How would you describe your procedure?	
Participants	
How many participants would you need?	
Which target population will you select your participants from?	
Which sampling method would you use to recruit your participants?	
Would you be considering equal numbers of female/male participants?	

The Abstract



Like the colours all merging on the above art piece, the abstract acts in a similar way for the whole investigation that you have conducted. The abstract is a summary of the entire investigation you have conducted. It's not a long piece and they are written to either 150 words or a maximum of 200 words. The abstract is written at the **last stage** of your report writing process.

Your abstract is painted and may include the following details:-

- A summary of the overall nature of your investigation
- Aim of your experiment
- Alternative hypothesis
- The type of design used
- The independent variables and dependent variable
- Control of extraneous variables
- Number of participants and sampling method employed
- Results – highlighting the type of statistical test used and overall summary of significance.
- Conclusion – indicating whether the null hypothesis was accepted or rejected
- New discoveries and implications from your results on the basis of your experiment

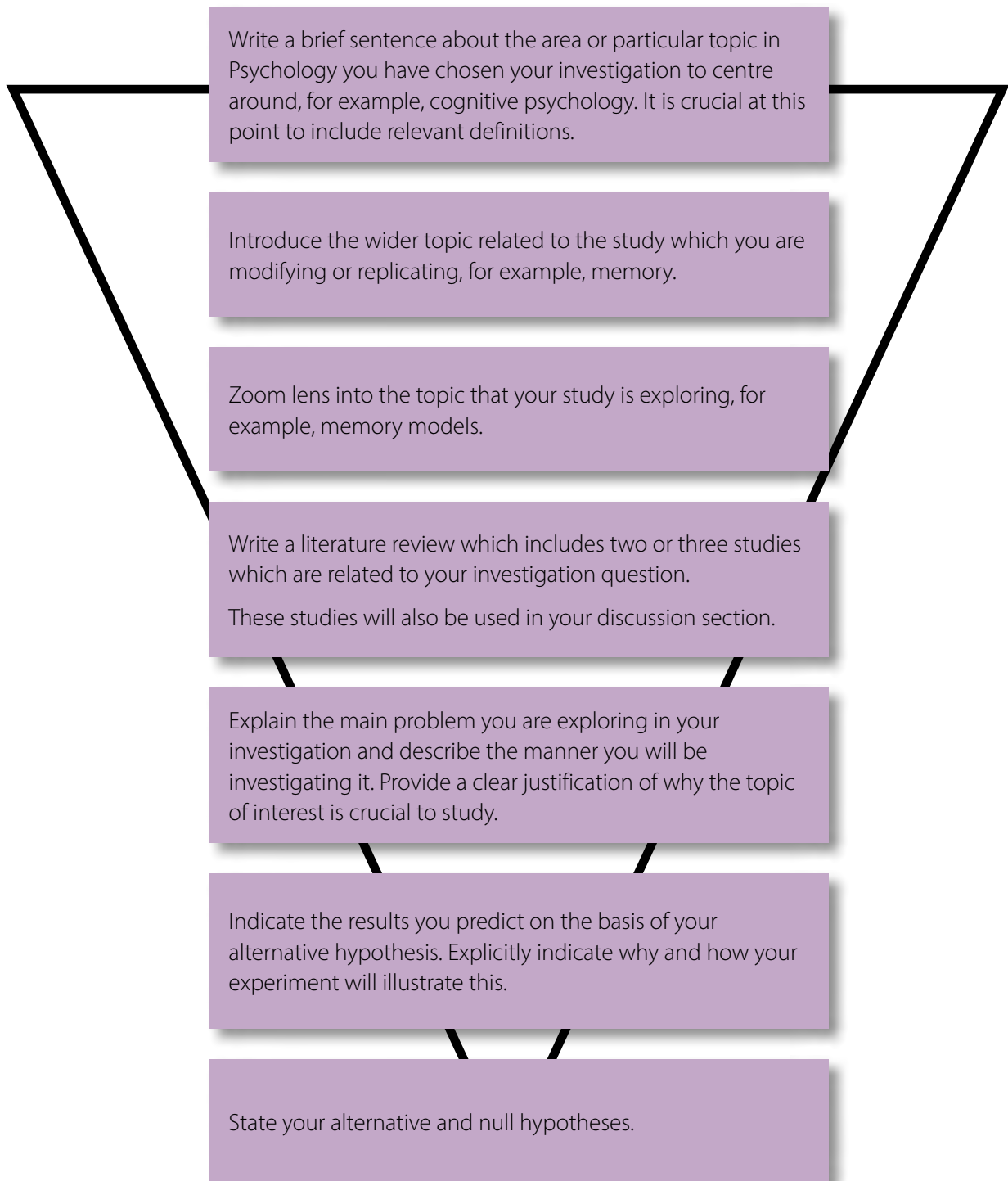
The Introduction

The introduction section sets the scene for the reader. It is the section in your report that contains relevant background theory and studies which are written in a logical manner to put the aim and hypothesis of your investigation into context.



Activity – In this box, jot down a few words/Psychologists' names associated with the topic/area/theme of your experiment, studies related to your experiment, or a few details linked with your modified/replication of the study.

The Introduction should be treated like an inverted triangle. Each section of the inverted triangle helps to assist you in writing your investigation.



The Introduction section of your report should be no longer than 600-700 words.

Activity – Now using the headings/notes you jotted in the previous activity re-arrange your points into the above introduction structure.

The Method

The Method section is the King or Queen section of your whole report. It is the section that requires you to be thorough so that anyone who wishes to replicate your study can follow the step by step process in what you have done.

The Method Section includes four key sections – known as **D.A.P.P.** You will be familiar with these sub-sections as you are required to them for each of the core studies in component 2.



DAPP

D – Design

A – Apparatus/Materials

P – Participants

P – Procedure

Design

Brief section which includes the following:

- The type of experimental design used and justification of why it was used.
- Statement of independent variable (IV) which is operationalised, for example, if exploring aggression, indicate which type of aggressive behaviour you will be exploring in your investigation.
- Statement of dependent variable (DV), which is operationalised, for example, how you will measure aggressive behaviour.
- Indicate ethical considerations taken into consideration.

Apparatus/Materials section includes the following:

- A **description** of apparatus used in your investigation (it is not a list).
- Samples of all materials to be included in the appendices section.
- Mention the use of both standardised instructions and debriefing of participants.
- Consent and debrief forms.

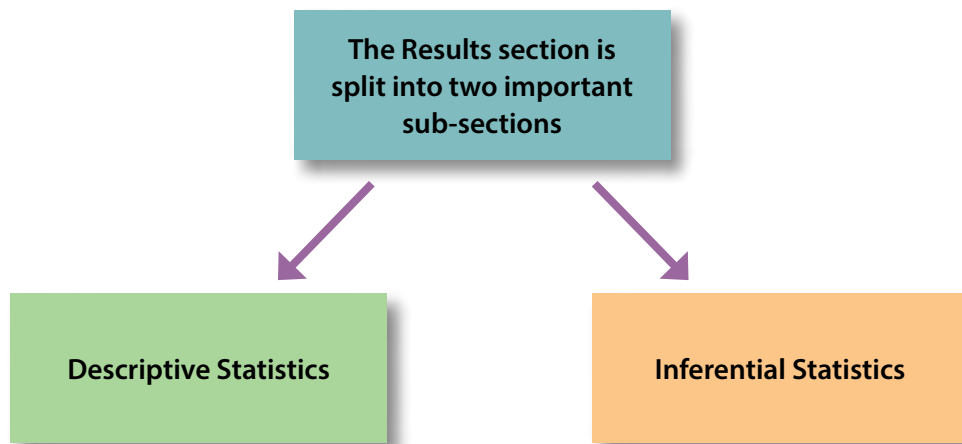
Participants Section includes the following:

- Number of participants in each condition.
- Age range and mean of age range.
- Demographic characteristics – of where participants come from, occupation and area/location.
- Identification of and justification for the sampling method used.
- Indication of how each participant was allocated to each condition of the experiment.

Procedure Section is exactly what the word means. Points to remember:

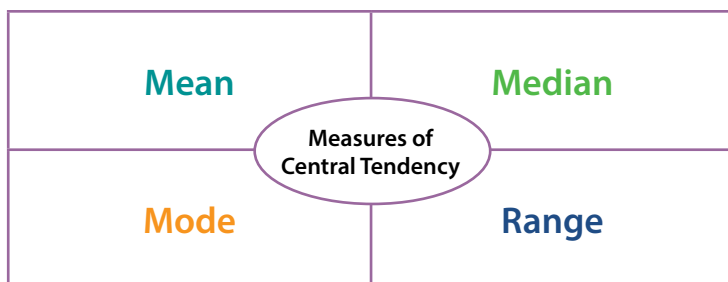
- Description of how you conducted your study step by step.
- Needs to be written in a chronological order.
- This section has to be written in a manner so that anyone can replicate the steps should they wish to replicate your study.
- A script (known as standardised instructions) should be highlighted (but not in full detail, a copy of this would appear in the appendices section).
- Indicate whether you conducted the study with groups of participants or individually.
- Specifically, mention that as a researcher the debriefing process was undertaken at the end of the experiment.

Activity – Using the DAPP approach, briefly outline the method section in relation to your chosen investigation.



Activity – Do you remember what Descriptive Statistics and Inferential Statistics mean? Furthermore, can you remember different types and how they are calculated?

Descriptive Statistics



In this sub-section of your Results section, you would give a summarised account of the data collecting using descriptive statistics.

WARNING: At no point in this section, would you include the raw scores (for example, number of words remembered by each participant) – these would need to appear in the appendices section of your report.

You would need to calculate the measures of central tendency from your data. However, there is an error in one of the words being in the wrong box for measures of central tendency. Which one of the above is a measures of dispersion? And what is its partner in crime in examining measures of dispersion?

The next step would be to write what you have found. For example, what does the calculated mean suggest about your data? Is the calculated mean bigger in one condition of your experiment in comparison to the other?

At this point, the best tip is to indicate what is happening rather than the why. The why is what you will be exploring in the discussion section of your report.

In order, to allow the reader to grasp a better understanding of your data. It is best also to present visual representations of your data. These graphs would need to be clearly labelled.

Activity – Draw a rough bar chart sketch of how you think the predicted results (as per your alternative hypothesis) may appear. Clearly, label the graph, for example, indicate whether it is a graph to illustrate the mean of your data or standard deviation. Label each conditions of your experiment clearly.

Inferential Statistics

The key to this section is using the correct statistical test to analyse your data. This is essential and can make and break the whole of your report if incorrect tests or insufficient details are present.

The important part is to figure out the following:

1. Type of data - nominal, ordinal or interval.
2. Type of Experimental Design/Independent or related items.
3. Is it a test of difference, association or correlation?

There are five common non-parametric statistical tests (which don't follow strict criterion relating to things such as the mean and standard deviation that are used:

- Mann Whitney U test.
- Wilcoxon Signed Rank tests.
- Chi Square.
- Binomial Sign test.
- Spearman's Rho.

When analysing your data, you need to justify why you have used the statistical test in question for data analysis.

Furthermore, you need to include the level of significance. The most common level in psychology is 0.05. This indicates the results obtained in your study are because of the 95% chance of manipulation of your independent variable, the rest 5% is due to other factors. When your results are significant, this indicates that you as a researcher can accept your alternative hypothesis and reject your null hypothesis. You would need to explicitly indicate this.

In addition, all calculations of your statistical test analysis would not appear in this section. **Where do you think they should go?**

Activity – On the basis of your aim and hypothesis, experimental design and type of data – which statistical test would you conduct for your data?

The Discussion

This section shows exactly what you are thinking. It is the main section where you will be:

1. Providing an explanation of your results.
2. Linking back and comparing the two or three studies mentioned in your introduction to your results.
3. Highlighting the weakness of your study and mentioning modifications to your study, if you were to conduct the study again.
4. Providing an overall conclusion in the conduction of your study.

1) Explaining your findings

- In your own words, describe the results of your study.
- Indicate whether your results supported (or did not support) your hypothesis.
- Indicate on any unusual findings (for example, a high score on a memory test in a condition where the score shouldn't be that high).

2) Linking Back to Studies

- Indicate whether you think participants performed as per your hypothesis.
- Make links to the research indicated in your introduction (don't repeat what you have already written in your introduction).
- If the results of your study were similar to the research studies indicate this. However, there were differences, indicate why this might have been so.

3) Weaknesses and Modifications and Future Research

- Evaluate the method you used in your investigation (can you identify any weaknesses?).
- Indicate elements, which were difficult to control (for example, time of day).
- When you have explored weaknesses, try to indicate solutions to improve on them.
- Ideas for future research and how the current study could be changed.

4) Conclusion

- Briefest section.
- Outline the statistical test again and results (briefly).
- Indicate whether your study was significant or not and whether the null hypothesis was accepted or rejected.

Your discussion section should follow the structure from 1-4 as above. However, instead of using headings to indicate each section – separate your ideas by using the above as a guide.

Activity – Using the above format as a guide in writing your discussion section of your report, write a few brief sentences of your chosen aim. What do you think may be the overall conclusion of your experiment?

Have you referenced?



Referencing is a bit like tagging your friends when you add pictures of them on social media sites. By you tagging your friends, you are acknowledging your friends in the photographs.

Referencing is a similar process only that when you access other psychologists research, studies or literature, it is academic convention to acknowledge researchers in your work. It is the Introduction and Discussion sections of your report that you will need to acknowledge researchers' theories, studies or models.

Another reason why this is important is when research is referenced – it is a way of you thanking the author for using their research to help construct the purpose of your research. Additionally, by referencing, you are allowing others to access your references so readers can read the referenced articles. Most importantly, doing this protects you against plagiarism – one of the most common mistakes that students can get penalised for not referencing. Many institutions or universities deal with this matter very seriously and today, there is specific referencing software, which tracks students work if large chunks of materials have been copied without referencing the authors. The message – be extremely careful when referencing literature in your academic work.

The most common referencing method is **Harvard Referencing**.



Don't Panic! You've already seen this.

For example, your teacher may highlight the Psychologist's name and year when introducing a study or theory.

Levine et al (2001)

Gould (1982)

Freud (1909)

How to Reference Books the Harvard way?

Step by Step Guide

Referencing Books

We will use Professor Edwin G Boring's book – *A History of Experimental Psychology* as an example.



1. When referencing books, you need to include all the authors' names. Their surname is mentioned first and then their initials.

Warning: Each initial must have a full stop and you need to include the commas.

For example:

Boring, E.G.

2. You then need to include the date in brackets after the last author's name you have written.

For example:

Boring, E.G. (1929)

3. Next you need to include the title of the book. This should be italics format.

Boring, E. G. (1929) *A History of Experimental Psychology*.

4. This doesn't stop here. You will need to include the publisher, location, edition and any page numbers of the pages you paraphrased research from. These need to be separated by the correct punctuation mark, as seen below.

For example:

Boring, E. G. (1929) *A History of Experimental Psychology*, New York: Century. Page 20.

TOP TIPS

- The list of books you reference must be in alphabetical order, in terms of the author's name. If you have many books of the same author name, indicate the first book published for that author.
- If you have used many studies from one book, you would have to copy and paste the reference and indicate each page used for your research.



Have a go... Pick a couple of textbooks in your classroom and see if you can reference them.

Referencing journal articles

If you use the original research paper then this must be referenced, below are examples of two of the core studies and how they should be correctly referenced.

Grant, H. M., Lane, C. Bredahl, J. C., Clay, J., Ferrie, J., Groves, J. E., McDorman, T. A. & Dark, V. J. (1998) Context-dependent memory for meaningful material: Information for students. *Applied Cognitive Psychology*, 12, (6), 617–623.

Sperry, R. W. (1968) Hemisphere disconnection and unity in conscious awareness. *American Psychologist*, 23, 723–733.

The format for this is surname, initial(s). (year) Name of journal article. *Name of journal in italics*, Volume number (Issue number), first and last page numbers.

Ask your teacher for copies of original journal articles and reference them here.

Appendices Section



The best tip to organise and 'package' your appendices section is to imagine the step by step process of when you start from presenting the consent sheet to your participants.

Appendices should contain the following:

1. Consent Form – a copy of the one you give to participants.
2. Standardised Instructions – a control instruction script like document which illustrates the uniformity of similar experiences of all participants in each experimental condition.
3. Ethics Sheet – this will appear in your consent sheet which will outline the ethical issues that will not be breached.
4. Materials – these could be, for example, the word lists used in memory experiment, power point slides or pictures used to explore hypotheses.
5. Raw Data – these should be in the form of tables illustrating both condition results obtained for each participant.
6. Statistical Analysis – any calculations conducted on data should appear here.



We'd like to know your view on the resources we produce. By clicking on the 'Like' or 'Dislike' button you can help us to ensure that our resources work for you. When the email template pops up please add additional comments if you wish and then just click 'Send'. Thank you.

If you do not currently offer this OCR qualification but would like to do so, please complete the Expression of Interest Form which can be found here: www.ocr.org.uk/expression-of-interest

OCR Resources: *the small print*

OCR's resources are provided to support the teaching of OCR specifications, but in no way constitute an endorsed teaching method that is required by the Board and the decision to use them lies with the individual teacher. Whilst every effort is made to ensure the accuracy of the content, OCR cannot be held responsible for any errors or omissions within these resources. We update our resources on a regular basis, so please check the OCR website to ensure you have the most up to date version.

© OCR 2015 – This resource may be freely copied and distributed, as long as the OCR logo and this message remain intact and OCR is acknowledged as the originator of this work.

OCR acknowledges the use of the following content: Page 3 – Clipboard: Yuri Getanov/Shutterstock.com, Page 4 – Chocolate bar: (modified) Angela Shvedova/Shutterstock.com, Page 7 – Abstract painting: State Tretyakov Gallery/Culture Images/Universal Images Group/Britannica.com, Page 8 – 3d rendered men: Sergey Nivens/Shutterstock.com, Page 11 – Crown: Sashkin/Shutterstock.com, Page 13 – Charts: Macrovector/Shutterstock.com, Page 17 – Crowd: Rawpixel/Shutterstock.com, Panic sign (modified): Glaznast/Shutterstock.com, Page 18 – Tip icon: Dirk Ercken/Shutterstock.com, Page 20 – Box image: Marko Tomicic/Shutterstock.com, Page 21 – Square down and Square up: alexwhite/Shutterstock.com

Please get in touch if you want to discuss the accessibility of resources we offer to support delivery of our qualifications: resources.feedback@ocr.org.uk

We will inform centres about any changes to the specification. We will also publish changes on our website. The latest version of our specification will always be the one on our website (www.ocr.org.uk) and this may differ from printed versions.

Copyright © 2015 OCR. All rights reserved.

Copyright

OCR retains the copyright on all its publications, including the specifications. However, registered centres for OCR are permitted to copy material from this specification booklet for their own internal use.

ocr.org.uk/alevelreform

OCR customer contact centre

General qualifications

Telephone 01223 553998

Facsimile 01223 552627

Email general.qualifications@ocr.org.uk

OCR is part of Cambridge Assessment, a department of the University of Cambridge. For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored. © OCR 2015 Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee. Registered in England. Registered office 1 Hills Road, Cambridge CB1 2EU. Registered company number 3484466. OCR is an exempt charity.

