



## Psychology Investigation skills handbook

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Any resources such as texts, websites and so on that may be referred to in this document are provided as examples of resources that teachers can use to support their learning programs. Their inclusion does not imply that they are mandatory or that they are the only resources relevant to the course.

## Helpful hints on how to write up an investigation

Below are some hints that may help you write investigation reports in Psychology.

## Overall

- Write in the third person i.e. do not use I, you or we. Use terms like 'the researcher', 'the participant' or 'it'.
- Write in the past tense, e.g. for example: it <u>was</u> hypothesis<u>ed</u>, the researcher collect<u>ed</u> the data, and the results show<u>ed</u>.

## Introduction

- Be careful to write an aim and hypothesis that clearly tells your reader why you are doing this study and what you think will happen.
- An hypothesis can be tricky to write.
  Make sure to include the participants, the variables being measured in a correlational study and the IV and DV in an experimental study, and the predicted outcome.

There is often a comparison between two groups, e.g. in an experimental study, the group that received the IV and the group that did not.

An example: It was hypothesised that the Year 11 psychology students who ate chocolate everyday would get better results on their end of semester exam than the Year 11 psychology students who did not eat chocolate everyday.

## Method

• The procedure section should be written in a brief and clear way. It should be written like a recipe that anyone can follow to copy your exact investigation. Write it in paragraph format; do not use steps (e.g. Step 1, Step 2, Step 3).

## Results

- Make sure your tables and/or graphs are titled and labelled correctly.
- Remember line graphs and histograms can only be used for continuous data.
- Make sure you describe the data by using your findings (i.e. %, means). Do not explain what it means as that is what the discussion section is for.

## Discussion

- You can only support or reject your hypothesis; never prove or disprove.
- Variables are things that might happen that could affect your results. They are problems with your investigation (i.e. not enough participants, unbalanced groups) or outside issues (i.e. the level of schooling or cultural background of the participants).
- Generalisations explain whether the results of your study can be applied to others. Small numbers of participants and the characteristics of your participants will impact on your ability to do this.
- Your conclusion should link your hypothesis and your findings together.

## Investigation 1: Flow chart Examining student beliefs about psychologists

#### Aim

The aim of this investigation was to:

Hypothesis (used in experimental studies) It is hypothesised that:

NTRODUCTION

**Participants** (How many? How many males and females? Age range? How were they selected?) The participants in this investigation were:

#### Materials

The materials used in this investigation were:

# **METHOD**

RESULTS

**Procedure** (What happened? Write in a way that anyone could replicate your study—not in steps [i.e. Step 1]) The procedure used in this investigation was:

#### Results

Table 1. (Write in title) Draw in table and label. Use summarised data (i.e. %, not raw data)

Draw graph if appropriate

(Write a summary of results using data. Do not explain the data, just report it as it is) The results of this study show:

**Possible variables** (List two possible variables that may have impacted on the results of this investigation) Some possible variables that may have impacted on the results of this study are:

DISCUSSION

Interpret the data, explain the findings and relate them to past research.

**Generalisations** (Can the results be generalised from sample to the wider population? Why/why not?) Discuss any ethical issues and make suggestions about how the investigation could be improved and suggest ideas for future research.

#### Conclusions

The results show that the hypothesis for this investigation is supported/rejected (circle). It can be concluded that:

## Investigation: [Title]

Name: \_\_\_\_\_\_ Date: \_\_\_\_\_\_

PLEASE ATTACH YOUR **ABSTRACT** TO THIS POSTER ON A SEPARATE SHEET OF PAPER

#### INTRODUCTION

**RESULTS:** 

General background information/theories:		Table and/or graph:
Past studies/research:		
Aim:		
Hypothesis: (if experimental study):		Descriptive summary of the results (data):
Independent variable(s):	Dependent variable(s):	
METHOD		DISCUSSION
Participants: Materials:		Interpretation and explanation of the results (data): Support or reject hypothesis: Identify extraneous variables and how they might impact on the results:
Procedure:		Conclusion:

## Investigation: [Name of investigation]

## REPORT

Abstract

Use the space below for planning purposes

\_\_\_\_\_

INTRODUCTION

\_\_\_\_\_

**METHOD** 

Participants

Materials

Procedure

RESULTS

Psychology: Investigation skills handbook

DISCUSSION

#### REFERENCES

## Helpful hints on how to write an abstract

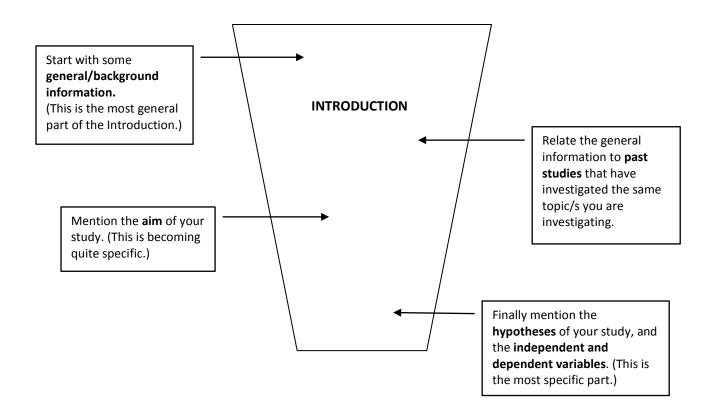
Below are some hints that may help you in writing abstracts to accompany investigative reports in Psychology.

- An abstract is an overview of an investigative report, which allows the reader to have a sneak peek at what the investigation was about without reading the entire report. You can think of it as the shortened version of your full report.
- An abstract should be written in paragraphs (no dot points) and should be approximately 100 to 200 words in length.
- An abstract should include the following pieces of information:
  - What was the **aim** of your investigation?
  - What was the hypothesis for your experimental investigation? (Make sure that it is the same hypothesis as is used throughout your report)
  - Explain the main features of your method: number of participants, the experimental groups, how variables will be measured and how the data was collected
  - State your results: describe the data rather than explain it
  - What conclusion/s can be drawn? (Make sure the information is the same as what you included in the discussion section)
- The abstract is the first section of a formal report, but it is much easier to write this section last, after you have written the rest of your report.
  You can cut and paste from the body of your report to form the abstract.
  Write the subheading 'Abstract' and make sure you leave space for it.
- Your abstract should be written in the third person and in past tense, like the rest of your investigative report.
- Make sure that your abstract is clear and concise. It should be easy for the reader to read to understand your study.

## Helpful hints on how to write an introduction

Below are some hints that may help you in writing introductions for investigative reports in Psychology.

The writing of an introduction can be illustrated using a funnel diagram. You begin with the most **general** information and end with the **specific**.



- The introduction gives the background of the investigation. It includes:
  - definitions of relevant terms
  - summary of relevant theory
  - summary and results of relevant previous research.
- At the end of your introduction, you need to include:
  - aim
  - hypothesis
  - independent variable
  - dependent variable.
- The introduction is written in paragraphs. Do not use subheadings in the introduction.
- The only time you refer to your study in the introduction is in the aim and the hypothesis.
- The introduction is written in past tense and the third person, like the rest of your report.
- This section should be at least  $\frac{1}{2}-1$  page in length (about 200–350 words).

## Hints on how to reference and cite other material

Below are some hints that may help you in writing introductions for investigative reports in Psychology.

In Psychology, we reference studies and ideas that have helped shape or influence our own thoughts when writing the introduction to an investigative study according to APA (American Psychological Association) standards.

Here is a quick guideline on referencing APA style.

If you refer to another person's ideas or a study in the body of your work, i.e. in the Introduction, you can cite them in two ways.

- Previous research has shown that people favour chocolate ice-cream over other flavours (Fitzgerald, 2007) OR
- Fitzgerald (2007) suggested that people prefer chocolate flavoured ice-cream more than other flavours.

If you use a quote in the body of your report, you cite it in the following ways.

- In her study, Fitzgerald (2007, p.18) noted that participants felt that 'colourful sprinkles added to the taste and appeal of ice-cream'.
   OR
- An added aspect of the research suggested that 'colourful sprinkles added to the taste and appeal of ice-cream' (Fitzgerald, 2007, p.18).

In the reference section at the end of your report/essay, you must provide an alphabetical list of the citations that you've referred. The most common reference you will use will be for authored books – see below.

## Authored book:

- Grivas, J., Down, R., & Carter, L. (1999). *Psychology VCE Units 3&4* (2<sup>nd</sup> Ed.). Melbourne: MacMillan Education. (Author's surname, given initials. (Publication year). *Title – underlined OR italicised*. Place of Publication: Publisher.)
- Jacks, J. (2002). *The life and times of Nostradamus*. Retrieved October 2 2005, www.mysteries.net.nostradamus/pph.html

## Useful website for referencing:

http://www.jcu.edu.au/office/tld/writingskills/reference/

## **Investigation report**

## <Title of the investigation>

### Abstract (100–200 words)

This section overviews the investigation by providing the aim, hypothesis, main features of the method, summary of results and conclusion/s.

#### See Handout 5

### Introduction (200–350 words)

### See Handout 6

### Method (200-250 words)

### Participants

The following is mentioned:

- number of participants
- age range of participants
- gender break down of participants
- selection process.

#### Materials

Gives details of the materials used in the investigation.

#### Procedure

The following is mentioned/included:

- allocation of participant numbers to ensure anonymity of individual data
- how the data will be collected, collated and presented.

#### Results (150-200 words)

The following is included:

- table and graph with appropriate title and labelling
- organised data is referred to when summarising (in a concise paragraph) what the findings show
- findings are not analysed in this section.

#### Discussion (250–350 words)

The following should be included:

- identifies whether the hypothesis was supported or rejected by the findings and explains why is there a relationship between the two variables, what is it's direction and strength likely to be?
- links the class data to the findings from past research or theories and explains how these ideas support this research
- explains any patterns in the findings (unusual or otherwise) why they may have occurred
- describes at least two uncontrolled variables that might have affected the results
- highlights possible improvements that could be made to this study and directions for future research
- describes relevant ethical issues, e.g. informed consent, confidentiality, voluntary participation, debriefing
- explains if this study can be generalised to others, e.g. the general population why or why not?
- provides a conclusion that ties the hypothesis and results together.

## References

Provides, in APA format, an alphabetical list of any references used in the body of the report.