EXAM NOTES 18 Reporting Psychological Investigations

The AQA specification: A-LEVEL ONLY

- Reporting psychological investigations. Sections of a scientific report: abstract, introduction, method, results, discussion and referencing.

The exam requires that you are able to:

- Describe the conventions for reporting psychological investigations, including how the report is structured (format).

Introduction

Once a research study has been completed, the next stage for the researcher is to share his/her findings with other psychologists. This will require the researcher to write up the study before sending it for peer review and possibly for publication in a scientific journal. There are certain conventions (guidelines) that should be followed when writing a psychological research (otherwise known as a 'Research Report'). The purpose of following this format is so the researcher can be conveyed in a clear and precise manner, so it is easier to understand. Below provides outline of the format on how the psychological report should be presented.

The layout of a psychological research report

The standard format of a research paper in a journal consists of the following elements:

Title:	tells the reader what the research is investigating
Abstract:	provides the reader with a short summary of the study
Introduction:	provides the reader the background literature and rationale of the study
Method:	describe how the study was carried out
Results:	to summarise the findings
Discussion:	to discuss the findings and their implications
References:	to inform the readers about allthe sources of information the researcher used
Appendices:	additional material that would interrupt the flow of the research report

Conventions for reporting psychological investigations

Title

A research report begins with a title page. This needs to be clear and precise (usually 12-15 words) as to what the research is investigating. This is important because anyone who reads it will know exactly what the report is about before they decide to read further.

Abstract

This is a short summary of the whole study (about 150 to 200 words). The report covers the aims/hypothesis, introduction, method/procedures, results and the conclusion. Although the abstract appears first it is usually written after all the other sections have been written—last.

Introduction

The introduction really includes three sections, although these are not identified by separate headings. The opening explains why it is interesting and/or important and the reason for carrying out this study. Next is the literature review; this gives the reader background information on previous studies and theories relevant to the research study. However, the literature review is not simply a list of past studies. Instead, provides an argument/reason for why the research question is worth addressing (it may have methodological problems, or perhaps scope for extending it or it may simply replicating the study). The final paragraph, the researcher need to state the hypothesis—what you intended the outcome of your study will be (e.g. participants who studied in the presence of music will recall significantly more words than participants who studied in silence).

Methods

The method section is where the researcher describes how they conducted your study. It should be clear and detailed enough that other researchers could replicate the study by following your 'recipe'. One way to improve the clarity is to split the method section in 3 or 4 subdivisions: Design, Participants, Materials/Stimuli and Procedure. A method might include a number of sections. Below is what a 'typical' method section might include:

Design —This states the chosen research method used: experimental or non-experimental (survey, observation, content analysis, or correlational analysis). If an experiment was car ried out; it will need to state the conditions (e.g. experimental and control group) and how the participants were assigned to the different groups — the experimental design used (i.e. repeated measures, independent group design or matched pairs). Need to state clearly how the variables were manipulated and measured and what controls were in place (e.g. standard instructions; random assignment; counter-balancing; double-blind technique; environment; time of day).

Participants —In this section, information about the participants are described such as the sampling technique and recruitment used (e.g. advertisement for a volunteer sample), the number, age and breakdown of gender should also be stated, and it may also be appropriate where the research was conducted and from what country the participants came.

Apparatus/materials —In this section, the researcher include the materials they needed in order to carry out their research. E.g.: computers, video/audio stimuli, consent forms, standardised instructions; tasks; response sheets; questionnaires, interview schedules; or observation schedule.

Procedure —This section of the report describes a step-by-step how the investigation was carried out—what the participants did and in the order it happened. Sufficient details needs to be provided so others researchers can replicate the study. You will need to include where it took place and instructions given to the participants before (e.g. consents form), during (standardised instructions) and after (debriefing) the study.

Results

This section is where the results are presented—what the researchers found; it should be a summary of data. They typically include ***descriptive statistics***; this is when the data is summarised by using the appropriate tables, averages and graphs. Then there is the ***inferential statistics***; a statistical test to determine how significant the results are—whether they hypothesis has been accepted or rejected.

Discussion

The discussion mainly explains what the results show. This covers a number of elements (although they are not broken into subheading such as below)

(a) ***Summary of research—*** Firstly, it begins with a summary of the study and provides a clear answer to the research question; whether the hypothesis is supported or rejected. The researcher then considers the relevance of the findings to existing theories and research evidence that they wrote in the introduction of their report (e.g. Do the results provide support for any existing theories/studies? If not, how can this be explained?).

(b) ***Theoretical implications***—Next, there is some discussion of the practical implications of the research. How can the results be used, and by whom, to accomplish some real-world application?

(c) ***Limitations***—This is followed by a discussion of the study's limitations by looking at the methodology and design which may have affected the validity of the study (e.g. Perhaps there is some evidence that participants did not fully understand their task) and how this could have been corrected.

(d) ***Suggestions for future research***—Most discussions end with some suggestions for future research. What ***new*** research questions has the study raised that could be investigated?

References

The final section is a reference list. The full details of any journal articles, books and websites that are mentioned in their report. This is very useful for those reading the report, as they may be interested to extend their reading to the articles and books indicated by the researchers who wrote the paper.

Appendices

An appendix is for additional material that would interrupt the flow of the research report if it were presented within any of the major sections. For example, in the appendices the researcher would place things like raw data, calculations, standard instructions, present lists of stimulus words, questionnaires, observation schedules and so on.

Exam Questions

1. A psychologist was interested in testing a new treatment for people with eating disorders. She put up adverts in several London clinics to recruit participants. Thirty people came forward and they were all given a structured interview by a trained therapist. The therapist then calculated a numerical score for each participant as a measure of their current functioning, where 50 indicates excellent, healthy functioning and zero indicates failure to function adequately. The psychologist then randomly allocated half the participants to a treatment group and half to a no-treatment group. After eight weeks, each participant was re-assessed using a structured interview conducted by the same trained therapist, and given a new numerical score. The trained therapist did not know which participants had been in either group. For each participant, the psychologist calculated an improvement score by subtracting the score at the start of the study from the score after eight weeks. The greater the number, the better the improvement.

Table 1: Median and range of improvement scores for the treatment group and for the non-treatment group

	Treatment group	Non-treatment group
Median	10.9	2.7
Range	2.1	0.8

The psychologist noticed that female and male participants seemed to have responded rather differently to the treatment. She decided to test the following hypothesis:

Female patients with an eating disorder will show greater improvement in their symptoms after treatment with the new therapy than male patients.

She used a new set of participants and, this time, used self-report questionnaires instead of interviews with a therapist.

a) Imagine that you are writing up the report for this study.
What is the purpose of the introduction section of a report? . . . . . **(2 marks)**

b) Imagine that you are the psychologist and are writing up the report of the study.
Write an appropriate methods section which includes reasonable detail of design, participants, materials and procedure. Make sure that there is enough detail to allow another researcher to carry out this study in the future. . . . . **(10 marks)**

- design
- participants
- materials
- procedures