2020

Psychology and Counselling: UWTSD House Rules

STACEY COLEMAN

Contents

Report writing in psychology 2
What is a research report? 2
General format of a lab report: 6
Abstract 7
Introduction/Literature review 8
Method 8
Results (Quantitative research studies) 10
Results / Findings (Qualitative research studies) 11
Discussion 12
Reference list 13
Appendices 13
APA 7th Edition Guidance: The Basics 15
Citations within the text 15
One author 15
Two authors 15
Three to 20 authors 15
Using 'et al.' when first authors have the same surname 15
Citing multiple works in the same sentence 15
Secondary citations 15
Group (corporate) author with abbreviation 15
Author of a chapter in an edited book 15
Quotations 15
Reference list 16
General conventions 16
Book or ebook with DOI 16
Book without DOI 16
Journal article 16
Chapter within an edited book (DOI to be included if available) 16
Webpages 16
Secondary sources 16
Tables and Figures 17
Tables 17
Figures 18
Writing Style: First- or Third-Person? 19

Report writing in psychology

Just because you can run does not necessarily make you a good runner, but with practice and guidance you can improve and take on others in competition. Writing is exactly the same; it is a skill, and practice and training can help you to become a better writer. We have written this document as part of your training, but it is up to you to use the guidance within it and practice.

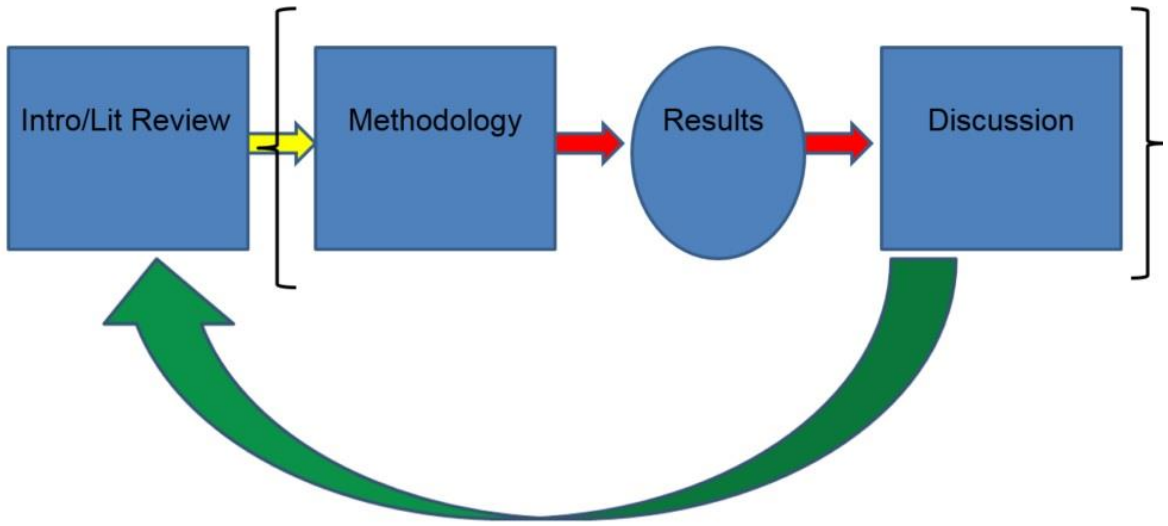
There is a lot of information available in books and on the internet, about writing psychology reports. Often this material is broadly similar (writing for Psychology generally uses the standards of the American Psychological Society [APA]) but there are instances where there are differences; the layout of sub-sections in the methodology for instance, or whether sections should be started on a new page. We have put this document together as a brief set of 'house rules' for writing psychology reports. It is not exhaustive, and does not cover everything that you need to know regarding layout and academic writing style – there are plenty of books in your reading lists that will help you with that. However, it should provide you with a general overview that will help you on your way to writing in Psychology. We have written it to provide you with the basic principles needed to write a report in psychology (quantitative or qualitative)[1]. This relates to research involving a single testable hypothesis or research question but the general principles can be easily applied to experiments and reports involving multiple experiments.

What is a research report?

A research report (sometimes referred to as a 'lab report') is a document that presents a particular research problem and incorporates an element of research within it. It differs from an essay in two key ways: first, it is likely to be much more focused on a specific area that does not allow for the more general overview that an essay may take; second, it will include your own research which must be described clearly. The reports that we ask you to write may vary in length, from 1,500 word reports up to the 8,000 word dissertation thesis, but the structure is always the same (see Figure 1).

[1] Some of the ideas for guidance in this document are taken from Beech, J. R. (2009). *How to write in psychology: A student guide*. Chichester: Wiley-Blackwell. We encourage you to read this as a source as it contains far more information than we can fit into this document.

Figure 1
The Psychology Lab Report Structure.



Whilst there are other important elements of a lab report that we will include in our coverage later (such as the title, the abstract, reference list, appendices, etc.) we will first focus on the main body of the report and, importantly, how all of the elements link together.

1. The Introduction/Literature Review: This should give the background research to the study that you are going to carry out/report. It should open with a statement of what the issue or problem is in fairly general terms (but still be supported by a reference if applicable). You should then move swiftly into more specific theory and research evidence that relate directly to the research under investigation. Keep as close to the central issue as possible. Once you have set out the literature you can explain what your study will contribute to the research and describe your research question or hypothesis. So, your Introduction/Literature review moves swiftly from the general to the specific to your work.
2. The Method Section (Methodology): The method section is like a diary of the research that you carried out. It needs to be clear and informative so that another student could read what you have done and replicate your study. In order to do this it is important for us to follow conventions – a set of procedures that we, as a psychological community, agree upon. When the writer and the reader know what the conventions of a report are they then know what to be saying and looking for.

Because of this, it is important that you follow these conventions when writing your lab report, from the order that you provide the information in to the level of detail that you provide. Later in this document you will find the specific order that we ask you to present this work in, and what we ask you to put into each section; this may differ from what you read in other sources so it is important that you follow the guidance in this document (these are the 'house rules').

3. The Results Section: We carry out research because we want to find something out and, just as in the Method section, it is important that the reader can understand what you have found in your study; therefore, just as before, following the agreed upon conventions is crucial for the writer to provide the reader with this information. From reading the Method section our reader should have a good idea of what was done, how it was done, and the type of data that they will expect to see in this section. Therefore it is important that this information is now presented, in a way that is easily understandable to someone trained in psychology to a reasonable level. You will find more information on this below but, at the very minimum, it is expected that the results section will contain *descriptive* information (data from your sample such as mean scores and standard deviations) and *inferential* information (statistical calculations of how your findings would relate to a wider population sample). This is carried out through a written narrative and may be supported by other forms of data presentation (such as tables and figures).
4. The Discussion: The Method and Results sections above are very factual; they describe what you did and what you found. The Discussion is where you should address *what it means*. You should start by summarising your overall findings and addressing directly the extent to which they support your hypothesis. You should then consider how the findings that you have relate to the literature that you covered in your introduction. This involves interpretation and comparison of your findings in relation to theirs. Your discussion should also include a critical review of potential limitations of your research, and possible future directions to extend the research. Finally, you should provide an overall conclusion summing up your findings and what it suggests.

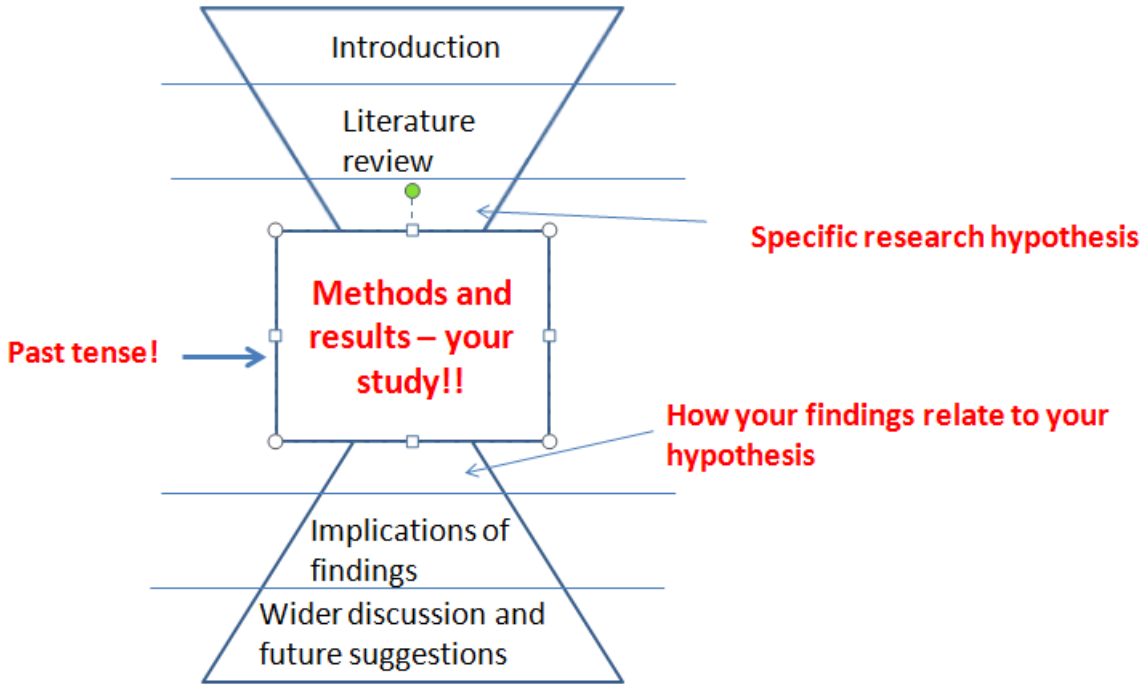
So, why the brackets and arrows in Figure 1? This is because a good lab report is not simply the linear reporting of your study from the Introduction to Discussion, there are some important elements to consider. First of all, we need to consider the importance of the

Introduction; it must have enough information in it to be able to justify your hypothesis and the reason for you to carry out your research study. However, it differs from the next three sections in one huge way (hence the reason why the other three sections are in their own bracket). If I was unclear on what you had written in the introduction I could at least go to other sources (hopefully that you have provided but, if not, I could find them myself) to find out about the topic area. However, I cannot do that for the other sections because the Method, Results and Discussion are all unique to your specific study; I have no other sources to refer to except the information that you provide me – and that means if you do not explain it well enough, there is no way for me to understand it.

Finally, as explained in point four above on the Discussion, this has to link to what you covered in the Introduction. This is important to highlight because a lab report is not a linear piece of work that flows from beginning to end; you will constantly be going backwards and forwards, considering whether something identified in your Discussion needs to be included in your in your Introduction, making sure that you have addressed in your Discussion the studies that you have covered in your Introduction. Writing a lab report is about crafting a factual story of your research, and this takes time and effort.

We suggest that you follow the 'cone' model of report writing (see Figure 2). You move from the general to the specific in your Introduction and Literature Review, cover your own study in the Method and Results, and then from the specific to the general in the Discussion.

Figure 2
The 'Cone' Model of Report Writing.



General format of a lab report:

Headings and subheadings are always used to identify the parts of a research report. It is important that you follow the structure set out in Figure 3 for your Psychology lab reports across all three years of your degree. Additional information about each heading and subheading are provided below.

Figure 3
Required Structure for Lab Reports

Title page
Abstract
Introduction/Literature Review
Method
    Participants
    Design
    Materials
    Procedure
Results
Discussion
Reference List
Appendices (if used)

Title

The title should summarise the main idea of the research in no more than about 15 words. A title should be concisely written but convey the relevant amount of essential information. For example,

> *An Experimental Investigation of the Effects of Practice in a Visual Aiming Task in a Sample of Human Participants*

is slightly long. This can be more concisely written in the following way:

> *Practice Effects in a Visual Aiming Task.*

The title should be presented on the first page (title page) and should be on a separate page from the rest of the report.

Abstract

An abstract is a single paragraph containing approximately 120-150 words (150 words max) that summarises your entire research report. The abstract is important as it creates an initial impression of the content of the paper. You should include the most important information from the report which includes what the research problem was, what was done to test your

hypothesis, what was found, and what this means. The abstract should be centre-justified and single spaced, and presented on a separate page from the rest of the report.

Remember: the abstract comes first but is written LAST. It should be in the third person and should concisely describe the research.

Introduction/Literature review

The introduction does just that; it *introduces* the area of research. You need to provide sufficient information so that the reader knows what the subject of your report is, and can understand what you mean by any terms that you will subsequently use that might otherwise be unclear. The point of an introduction and literature review is to convince the reader of the validity and value of your research question at the end. To do this, you must present evidence to support your argument using relevant empirical literature.

1) Introduce the research problem
2) Review the literature – create a balanced argument of why you are conducting this research
3) Conclusion of the literature plus specific research hypothesis/hypotheses

Method

Your method will set out exactly how you tested your research hypotheses. This section should be written as briefly and concisely as possible, but it must provide sufficient detail so that the reader can evaluate the validity of the method used.

Tip: Try to think about writing a method as a 'step-by-step' guide to replication – other people should be able to replicate your study exactly as you carried it out purely from the information you provide in this section.

Participants

The people involved in your study should always be referred to as 'participants'. Details put in to this section can vary but will typically include how the participants

were recruited, their age (mean and standard deviation or range) and gender. Any other **relevant** information about your participants that is specific to your research can be included. (e.g., if any participants were excluded for any reason, it should be clearly explained here).

Design

State the design that was used and the variables included. You should clearly define your independent and dependent variables (if applicable; e.g., if using an experimental design) and state how each of these were being measured/scored. If you are categorising participants, then you should explain what the independent conditions were and how participants were categorised into these conditions. Describe what participants had to do (i.e., their task) in relation to the groups they were categorised into and identify any extraneous variables that you had to make an attempt to control.

For qualitative studies, you must state the type of method used to collect data and the type of analysis.

Materials

The materials section of your method should be as detailed as possible (think about others replicating your study). This should include everything you used and/or created for the study. If you used a validated questionnaire it should be introduced and referenced correctly, with the number of questions/items stated, examples given of the types of questions being asked and if any reverse coding is needed prior to statistical analysis taking place. Methods of scoring should also be included (5-point Likert scale, yes/no, etc.) and also what the final scores mean (if applicable). If you construct materials yourself for an experiment you should go into some depth about how you created them and why. If you have used an instrument such as a computer program, this again should be introduced and referenced correctly and an explanation should be given as to what the program seeks to do.

> *Remember: Copies of your questionnaire/materials etc., will be included in the appendices at the back of the report, so it is important to make reference to this within the materials section; (see Appendix A), for example.*

Procedure:

Describe the precise procedure your participants went through when participating in your research study i.e., exactly what they did. Any researcher should be able to replicate exactly what you did from the information presented in this section. The procedure should start from the moment participants are recruited for the study and ends at the point of being given a debrief form or debrief information. Ethical considerations (according to BPS guidelines) should be considered in this section, including informed consent and debrief (copies of which should be included in the appendix).

Note: For more complex experiments, procedure sections can be quite long and complex themselves!

Results
(Quantitative research studies)

Results must be presented as simply, concisely, and clearly as possible. It may be helpful to think of the results section as including three things; descriptive statistics, inferential statistics, figures and tables. Note that the headings below are for information purposes and these do not belong in your written report as separate headings.

Descriptive statistics:

- Can include the mean, (or median if applicable), range and/or standard deviation of participant scores on a questionnaire, for example. These can be presented in tables (with an appropriate title labelled according to APA conventions) and briefly summarised, or a longer explanation can be given if not using a table or graph. The descriptive statistics for both the IV and DV should be included where possible.

Inferential statistics:

- These should include; the statistical test that was carried out (in some cases a justification can be included, for example with the use of a non-parametric test) plus all the relevant information taken from the SPSS output*. In most cases this will

include a critical value of the test, degrees of freedom and significance level (whether the test is significant or non-significant – **never insignificant**). State the outcomes of the test in terms of how this relates to your hypothesis, i.e., accept or reject.

** Raw SPSS outputs will be included in your appendices*

Figures and tables:

- These should only be used if they achieve some purpose within your results section. If your descriptives, for example, are better presented in a table then use one; but do not then also include a paragraph explaining the descriptives. Figures and tables must also be correctly labelled according to APA style (see referencing document or APA manual for more information).

Results / Findings
(Qualitative research studies)

As above, results must be presented as simply, concisely and clearly as possible. For a qualitative research study, your data will come from the words/narrative with the participant(s). As a general rule of thumb, there is no single correct way to present qualitative interpretations; the researcher must choose which story to tell and how best to tell it using the data that they have obtained. For our 'house rules', however, please use the guidance below for general structure.

1. Always start by indicating what the primary aim of the research was, what form of analysis was used to explore the specific research question, and how many themes emerged from the transcripts/data (where applicable).
2. Introduce the main themes followed by the sub-themes within each theme in brief detail. For this part, it is sometimes advisable to use a table or diagram format. A table of your themes and sub-themes (plus supporting quotes as evidence) must be included in the appendices of the report, but you can choose to include this in your results section instead if you wish.
3. Provide a general description of Theme 1 and a justification/explanation of why this is/was considered to be a main theme.

4. Introduce each sub-theme of this theme in turn along with an explanation of how this became a subtheme. At this point you need to make use of supporting quotes from the data to support the subtheme. Offer an interpretation of the findings/data and link to the next point or quote.
    a. Note: deal with each theme/subtheme in the order in which you have stated they will be presented.
5. Summarise at the end of each subtheme/theme to tie up before moving on to the next.
6. Repeat steps 3 to 6 until all themes/subthemes have been explained and interpreted.
7. Provide a summary at the end of the results chapter.
    a. E.g., what threads have been the most strong/dominant throughout the interviews/focus groups?

Reporting of quotes:

Quotes from participants that are less than 40 words long must be contained within the text, encased in "quotation marks", and accompanied by a page/line number (along with any other information that may need to be included, e.g., gender/age). Any quotes that are more than 40 words long should be set as an extract in itself and indented to the left. Quotation marks are not required, but page/line numbers (identifiers) are.

Discussion

The discussion should theoretically flow on smoothly from the introduction, which ends with the hypothesis to be tested. As for this, it makes sense that the discussion should begin with some comment on whether or not the hypothesis was supported. A helpful structure to a basic discussion is outlined below:

1) Describe the outcome of the research – was your hypothesis supported or must it be rejected?
2) Discuss how your findings relate to the research problem you outlined in the introduction/literature review
3) Discuss any other implications of the findings

4) Indicate any flaws or weaknesses of the present study; this can include information relating to participants, design of the study, materials used, etc., plus potential alternatives.
5) Suggest the next step required to investigate the research problem. What can be changed to further study this area of research and how could it be done?

Remember: A discussion should not be a complete list of why your study was flawed. Whilst it is imperative to acknowledge the weaknesses in your experiment, do not write a lengthy, in-depth criticism of it. You must also remember to relate your findings back to the relevant literature and introduce potential developments of this experiment.

Reference list

The reference list should start on a brand new page of your work, and must list of all the material (i.e., studies from books, journal articles, etc.) that you have referred to in the entirety of your report. References need to adhere to APA 7th edition guidelines (see the information provided later in this document for the basics of APA referencing, and the full referencing handbook available via the library system for more information).

Appendices

This should include any materials you have outlined and used in your study (questionnaires, consent forms, debrief forms, interview schedules, etc.) plus any raw SPSS output data (quantitative) or interview/focus group transcripts (qualitative).

Some important things to bear in mind before starting a research report:

1) The introduction and discussion are generally written in the present tense, but the abstract, method and results sections are written in the past tense. The past tense is used in the discussion when referring to the method employed in the research that you are reporting, or to the results that were gathered.
2) Before you begin writing your research report you must have a topic to research! There are three essential elements that must be clearly determined and understood. These are:
    - The research problem
    - The research design
    - The hypothesis that is/was tested
3) APA guidelines advise and encourage the use of active voice over passive voice, where appropriate. This means that writing in the first-person is allowed in APA papers when the writers are providing information on what **they** did (e.g., in setting up methodology, conducting interviews, testing hypotheses, etc). If you have been provided with data and/or information regarding the collection of data for an assessment, then you should not write in the first-person as you have **not** collected the data or conducted the study.
4) Results are 'significant' or 'non-significant': They are **never** 'insignificant'.
5) You will find that there are often exceptions to rules. It is a common rule of style that we write numbers below ten (so it is 'nine', not '9'); however, take a look through this document and you will see that we refer to 'Figure 1', 'Figure 2', etc. The reason for this is that *Section 4.31* of the APA Manual states that numbers should be used to refer to parts of books and tables. Learning these nuances takes time, and it is why there are so many books written about writing style. If we could explain it all simply to you we would, as it would make our lives easier too – but good writing comes with lots of practice and reading these style and writing books. So remember, the guiding principles of your report writing are contained within two documents – this handbook and the APA Manual.

APA 7th Edition Guidance: The Basics

Citations within the text

Citation type	Format	Example
One author	Surname followed by date of publication	Jones (2009) (Jones, 2009)
Two authors	Both surnames followed by date of publication for all uses of citation	Griffiths and Hammond (2015) (Griffiths & Hammond, 2015)
Three to 20 authors	First authors surname followed by 'et al.' for all uses of citation, even the first use	Watson et al. (2019) (Watson et al., 2019)
Using 'et al.' when first authors have the same surname	To avoid ambiguity, as many names should be listed as needed to differentiate between the papers, and then followed with 'et al.'	1. Fannon, Chan, Ramirez, Johnson and Grimsdottir (2019) 2. Fannon, Chan, Montego, Daniels and Miller (2019) 1. Fannon, Chan, Ramirez, et al. (2019) 2. Fannon, Chan, Montego, et al. (2019)
Citing multiple works in the same sentence	Order citations within the same parentheses alphabetically (including citations shortened to et al.) and separate these with semicolons.	Several studies (Eysenck & Keane, 1980; Morris, 2009; Thomas, 1999) have suggested that……
Secondary citations	Include the original work and date, as well as the *citation for the source where you found the information*	Seidenburg and McClelland (1990, *as cited in Coltheart et al., 1993*) demonstrated that…
Group (corporate) author with abbreviation	**First citation**: use full name **Subsequent:** use abbreviation if one is available. If not, use full name throughout.	The National Health Service [NHS], (2020)… According to the NHS (2020)…
Author of a chapter in an edited book	Same rules for number of authors apply as above. Reference list entry will be different.	Lawrence and Dodds (2003)
Quotations	Authors as above, plus date and page number	**Up to 40 words long:** Contain within "quotation marks" It is suggested that "quotations are effective in research papers when used selectively" (Gibaldi, 2003, p. 109) **More than 40 words long:** Omit quotations marks, set quote as an extract and indent ½ inch to the left.

Reference list

General conventions

- Start reference list on a brand new page
- Arrange reference list in alphabetical order by first authors surnames
- All references should be double spaced and have a hanging indent
- An ampersand (&) goes between the last two surnames of a reference at all times (not 'and')
- Titles of books, names of journals and volume numbers should be *italicised*
- Titles of journal articles and issue numbers should **not** be italicised
- Dates are contained within parentheses, as are edition numbers of books (if available)

Reference type	Format	Example
Book or ebook with DOI	Authors surname, initial(s). (publication year). *Book title* (edition). Publisher. DOI or URL	Brace, N., Kemp, R., & Snelgar, R. (2012). *SPSS for psychologists* (5th ed.). Palgrave Macmillan. https://doi.org/10.xxxxx
Book without DOI	Authors surname, initial(s). (publication year). *Book title* (edition). Publisher.	Brace, N., Kemp, R., & Snelgar, R. (2012). *SPSS for psychologists* (5th ed.). Palgrave Macmillan.
Journal article	Authors surname, initial(s). (publication year). Title of article. *Title of Journal (using capitals for main words), volume*(issue), page range. DOI	Honsi, A., Mentzoni, R. A., Molde, H., & Pallesen, S. (2013). Attentional bias in problem gambling: A systematic review. *Journal of Gambling Studies, 29*, 359-375. https://doi.org/10.1007/s10899-012-9315-z
Chapter within an edited book (DOI to be included if available)	Surname, initial(s). (publication year). Title of chapter. In authors initial(s), surname (Eds.), *Book title* (edition number., page range). Publisher	Dillard, J. P. (2020). Currents in the study of persuasion. In M. B. Oliver, A. A. Raney, & J. Bryant (Eds.), *Media effects: Advances in theory and research* (4th ed., pp. 115–129). Routledge.
Webpages Note: website name gets omitted if author and site name are the same.	Authors surname, initial(s) OR organisation/agency name. (publication year, month day – if available). *Title of page.* Website name. URL	Mayo Clinic. (2017, March 8). *Nutrition and healthy eating.* https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/caffeine/art-20045678?p=1
Secondary sources	Only include the reference of the source you have read / located the information from. Format dependent upon type of reference as above. e.g., in the citation example, we would only include Coltheart et al. (1993) in the reference list.	Coltheart, M., Curtis, B. Atkins, P., & Haller, M. (1993). Models of reading aloud: Dual-route and parallel-distributed-processing approaches. *Psychological Review, 100*, 589–608. https://doi.org/xxxxx

Tables and Figures

Tables

- Number all tables with Arabic numerals (Table 1, Table 2,) sequentially. Suffix letters should not be used (e.g., Table 1a). 'Table X' should be in bold font above the table.
- Tables must have a clear and concise title. Titles should be italicised and written below the table number, with a blank line between the number and the title (or one 'enter' if work is already double spaced). Titles should be written above the table and in title case.
- All columns within a table must have a heading. These should be written in sentence case. See the full APA Publication manual for different types of headings.
- The main body of the table should be centre aligned (unless left alignment is required for longer entries).
- Not all tables have to include notes underneath, but if these are being used then they should be placed below the table, double-spaced and flush left. See the full APA publication manual for different types of notes.
- Vertical borders should not be included, neither should borders around each cell; tables should only include borders and lines that are needed for clarity.

e.g.

Table 1

Means, Standard Deviations and One-Way ANOVA results: Police Officers

Measure	Females		Males		$F(1, 234)$	η^2
	M	*SD*	*M*	*SD*		
Self-esteem	2.91	0.49	3.35	0.35	68.87*	.19
Social support	4.22	1.50	5.56	1.20	62.60*	.17
Cognitive appraisals						
Threat	2.78	0.87	1.99	0.88	56.35*	.20
Challenge	2.48	0.88	2.83	1.20	7.87*	.03
Self-efficacy	2.65	0.79	3.53	0.92	56.35*	.16

*$p < .001$

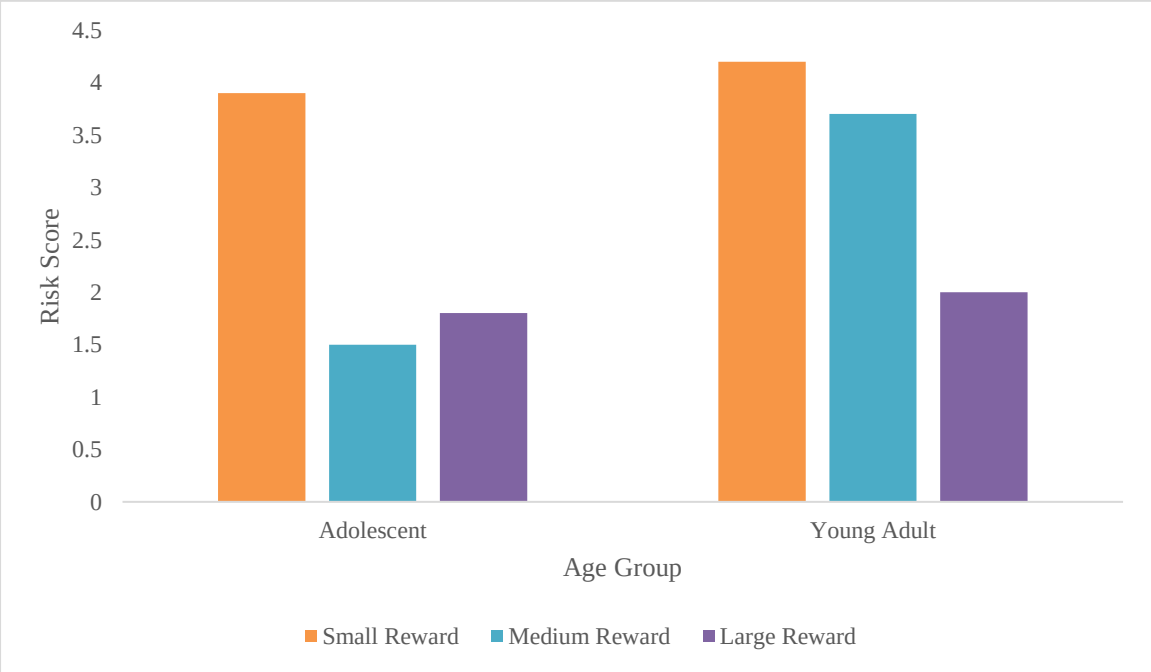
Figures

- All figures that are part of the main text require a number using Arabic numerals (Figure 1, Figure 2, etc.). Numbers are assigned based on the order in which figures appear in the text and should be in bold and left aligned above the figure.
- Titles of figures should be italicised and written below the figure number, with a blank line between the number and the title (or one 'enter' if work is already double spaced). Titles should be written above the figure and in title case.
- Images used in figures (charts, scatterplots, pictures, etc.) should be legible in both size and resolution.
- Title case should be used for axis labels and other headings; descriptions within figures should be in sentence case.
- Not all figures require a legend but if one is used then these should go within or underneath the image rather than to the side, and words should be in title case.
- Gridlines should be removed from figures.

e.g.

Figure 1

Risk Scores for Different Reward Sizes in a Simulated Gambling Task



Writing Style: First- or Third-Person?

First-person voice: written from the writer's perspective and shares emotion, thought processes, personal experiences and reflection. First-person writing uses pronouns such as *I* and *me*.

Third-person voice: objective writing designed to present information, or communicate ideas, without obvious bias or emotion. The author's personal perspective is removed and, therefore, points and ideas made within the writing need to be more carefully defined and supported with evidence.

There is also the temptation to write in second-person voice; making use of the personal pronoun *you*. This is strongly discouraged in formal and academic writing.

APA encourages the use of **active voice** rather than passive voice, where appropriate. This means that first-person writing is allowed in APA papers when the writers are providing information on what **they did** (e.g., in setting up methodology, conducting interviews, testing hypotheses, etc).

However, **third-person is preferred** when authors are required to remain objective, as in a literature review or when sharing background information and supporting evidence.

For most student research papers (assessments) that you will write during your time with us, **we prefer that third-person voice is used**, as well as in submitted essays (an exception to this may be your final year Psychology Empirical Project, in which it may be necessary to report what you have designed and conducted within the first-person). A combination of first- and third-person should be used in reflective work.