

Research: Manuscript Structure and Content

This guide provides general information about the main elements of a research manuscript. For specific details about writing a manuscript for coursework at ACAP, check the assignment requirements in the unit outline, and check with your Educator.

Manuscript Elements

A research manuscript usually contains the following key elements:

- Title
- Author's name and institutional affiliation
- Abstract
- Introduction
- Literature review
- Method
- Results
- Discussion and Conclusion
- References
- Appendices and Supplemental materials

More information about these elements and other additional elements can be found in the *Publication Manual of the American Psychological Association* (APA), sixth edition (2010). The Publication Manual also outlines the formatting requirements for these elements.

Depending on the type of study and its methodology, the elements may be ordered differently. For example, the introduction may contain the literature review, the results and discussion may be integrated in the same section. See the Publication Manual for details to include in specific types of studies such as empirical study, meta-analysis, theory-oriented paper, a methodological paper, and a case study.

Note: If you are submitting the manuscript to a journal for publication, check the publication requirements for that particular journal; each journal has its own specific requirements.

Title

The title of a manuscript should be concise, no more than 12 words, and should capture the main topic, the variables manipulated in the study, and/or the theoretical issues explored in the study. The title avoids unnecessary words such as *A study of...* It provides the reader with the key pieces of information that identify the main features of the study, and frequently reads like a long noun group (no verbs). For example: *Dependability and Treatment Sensitivity of Multi-Item Direct Behaviour Rating Scales for Interpersonal Peer Conflict.*

Daniels, B. D., Volpe, R. J., & Briesch, A. M. (2017). Dependability and Treatment Sensitivity of Multi-Item Direct Behaviour Rating Scales for Interpersonal Peer Conflict. *Assessment for Effective Intervention* 1 – 12. <http://journals.sagepub.com/doi/pdf/10.1177/1534508417698456>

Abstract

An abstract is a concise report of a study. It includes the topic, the purpose of the research, the research question/s, the method, findings, and conclusion. It ranges from 150 -250 words. It is written from an objective viewpoint, uses active reporting verbs; for example: *This study investigated....* Past tense is used when reporting the method, and variables manipulated, and present tense is used for reporting the results and conclusions. The abstract contains the key words readers are likely to use for searching journal databases.

Introduction (does not require a heading)

The introduction identifies the problem to be studied; establishes the significance of the study to the field of knowledge; states the research question/s and hypothesis/ese; and identifies the research strategy. Like all introductions, the reader should be given an overview of what they can expect to read about and in what order. Some manuscripts include the review of the literature in the introduction; the introduction then proceeds with a detailed, analytical review of the literature. You will find the following language framing the introduction:

Central to the discipline of ... is ...

Recent developments in the field of ... have led to a renewed interest in ...

Over the past century, there has been a (major) decline in ...

To date, there has been little agreement on ...

The issue of ... has recently grown in importance.

From RMIT. (2014). *Research writing: Starter phrases*. Retrieved from
https://emedia.rmit.edu.au/learninglab/sites/default/files/Research_Starter_phrases_2014_Accessible.pdf



Literature Review

The literature review considers the quality of evidence so far (on the topic of interest). It usually focuses on key studies/papers that have contributed to the current understandings of the topic. This may mean that a brief overview of the historical development of findings is provided, or that only an overview of significant findings is reported. Regardless, the overview should be an analytical exploration of the way the findings and conclusions were arrived at; that is, methodologies used, and their varying limitations for providing reliable and valid outcomes. This analysis should then identify where the current study could further refine and deepen understandings about the topic; this analysis legitimises the argument for the current study and its methodology. The final part of a literature review poses the research question and a thesis statement as a logical conclusion to the literature reviewed. You will find the following language framing the literature review:

Numerous studies have argued that ...

The research to date has tended to focus on ...

Data from several studies have identified the ...

Other studies have considered the relationship between ...

The first systematic study of ... was reported by ...

Most studies of ... have only been carried out on ...

Until now, this method has only been applied to ...

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https://emedia.rmit.edu.au/learninglab/sites/default/files/Research_Starter_phrases_2014_Accessible.pdf

Method

The method section details how the research study was designed to maximize reliability and validity of the results. The method should address how the current study improves on previous attempts to study the topic and/or expands the knowledge base of the topic. The method section can be divided into subsections with subheadings. For example, participants, procedure, materials, measurement approaches, research design. See the summary about formatting headings (APA6) on page 6. What was done is reported in past tense, while theory informing the method is reported in present tense. You will find the following language framing the method section:

The design of the questionnaire was informed by ...

The measures and has been accepted as a reliable tool for use with.....

This methodology has a number of advantages, such as ...

..... are potential limitations to the study design in that ...

...was prepared according to the procedure outlined by ...

To increase the reliability of measures, ...

The initial sample consisted of...

From RMIT. (2014). *Research writing: Starter phrases*. Retrieved from
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Results

The results section reports all the data collected, and summarises the outcomes for each part of the data. It does this without bias or justification for the results; it reports data whether it supports the thesis statement or not. See the Publication Manual for details to include for statistical data. Generally, the results are reported in past tense; some statements about the data are reported in present tense, for example, when the data recorded in a table or figure is referred to. You will find the following language framing the content of the results section:

It is apparent from Table 1 that ...

The data in Figure 2 indicates that ...

Strong evidence of ... was found when ...

A positive correlation was found between ... and ...

The results, as seen in Table 2, indicate that ...

No significant reduction in ... was found.

The majority of respondents felt that ...

A small number of those interviewed indicated that ...

A comparison of the two results reveals that ...

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https://emedia.rmit.edu.au/learninglab/sites/default/files/Research_Starter_phrases_2014_Accessible.pdf

Discussion

The discussion reviews and analyses the results; it addresses the results in relation to the research question and hypothesis/es; it attempts to make sense of and meaning from the results in a scholarly way; it offers explanations for the results in terms of the method and its limitations or successes; it makes reference to the studies discussed in the literature review as part of the explanations; it may refer to additional studies when it is relevant to the explanations and/or when it is making new meaning of the data; similarities and differences between other studies and this study are used to “contextualise, confirm, and clarify” (APA, 2010, p. 35) the explanations; the discussion draws out the contribution (however small or limited) to answering the research question. The language in this section is cautious and honest. You will find the following language framing the content of the discussion section:

Contrary to expectations, this research did not find a significant difference between ...

This finding was unexpected and suggests that ...

Findings in the present study are consistent with the findings of ...

There are similarities in...between the present study and those described by ...

It is possible to hypothesise that ...

These findings suggest ...

In contrast to earlier findings, however, no evidence of ... was detected.

There are several possible explanations for this result. For example, ...

This inconsistency may be due to ...

These data must be interpreted with caution because ...

It may be the case that ...

This finding, while preliminary, suggests that ...

This finding has implications for ...

An important issue emerging from these findings is ...

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https://emedia.rmit.edu.au/learninglab/sites/default/files/Research_Starter_phrases_2014_Accessible.pdf

Conclusion

Whether a separate conclusion or concluding paragraphs in the discussion section, the conclusion summarises the whole study; it restates the research question/s, hypothesis/es and what the study attempted to address; it summarises the key results and the conclusions arrived at in the discussion; it then relates the significance of the study to the broader knowledge base of the field of study; it may make specific recommendations for future research.

References

See the following resources for APA6 style information:

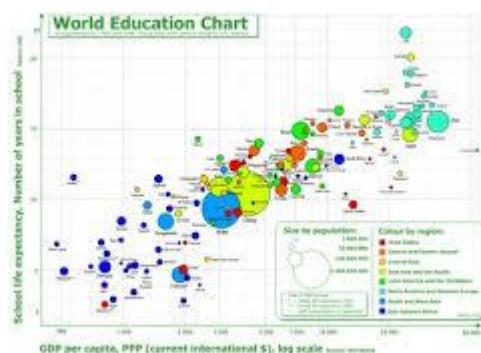
- Navitas Library Referencing in APA6 Student Guide (<http://libguides.navitas.com/referencing>)
- the SLS website (<http://sls.navitas-professional.edu.au/college/acap>)
- the APA website (www.apastyle.org)

Appendix: Appendices

This section contains the full version of materials that relate directly to the study but would not sit as a coherent text in the manuscript itself, for example, questionnaires. The materials in appendices are discussed within the manuscript and referred to in the following ways: if there is only one, then it is titled and referred to as **Appendix**; if there is more than one, then each one is titled **Appendix A, Appendix B** (and so on) and referred to by these titles. For how to label figures and tables, see the Publication Manual (APA, 2010).

Supplemental Materials

This section contains materials such as online supplemental archives as used for meta data analyses. For more detail about types of materials included in this section and the formats to use, see the Publication Manual (APA, 2010).



Formatting headings according to APA Style

The APA Publication Manual gives guidelines for up to five levels of heading in a paper. Here are examples of the first three:

The First Level is Centered and in Bold. (level 1 heading)

Each main word starts with a capital letter. The first line of text below it is indented.

The Second Level is Left Aligned and in Bold. (level 2 heading)

Each main word starts with a capital letter. The first line of text below it is indented.

The third level is indented and in bold: Just like this. (level 3 heading) Only the first letter of the first word is capitalised, as well as the first letter of the first word after a colon. The heading ends with a full stop. The text begins straight after the heading (on the same line with the heading).

For more detail on formatting headings, check out the APA Website (www.apastyle.org) and the APA Style Blog (www.blog.apastyle.org).

