

How to Write APA Style Research Papers

The Complete Paper from Title to References • By Professor Emma Geller

Title Page

1. What is the title of the paper?
 - a. This should make the main idea or purpose of the research clear
 - b. A title should not be more than 10-12 words
 - c. You should also include a **running head** in the upper margin
 - i. The running head itself is a shortened version of the title (max 50 characters, including spaces) and it is written in ALL CAPS and is left-aligned
 - ii. On the title page, the running head is preceded by the words “Running head:”
 - iii. On every other page of the paper, the running head appears alone
 - iv. The upper margin should also contain **page numbers** that are right-aligned
2. Who are the authors?
 - a. Author names should be formatted as: first name, middle initial, last name
 - b. If multiple authors, they should be listed in order of their contribution to the paper (most to least)
3. Where are the authors from (institutional affiliation)?
 - a. The affiliation is the location where the research was conducted
 - b. If conducted in multiple locations, then this should be indicated with superscripts

► **Big Picture:** *What topic is this paper about and who wrote it?*

Abstract

1. What topic are you investigating?
2. What question did you try to answer?
3. How did you try to answer it?
4. What did you find?
5. What does this tell us about the topic you're investigating?

► **Big Picture:** *Provide a one-paragraph summary of the whole study.*

Introduction

1. What topic/effect/phenomenon are you investigating?

Describe it in a general sense.

 - a. Define key terms that you'll be using in the paper (don't assume the reader will know them!)
 - b. Give an example of the topic/effect/phenomenon, if possible (help your reader clearly understand what you're talking about)
2. What have other researchers found out about this topic, and how did they do so?
 - a. For each study, **describe**:
 - i. Their research question
 - ii. The design/methods of their study
 - iii. The results they found (no need to report stats, just the general finding)
 - iv. What this finding tells us about the topic
 - b. Use **connective phrases** to link these studies together
 - i. “In one study, so-and-so investigated ___ and found...”
 - ii. “So-and-so also investigated the role of ___ in ___ and found...”
 - iii. “So-and-so approached this problem from a different angle...”
 - iv. “On the other hand, so-and-so found contradictory results when...”
 - c. **Summarize** what we know so far about this topic (on the basis of the studies you've just described)
3. What question about this topic remains unanswered? How do you plan to answer it?
 - a. What specific question are you trying to answer? (research question)
 - b. What are the possible answers to that question? (alternatives)
 - c. Describe the design/methods of your study (logic of design)
 - d. What are the possible outcomes of your study? How will they answer your question? (predicted results and what they will mean)

► **Big Picture:** *What do we already know about this topic and how will your study help us learn more? What question will you try to answer and how?*

1. Participants

- a. How many people participated?
- b. Who were they?
- c. Why did they participate? (i.e., how did you recruit them, and how were they compensated?)
- d. Describe relevant demographic info
 - i. Common standard is mean age and number of males/females
 - ii. If other info is relevant to your study, report it here (if not, leave it out)

► **Big Picture:** *What kind of sample would a researcher need to replicate your study?*

2. Design

- a. What did you manipulate (i.e. what was the independent variable)?
 - i. Give the IV a brief name that you can use throughout the paper to refer to it, and then describe how it was operationally defined in this study
 - ii. How did you manipulate it (between or within subjects)?
 - iii. How many levels were there? How were those levels defined?
- b. *Repeat section A for all independent variables in your design*
- c. What did you measure (i.e. what was the dependent variable)?
 - i. Give the DV a brief name that you can use throughout the paper to refer to it, and then describe how it was operationally defined in this study
- d. Were there any other variables that you measured (either to include as statistical controls or as possible mediators or moderators)?
 - i. If so, name them and indicate how they were operationally defined

► **Big Picture:** *What variables would a researcher need to manipulate and/or measure to replicate your study?*

3. Materials

- a. Indicate what participants interacted with during the study
 - i. Did they read/look/hear something? Did they interact with a person or an object?
- b. Answer all of these questions that you can (that are relevant to the study)
 - i. How many of them were there?
 - ii. How did you choose/create them?
 - iii. What features did you control, and how?
 - iv. How did the participant interact with them? Be specific!
 - v. Were things presented one at a time or all at once?
 - vi. Was there a time limit?
 - vii. Did the participant choose any part of what they were doing or what they interacted with?
 - viii. Was there a test? If so, how did participants give their answers? How were answers scored?
- c. If there were multiple phases to the study (e.g. a study and a test period, or an interaction and then a survey, different sections of a survey, etc.), describe the materials for each in separate paragraphs

► **Big Picture:** *What specific things would a researcher need to have if they wanted to replicate your study? Which features of those things are critical?*

4. Procedure

- a. How did participants complete the study?
 - i. Imagine you are a participant in the study, and describe your experience from beginning to end (don't skip anything), and THEN *edit for clarity, conciseness, and relevance*
 - ii. When and where did they complete the study?
 1. Was it in a lab? Online? In class? In a public place?
 2. Were they alone or with other participants?
 3. Did you control what time of day/week/month/year they participated? If so, why? (Justify your choice)
 - iii. What exactly did they do, and in what order did they do it?
 - iv. What specific instructions were they given? (What did they think they were supposed to be doing?)
- b. The toughest part of this section is deciding which details are relevant and which are not (better to err on the side of too much detail than too little, but try not to go overboard)

► **Big Picture:** *What would a researcher need to do (and in what order) during the study to replicate your study?*

Results

1. **What specific question are you trying to answer? (state it clearly)**
 - a. Describe the relevant variables for this question by reporting the means and standard deviations (continuous variables), or frequencies (categorical variables)
 - b. What test did you use to compare the variables? (state it clearly)
 - c. Report the results of the test in APA format, including
 - i. The test statistic (z , t , X^2 , r , whatever it is for your test)
 - ii. The degrees of freedom
 - iii. The p-value
 - d. If you have a figure or table related to these results, mention it
 - i. “These results are displayed in Figure 1.”
 - ii. “These results are shown in Table 1.”
 - e. Focus explicitly on reporting what you specifically measured and what you specifically tested (i.e. describe in terms of what you *observed*, not the constructs you intended to measure)
 - i. For example: say “Participants more accurately identified artists’ styles when those artists were studied in an interleaved schedule than when they were studied in a blocked schedule”
 - ii. Don’t say: “Participants learned better in the interleaved condition.”
 - f. Do NOT interpret the results in this section - save that for the discussion
 - i. Avoid phrases like “This means that...” or “This shows that...”
2. **Repeat section 1 for each separate test you run on your data**
3. **Each figure you include should...**
 - a. Be on its own page at the end of the manuscript (after the References)
 - b. Have a figure caption that describes the contents of the figure
 - i. E.g. “Figure 1. Mean accuracy in the blocked and interleaved conditions.”
 - c. Have clearly labeled axes
 - i. Axis labels should correspond to your variable names and include labels for the levels of those variables, as appropriate
 - d. Not have a title (that’s what the figure caption is for)
 - e. Not have a heading (figures don’t get a heading in APA style)
4. **Everything that applies to figures also applies to tables**

► **Big Picture: How did you analyze your data (what tests did you use)? What were the results of those tests?**

Discussion

1. **Summarize your results in plain English**
 - a. Repeat the results section in simpler terms and without referring to stats
 - b. Be sure to summarize ALL of your results (don’t skip any)
 - c. Interpret what these findings mean beyond “scoring higher” or “being correlated”
 - i. This is where you can refer to your constructs and make claims about what can be inferred from the results (“This suggests that...”)
 - d. State whether or not your hypothesis was supported
 - i. Do not use the word “proved”!
 2. **Discuss the practical and theoretical implications of your finding**
 - a. What does this mean for understanding the topic on a theoretical level? (How does it help us understand the topic better?)
 - b. What does this mean for applying the findings to real life situations/problems?
 3. **Discuss the limitations of the study**
 - a. What things make you cautious about interpreting the relationship between variables as causal or reliable? Why?
 - b. What things make you cautious about generalizing your findings to other studies, populations, or real life situations? Why?
 4. **Suggest directions for future research**
 - a. Directly address the limitations you’ve just raised by suggesting ways to address them in future studies
 - b. Are there any new questions that are raised by your results? If so, how could we address those in further research?
- **Big Picture: What did you learn from this study? What new questions does this raise?**

- Put them in alphabetical order by the *last name of the first author*
 - Never re-order authors on a paper!
 - Author names should be written with the last name first, followed by a comma, then the first (and middle) initials
 - Never write out first names!
 - Use the & symbol to write “and”
 - The year of publication goes in parentheses
 - Do not include month or day
 - The title is written like a sentence
 - Only capitalize the first word, and the first word after a semi-colon
 - No italics
 - No quotation marks
 - Journal Info:
 - The journal name is written in italics, and every key word is capitalized
 - The volume number is also italicized
 - The issue number is not italicized, but it is in parentheses
 - The page numbers refer to the original publication (not your pdf)
 - e.g., *Journal of Experimental Psychology*, 23(10), 316-332.
 - Indicates volume 23
 - Indicates issue 10
 - Indicates pages 316-332
- **Big Picture:** *What other papers/research did you read when designing your study? Where can those papers be found?*

Answers to frequently asked questions about formatting the text:

1. Double space everything, including the title page and references
2. Use one-inch margins on all sides of the paper
3. The text should be left-justified (a straight line), and the right side should be “ragged” (do not justify on both sides)
4. Paragraphs should be indented at the beginning (please use paragraphs!)
5. Do not emphasize things with boldface (except headings), do not change fonts
6. Number all pages consecutively, including the title page

Answers to frequently asked questions about organization:

1. Section labels:
 - a. The following sections are labeled with a boldface, centered heading: Abstract, Methods, Results, Discussion, References
 - b. The following sections are labeled with a boldface, left-aligned heading: Participants, Design, Materials, Procedure
 - c. The following sections are NOT labeled with headings: Title Page, Introduction, Figures
 - i. The “heading” for the introduction should be the title of the paper
2. Ordering of manuscript parts
 - a. Title page - on its own page, numbered page 1
 - b. Abstract - on its own page, numbered page 2
 - c. All text - starts on page 3, all sections are continuous (nothing starts on a new page) from Introduction through Discussion
 - d. References - begin on a separate page
 - e. Tables - place each on a separate page (should be in the order they are referenced in the text)
 - f. Figures - place each on a separate page (should be in the order they are referenced in the text)