

**University of New Haven  
Criminal Justice Department  
Honors Thesis Guidelines for Quantitative Research**

When writing the thesis, students who conduct an empirical study must adhere to the formatting guidelines presented in the current (7<sup>th</sup>) edition of the *Publication Manual of the American Psychological Association* (2020). The information provided below is a brief summary of the requirements for each component of an APA-formatted paper. As such, everything that students may need to know will not be included. Thus, students are expected to refer to the manual to determine the correct formatting. **They are discouraged from referring to online sources other than the APA website (<https://apastyle.apa.org/>), as they are not always accurate.** The APA website provides detailed information about how to format a paper as well as samples.

The thesis will consist of at least eight components:

- Honors Thesis Title page (separate page; Honors Program Requirement)
- Title page
- Table of Contents (separate page; Honors Program requirement)
- Abstract (separate page)
- Introduction
- Method
- Results
- Discussion
- Reference page (separate page)

In addition, theses may include Footnotes, Tables, Figures, Appendices, and other graphic forms of presenting information (each starting on a separate page). Footnotes appear after the end of the discussion section and before the references begin. Next, present Tables, then Figures, followed by Appendices. For Figures, include a caption on the page.

The APA manual is very specific (e.g., where the title is located on the title page, how many words can be included in the abstract, how to cite references in the text, how to format numbers) and students are expected to adhere to all requirements. Guidelines on the structure and content of the main components of the paper are described in Chapter 2 of the APA manual. A tutorial is also available at: [https://extras.apa.org/apastyle/basics-7e/?\\_ga=2.233827613.2026613414.1588116008-110464740.1588116008#/](https://extras.apa.org/apastyle/basics-7e/?_ga=2.233827613.2026613414.1588116008-110464740.1588116008#/).

### **Title Page**

- Be sure to include:
  - Page number (page numbers appear on all pages)
  - Title (a meaningful description of the main issue under investigation in the paper)
    - For example, in the title “The Effects of Nicotine on Body Weight in Female and Male Rats,” both independent and dependent variables are identified, and it is clear what issue is under investigation.
    - The title should be no more than **15 words**

## Abstract

The abstract must include three key pieces of information: the objectives/purpose of study, a description of the method, and a summary of the results.

- The abstract is a brief summary (**150-250 words** in length) of the purpose and content of the paper.
- The abstract is typed in **block form** (a single paragraph with no indentation), left justified, and is *written last*, after the paper is finished.
- Readers use the abstract to decide whether to read the entire paper. Therefore, each sentence should be accurate and maximally informative.
- First, state the general problem under investigation, the purpose of the study, and research question(s) and/or the hypotheses.
- Next, provide information about the participants, including sample size and relevant demographic information.
- Then summarize the methodology (how the study was conducted).
- Briefly summarize the results, perhaps only the significant ones.
- Finish with a statement about the implications of the results (e.g., how can they be applied).
- At the bottom, include three to five **keywords**, which are terms that individuals would use when conducting a search for articles on your topic.
- Although not prohibited, it is best to avoid citing references in the Abstract.

## Introduction

### *Initial paragraphs*

- Explain the problem under investigation by defining it and then establishing the importance of studying it. The goal here is to introduce the general topic to your reader so that s/he can place the information that you are about to describe in greater detail into some kind of context. Devote paragraphs to introducing the problem and establishing the importance of studying it. The length of this section will vary depending on the topic.

### *Literature review*

- After introducing the problem, begin your review of the literature. This is where you summarize the relevant research on your topic. The purpose of this section is to review what research has already been done and to provide justification for your research question(s) and hypotheses.
- The recommended approach is to review the literature by themes or topics. For example, if 10 studies have investigated one aspect of a problem, review those articles in one section. Note that, in some cases, another approach will be more appropriate.
- When reviewing research studies, briefly describe the purpose of the each one, participants, procedure, and results that are relevant to your study.
- Because the literature review is typically lengthy, including subheadings that correspond to the different themes or topics is recommended.

Things to keep in mind:

- **Quotations.** Limit your use of quotes from your sources. You are expected to paraphrase instead of using direct quotation. It is recommended to include no more than five direct quotes.
- **Plagiarism.** You need to read the articles (not just the abstracts) carefully and describe the content in your own words (i.e., paraphrase). Failing to properly cite material and insufficiently paraphrasing an author's words both constitute plagiarism. See below for more information on plagiarism and tips on how to avoid it.
- **Transitions.** Include transition sentences between paragraphs, including those describing the studies. This can be achieved by linking the studies through comparing and contrasting the focus and/or findings of the studies.
- **References.** Expect to cite at least **20 sources** in your thesis. Your sources should be scholarly (e.g., from peer-reviewed journal, a government report) and can include research articles, literature reviews, policy analyses, and theoretical papers. Textbooks are not acceptable sources of information for a thesis. Avoid using websites as a source of information for your thesis. Note that there may be some exceptions (e.g., citing information provided on a government website). When possible, obtain and read all sources you want to reference in your paper. That is, do not rely on another author's summary of a source, as it may be incorrect.

#### *Final paragraph*

- The last paragraph of the introduction must explain your approach to addressing the problem under investigation and state the research question(s). Consider making it a separate subsection titled "Current Study."
- You may list the specific hypotheses here, as recommended by the APA manual. It is also acceptable to include them in a subsection in the Method section prior to the Participants section. Consult your advisor about which option is most appropriate for your thesis.
- Begin the final paragraph by stating the purpose of your study followed by a very brief description of how you tested your hypotheses (detailed information about the method does NOT belong in the introduction). Be sure to clearly indicate the variables assessed in the study (i.e., predictor/outcome, independent variable/dependent variables). This is usually achieved by clearly stating your research questions(s) and/or hypotheses.

#### **Method (or Data and Methods)**

##### *Participants*

- Provide a detailed description of the sample in this section
- Indicate the number of participants
- Explain why data from some participants were removed from the analyses (e.g., excessive missing data, did not meet certain criteria for participation).
- Include the following demographic information about your participants:
  - Number of females and/or males
  - Mean age and standard deviation
  - Approximate number of participants in each racial/ethnic category
  - Any other demographic information that is relevant to your study

- Describe participant selection criteria (e.g., must be 18 years of age or older, must be a Criminal Justice major), if any.
- Describe participant incentives that were provided (e.g., course credit, money), if any.
- Describe how informed consent was obtained, if applicable to your study. Indicate that the Institutional Review Board approved all procedures.

### *Measures*

- In this section, describe all measures used to assess the variables in the study. Devote a paragraph to each measure. First, describe your independent/predictor variable(s) and then your dependent/outcome variable(s).
- If you collected data using a questionnaire, indicate the number of items measuring each variable on the measure, provide a few examples of the items, and describe the response options.
- Those who use a questionnaire, whether created for the study or obtained from some scholarly source, should include it as an Appendix. If you modified a measure for your study, describe how it was modified. Be sure to properly cite the publication(s) from which you obtained the measures both in the Measures section and on the Reference page.
- Refer readers to each Appendix as you mention it in the text.

### *Procedure*

- In this section, provide a coherent and concise description of how data were collected. Provide a clear step-by-step description so that someone else could conduct the study.
- Describe or note the following:
  - Procedure(s) for selecting participants (e.g., how participants were obtained)
  - Setting(s)/location(s) in which the data collection took place (e.g., classrooms)
  - Approximately how long it took for participants to participate
  - Any debriefing procedure implemented (if applicable)

Your advisor may also require you to include a subsection in the Method section in which you describe the design of your study (e.g., correlational, experimental).

### **Results**

- If appropriate, include a data analysis plan subsection.
- Summarize descriptive results first (e.g., sample characteristics).
- Next, present the results of your hypothesis tests, one by one, including descriptive statistics that are relevant to the specific hypothesis tested.
- Clearly indicate whether or not the results support the hypothesis.
- Discuss findings not related to your specific hypotheses (e.g., post-hoc analyses) last.
- Include measures of central tendency (e.g., means, modes) and measures of variability (e.g., standard deviation, range), when appropriate.
- Be sure to explain what correlational results mean. For example, if you find a significant positive correlation between population density and crime rate, you need to state the results and explain them – in other words, you need to say that a higher population density is associated with an increase in crimes rates.

- Use a research conclusion format (e.g., “As hypothesized, participants who attended the program reported significantly more positive attitudes ( $M = 10.75$ ,  $SD = 2.46$ ) than those who did not ( $M = 5.47$ ,  $SD = 2.46$ ),  $t(234) = 8.45$ ,  $p = .002$ .”). Refer to the APA manual for guidelines on how to report significant and non-significant results.
- Refer readers to tables or figures that display results as you mention them in the text.
- Do not interpret results in the Results section (that is done in the Discussion).

## Discussion

- The focus of the discussion is on evaluating and interpreting the results from the study that was conducted.
- In the first paragraph of the discussion section, briefly restate the purpose of the study and summarize the results.
- Then, discuss the implications of these results. What does it mean that you found or did not find support for your hypotheses? How could the results be interpreted? How could they be useful? Refer to previous research or other scholarly sources to support your points.
- Next, identify the limitations of your study. No research is perfect; every research design has its limitations. Researchers are obligated to acknowledge the limitations in the studies they conduct. Therefore, you will devote **at least two** paragraphs to identifying the limitations of your proposed study. These limitations should focus on substantive issues such as the methodology (e.g., measurement of variables) and not on minutiae (e.g., did not get an equal number of women and men in the study).
- The next task is to provide the reader with directions for future research:
  - Describe **at least two** things that can be done to further research on this important topic, beyond simply correcting the problems with your proposed study
    - Tip: Review the research articles you obtained to see how they formulated their suggestions for future research and use a similar format.
  - Tell the reader what needs to be done as the next step in this field of research and why it is important to continue studying this topic.
- Provide your reader with closure. Do not end your discussion abruptly and leave your reader without a take-home message.
- As with the Introduction, it is helpful to include subheadings (e.g., Limitations, Conclusions and Recommendations for Future Research).

## Reference Page

In this section, you will list all sources cited in your thesis. Be sure to follow APA’s specific guidelines for formatting your references.

## Tables and Appendices

APA has specific guidelines for different types of tables and appendices so be sure to refer to the manual in order to format them properly. Do not simply paste SPSS or Excel output into your tables.

## General Formatting Requirements:

Your entire paper must adhere to the following general formatting requirements:

- 12-point Times New Roman font (required by Honors Program)
- 1.5” margin on left margin, 1” margin on the right (required by Honors Program)
- Double-spaced (not including Appendices, Tables, Figures and block quotations)
- All type left justified (creating an uneven right margin)

### *Other Matters*

## Spelling and grammar

Proofread your paper (reading it out loud can help you identify phrasing that is not clear) and have someone else proofread it before you turn it in to your advisor. Microsoft Word also has a useful Spelling and Grammar tool that can be utilized.

## Plagiarism

Plagiarism is a serious ethical infraction and, thus, you need to cite your sources properly. The APA manual provides guidance on properly citing sources and avoiding plagiarism. Quotation marks should be used to indicate the exact words of another, and proper citation should be used each time another author is paraphrased (i.e., when summarizing a passage or reordering a sentence and/or changing some of the words).

Use Turnitin to check to make sure you have sufficiently paraphrased your sources. **A final report from Turnitin.com must be provided to the Thesis Coordinator with your final paper on November 16, 2022 (for Fall 2022 graduation) or April 14, 2023 (for Spring 2023 graduation).**

**Writing well.** You are encouraged to read Chapter 4 of the APA manual, titled “Writing Style and Grammar” It provides excellent suggestions for writing well.

## Reference

American Psychological Association (2020). *Publication Manual of the American Psychological Association (7<sup>th</sup> Ed.)*. Washington, DC: Author.

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