**Introduction:**

The MPH program has adopted the APA style of writing. This style should be used to write **ALL** papers. APA style was developed by social and behavioral scientists to standardize scientific writing. The purpose of this manual is to assist students when writing term papers, research reports, empirical studies, literature reviews, theoretical articles, methodological articles and case studies. This information is credited to OWL at Purdue.

**Summary**

APA (American Psychological Association) is most commonly used to cite sources within the social sciences. This resource, revised according to the 6th edition, second printing of the APA manual, offers examples for the general format of APA research papers, in-text citations, endnotes/footnotes, and the reference page. For more information, please consult the Publication Manual of the American Psychological Association, 6th edition, second printing.

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Manuscript Structure:

APA Research papers (Experiment Paper) are divided into sections. The main sections are

- Title page
- Abstract
- Introduction
- Method
- Results
- Discussion
- References
- Appendices

APA Essay papers are divided into four major sections. The major sections are

- Title
- Abstract
- Main Body
- References

General APA Guidelines and Rules

Your essay should be typed, double-spaced on standard-sized paper (8.5" x 11") with 1" margins on all sides. APA recommends using 12 pt. Times New Roman font. Include a page header at the top of every page. To create a page header, insert page numbers flush right. Then type "TITLE OF YOUR PAPER" in the header flush left.
Title Page

The title page should contain the **title** of the paper, the **author's name**, and the **institutional affiliation**. Include the page header (described above) flush left with the page number flush right at the top of the page. Please note that on the title page, your page header should look like this:

**Running head: TITLE OF YOUR PAPER**

Pages after the title page should have a running head that looks like this:

**TITLE OF YOUR PAPER**

Type your **title** in upper and lowercase letters centered in the upper half of the page. APA recommends that your title be no more than 12 words in length and that it should not contain abbreviations or words that serve no purpose. Your title may take up one or two lines. All text on the title page, and throughout your paper, should be double-spaced.

Beneath the title, type the **author's name**: first name, middle initial(s), and last name. Do not use titles (Dr.) or degrees (Ph.D.).

Beneath the author's name, type the **institutional affiliation**, which should indicate the location where the author(s) conducted the research.
The Purdue Online Writing Lab's Sample Title Page:
Following the American Psychological Association's Guidelines.

Purdue Pete
Purdue University
Abstract

Begin a new page. Your abstract page should already include the page header (described above). On the first line of the abstract page, center the word “Abstract” (no bold, formatting, italics, underlining, or quotation marks).

Beginning with the next line, write a concise summary of the key points of your research. (Do not indent.) Your abstract should contain at least your research topic, research questions, participants, methods, results, data analysis, and conclusions. You may also include possible implications of your research and future work you see connected with your findings. Your abstract should be a single paragraph double-spaced. Your abstract should be between 150 and 250 words.

You may also want to list keywords from your paper in your abstract. To do this, indent as you would if you were starting a new paragraph, type Keywords: (italicized), and then list your keywords. Listing your keywords will help researchers find your work in databases.
Abstract

Keywords: lorem ipsum, nulla vitae
APA Citation Basics

When using APA format, follow the author-date method of in-text citation. This means that the author's last name and the year of publication for the source should appear in the text, for example, (Jones, 1998), and a complete reference should appear in the reference list at the end of the paper.

If you are referring to an idea from another work but NOT directly quoting the material, or making reference to an entire book, article or other work, you only have to make reference to the author and year of publication and not the page number in your in-text reference. All sources that are cited in the text must appear in the reference list at the end of the paper.

In-Text Citation Capitalization, Quotes, and Italics/Underlining

- Always capitalize proper nouns, including author names and initials: D. Jones.

- If you refer to the title of a source within your paper, capitalize all words that are four letters long or greater within the title of a source: Permanence and Change. Exceptions apply to short words that are verbs, nouns, pronouns, adjectives, and adverbs: Writing New Media, There Is Nothing Left to Lose. (Note: in your References list, only the first word of a title will be capitalized: Writing new media.)

- When capitalizing titles, capitalize both words in a hyphenated compound word: Natural-Born Cyborgs.

- Capitalize the first word after a dash or colon: "Defining Film Rhetoric: The Case of Hitchcock's Vertigo."

- Italicize or underline the titles of longer works such as books, edited collections, movies, television series, documentaries, or albums: The Closing of the American Mind; The Wizard of Oz; Friends.

- Put quotation marks around the titles of shorter works such as journal articles, articles from edited collections, television series episodes, and song titles: "Multimedia Narration: Constructing Possible Worlds"; "The One Where Chandler Can't Cry."
Short Quotations

If you are directly quoting from a work, you will need to include the author, year of publication, and the page number for the reference (preceded by "p."). Introduce the quotation with a signal phrase that includes the author's last name followed by the date of publication in parentheses.

According to Jones (1998), "Students often had difficulty using APA style, especially when it was their first time" (p. 199).

Jones (1998) found "students often had difficulty using APA style" (p. 199); what implications does this have for teachers?

If the author is not named in a signal phrase, place the author's last name, the year of publication, and the page number in parentheses after the quotation.

She stated, "Students often had difficulty using APA style" (Jones, 1998, p. 199), but she did not offer an explanation as to why.

Long Quotations

Place direct quotations longer than 40 words in a free-standing block of typewritten lines, and omit quotation marks. Start the quotation on a new line, indented 1/2 inch from the left margin, i.e., in the same place you would begin a new paragraph. Type the entire quotation on the new margin, and indent the first line of any subsequent paragraph within the quotation 1/2 inch from the new margin. Maintain double-spacing throughout. The parenthetical citation should come after the closing punctuation mark.

Jones's (1998) study found the following:

Students often had difficulty using APA style, especially when it was their first time citing sources.

This difficulty could be attributed to the fact that many students failed to purchase a style manual or to ask their teacher for help. (p. 199)
Summary or Paraphrase

If you are paraphrasing an idea from another work, you only have to make reference to the author and year of publication in your in-text reference, but APA guidelines encourage you to also provide the page number (although it is not required.)

According to Jones (1998), APA style is a difficult citation format for first-time learners.

APA style is a difficult citation format for first-time learners (Jones, 1998, p. 199).

In-Text Citations: Author/Authors

APA style has a series of important rules on using author names as part of the author-date system. There are additional rules for citing indirect sources, electronic sources, and sources without page numbers.

Citing an Author or Authors

A Work by Two Authors: Name both authors in the signal phrase or in the parentheses each time you cite the work. Use the word "and" between the authors’ names within the text and use the ampersand in the parentheses.

Research by Wegener and Petty (1994) supports...

(Wegener & Petty, 1994)

A Work by Three to Five Authors: List all the authors in the signal phrase or in parentheses the first time you cite the source.

(Kernis, Cornell, Sun, Berry, & Harlow, 1993)

In subsequent citations, only use the first author’s last name followed by "et al." in the signal phrase or in parentheses.

(Kernis et al., 1993)
In *et al.*, *et* should not be followed by a period.

**Six or More Authors:** Use the first author's name followed by *et al.* in the signal phrase or in parentheses.

Harris et al. (2001) argued...

(Harris et al., 2001)

**Unknown Author:** If the work does not have an author, cite the source by its title in the signal phrase or use the first word or two in the parentheses. Titles of books and reports are italicized or underlined; titles of articles, chapters, and web pages are in quotation marks.

A similar study was done of students learning to format research papers ("Using APA," 2001).

**Note:** In the rare case the "Anonymous" is used for the author, treat it as the author's name (Anonymous, 2001). In the reference list, use the name Anonymous as the author.

**Organization as an Author:** If the author is an organization or a government agency, mention the organization in the signal phrase or in the parenthetical citation the first time you cite the source.

According to the American Psychological Association (2000),...

If the organization has a well-known abbreviation, include the abbreviation in brackets the first time the source is cited and then use only the abbreviation in later citations.

First citation: (Mothers Against Drunk Driving [MADD], 2000)

Second citation: (MADD, 2000)

**Two or More Works in the Same Parentheses:** When your parenthetical citation includes two or more works, order them the same way they appear in the reference list, separated by a semi-colon.

(Berndt, 2002; Harlow, 1983)
**Authors With the Same Last Name:** To prevent confusion, use first initials with the last names.

(E. Johnson, 2001; L. Johnson, 1998)

**Two or More Works by the Same Author in the Same Year:** If you have two sources by the same author in the same year, use lower-case letters (a, b, c) with the year to order the entries in the reference list. Use the lower-case letters with the year in the in-text citation.

Research by Berndt (1981a) illustrated that...

**Introductions, Prefaces, Forewords, and Afterwords:** When citing an Introduction, Preface, Foreword, or Afterwords in-text, cite the appropriate author and year as usual.

(Funk & Kolln, 1992)

**Personal Communication:** For interviews, letters, e-mails, and other person-to-person communication, cite the communicators name, the fact that it was personal communication, and the date of the communication. Do not include personal communication in the reference list.


A. P. Smith also claimed that many of her students had difficulties with APA style (personal communication, November 3, 2002).

**Citing Indirect Sources**

If you use a source that was cited in another source, name the original source in your signal phrase. List the secondary source in your reference list and include the secondary source in the parentheses.

Johnson argued that...(as cited in Smith, 2003, p. 102).

**Note:** When citing material in parentheses, set off the citation with a comma, as above. Also, try to locate the original material and cite the original source.
Electronic Sources

If possible, cite an electronic document the same as any other document by using the author-date style.

Kenneth (2000) explained...

Unknown Author and Unknown Date: If no author or date is given, use the title in your signal phrase or the first word or two of the title in the parentheses and use the abbreviation "n.d." (for "no date").

Another study of students and research decisions discovered that students succeeded with tutoring ("Tutoring and APA," n.d.).

Sources Without Page Numbers

When an electronic source lacks page numbers, you should try to include information that will help readers find the passage being cited. When an electronic document has numbered paragraphs, use the abbreviation "para." followed by the paragraph number (Hall, 2001, para. 5). If the paragraphs are not numbered and the document includes headings, provide the appropriate heading and specify the paragraph under that heading. Note that in some electronic sources, like Web pages, people can use the Find function in their browser to locate any passages you cite.

According to Smith (1997), ... (Mind over Matter section, para. 6).

Note: Never use the page numbers of Web pages you print out; different computers print Web pages with different pagination.

APA does not recommend the use of footnotes and endnotes because they are often expensive for publishers to reproduce. However, if explanatory notes still prove necessary to your document, APA details the use of two types of footnotes: content and copyright.
When using either type of footnote, insert a number formatted in superscript following almost any punctuation mark. Footnote numbers should not follow dashes (—), and if they appear in a sentence in parentheses, the footnote number should be inserted within the parentheses.

Scientists examined—over several years\(^1\)—the fossilized remains of the wooly-wooly yak.\(^2\)
(These have now been transferred to the Chauan Museum.\(^3\))

When using the footnote function in a word-processing program like Microsoft Word, place all footnotes at the bottom of the page on which they appear. Footnotes may also appear on the final page of your document (usually this is after the References page). Center the word “Footnotes” at the top of the page. Indent five spaces on the first line of each footnote. Then, follow normal paragraph spacing rules. Double-space throughout.

\(^1\) While the method of examination for the wooly-wooly yak provides important insights to this research, this document does not focus on this particular species.

**Content Notes**

Content Notes provide supplemental information to your readers. When providing Content Notes, be brief and focus on only one subject. Try to limit your comments to one small paragraph.

Content Notes can also point readers to information that is available in more detail elsewhere.

\(^1\) See Blackmur (1995), especially chapters three and four, for an insightful analysis of this extraordinary animal.

**Copyright Permission Notes**

If you quote more than 500 words of published material or think you may be in violation of “Fair Use” copyright laws, you must get the formal permission of the author(s). All other sources simply appear in the reference list.

Follow the same formatting rules as with Content Notes for noting copyright permissions. Then attach a copy of the permission letter to the document.
If you are reproducing a graphic, chart, or table, from some other source, you must provide a special note at the bottom of the item that includes copyright information. You should also submit written permission along with your work. Begin the citation with “Note.”


APA Tables and Figures 2

Figures

Figure Checklist

• Is the figure necessary?
• Is the figure simple, clean, and free of extraneous detail?
• Are the data plotted accurately?
• Is the grid scale correctly proportioned?
• Is the lettering large and dark enough to read? Is the lettering compatible in size with the rest of the figure?
• Are parallel figures or equally important figures prepared according to the same scale?
• Are terms spelled correctly?
• Are all abbreviations and symbols explained in a figure legend or figure caption? Are the symbols, abbreviations, and terminology in the figure consistent with those in the figure caption? In other figures? In the text?
• Are the figures numbered consecutively with Arabic numerals?
• Are all figures mentioned in the text?

As tables supplement the text, so should each figure.
**Types of Figures**

**Graphs** are good at quickly conveying relationships like comparison and distribution. The most common forms of graphs are scatter plots, line graphs, bar graphs, pictorial graphs, and pie graphs. For more details and specifics on what kind of information, relations, and meaning can be expressed with the different types of graphs, consult your textbook on quantitative analysis. Spreadsheet programs, such as Microsoft Excel, can generate the graphs for you.

**Scatter plots** are composed of individual dots that represent the value of a specific event on the scale established by the two variables plotted on the $x$- and $y$-axes. When the dots cluster together, a correlation is implied. On the other hand, when the dots are scattered randomly, no correlation is seen.

![Scatter Plot Graph](image)

**Line graphs** depict the relationship between quantitative variables. Customarily, the independent variable is plotted along the $x$-axis (horizontally) and the dependent variable is plotted along the $y$-axis (vertically). See example Figure 1...
Bar graphs come in three main types: 1) solid vertical or horizontal bars, 2) multiple bar graphs, and 3) sliding bars. In solid bar graphs, the independent variable is categorical, and each bar represents one kind of datum, e.g. a bar graph of monthly expenditures. A multiple bar graph can show more complex information than a simple bar graph, e.g. monthly expenditures divided into categories (housing, food, transportation, etc.). In sliding bar graphs, the bars are divided by a horizontal line which serves as the baseline, enabling the representation of data above and below a specific reference point, e.g. high and low temperatures v. average temperature.
**Pictorial graphs** can be used to show quantitative differences between groups. Pictorial graphs can be very deceptive: if the height of an image is doubled, its area is quadrupled. Therefore, great care should be taken that images representing the same values must be the same size.

**Circle (pie) graphs** are used to represent percentages and proportions. For the sake of readability, no more than five variables should be compared in a single pie graph. The segments should be ordered very strictly: beginning at twelve o’clock, order them from the largest to the smallest, and shade the segments from light to dark (i.e. the smallest segment should be the darkest). Lines and dots can be used for shading in black and white documents.

**Charts** are used to represent the components of larger objects or groups (e.g. a tribal hierarchy), the steps in a process (as in a flow-chart), or the schematics of an object (the components of a cell phone).
**Drawings and photographs** can be used to communicate very specific information about a subject. Thanks to software, both are now highly manipulable. For the sake of readability and simplicity, line drawings should be used, and photographs should have the highest possible contrast between the background and focal point. Cropping, cutting out extraneous detail, can be very beneficial for a photograph. Use software like GraphicConverter or Photoshop to convert color photographs to black and white before printing on a laser printer. Otherwise most printers will produce an image with poor contrast.

*Photograph*

**Preparing Figures**

In preparing figures, communication and readability must be the ultimate criteria. Avoid the temptation to use the special effects available in most advanced software packages. While three-dimensional effects, shading, and layered text may look interesting to the author, overuse, inconsistent use, and misuse may distort the data, and distract or even annoy readers. Design properly done is inconspicuous, almost invisible, because it supports communication. Design improperly, or amateurishly, done draws the reader’s attention from the data, and makes him or her question the author’s credibility.
The APA has determined specifications for the size of figures and the fonts used in them. Figures of one column must be between 2 and 3.25 inches wide (5 to 8.45 cm). Two-column figures must be between 4.25 and 6.875 inches wide (10.6 to 17.5 cm). The height of figures should not exceed the top and bottom margins. The text in a figure should be in a san serif font (such as Helvetica, Ariel, or Futura). The font size must be between eight and fourteen point. Use circles and squares to distinguish curves on a line graph (at the same font size as the other labels). (See examples above.)

Captions and Legends

For figures, make sure to include the figure number and a title with a legend and caption. These elements appear below the visual display. For the figure number, type Figure X. Then type the title of the figure in upper and lowercase letters. Follow the title with a legend that explains the symbols in the figure and a caption that explains the figure:

Figure 1. How to create figures in APA style. This figure illustrates effective elements in APA style figures.

Captions serve as a brief, but complete, explanation and as a title. For example, “Figure 4. Population” is insufficient, whereas “Figure 4. Population of Grand Rapids, MI by race (1980)” is better. If the figure has a title in the image, crop it.

Graphs should always include a legend that explains the symbols, abbreviations, and terminology used in the figure. These terms must be consistent with those used in the text and in other figures. The lettering in the legend should be of the same type and size as that used in the figure.

APA Abbreviations

In APA, abbreviations should be limited to instances when a) the abbreviation is standard and will not interfere with the reader’s understanding and b) if space and repetition can be greatly avoided through abbreviation.
There are a few common trends in abbreviating that you should follow when using APA, though there are always exceptions to these rules. When abbreviating a term, use the full term the first time you use it, followed immediately by the abbreviation in parentheses.

According to the American Psychological Association (APA), abbreviations are best used only when they allow for clear communication with the audience.

*Exceptions*: Standard abbreviations like units of measurement and states do not need to be written out. APA also allows abbreviations that appear as words in *Meriam-Webster’s Collegiate Dictionary* to be used without explanation (IQ, REM, AIDS, HIV).

Do not use periods or spaces in abbreviations of all capital letters, unless it is a proper name or refers to participants using identity-concealing labels:

MA, CD, HTML, APA

P. D. James, J. R. R. Tolkien, E. B. White or F. I. M., S. W. F.

*Exceptions*: Use a period when abbreviating the United States as an adjective (U.S. Marines or U.S. Senator)

Use a period if the abbreviation is Latin abbreviation or a reference abbreviation:

etc., e. g., a. m. or Vol. 7, p. 12, 4th ed.

Do not use periods when abbreviated measurements:

cd, ft, lb, mi, min

*Exceptions*: Use a period when abbreviated inch (in.) to avoid confusion.

Units of measurement and statistical abbreviations should only be abbreviated when accompanied by numerical values:

7 mg, 12 mi, M = 7.5

measured in milligrams, several miles after the exit, the means were determined
Only certain units of time should be abbreviated.

Do not abbreviate:

day, week, month, year

Do abbreviate:

hr, min, ms, ns, s

To form the plural of abbreviations, add s alone without apostrophe or italicization.

vols., IQs, Eds.

*Exception:* Do not add s to pluralize units of measurement (12 m not 12 ms).

**Abbreviations in Citations**

Citations should be as condensed as possible, so you should know the basic rules of abbreviation endorsed by the APA to provide your readers with reference information.

Always abbreviate the first and middle names of authors, editors, etc.

Shakespeare, W., Chomsky, N.

Use the following abbreviations within citations (take note of capitalization):

<table>
<thead>
<tr>
<th>APA Citation Abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Book Part</strong></td>
</tr>
<tr>
<td>edition</td>
</tr>
<tr>
<td>revised edition</td>
</tr>
<tr>
<td>Second Edition</td>
</tr>
<tr>
<td>Editor(s)</td>
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<tr>
<td>Translator(s)</td>
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<td>No date</td>
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<td>Page(s)</td>
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<td>Volume(s)</td>
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<tr>
<td>Number</td>
</tr>
<tr>
<td>Part</td>
</tr>
<tr>
<td>Supplement</td>
</tr>
</tbody>
</table>
Statistics in APA

When including statistics in written text, be sure to include enough information for the reader to understand the study. Although the amount of explanation and data included depends upon the study, APA Style has guidelines for the representation of statistical information:

- Do not give references for statistics unless the statistic is uncommon, used unconventionally, or is the focus of the article

- Do not give formulas for common statistics (i.e. mean, t test)

- Do not repeat descriptive statistics in the text if they’re represented in a table or figure

- Use terms like respectively and in order when enumerating a series of statistics; this illustrates the relationship between the numbers in the series.

Punctuating Statistics

Use parentheses to enclose statistical values:

...proved to be statistically significant \( p = .42 \) with all variables.

Use parentheses to enclose degrees of freedom:

\( t(45) = 4.35 \)

\( F(3, 87) = 2.11 \)

Use brackets to enclose limits of confidence intervals:

89% CIs [3.45, 2.7], [-6.0, 3.89], and [-7.23, 1.89]

Use standard typeface (no bolding or italicization) when writing Greek letters, subscripts that function as identifiers, and abbreviations that are not variables.

Use **boldface** for vectors and matrices:
Use *italics* for statistical symbols (other than vectors and matrices):

\[ t, F, N \]

Use an *italicized*, uppercase \( N \) in reference to number of subjects or participants in the total sample.

\[ N = 328 \]

*Use an italicized, lowercase \( n \) in reference to only a portion of the sample.*

\[ n = 42 \]

**APA Classroom Poster**

The APA poster at the link below is a printable jpg file you may download and print out at different sizes for use in classrooms, writing centers, or as a pocket reference. Please keep in mind that the file size, as a print-quality resource (120 dpi), is large, so it may take a while to download. You may adjust the print size of the poster from your print menu. As is, the poster is 27 x 36 inches.

Because the poster is quite large, standard printers cannot print the poster. If you do not have access to a printer that can print large documents, contact a local print shop to print the poster. The Purdue OWL cannot grant requests to print and mail posters.

If you do not have access to a print shop to print the poster, please use the resources we have available [here](link) for printing on standard 8.5 x 11 inch paper. Go to resource you would like to print, scroll down to the bottom of the page, and click "Full Resource for Printing."

Also please note that the poster only contains *basic* APA guidelines. For detailed instructions, please see the complete OWL APA resources [here](link).

The Purdue OWL APA Classroom Poster was developed by Kate Bouwens for the Purdue Professional Writing - Purdue OWL Internship class, English 490, in spring 2009.

[Purdue OWL APA Classroom Poster](link) (Please note: The poster is best viewed in Firefox.)