



General Advice and Key Characteristics

Taking a Psychological Approach to Knowledge

Like other social scientists, psychologists carefully observe human behavior and ask questions about what forces drive patterns in this behavior—they use systematic methods to understand and predict human behavior. Psychologists produce "probabilistic claims" about human behavior rather than assert absolute truths. The primary goal of writing in psychology is to communicate these probabilistic claims and the research-based evidence that supports these claims.

Argument and Thesis

Most papers in psychology require that you use this psychological approach to knowledge to form an argument whose thesis is supported by acceptable evidence. In a psychological argument, you must:

- be clear in stating your thesis or hypothesis.
 - form explanations and draw conclusions that are grounded in appropriate evidence (see below).
- move beyond summary to analyze and evaluate texts or data.

Evidence

As an empirical field, psychology accepts documented and carefully collected evidence. Whether you are making a critical argument about a text or set of texts, a theoretical argument, or a data-oriented argument, you must substantiate your argument with evidence that reflects observable examples of patterns in human behavior. For each claim you make, ask yourself, "how do I know this?"

Generally, personal opinion or personal anecdotes are not appropriate evidence in a psychological argument; emphasize the research you or others have done, not your own experiences. Take care to distinguish between your opinion and evidence that is grounded in what a text actually says or in what the data actually tell you. Be rigorous in making this distinction.

Unacceptable: Americans have developed more informed understandings of learning disabilities. Acceptable: Research suggests that over the last two decades Americans have begun to understand that learning disabilities do not indicate a general deficit in intellectual ability (Jones, 2006; Smith, 1999).

Unacceptable: Hurricane Katrina was a disaster.

Acceptable: Hurricane Katrina resulted in thousands of PTSD cases, which researchers argue demonstrate the intersections of mental health, natural disasters, and government response (Anderson, 2007; Williams, 2006).

Types of evidence

In psychology, accepted evidence falls into two categories:

Quantitative data measure subjects' or objects' behaviors or characteristics that differ in quantity.
 Quantitative data are expressed numerically and often are based on experiments, content analysis of written documents, surveys, and statistics. For example, you might look at how many couples in a particular group decide not to have children or how many children in a particular community experience online bullying.

¹ Some content adapted from Harvard College Writing Center's "A Brief Guide to Writing the Psychology Paper." Harvard College Writing Program. 2008.

Qualitative data focus on variables that differ in quality rather than kind. Qualitative data—often based on
observation, interviews, and texts—express qualities of behavior and can be used to understand patterns
descriptive of a behavior. For example you may look at gender experience or at mothers' beliefs about
postpartum depression.

These two types of data will be used as evidence in the following contexts:

- In your own original empirical research papers which report the findings of your experiments.
- In the original empirical peer-reviewed research articles you read for class. These articles report research findings for the first time.
 - In the review articles you read for class. These articles synthesize evidence from multiple studies.

Plain Language

Clarity and brevity in scientific writing allow you to make complex ideas accessible to readers. Minimize descriptive language and literary devices (e.g., metaphor, alliteration, anecdotes). Avoid overly complex sentence structure by placing the main actor at the beginning of the sentence.

For example:

Unclear. A focus on early childhood experiences is a common point of emphasis in the work of Adler and Freud.

Clear. Adler and Freud both emphasize the importance of early childhood experiences.

Accurate and ethical documentation of sources

Writers in psychology use the American Psychological Association (APA) format for citation, allowing them to document consistently those aspects of source materials that most matter to the discipline. For example, APA style places importance on authorship and on time and its passage. Because APA format for citation is a complex and strict citation system, refer to a style guide such as the *Publication Manual of the American Psychological Association*. 6th edition.

Using proper APA style for citation allows you to.

- make your information easier to digest and find.
 - join a community of writers and readers who share certain values and a common citation system.
- build your credibility as a writer and researcher.
- adhere to a standard format that ensures your paper is not unfairly judged because you use a more or less attractive font size or heading style.

Make clear where your ideas end and another's begin. Whether you are quoting, summarizing, or paraphrasing in your own words, you *must* cite your sources.

Common Writing Tasks

Critical Reviews of Existing Research & Reaction Papers

Whether you are reviewing a selected article or relevant literature on a particular topic, your task is not only to summarize but also to evaluate in order to identify the strengths and limitations of the article, or set of texts. This evaluation will be based on criteria that grow out of the field of psychology and its values, not on criteria based in personal opinion or value judgments. In the case of an article critique, identify the text's thesis, the methods used, the evidence/data presented, and any contributions to the field. Further, you must evaluate how convincingly the article accomplishes its purpose. In the case of a review of literature—an assignment that requires you to look at the relationships among texts—you must not only identify, summarize, and compare literature relevant to the topic under consideration, but also synthesize this literature in order to make a point about the current state of knowledge.

Some questions to ask when writing in response to others' research:

- What conclusions does this research support? What trends or needs does the research reveal?
- What is the *quality* and *quantity* of the evidence the writer uses to support his or her argument?
- What are the authors' biases or agendas?

- Are the methods sound?
- Are the statistical analyses appropriate?
- Do the conclusions match the evidence?
- How does this research compare to other recent research?

Research Papers

Identifying a question or problem

A key step in writing a research paper is identifying a question or problem worth investigating, a step that requires a lot of reading and note taking. You cannot identify methods or data appropriate for answering the question/solving the problem if you do not have a clear understanding of the problem in the first place. For example, through careful reading, you might formulate a question that asks about the relationship between obesity and general life stress or between trauma and anxiety disorders.

Research papers based on readings

Some research papers may invite you to perform an analysis of the literature in order to argue for a particular perspective on an observed phenomenon. For example, a professor may ask you to investigate the role of psychologists in disaster relief operations or the relationship between poverty and self-image. Or a professor might ask you to compare and contrast the work of two scholars in the field.

Empirical research papers

Empirical research papers invite you to apply psychological research methods to answer a particular question/test a hypothesis. These assignments may involve collecting and analyzing data.

Example: A professor may invite you to pick a topic related to heterosexuals' attitudes toward lesbians and gay men, to define a question related to that topic, to formulate a hypothesis, to test this hypothesis, and to report and discuss your findings.

Example: A professor might invite you to design a study to evaluate a strategy that aims to increase the adherence of medical patients to a prescribed medication regimen.

These research papers reflect the scientific method, which usually involves a number of steps:

- 1. Define a problem and formulate a research question.
- 2. Conduct a literature review to determine what is known about the research problem.
- 3. Formulate a meaningful hypothesis.
- 4. Identify dependent, independent, and intervening variables.
- 5. Formulate a research design.
- 6. Conduct the study.
- 7. Analyze and interpret the results, using appropriate tools.

These thinking and analyzing steps eventually will be reflected in the main parts of a data-oriented psychological research paper. These papers generally include the following sections:

- 1. Title Page
- 2. Abstract
- 3. Introduction
- 4. Literature review (sometimes combined with the Introduction)
- 5. Empirical methodology
- 6. Results
- 7. Discussion
- 8. References

Application or Testing of a Theory

Some psychology writing assignments ask you to apply a theory (sometimes called an argument or perspective) to a particular case. For example, you may be asked to apply attribution theory to an existing phenomenon such as college students' behavior when working as part of a team versus as an individual. Before you successfully can apply a theory to a case study, it is imperative that you have a good understanding of the theory, under what conditions it originally was constructed (e.g., is it only supposed to apply to a certain demographic?), and what it attempts to explain. When applying a theory to a particular example, keep in mind that you must analyze the

example as it compares to the theory. That is, what does the theory help you to understand about the example? What does the theory fail to help you understand (where is it not a good fit)?

The testing a theory paper is similar to the applying a theory paper except that your purpose in testing a theory is to determine the veracity and usefulness of the theory. Do particular case studies confirm, disconfirm, or partially confirm the theory? You are therefore taking an evaluative approach in both types of papers: application papers evaluate a case study through the lens of a particular theory; testing papers evaluate a theory by trying it out on case studies to determine whether or not the theory's hypothesis holds.

Some Tips

Use published research as models

Students commonly read to understand the content of published research. Good writers also read as a writer, paying attention to the ways published authors organize their writing, use evidence, synthesize ideas, and draw conclusions. Use the published articles you read for class as models for imitation.

Use subject librarians throughout the research process

Librarians at the Mansfield Library can help you identify and evaluate source materials, narrow your focus, and refine your ideas. Effective research strategies are a key part of a successful writing process.

Use tables, graphs, figures, and displayed equations purposefully

Make purposeful decisions about which information needs to be presented visually, then present precisely and in a simplified form. Be clear. Be brief. Don't force a reader to work too hard to understand your visual. Also, describe these visuals in the text, explaining the main point and significance of the information presented. Use verbs such as "show" and "indicate" to describe what the tables represent. Use APA style to format your tables and figures.

Avoid direct quotation

Writers of psychology rarely quote source material. Instead, they re-represent in their own words the key, most important ideas from the original source. For example, instead of writing Cardoza (2014) demonstrates that "membership in a stigmatized group has self-protective properties," you might write Cardoza (2014) demonstrates that belonging to a stigmatized group can act as a protection against low self-esteem.

Pay attention to verb tense

Use past tense when expressing actions or conditions that occurred at a specific time in the past, when discussing what others did, and when reporting results (Olsen (2013) found a relationship between...) Use present tense for generalizations and stable conditions (Theory of mind refers to.).

Minimize Jargon

The field of psychology has its own jargon, but the more technical the language you use, the narrower your audience becomes. Aim to make your writing understandable to an educated audience.

Reduce biased language

A good general guideline is to refer to people as those people refer to themselves. For example.

- Don't use the male pronoun as generic. Instead, use "he or she" or "him or her," or reshape your sentence to avoid using gendered pronouns altogether.
- Use phrases that denote person-first language such as "people with dementia" rather than "demented people."
- When referring to sexual and gender minorities, be sensitive to the acronyms and terminology used to
 describe groups of people. For example, do not use "LGBT" if the research you are citing does not
 specifically address transgender individuals. Use "gay men and lesbians" rather than "homosexuals".
- Don't define people by what they aren't (e.g., non-white).

Common Pitfalls to Avoid

When writing a paper for a psychology course, take care to avoid the following common pitfalls.

- Excessive summarizing/lack of analysis Your task is to move beyond mere summary to help a reader understand your evaluation and analysis of the texts or data.
- Lack of an adequately complex thesis A good thesis moves your reader beyond a simple observation. It asserts an arguable perspective that requires some work on your part to demonstrate its validity.
- Lack of adequate support A well-crafted thesis requires substantiation in the form of acceptable evidence. Often, if your thesis doesn't make a complex, arguable claim, the act of substantiation becomes difficult.
- False certainty Using words like "proves" and "establishes" suggests there is no doubt about the results. Few experiments are beyond doubt. Instead use verbs such as "suggests" or "indicates."
- *Plagiarism* Plagiarism is the use of someone else's work or ideas, in any form, without proper acknowledgement. Cite sources you quote, summarize, or paraphrase in your own words.
- Use of personal opinion or anecdotes Personal opinions or anecdotes generally do not qualify as rigorous and appropriate psychological evidence in support of a claim.
- *Improper use of a theory* If you are applying or testing a particular theory, be sure you have a good understanding of this theory.
- Excessive quoting Writers of psychology almost never directly quote a source.
- Shifting verb tense Take care to shift verb tense only when necessary. Science's strong sense of timing
 requires that you accurately reflect that research was performed in the past and that certain knowledge is
 current.
- Passive voice Use active voice as often as possible. Active voice generally is more concise and lively than passive voice.
- Reference to the author by his/her first name Refer to the author using his/her last name.
- Incorrect use of "effect" and "affect"- Use "effect" as a noun. Use "affect" as a verb.
- Treating "data" as a singular noun-- Data is a plural noun. "These data support..."