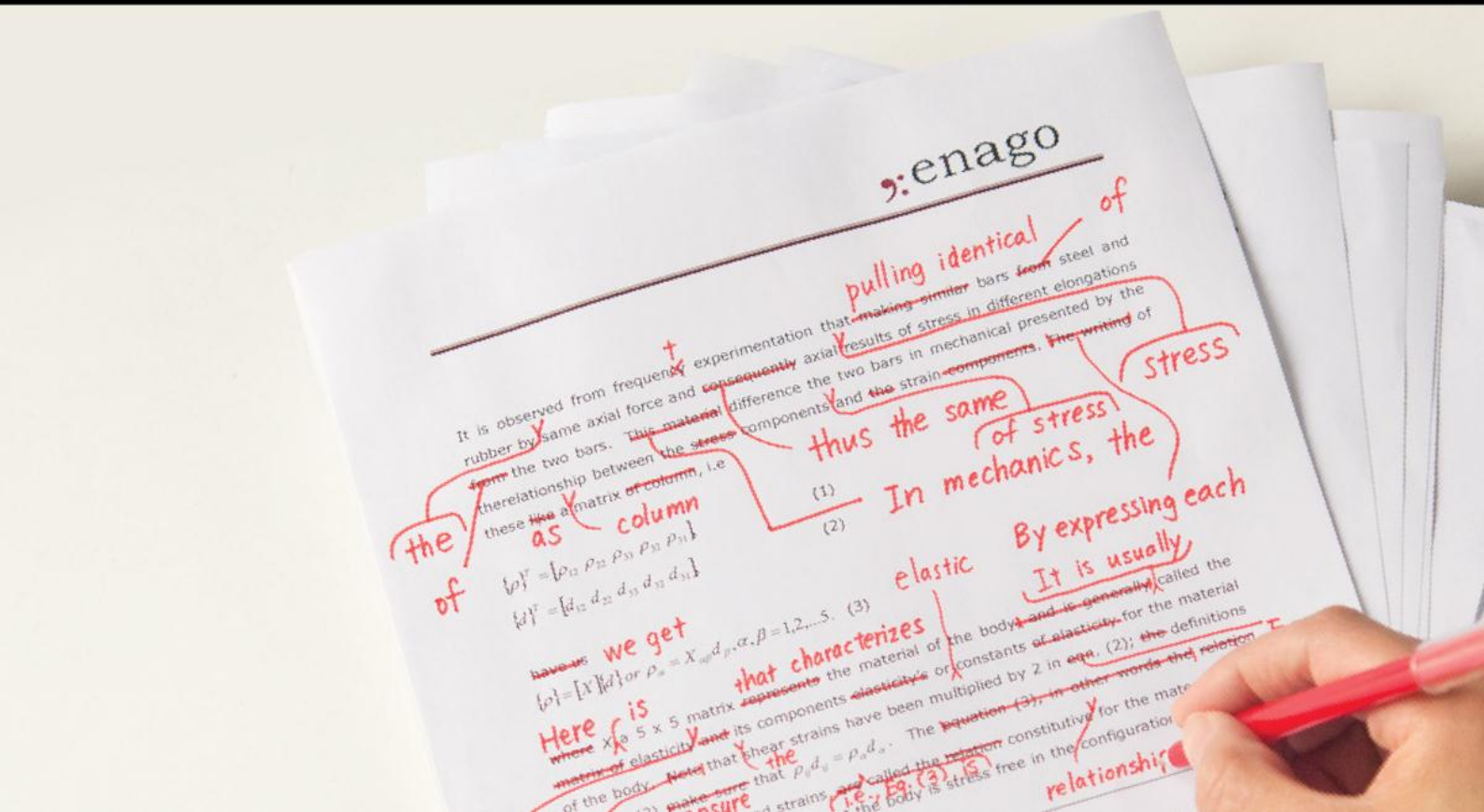
www.enago.com

English Academic Editing

Common Errors in Research Papers



Contents

Common Errors in Research Papers

Common Errors in Research Papers

Careful writing can help draft a perfectly good research paper. However, erroneous writing can cost a lot put all writing efforts in vain if when an editor/ or reviewer rejects your paper.

While grammar, spelling, inaccurate words or phrases are common errors in writing; usage of direct quotes, including unnecessary background, inadequate proofreading also pose a threat to document acceptance.

Any paper can be transformed into a professionally written research paper with this guide.

I. Do Not Use Direct Quotes

Using direct quotes of a full discussion might be essential only when you write a paper related to literature, history, current events, and similar fields. However, in areas like science, there is a rare need to use quotes. As a general rule, do not use direct quotes in a scholarly technical paper since it should express only your thoughts not someone else'.

II. Verb Tense

Use of the wrong verb tense reflects poor writing skills and can affect understanding. It can even confuse the reader since they will infer already known facts as newly discovered. As a general rule, use past tense to describe events that have happened; includes procedures conducted and results that you observed. Reference to results of a specific study should also be in past tense. Use present tense to describe generally accepted facts.

III. Proofread

A paper written in hurry can result in several issues such as incomplete sentences, redundant phrases and misspellings. Starting your work early will give you enough time to proofread it. Avoid errors in spelling and grammar. Since several terms have similar names, a spelling error can result in a completely incorrect statement.

While printing, ensure that the tables don't spread over a page and if so, mention the headings clearly. The page sequence needs to be checked before submitting a paper.

An editor or reviewer might reject your paper if such errors exist due to careless proofreading.

IV. Irrelevant Information

IV. (a) Anecdotal Information

Information such as “instructions of the professor” is anecdotal and is considered as unnecessary, regardless of how much you feel the need to justify a statement or procedure. It’s unfortunate that modern papers are less informative than older ones since older papers allow the researcher to report how a conclusion was arrived at by including various side-tracks and reasoning even the whole investigation process, which is now omitted as anecdotal information. The reason to omit such information is to facilitate access to relevant information and saving time than reading through great volume of literature. Also publication costs can be reduced.

The purpose of a research paper is to summarize a study rather than identifying the person responsible. Reference to instructors, fellow students, teams, partners, etc. are not appropriate, nor is it appropriate to refer to "the lab."

IV. (b) Unnecessary Background

Facts or mechanisms can be stated only to help a reader interpret results relevant to the present study. Writing information already known about the subject is just a vain time consuming task. Include a reference to referred background information source only if you feel it important. Otherwise, just mention the appropriate point.

IV. (c) Material That Is Inappropriate For the Readership

Mentioning the field that your study pertains to isn't necessary since the reader can reckon the related field. Also defining terms well known to intended audience is needless.

For example, defining systolic blood pressure to physicians.

IV. (d) Subjectivity and use of superlatives

Use of superlatives and subjective statements in order to emphasize a point is not used in writing a research or technical paper. Objectivity is absolutely essential.

Subjectivity refers to the opinions, feelings, etc. For example, while making a decision you might write, “We feel that the food was undercooked." Another researcher might not want to risk time and his resources on the basis of your ‘feelings.’ While on the other hand, you might have written the following, “The internal temperature of the food was inversely proportional to the time that they had spent cooking it.” This is the information that any other scientist can use and gives it a better fact approach rather than a feeling being portrayed to someone.

Superlatives include the adjectives such as “awesome,” “wonderful,” “exciting,” “incredible,” “amazing,” etc. For example, “the food was awesome.” Your definition of what constitutes awesome might be different from that of someone else – it is a superlative that is also subjective--your opinion. It doesn't belong in a research paper.

Similarly, beliefs should be substituted with the evidence supporting a result, rather than a hypothesis to state that the result was predicted correctly. Objectivity is the key.

V. Proof

Scientific proof is strictly necessary. It is highly doubtful that any single experiment can be so well controlled that its conclusions can be regarded as proof. For any result to be accepted it must be confirmed independently. We can't identify if a model we describe presents a picture of any natural process. Hence your data may strongly support a position, or allow you to reject a hypothesis, but they are not likely to provide a proof.

VI. Grammar and Spelling

Avoid obvious grammatical errors. Clear written communication requires proper sentence structure and use of words. Ensure the sentences are complete and make sense and that you have verb/subject agreement.

Spelling errors in a paper aren't appreciated. For example, the statement "*absorbance* is read from a *spectrophotometer*" is correct and not "read *absorbency* from a *spectrometer*". One letter can change the chemical compound you describe. For example "the action of *cycloheximide* in eukaryotic cells" and "the action of *cyclohexamide*".

VII. Inaccurate Word or Phrase

Using the right form of the word according to the sentence part and function is imperative. It's also important to know the difference between similarly words and their function in a sentence. This could change the context drastically.

For example, the difference between 'Affect' and 'Effect'. 'Affect' is a verb. 'Effect' is a noun.

VIII. Oversimplification

Oversimplification occurs whenever the series of actual causes for an event are reduced to the point where there is no longer a genuine, causal connection between the alleged causes and the actual effect. In other words, multiple causes are reduced to just one or a few (oversimplification).

Though there are so many ostensibly good reasons for simplifying things, well-intentioned writers can fall into the trap of oversimplification if they are not careful.

Writing needs to be clear and precise, thus helping people to understand an issue rather than confusing them even more. In the process, however, a writer can easily leave out **too many** details, omitting critical information which needs to be included.

IX. Superficiality

A superficial discussion ignores mechanisms or fails to explain them completely, thus making it unclear for the reader on how a specific result was obtained.

The statement, "The result agreed with the known theoretical value," tells us nothing about the mechanism(s) behind the result. What is the basis for expecting a particular result?

Explaining a result may not be easy but striving to explain will be beneficial since it enhances the reader's ability to interpret the results, even if it is not quite right.

X. Anthropomorphism

Anthropomorphism, also referred as personification, is one of the most common errors found in researchers writing. It attributes human motivation, characteristics, or behavior to lifeless objects. Avoid using anthropomorphisms in technical writing because they can be ambiguous and can confuse readers.

For example,
Incorrect: The research found that history professors were satisfied with their jobs.
Correct: The researchers found that history professors were satisfied with their jobs.

XI. Common Mistakes in Reporting Results

Converted data are data that have been analyzed, usually summarized, and presented in such a way that only the information pertinent to the objectives of the study is presented. *Raw data* refers to results of individual replicate trials, individual observations, chart records, and other information that comes directly from the laboratory.

Once you have presented converted data, do not present the same data in a different way.

For example, if the data are plotted, then don't include a table of data as well. Present a figure (such as a graph) if appropriate. If the data are better represented by a table, then use a table.

Raw data should not be used in your results.

Raw data includes:

- lists of observations
- measurements taken in order to obtain a final result

(e.g., absorbance, relative mobility, tick marks on a microscope reticule).

Use an appropriate number of decimal places (if you need decimal places at all) to report means and other measured or calculated values. The number of decimal places and/or significant figures must reflect the degree of precision of the original measurement.

Graphs and other pictures that represent data are called figures, and should be numbered consecutively. Tables are distinguished from figures, and should be numbered consecutively as well. Graphs are analytical tools. You must not draw conclusions in the results section. Reserve your data interpretation for the discussion section.

XII. The Significance of 'Significance'

The purpose of experimental science is to discover the truth - not to make the data conform to one's expectations. Researchers and authors must not reject a study as inconclusive just because no statistically significant differences were found. Such rejection suggests a misunderstanding of the scientific method itself. You can conclude something from even the most poorly designed experiments. In fact, most well-designed experiments result in support for the null hypothesis. Be prepared to interpret whatever you find, regardless of what you think you should find.

Few other eBooks you'll receive through next emails:

- How to write a research paper that is understandable to your audience
- How to select the right journal to maximize your chance of publication.
- 9 rules on the use of upper and lower case letters in writing.

enago™
www.enago.com

Are You Ready to Improve Your Research Paper Quality Even Further?

We've introduced the most beneficial service for researchers – Enago English Editing that is helping researchers improve the paper quality.

The eBook you've just read has covered the very basics of Academic Writing for a researcher; but that's only the beginning.

A lot of researchers benefit from our editing service that's enhancing their manuscript and eliminating language errors that could lead to rejections.

You can now directly benefit from our editing service to clear peer-review process and avoid journal rejection.

You can effortlessly hold a flawless research paper, with a powerful group of editors working toward the goal for you!

Click Here to Find Out More