

Unit 4 Ethical issues in research and writing

Task 1 Ethical Decision Making in Research

There are many codes of research ethics, however, they do not cover every situation and they require considerable interpretation. Researchers therefore have to learn to assess, interpret and apply various rules of ethical conduct.

A) Read cases 1 and 2. Do you consider them to be examples of research misconduct?

Case 1:

The research protocol for a study of a drug on hypertension requires the administration of the drug at different doses to 50 laboratory mice, with chemical and behavioral tests to determine toxic effects. Tom has almost finished the experiment for Dr. Q. He has only 5 mice left to test. However, he really wants to finish his work in time to go to Florida on spring break with his friends, who are leaving tonight. He has injected the drug in all 50 mice but has not completed all of the tests. He therefore decides to extrapolate from the 45 completed results to produce the 5 additional results.

Case 2:

Dr. T has just discovered a mathematical error in her paper that has been accepted for publication in a journal. The error does not affect the overall results of her research, but it is potentially misleading. The journal has just gone to press, so it is too late to catch the error before it appears in print. In order to avoid embarrassment, Dr. T decides to ignore the error.

<https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>

B) Consider other possible deviations from acceptable research practice in the following areas:

- Participation in research
- Experimental group vs. no-treatment control group
- Confidentiality
- Collaboration with other researchers
- Dealing with data
- Others?

Task 2 Plagiarism

The U.S. Office of Research Integrity defines plagiarism as “the appropriation of another person’s ideas, processes, results, or words without giving appropriate credit.” Said differently, plagiarism is the misrepresentation of someone else’s original thought as your own. In fact, the Latin root of *plagiarism* means *kidnapper* or *thief*. Such theft is a form of academic misconduct and can thus lead to dismissal from universities and other research institutions, article rejections or retractions from journals, and decreased credibility as a researcher.

Match the types of plagiarism with their descriptions:

- A) Verbatim plagiarism
- B) Plagiarism of ideas
- C) Loose paraphrasing
- D) Plagiarism from alternate sources
- E) Self-plagiarism
- F) Duplicate publication

1. Paraphrasing someone else’s work with only slight changes, effectively maintaining the other author’s logic while mentioning most or all of the same ideas. Note that the flow of an argument is indeed an original idea.
2. Recycling your own previously published text.
3. Copying text word-for-word from someone else’s work. If content from several sources is duplicated, this form of plagiarism is known as *mosaic* or *patchwork*.
4. Submitting the same paper to different journals without telling the editors.
5. Mentioning someone else’s unique idea, whether in the form of a theory, an interpretation, data, a method, an opinion, or new terminology, without citing your source, even if explained in your own words.
6. Failing to cite the source of publicly available knowledge that is not in the scholarly literature. Similar to journal articles, sources such as books, webpages, blogs, lectures, and personal communication (including descriptions of unpublished ideas, with permission) should be referenced if they contributed unique information to your manuscript.

(adapted from <http://www.aje.com/en/arc/editing-tip-defining-plagiarism/>)

Task 3 Paraphrasing

A paraphrase is an alternative to a direct quote. In rewriting an author's idea in your own words, you avoid plagiarism and show that you understand the original text. Paraphrases are normally a similar length to the original text, and always acknowledge the source. Although the style of writing should be your own, most paraphrases feature a combination of some of the following techniques.

1. A reference to the author with a reporting verb such as *indicate*, *claim*, etc.
Ex. Stafford **concludes** that a golfer's familiarity with a course is not always a psychological advantage.
2. The use of synonyms such as *depend on* instead of *rely on*.
3. A change in word form (i.e. part of speech, such as verb to noun).
Ex. The rate of crime **rises** (verb) in inverse proportion to the standard of living.
→ A **rise** (noun) in the level of crime follows a fall in living standards.
4. A change in the structure of sentences.
Ex. Exercise performance is impaired when an individual is dehydrated.
→ Dehydration can result in impaired exercise performance.

Words and phrases that you don't change

There are two types of word or phrase that you should repeat in your paraphrase, even if synonyms exist, because you don't need to demonstrate that you know what they mean and using them won't leave you open to charges of plagiarism. Normally these words are single nouns, or nouns in pairs. They are:

- A) Conventional words or phrases, e.g. *passport*, *pension*, *festival*, *processed foods*, *residential area*, etc.
- B) Specialised words or phrases, e.g. *business plan*, *director*, *arthritis*, *endurance*, *synonym*, etc.

Note: In some cases, whether or not you repeat a word will be a matter of personal judgement.

Circle the word(s) that you do not need to paraphrase:

- a) Systolic blood pressure response to exercise has been shown to predict development of hypertension in men.
- b) Emotional distress in women during pregnancy has been shown to increase the risk of adverse outcomes for women and newborns.
- c) One of the obstacles to a scientific sociology of sport is due to the fact that sociologists of sport are in a way doubly dominated, both in the world of sociologists and in the world of sport.
- d) Teachers are positive about integrating only those children whose disabling characteristics are not likely to require extra instructional or management skills on the part of the teacher.

Ad 1 A reference to the author with a reporting verb

A common way of referring to the original author in your paraphrase is to use his or her name with a reporting verb and sometimes with the word *as*.

Study the list of reporting verbs below. Can you identify any synonyms or categories?

reveal accept identify indicate agree believe deny argue evaluate define
suggest state doubt demonstrate characterize accept claim insist classify

Circle the correct answer:

- a) Pennycook *doubts/criticizes* the organisers for the delays in providing first aid.
- b) Markham has *concluded/ identified* the poor performance of some schools as a key factor in youth unemployment.
- c) The authors of the report *demonstrate / evaluate* that health and safety standards have risen in this institution.
- d) As Rumisek *states / classifies* in the introduction to her book, the design of a hospital can have a positive effect on the health of its patients.
- e) Heller and Golding have *believed / argued* that the concept of the relative age effect needs to be revisited.

Ad 4 Changes in structure

Changing the grammatical structure of a sentence can help you to make a paraphrase. To make these changes, you may need to change a conjunction, use a participle (-ing form), change a modal word, etc.

Rewrite each sentence, following the instructions in brackets.

1. Psychologists have yet to study the effects of the very long-term use of computer games. (use a passive form)
2. Religious people tend to be more optimistic than non-believers. (use *as*)
3. Back pain will probably become more common in the future as the posture of people is getting worse. (use *likely*)
4. Despite their many advantages, the alternative methods of teaching have some drawbacks. (use *although*)
5. Data loss may occur while the virus is being eliminated. (use *possible*)
6. Long-term exposure to radiation can cause cancer. (use *result from*)
7. Before she published her groundbreaking study, Norton worked as a lecturer in sports psychology. (use –ing form)

(adapted from Paterson, K. *Oxford Grammar for EAP*. Oxford University Press, 2013.)

Task 4 Writing a literature review

You are going to read an extract from the literature review section of an article about the consequences of high-stakes test.

1. Read the first part of the literature review below.

Six years ago, when Reardon reviewed existing research, there was almost no empirical evidence regarding the effects of high-stakes testing on student motivation, achievement, and dropout patterns (Reardon, 1996). In recent years, however, several analyses of survey data have been published. The evidence from these, however, is mixed.

2. Predict what the writers will do in the second part:

- a) describe the evidence for the reader
- b) move on to review another area
- c) give their opinion why the evidence is mixed

3. Now read the second part below and check your prediction.

The best quality evidence on the association between high-stakes testing and dropping out comes from two recent analyses of the relationship between high school graduation test requirements and school completion using NELS data (Jacob, 2001; Warren and Edwards, 2001). Although Jacob (2001) found no reading and math achievement differences associated with the presence of graduation tests, he found that dropout rates are roughly 6.5% greater among students in the bottom quintile on achievement tests in states with high school graduation test requirements than comparable students with states without such tests. Warren and Edwards (2001) however, find no effect of graduation tests on the probability of dropping out. Warren and Edwards, moreover, like Jacob, test for an interaction between the graduation test requirement and student achievement levels, in order to see if test policies disproportionately impact low-achieving students, but they find no interaction.

4. Now predict what the writers will do in the third part:

- a) move on to review another area
- b) suggest why they found no interaction
- c) dismiss the results as useless

5. Read the third part below and check your prediction.

The discrepancy between the Jacob (2001) and Warren and Edwards (2001) results is puzzling, since both use the same data. There are some differences in the variables included in their models, but not dramatic ones. A close examination of the precise NELS samples they use, however, reveals a potential reason for the discrepancy. Warren and Edwards use school administrator reports about the presence of a graduation test requirement as their variable. Jacob points out, however, that this data is missing for a number of students (971 out of 12,721 students in his sample are missing this variable). Importantly, it is missing in most of these cases because these students had dropped out of school and so had no school administrator questionnaire in their record. Warren and Edwards find no effect of the tests on dropout rates, but that may be because they have excluded from their sample a large number of dropouts, who may have disproportionately dropped out of schools with graduation test requirements.

6. From here the writers go on to suggest a second possible reason for the discrepancy. Notice how they claim a gap in the research.

On balance then, neither Jacob's nor Warren and Edwards' results can be taken as definitive. It would be useful to reanalyse the NELS data using Jacob's sample and Warren and Edwards' models.

As you have seen in the example above, writing a literature review requires skills in summarising. Each research article reviewed has to be reduced to a sentence or 2,3 for the most important articles you review. To do this, you need to decide what is most relevant to your own work from the article (or book, etc.). Remember to think about your **research gap** when you are deciding what information is relevant to include in your literature review.

(adapted from Hamp-Lyons, L. & Heasley, B. *Study Writing*. Cambridge University Press, 2006.)