

APPENDIX: Survey Instruments

EXPERT SURVEY

ABOUT THIS SURVEY

Text recycling refers to the reuse of excerpts (verbatim or nearly so) from previously published writing in a new publication without the use of quotation marks or other means to identify the material as reused. As academic journals have begun using new tools such as Turnitin/Ithenticate that allow manuscripts to be checked against previously published work, text recycling has become a source of considerable confusion and debate in the scientific research community. This study is part of a larger initiative investigating the ethics and acceptability of text recycling in different contexts and situations. It inquires about the attitudes and beliefs of academics across a broad spectrum of disciplines. You have been invited to participate in this study because you are a professional researcher in a STEM (Science, Technology, Engineering and Mathematics) field.

Start of Block: Personal information

What is your general field of research or work? (e.g., physics, biology, sociology, environmental science, medicine) _____

Which of these most closely fits the area of your primary area of research or work?

- Agriculture, Agriculture Operations, and Related Sciences (15)
- Natural Resources and Conservation (16)
- Communications Technologies/Technicians and Support Services (17)
- Computer and Information Sciences and Support Services (18)
- Engineering (19)
- Engineering Technologies/Technicians (20)
- Biological and Biomedical Sciences (21)
- Mathematics and Statistics (22)
- Military Technologies (23)
- Physical Sciences (24)
- Science Technologies/Technicians (25)
- Psychology (26)
- Social Sciences--interpretive (27)
- Social Sciences--quantitative (28)
- Health Professions—clinical (e.g., medicine, nursing, surgery) (29)
- Health Professions—basic science (e.g., hematology, pharmacology) (30)
- Other (31) _____

Which degrees do you hold?

- Masters (8)
- PhD (9)
- Doctoral (non-PhD) (10)
- MD (11)
- MD/PhD (12)
- Other (14) _____

What is your primary language (the one you most often speak at home)?

- Mandarin/Chinese (4)
- Spanish (5)
- English (6)
- Hindi (7)
- Arabic (8)
- Portuguese (9)
- Bengali (10)
- Russian (11)
- Japanese (12)
- Punjabi (13)
- German (14)
- Javanese (15)
- Malaysian/Indonesian (16)
- Vietnamese (17)
- Korean (18)
- French (19)
- Other (20) _____

Start of Block: PERSONAL INFORMATION

This first set of questions asks about your background and area of specialization.

In which of the following types of workplaces have you done research for at least 5 years?

Academic institution (1)

- Industry (2)
- Government institution (3)
- Non-profit (4)
- Other (5) _____

Which of the following best describes your **current** workplace?

- Academic institution (1)
- Industry (2)
- Government institution (3)
- Non-profit (4)
- Other (5) _____

Display This Question:

If Which of the following best describes your current workplace? = Academic institution

What is your academic rank or position?

- Full Professor (1)
- Associate Professor (2)
- Assistant Professor (3)
- Full-time, non-tenure-track faculty (4)
- Part-time or contingent non-tenure-track faculty (5)
- Emeritus faculty (6)
- Staff (7)
- Other (8) _____

Approximately how many scientific articles have you written--either alone or as a co-author?
(Include only those for which you have been **directly** involved in the writing.)

- none (1)
- 1-10 (2)
- 11-20 (3)
- 21-50 (4)
- 50-100 (5)
- More than 100 (6)

Have you been the Editor of any academic journals? If so, how many?

- None (11)
- (6)
- (7)
- (8)
- (9)
- or more (10)

In which year were you born? _____

What is your primary language?

- Arabic (11)
- Chinese (7)
- English (4)
- French (8)
- German (6)
- Hindi (10)
- Japanese (9)
- Spanish (5)
- Other (12) _____

How would you describe your English language proficiency?

- excellent (1)
- good (2)
- fair (3)
- poor (4)

Start of Block: SCENERIOS

The next set of questions ask for your opinion regarding the appropriateness of recycling text in four different scenarios. The term “text recycling” as used here means reusing the exact (or nearly exact) language from an earlier paper in a subsequent manuscript with NO indication that the text was reused (no quotation marks, footnote, or citation identifying the reused text as such).

SCENARIO A: Sarah is a graduate student is doing research with an environmental science lab group. Prior to Sarah joining this group, the lab published an article, "Paper A," in an environmental science journal; this article included a description of a measurement apparatus—a combination of hardware and software for measuring carbon emissions from coal plants with drones. Since Sarah is using this same apparatus in her research, her advisor suggests that she recycle that description for the Methods section she is currently writing for "Paper B" in her work in this lab. Is this appropriate?

- Definitely appropriate (1)
- Probably appropriate (2)
- Probably NOT appropriate (3)
- Definitely NOT appropriate (4)

SCENARIO B: The following year, a different group of researchers at different university uses this same equipment set-up in a research project to study the movement of pollen from GM crops to non-GM fields. They recycle the description of the apparatus verbatim from Paper A. Is this appropriate?

- Definitely appropriate (1)
- Probably appropriate (2)
- Probably NOT appropriate (3)
- Definitely NOT appropriate (4)

SCENARIO C: Some time later, Sarah has completed her PhD and taken a faculty position at a different university. She is now collaborating with a new group of colleagues doing new studies on coal emissions.

	Definitely appropriate (1)	Probably appropriate (2)	Probably NOT appropriate (3)	Definitely NOT appropriate (4)
She recycles the apparatus description from Paper A (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
She recycles the apparatus description from Paper B (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SCENARIO D: Later in her career, Sarah and a colleague named Karen have been collaborating on a research project. The two are asked by a major newspaper to co-author a story explaining their research for an audience of non-scientists. While drafting the piece, Sarah comes up with a really clever and insightful joke related to their research. It's one of her favorite parts of the story. A year later, Karen writes a "Commentary" which is published in a high profile scientific journal—and she recycles Sarah's joke, almost verbatim, from the newspaper story they wrote together.

- Definitely appropriate (1)
- Probably appropriate (2)
- Probably NOT appropriate (3)
- Definitely NOT appropriate (4)

Start of Block: SOURCE FOR TEXT RECYCLING

As a reminder, the term “text recycling” as used here means reusing the exact (or nearly exact) language from an earlier paper in a subsequent manuscript with NO indication that the text was reused (no quotation marks, footnote, or citation identifying the reused text as such).

Imagine you are currently writing a journal article (research report) in your field reporting on research you have been doing. This question asks for your opinion about text recycling when writing such an article--

depending on the source of the recycled material. Please respond with the choice that best aligns with your views.

	A. I can recycle material from this document as appropriate for the new paper without limits.	B. Recycling would be acceptable with some limitations.	C. This would never be acceptable.	I have no idea.
From my own GRANT PROPOSAL	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a GRANT PROPOSAL written by other members of my lab/research group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a POSTER I presented at a professional conference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a PAPER I presented at a professional conference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a paper I presented at a professional conference that was published in CONFERENCE PROCEEDINGS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a published JOURNAL ARTICLE for which I was one of the authors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a journal article I am writing at the same time as the article in question (to be submitted at nearly the same time).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a published JOURNAL ARTICLE written by members of my lab/research group--but for which I was NOT an author	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A published JOURNAL ARTICLE written neither by me nor those in my lab/research group.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The next prompts asks your opinion about the “acceptability” of text recycling from one of your prior publications--depending on the structural placement of the recycled material. Please respond with the choice that best aligns with your views.

For each section listed to the left, indicate whether you think that using recycled text in writing that section is acceptable in your area of research.

	A. Any amount of recycling in this section would be acceptable (1)	B. Recycling in this section would be acceptable with some limitations (2)	C. Recycling in this section would never be acceptable (3)	I have no idea (4)
Abstract (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Introduction (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Review of previous research (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Theory (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Methods (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Results (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussion (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

You chose response 'B' for at least one of the prompts in the previous question. We'd like to know more about this. What is the maximum amount of material it that would be acceptable to recycle in these sections? (Choose the response that most closely matches your sensibilities.)

	a. 1 or 2 sentences (1)	b. About one paragraph (2)	c. 2-3 paragraphs (3)	d. No particular limit on amount of recycling (4)
Abstract (x1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Introduction (x2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Review of previous research (x3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Theory (x4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Methods (x5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Results (x6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussion (x7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: RECYCLING FROM WORK WITH MULTIPLE AUTHORS

The next questions ask whether you feel there are any differences in overall “acceptability” of text recycling when multiple authors have been involved in the creation of the source text. (For

these questions, please consider the practice of text recycling in general, not which specific part of a research paper it might be used in.)

For multiple-authored papers, text recycling is never acceptable.

- definitely true (1)
- probably true (2)
- Probably false (3)
- Definitely false (4)

For multiple-authored papers, text recycling is acceptable if the source text and the new paper have identical authors.

- definitely true (1)
- probably true (2)
- Probably false (3)
- Definitely false (4)

For multiple-authored papers, text recycling is acceptable if the source text and new text share at least one author and any other authors have given permission.

- definitely true (1)
- probably true (2)
- Probably false (3)
- Definitely false (4)

For multiple-authored papers, text recycling is acceptable if the person who originally "wrote" (drafted) the specific material being recycled is one of the authors of the new paper.

- definitely true (1)
- probably true (2)
- Probably false (3)
- Definitely false (4)

Members of a "lab" or long-term research project can recycle material from an earlier published paper produced by the same lab or project -- even if the authors of the two papers are not identical.

- definitely true (1)
- probably true (2)
- Probably false (3)
- Definitely false (4)

Start of Block: General opinions

For each of the following, indicate how strongly you agree with the given statement.

I understand how and when to recycle text ethically and properly in my work.

- Strongly agree (15)
- Somewhat agree (16)
- Neither agree nor disagree (17)
- Somewhat disagree (18)
- Strongly disagree (19)

I would benefit from explicit instruction regarding the ethics and conventions of text recycling for scientific writing.

- Strongly agree (15)
- Somewhat agree (16)
- Neither agree nor disagree (17)
- Somewhat disagree (18)
- Strongly disagree (19)

Before taking this survey I was aware that scientists sometimes recycle text.

- Strongly agree (15)
- Somewhat agree (16)
- Neither agree nor disagree (17)
- Somewhat disagree (18)
- Strongly disagree (19)

Novice Survey

ABOUT THIS SURVEY

Text recycling refers to the reuse of excerpts from previously published writing in a new publication without attributing the material to the prior work via quotation marks or citation. As academic journals have begun using new tools such as Turnitin/iThenticate that allow manuscripts to be checked against previously published work, text recycling has become a source of considerable confusion and debate in the academic community. This study is part of a larger initiative investigating the ethics and acceptability of text recycling in different contexts and situations. It inquires about the attitudes and beliefs of academics across a broad spectrum of disciplines. You have been selected to participate in this study because you are a graduate student or post-doctoral researcher in a STEM (Science, Technology, Engineering and Mathematics) field.

Start of Block: Personal information

What is your general field of study? (e.g., physics, biology, sociology, environmental science, medicine)

Which of these most closely fits the area of your primary research/scholarship?

- Agriculture, Agriculture Operations, and Related Sciences (15)
- Natural Resources and Conservation (16)
- Communications Technologies/Technicians and Support Services (17)
- Computer and Information Sciences and Support Services (18)
- Engineering (19)
- Engineering Technologies/Technicians (20)
- Biological and Biomedical Sciences (21)
- Mathematics and Statistics (22)
- Military Technologies (23)
- Physical Sciences (24)
- Science Technologies/Technicians (25)
- Psychology (26)
- Social Sciences--interpretive (27)
- Social Sciences--quantitative (28)
- Health Professions—clinical (e.g., medicine, nursing, surgery) (29)
- Health Professions—basic science (e.g., hematology, pharmacology) (30)
- Other (31) _____

Which degree are you currently pursuing?

- Masters (8)
- PhD (9)
- Doctoral (non-PhD) (10)
- MD (11)
- MD/PhD (12)
- Current Post-Doc (13)
- Other (14) _____

Which of these best describes your current status?

- Post-doc (4)
- Completed coursework; working on thesis/dissertation (5)
- Have not yet completed coursework; working on thesis/dissertation (6)
- Primarily doing coursework; have not yet begin serious work on my thesis or dissertation (7)

Which degrees do you already hold? (Check all that apply.)

- Bachelor's (11)
- Masters (12)
- PhD (13)
- Doctoral (non-PhD) (14)
- JD (15)
- MBA (16)
- MD (17)
- Other (18) _____

Have you *directly participated* in the writing of any scientific articles--either published or submitted? If so, how many?

- none (11)
- (12)
- (13)
- 3-5 (14)
- 6-10 (15)
- more than 10 (16)

Have you given any conference talks? If so, how many?

- none (11)
- (12)
- (13)
- 3-5 (14)
- 6-10 (15)
- more than 10 (16)

In which country were you born?

In which country did you get your primary undergraduate degree?

In which country are you currently in school or employed?

Is English one of your native languages?

- Yes (1)
- No (2)

What is your primary language (the one you most often speak at home)?

- Mandarin/Chinese (4)
- Spanish (5)
- English (6)
- Hindi (7)
- Arabic (8)
- Portuguese (9)
- Bengali (10)
- Russian (11)
- Japanese (12)
- Punjabi (13)
- German (14)
- Javanese (15)
- Malaysian/Indonesian (16)
- Vietnamese (17)
- Korean (18)
- French (19)
- Other (20) _____

What is the name of the college or university where you are studying/working?

Start of Block: SCENERIOS

The next set of questions ask for your opinion regarding the appropriateness of recycling text in four different scenarios. The term “text recycling” as used here means reusing the exact (or nearly exact) language from an earlier paper in a subsequent manuscript with NO indication that the text was reused (no quotation marks, footnote, or citation identifying the reused text as such).

SCENARIO A: You are a graduate student doing research with an environmental science lab group. Before you joined this group, the lab published an article -- "Paper A" --in an environmental science journal that included a description of a measurement apparatus—a combination of hardware and software for measuring carbon emissions from coal plants with drones. Your advisor suggests that you recycle that description for the Methods section you are currently writing for "Paper B" in your work with this lab group. Is this appropriate?

- Definitely appropriate (1)
- Probably appropriate (2)
- Probably NOT appropriate (3)
- Definitely NOT appropriate (4)

SCENARIO B: The following year, a different group of researchers at a different university uses this same equipment set-up in a research project to study the movement of pollen from GM crops to non-GM fields. They recycle the description of the apparatus verbatim from Paper A. Is this appropriate?

- Definitely appropriate (1)
- Probably appropriate (2)
- Probably NOT appropriate (3)
- Definitely NOT appropriate (4)

SCENARIO C: Some time later you have completed your PhD and taken a faculty position at a different university. Now you are collaborating with a new group of colleagues doing new studies on coal emissions.

	Definitely appropriate (1)	Probably appropriate (2)	Probably NOT appropriate (3)	Definitely NOT appropriate (4)
You recycle the apparatus description from Paper A (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You recycle the apparatus description from Paper B (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SCENARIO D: Later in your career you and a colleague named Karen have been collaborating on a research project. The two of you are asked by a major newspaper to co-author a story explaining your research for an audience of non-scientists. While drafting the piece, you come up with a really clever and insightful joke related to your research. It's one of your favorite parts of the story. A year later, Karen writes a "Commentary" which is published in a high profile scientific journal—and she recycles "your" joke, almost verbatim from the newspaper story you wrote together.

- Definitely appropriate (1)
- Probably appropriate (2)
- Probably NOT appropriate (3)
- Definitely NOT appropriate (4)

Start of Block: SOURCE FOR TEXT RECYCLING

As a reminder, the term "text recycling" as used here means reusing the exact (or nearly exact) language from an earlier paper in a subsequent manuscript with NO indication that the text was reused (no quotation marks, footnote, or citation identifying the reused text as such).

Imagine you are currently writing a journal article (research report) in your field reporting on research you have been doing. This question asks for your opinion about text recycling when writing such an

article--depending on the source of the recycled material. Please respond with the choice that best aligns with your views.

	A. I can recycle material from this document as appropriate for the new paper without limits. (1)	B. Recycling would be acceptable with some limitations (2)	C. This would never be acceptable (3)	I have no idea (4)
From my own GRANT PROPOSAL	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a GRANT PROPOSAL written by my mentor or lab/research group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a POSTER I presented at a professional conference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a PAPER I presented at a professional conference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A paper I presented at a professional conference that was published in CONFERENCE PROCEEDINGS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A published JOURNAL ARTICLE for which I was an author	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A journal article I am writing at the same time as the article in question (to be submitted at nearly the same time).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A published JOURNAL ARTICLE written by my mentor or lab/research group--but for which I was NOT an author	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A published JOURNAL ARTICLE written neither by me nor my mentor or those in my lab/research group.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The next prompts asks your opinion about the “acceptability” of text recycling depending on the structural placement of the recycled material or the rhetorical aim (or purpose) of the recycled material. There will likely be some overlap between these two categories, but please answer each question as best you can. Please respond with the choice that best aligns with your views.

For each section listed to the left, indicate whether you think that using recycled text in writing that section is acceptable in your area of research.

	A. Any amount of recycling in this section would be acceptable (1)	B. Recycling in this section would be acceptable with some limitations (2)	C. Recycling in this section would never be acceptable (3)	I have no idea (4)
Abstract (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Introduction (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Review of previous research (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Theory (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Methods (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Results (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussion (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

You chose response 'B' for at least one of the prompts in the previous question. We'd like to know more about this. What is the maximum amount of material that would be acceptable to recycle in these sections? (Choose the response that most closely matches your sensibilities.)

	a. 1 or 2 sentences (1)	b. About one paragraph (2)	c. 2-3 paragraphs (3)	d. No particular limit on amount of recycling (4)
Abstract (x1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Introduction (x2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Review of previous research (x3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Theory (x4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Methods (x5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Results (x6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussion (x7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: RECYCLING FROM WORK WITH MULTIPLE AUTHORS

The next questions ask whether you feel there are any differences in overall “acceptability” of text recycling when multiple authors have been involved in the creation of the source text. (For these questions, please consider the practice of text recycling in general, not in which specific part of a research paper it might be used in.)

For multiple-authored papers, text recycling is never acceptable.

- Definitely true (1)
- Probably true (2)
- Probably false (3)
- Definitely false (4)

For multiple-authored papers, text recycling is acceptable if the source text and the new paper have identical authors.

- Definitely true (1)
- Probably true (2)
- Probably false (3)
- Definitely false (4)

For multiple-authored papers, text recycling is acceptable if the source text and new text share at least one author and any other authors have given permission.

- Definitely true (1)
- Probably true (2)
- Probably false (3)
- Definitely false (4)

For multiple-authored papers, text recycling is acceptable if the person who originally “wrote” (drafted) the specific material being recycled is one of the authors of the new paper.

- Definitely true (1)
- Probably true (2)
- Probably false (3)
- Definitely false (4)

Members of a "lab" or long-term research project can recycle material from an earlier published paper produced by the same lab or project -- even if the authors of the two papers are not identical.

- Definitely true (1)
- Probably true (2)
- Probably false (3)
- Definitely false (4)

Start of Block: General opinions

For each of the following, indicate how strongly you agree with the given statement.

I understand how and when to recycle text ethically and properly in my work.

- Strongly agree (15)
- Somewhat agree (16)
- Neither agree nor disagree (17)
- Somewhat disagree (18)
- Strongly disagree (19)

I would benefit from explicit instruction regarding the ethics and conventions of text recycling for scientific writing.

- Strongly agree (15)
- Somewhat agree (16)
- Neither agree nor disagree (17)
- Somewhat disagree (18)
- Strongly disagree (19)

Before taking this survey I was aware that scientists sometimes recycle text.

- Strongly agree (15)
- Somewhat agree (16)
- Neither agree nor disagree (17)
- Somewhat disagree (18)
- Strongly disagree (19)