

## How to deal with plagiarism

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## **Research Integrity Group**

Provide advice to editors, peer reviewers and authors on all aspects of research and publication ethics, including plagiarism



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### Overview of this session

- What plagiarism is and why it is damaging
- The difference between plagiarism and text recycling
- The use and limitations of plagiarism detection software
- How to handle plagiarism in line with COPE guidelines

## **Definition of plagiarism**

#### To plagiarise:

- to steal and pass off (the ideas or words of another)
   as one's own
- to use (another's production) without crediting the source
- to commit literary theft
- to present as new and original an idea or product derived from an existing source

(<a href="http://www.merriam-webster.com/">http://www.merriam-webster.com/</a>)



Source: Flickr. Adapted from Alan Cleaver

#### Plagiarism in research:

 theft or misappropriation of intellectual property and the substantial unattributed textual copying of another's work

(The US Office of Research Integrity (ORI) <a href="http://www.ori.hhs.gov/policies/plagiarism.shtml">http://www.ori.hhs.gov/policies/plagiarism.shtml</a>)



## Terms related to plagiarism

- If the authors reuse their own:
  - words: text recycling
  - > figures: figure duplication
  - > ideas: salami slicing
- If the authors recycle the whole article:
  - duplicate (redundant)submission or publication





## Is plagiarism a widespread problem?

- Most frequent query type seen by our team
- Often brought to COPE
   http://publicationethics.org/cases

## **Search by classification**

Questionable/unethical research (169)

Redundant/duplicate publication (116)

Data (108)

Misconduct/questionable behaviour (105)

Authorship (103)

Correction of the literature (87)

Conflict of interest (63)

Plagiarism (58)

Peer review (55)

Miscellaneous (54)



## **Plagiarism**

- How much plagiarism of <u>someone else's</u> work is acceptable?
  - A. A couple of paragraphs
  - B. A couple of sentences
  - C. None

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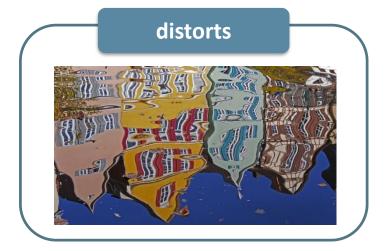
Not just previously published articles - websites, books etc.

## Why is plagiarism damaging?



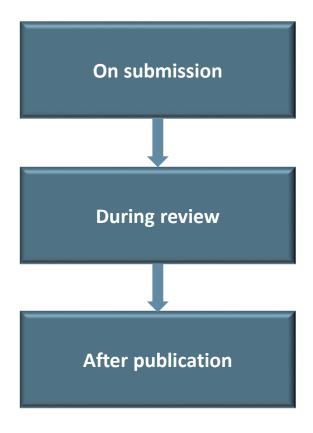








## When is plagiarism detected?





## Plagiarism detection software



#### There is no software able to detect plagiarism!

- Only detects text overlap
- Needs human eye to interpret
- Unhelpful with figures or translations
- No software is perfect
- Don't depend on a score!

















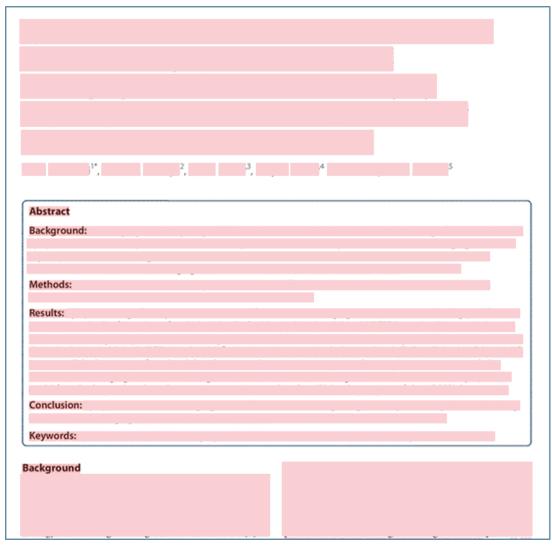








## How to analyse results of a plagiarism check



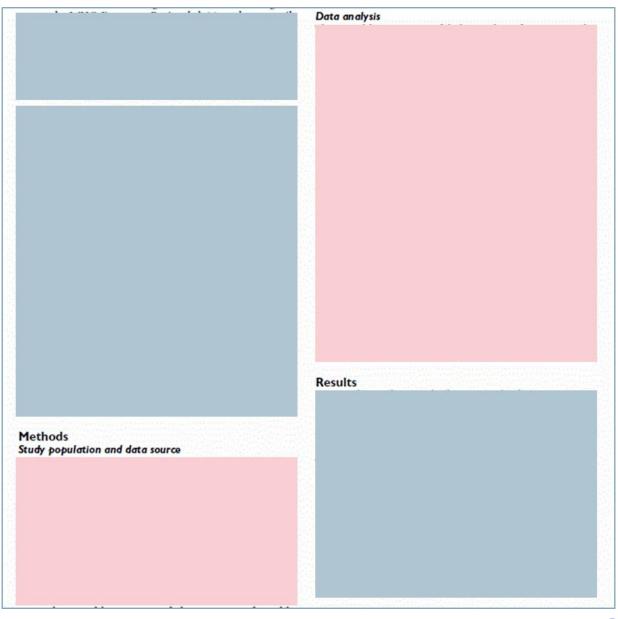
If the article is already published, it will find a match to itself

important to exclude irrelevant sources

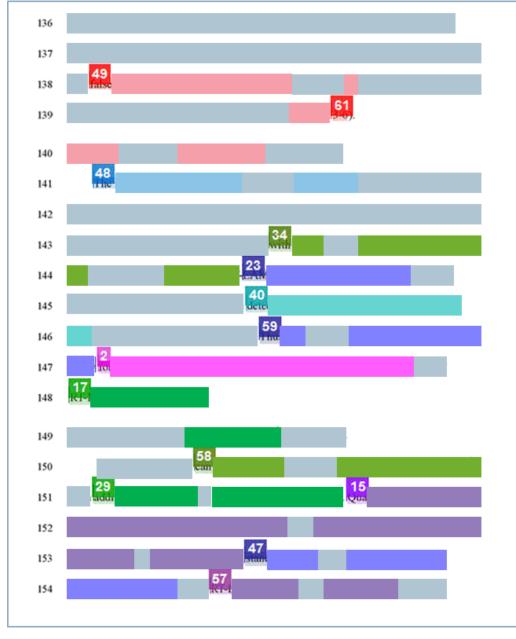


### Overlap of whole paragraphs

difficult to justify usually serious



**Overlap in the Methods:** cause for concern?



#### Insignificant (chance) overlap

few words overlapping many different sources



#### **Paraphrased text**

overlap may be small but coming from one source same pattern of references

#### What to take into account:

#### **Published?**

sources published before or after?

#### Main sources?

- same authors?
- copyright issues?
- sources cited?

#### Large fragments?

- whole paragraphs?
- paraphrased text?
- any novelty?



## Interpretation depends on article type

#### Research or Methodology article

- which sections have overlap?
  - Methods?
  - Results?
  - Discussion?
  - Conclusions?

#### Review article

- citations next to appropriate text?
- any text needs quotation marks?
- conclusions original?
- Expert advice on novelty?



## How plagiarism can be disguised

- No citation
- Citation but no quotation marks
- Citation in wrong place
- Paraphrasing without citation
- White quotation marks.





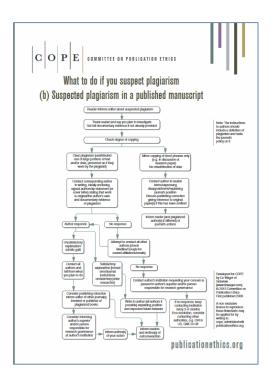






## **COPE** guidelines on plagiarism

- Collect evidence and ask the authors neutrally for explanation
- Minor plagiarism
  - Submitted: ask the authors to rewrite
  - Published: correction
- Major plagiarism:
  - Submitted: reject
  - Published: retract
  - Contact authors' institution?
- The aim is to correct the scientific record, not punish the authors.



## **Guidelines on text recycling**

- Consider each case separately
- novel?
- misleading?
- data/results duplicated?
- copyright infringement?
- action depending on findings.

# How to deal with text recycling

These guidelines are intended to guide editors when dealing with cases of text recycling.

Text recycling, also known as self-plagiarism, occurs when sections of the same text appear (usually un-attributed) in more than one of an author's own publications. The term 'text recycling' has been chosen to differentiate from 'true' plagiarism (i.e. when another author's words or ideas have been used, usually without attribution).

A separate issue, not to be confused with text recycling, is redundant (duplicate) publication. Redundant (duplicate) publication generally denotes a larger problem of repeated publication of data or ideas, often with at least one author in common. This is outside the scope of these guidelines and is covered elsewhere<sup>1,2</sup>.

Journals should also ensure that they have a clear policy on duplicate publication, detailing what is considered a previous publication and informia authors of the need to declare any potentially overlapping publications and cite them.

#### How can editors deal with text recycling?

Editors should consider each case of text recycling on an individual basis as the 'significance' of the overlap, and therefore the most appropriate course of action, will depend on a number of factors. These factors will be discussed in more detail below and include:

- · How much text is recycled
- · Where in the article the text recycling occurs
- Whether the source of the recycled text has been acknowledged
- · Whether the article is a research or non-research article
- Whether there is a breach of copyright
- In some circumstances, cultural norms at the time and place of publication

#### When should action be considered?

Text recycling can occur in submitted manuscripts or published articles. It can occur in different article types (e.g. research articles, review articles) and in different sections within the article. When significant overlap is identified between two or more articles, editors should consider asking for clarification and/or taking action. What is considered 'significant overlap' will depend on a number of factors including where in the article the text recycling occur. This will discussed in more detail below.

In general terms, editors should consider how much text is recycled. The reuse of a few sentences is clearly different to the verbatim reuse of several paragraphs of text, although large amounts of text recycled in the methods might be more acceptable than a similar amount recycled in the discussion.

When deciding whether to take action, editors should consider whether there is significant overlap with a previous publication and how significantly the degree of overlap impinges on the originality of the content for the journal's audience. While the factors discussed below should be taken into consideration when deciding on the significance of the overlap, editors need to decide whether the author has re-used text legitimately or has misrepresented previously presented ideas or data as new.

#### Research articles

#### Introduction/background

Some degree of text recycling in the background/ introduction section of an article may be unavoidable, particularly if an article is one of several on a related topic. Duplication of background ideas may be considered less significant or even considered desirable, contrasted with duplication of the hypothesis, which will only be appropriate in very closely related papers. Editors should consider how much text is repeated verbatim, and whether the original source is cited (although editors should note that citing the source is not a justification per se).

biomedcentral.com







#### **COPE** resources

**COPE** (Committee on Publication Ethics) <a href="http://www.publicationethics.org/">http://www.publicationethics.org/</a>

**Flowcharts** on how to deal with publication ethics problems:

http://www.publicationethics.org/resources/flowcharts

Suspected redundant publication in a submitted manuscript:

http://publicationethics.org/files/u2/01A\_Redundant\_Submitted.pdf

Suspected redundant publication in a published article:

http://publicationethics.org/files/u2/01B Redundant Published.pdf

Suspected plagiarism in a submitted manuscript:

http://www.publicationethics.org/files/u2/02A Plagiarism Submitted.pdf

Suspected plagiarism in a published article:

http://www.publicationethics.org/files/u2/02B Plagiarism Published.pdf

#### COPE discussion paper on plagiarism:

http://www.publicationethics.org/files/COPE plagiarism discussion %20doc 26%20Apr%2011.pdf

Text recycling guidelines <a href="http://publicationethics.org/text-recycling-guidelines">http://publicationethics.org/text-recycling-guidelines</a>

COPE cases involving plagiarism: <a href="http://publicationethics.org/cases/?f[0]=im-field\_classifications%3A813">http://publicationethics.org/cases/?f[0]=im-field\_classifications%3A813</a>



## Take-home messages

- Software can only detect text overlap not plagiarism
- A degree of common sense is needed in interpreting the results
- Don't depend on 'plagiarism score'
- Be guided by COPE flowcharts and guidelines
- Correct literature, not punish authors





# Thank you

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