

WRITING

TASK: The handout presents some introductory hints on writing abstracts as part of academic textual communication. It gives guidance on several mandatory components which all abstracts share, as linguistic research shows.

In the following pages:

- a) read the theoretical background in part 1
- b) in the practical part 2, answer the questions and compare with the key placed at the end of the material
- c) optional reading – read the British Medical Journal short article containing expert opinion on writing abstracts for this specific scientific journal
- d) optional writing – in case you are interested in writing your own abstract, you can create an abstract for a specific conference of your choice = conference abstract
- e) Upload the handout with your answers in the odevzdávárna / depository under the study materials for VLAJ0222 / VSAJ0222 by next Sunday 13 March 2016
- f) in case you submit your abstract upload it in odevzdávárana, too

PART 1

What is an abstract? : An abstract is a self-contained, short, and powerful statement that describes a larger work. Components vary according to discipline. An abstract of a social science or scientific work may contain the scope, purpose, results, and contents of the work. An abstract of a humanities work may contain the thesis, background, and conclusion of the larger work. An abstract is not a review, nor does it evaluate the work being abstracted.

Why write an abstract? : Irrespective of the very scientific discipline, we may write an abstract for various reasons. One of them is selection. Abstracts allow readers who may be interested in a longer work to quickly decide whether it is worth their time to read it. Also, many online databases use abstracts to index larger works. Therefore, abstracts should contain keywords and phrases that allow for easy searching.

Say you are beginning a research project on how Brazilian newspapers helped Brazil's ultra-liberal president Luiz Ignácio da Silva wrest power from the traditional, conservative power base. A good first place to start your research is to search Dissertation Abstracts International for all dissertations that deal with the interaction between newspapers and politics. "Newspapers and politics" returned 569 hits. A more selective search of "newspapers and Brazil" returned 22 hits. You may want to select each single work and flick through its content. A better option is to read the abstract. In this case, the abstract reveals the main focus of the dissertation:

This dissertation examines the role of newspaper editors in the political turmoil and strife that characterized late First Empire Rio de Janeiro (1827-1831). Newspaper editors and their journals helped change the political culture of late First Empire Rio de Janeiro by involving the people in the discussion of state. This change in political culture is apparent in Emperor Pedro I's gradual loss of control over the mechanisms of power. As the newspapers became more numerous and powerful, the Emperor lost his legitimacy in the eyes of the people. To explore the role of the newspapers in the political events of the late First Empire, this dissertation analyzes all available newspapers published in Rio de Janeiro from 1827 to 1831. Newspapers and their editors were leading forces in the effort to remove power from the hands of the ruling elite and place it under the control of the people. In the process, newspapers helped change how politics operated in the constitutional monarchy of Brazil.

From this abstract you now know that although the dissertation has nothing to do with modern Brazilian politics, it does cover the role of newspapers in changing traditional mechanisms of power. After reading the abstract, you can make an informed judgment about whether the dissertation would be worthwhile to read.

When do people write abstracts?

- when submitting articles to journals, especially online journals
- when applying for research grants
- when completing the Ph.D. dissertation or M.A. thesis or Bachelor thesis
- when writing a proposal for a conference paper

How do I write an abstract? : The format of your abstract will depend on the work being abstracted. An abstract of a scientific research paper will contain elements not found in other fields. However, all abstracts share several mandatory components. Please, when composing your own abstract, keep the following key elements in mind:

- What is the importance of the research? Why would a reader be interested in the larger work?
- What problem does this work attempt to solve? What is the scope of the project? What is the main argument/thesis/claim?
- An abstract of a scientific work may include specific models or approaches used in the larger study. Other abstracts may describe the types of evidence used in the research.
- Again, an abstract of a scientific work may include specific data that indicates the results of the project. Other abstracts may discuss the findings in a more general way.
- How does this work add to the body of knowledge on the topic?

All abstracts include:

- The same type and style of language found in the original, including technical language.
- Key words and phrases that quickly identify the content and focus of the work.
- Clear, concise, and powerful language.

How not to write an abstract:

- Do not refer extensively to other works.
- Do not add information not contained in the original work.
- Do not define terms.

You can easily do the same search for any keywords that reflect your area of interest. You may try this one: → in your search engine type *medical abstracts resuscitation* → you get a whole load of hits, for instance the third hit reveals the following:

Abstract: Resuscitation of avalanche victims: Evidence-based guidelines of the international commission for mountain emergency medicine (ICAR MEDCOM) [\[2\]](#)

Intended for physicians and other advanced life support personnel

Background

In North America and Europe ~150 persons are killed by avalanches every year.

Methods

The International Commission for Mountain Emergency Medicine (ICAR MEDCOM) systematically developed evidence-based guidelines and an algorithm for the management of avalanche victims using a worksheet of 27 Population Intervention Comparator Outcome questions. Classification of recommendations and level of evidence are ranked using the American Heart Association system.

Results and conclusions

If lethal injuries are excluded and the body is not frozen, the rescue strategy is governed by the duration of snow burial and, if not available, by the victim's core-temperature. If burial time ≤ 35 min (or core-temperature ≥ 32 °C) rapid extrication and standard ALS is important. If burial time > 35 min and core-temperature < 32 °C, treatment of hypothermia including gentle extrication, full body insulation, ECG and core-temperature monitoring is recommended, and advanced airway management if appropriate. Unresponsive patients presenting with vital signs should be transported to a hospital capable of active external and minimally invasive rewarming such as forced air rewarming. Patients with cardiac instability or in cardiac arrest (with a patent airway) should be transported to a hospital for extracorporeal membrane oxygenation or cardiopulmonary bypass rewarming. Patients in cardiac arrest should receive uninterrupted CPR; with asystole, CPR may be terminated (or withheld) if a patient is lethally injured or completely frozen, the airway is blocked and duration of burial > 35 min, serum potassium > 12 mmol L⁻¹, risk to the rescuers is unacceptably high or a valid do-not-resuscitate order exists. Management should include spinal precautions and other trauma care as indicated.

Keywords: *Avalanche, Extracorporeal circulation, Hypothermia, Resuscitation, Rewarming*

ABSTRACTS AND THEIR STRUCTURE:

- | |
|---|
| <ol style="list-style-type: none">1. Background/introduction2. Purpose3. Methods/materials4. Results/findings5. Discussion/conclusion |
|---|

1. Each section answers some implied questions. Match the following questions with the sections above.

- a. What was discovered? Section ____
- b. How was the research done? Section ____
- c. What do we know about the topic and why is it important? Section ____
- d. What do the findings mean? Section ____
- e. What is this study about and why is it done? Section ____

2. Here is an abstract from a published paper. It is 178 words long. Read it through looking for the main function of each sentence (background, purpose, methods, results, and discussion).

<p>Warmer Climates Boost Cyanobacterial Dominance in Shallow Lakes¹</p>
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<p>(1) Dominance by cyanobacteria hampers human use of lakes and reservoirs worldwide. (2) Previous studies indicate that excessive nutrient loading and warmer conditions promote dominance by cyanobacteria, but evidence from global scale field data has so far been scarce. (3) In this paper we show that although warmer climates do not result in higher overall phytoplankton biomass, the percentage of the total phytoplankton biovolume attributable to cyanobacteria increases steeply with temperature. (4) Our analysis is based on a study of 143 lakes along a latitudinal transect ranging from subarctic Europe to southern South America. (5) Our results reveal that the percent cyanobacteria is greater in lakes with high rates of light absorption. (6) This points to a positive feedback because restriction of light availability is often a consequence of high phytoplankton biovolume, which in turn may be driven by nutrient loading. (7) Our results indicate a synergistic effect of nutrients and climate. (8) The implications are that in a future warmer climate, nutrient concentrations may have to be reduced substantially from present values in many lakes if cyanobacterial dominance is to be controlled.</p>
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¹ (Kosten, S. et al. (2012), Warmer climates boost cyanobacterial dominance in shallow lakes. *Global Change Biology*, 18: 118-126.)

3. Answer the following questions about the abstract.

- a. Are introductory statements general or specific?
- b. Are they in first person or third person style?
- c. What tense is used?

4. Read the sentences below and fill in the gaps with one of the following verbs:

<i>develops - calls - argues - provides - looks - consider</i>
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- a. This paper _____ an axiomatic basis for a representation of personal preferences in which ...
- b. The authors _____ a broad class of situations where a society must choose from a finite set of alternatives.
- c. This paper _____ that the analysis of these games involves a key technical issue.
- d. This paper _____ at the effectiveness of the Environmental Protection Agency (EPA) in reducing the time that manufacturing plants spend in a state of non-compliance.
- e. This study _____ into question the established view that lack of information on clean-up cost functions represents a serious problem ...
- f. This paper _____ a model of corporate hierarchy in which workers accumulate heterogeneous human capital suitable for different positions within the hierarchy.

5. Sometimes, the Methods section sentences are expressed in the passive form. Rewrite the following sentences using the passive voice.

- a. We then monitored the physicochemical parameters of the lake water for 1 year.

- b. We collected samples for particulate toxin analysis from more than 140 lakes...

- c. We detected microcystins in nearly 50% of the samples.

6. Read the following conference abstract on conference abstracts. Complete it with the following phrases:

has not yet become a subject of research

As a result, this study raises a broader question

This paper attempts to describe

to provide some tentative explanations

plays a significant role

It will also be shown

This issue will be discussed

can be regarded as

has been investigated

Cultural Variation in the Genre of the Conference Abstract:

Rhetorical and Linguistic Dimensions

The conference abstract is a common and important genre that A. _____ in disseminating new knowledge within scientific communities, both national and international. As a genre with the specific features of "interestingness" created to attract the attention of reviewing committees, the conference abstract B. _____ by Berkenkotter & Huckin (1995) and Swales (1996). However, the issue of cultural variation in the genre C. _____, although the conference abstract, like other genres of academic discourse, can be presumed to reflect national proclivities in writing. D. _____ the cultural-specific differences of English versus Ukrainian and Russian conference abstracts on the level of their cognitive structure and language, and E. _____ of the cultural and ideological backgrounds underlying these rhetorical and textlinguistic preferences. F. _____ how the inherited cognitive patterns of Slavic writers interplay with the acquired stereotypes of English scientific discourse in the abstracts they construct in English. These texts, hybrid from the viewpoint of their cultural shaping, G. _____ evidence of the transition period typical of both sociopolitical and intellectual life of Ukraine and other states of the former Soviet Union. H. _____: To what extent is it necessary to adopt the English conventions of this genre in order to be accepted and recognized by international fora? I. _____ in connection with the pedagogical implications arising from the findings and observations of this study.

How to write an abstract that will be accepted

Authors: Mary Higgins, Maeve Eogan, Keelin O’Donoghue, Noirin Russell

Publication date: 16 May 2013

Researchers do not always appreciate the importance of producing a good abstract or understand the best way of writing one. **Mary Higgins and colleagues** share some of the lessons they have learnt as both researchers and reviewers of abstracts

Effective abstracts reflect the time, work, and importance of the scientific research performed in the course of a study. A last minute approach and poor writing may not reflect the good quality of a study.

Between the four of us we have written over 150 published papers, as well as having reviewed numerous abstracts for national and international meetings. Nevertheless, we have all had abstracts rejected, and this experience has emphasised a number of teaching points that could help maximise the impact of abstracts and success on the world, or other, stage.

An abstract is the first glimpse an audience has of a study, and it is the ticket to having research accepted for presentation to a wider audience. For a study to receive the respect it deserves, the abstract should be as well written as possible. In practice, this means taking time to write the abstract, keeping it simple, reading the submission guidelines, checking the text, and showing the abstract to colleagues.

It is important to take the necessary time to write the abstract. Several months or years have been spent on this groundbreaking research, so take the time to show this. Five minutes before the call for abstracts closes is not the time to start putting it together.

Keep it simple, and think about the message that needs to be communicated. Some abstracts churn out lots of unrelated results and then have a conclusion that does not relate to the results, and this is just confusing. Plan what points need to be made, and then think about them a little more.

Read the submission guidelines and keep to the instructions provided in the call for abstracts. Don’t submit an unstructured abstract if the guidance has asked for a structured one. Comply with the word or letter count, and do not go over this.

An abstract comprises five parts of equal importance: the title, introduction and aims, methods, results, and conclusion. Allow enough time to write each part well.

The title should go straight to the point of the study. Make the study sound interesting so that it catches people’s attention. The introduction should include a brief background to the research and describe its aims. For every aim presented there needs to be a corresponding result in the results section. There is no need to go into detail in terms of the background to the study, as those who are reviewing the abstract will have some knowledge of the subject. The methods section can be kept simple—it is acceptable to write “retrospective case-control study” or “randomised controlled trial.”

The results section should be concrete and related to the aims. It is distracting and irritating to read results that have no apparent relation to the professed aims of the study. If something is important, highlight it or put it in italics to make it stand out. Include the number of participants, and ensure recognition is given if 10 000 charts have been reviewed. Equally, a percentage without a baseline number is not meaningful.

In the conclusion, state succinctly what can be drawn from the results, but don't oversell this. Words like "possibly" and "may" can be useful in this part of the abstract but show that some thought has been put into what the results may mean. This is what divides the good from the not so good. Many people are capable of doing research, but the logical formation of a hypothesis and the argument of its proof are what make a real researcher.

Once you have written the abstract, check the spelling and grammar. Poor spelling or grammar can give the impression that the research is also poor. Show the abstract to the supervisor or principal investigator of the study, as this person's name will go on the abstract as well. Then show the abstract to someone who knows nothing about the particular area of research but who knows something about the subject. Someone detached from the study might point out the one thing that needs to be said but that has been forgotten.

Then let it go; abstracts are not life and death scenarios. Sometimes an abstract will not be accepted no matter how wonderful it is. Perhaps there is a theme to the meeting, into which the research does not fit. Reviewers may also be looking for particular things. For one conference, we limited the number of case reports so that only about 10% were accepted. It may be that your research is in a popular or topical area and not all abstracts in that area can be chosen. On occasions, politics play a part, and individual researchers have little control over that.

Finally, remember that sometimes even the best reviewer may not appreciate the subtleties of your research and another audience may be more appreciative.

Competing interests: We have read and understood the BMJ Group policy on declaration of interests and have no relevant interests to declare.

<http://careers.bmj.com>

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Sources and adapted from: <http://www.resuscitationjournal.com> // <http://writingcenter.unc.edu> // <http://careers.bmj.com/>

ANSWERS

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1. Background/introduction
2. Purpose
3. Methods/materials
4. Results/findings
5. Discussion/conclusion

1. Each section answers some implied questions. Match the following questions with the sections above.

- a. What was discovered? Section 4
- b. How was the research done? Section 3
- c. What do we know about the topic and why is it important? Section 1
- d. What do the findings mean? Section 5
- e. What is this study about and why is it done? Section 2

2. Here is an abstract from a published paper. It is 178 words long. Read it through looking for the main function of each sentence (background, purpose, methods, results, and discussion).

Warmer Climates Boost Cyanobacterial Dominance in Shallow Lakes²

(1) Dominance by cyanobacteria hampers human use of lakes and reservoirs worldwide. (2) Previous studies indicate that excessive nutrient loading and warmer conditions promote dominance by cyanobacteria, but evidence from global scale field data has so far been scarce. (3) In this paper we show that although warmer climates do not result in higher overall phytoplankton biomass, the percentage of the total phytoplankton biovolume attributable to cyanobacteria increases steeply with temperature. (4) Our analysis is based on a study of 143 lakes along a latitudinal transect ranging from subarctic Europe to southern South America. (5) Our results reveal that the percent cyanobacteria is greater in lakes with high rates of light absorption. (6) This points to a positive feedback because restriction of light availability is often a consequence of high phytoplankton biovolume, which in turn may be driven by nutrient loading. (7) Our results indicate a synergistic effect of nutrients and climate. (8) The implications are that in a future warmer climate, nutrient concentrations may have to be reduced substantially from present values in many lakes if cyanobacterial dominance is to be controlled.

² (Kosten, S. et al. (2012), Warmer climates boost cyanobacterial dominance in shallow lakes. *Global Change Biology*, 18: 118-126.)

3. Answer the following questions about the abstract.

- a. Are introductory statements general or specific? **GENERAL**
- b. Are they in first person or third person style? **THIRD PERSON**
- c. What tense is used? **PRESENT SIMPLE**

4. Read the sentences below and fill in the gaps with one of the following verbs:

develops - calls - argues - provides - looks - consider

- a. This paper **PROVIDES** an axiomatic basis for a representation of personal preferences in which ...
- b. The authors **CONSIDER** a broad class of situations where a society must choose from a finite set of alternatives.
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Samples for particulate toxin analysis from were collected.
- c. We detected microcystins in nearly 50% of the samples.
In nearly 50% of the samples microcystins were detected.
Microcystins were detected In nearly 50% of the samples.

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D. This paper attempts to describe the cultural-specific differences of English versus Ukrainian and Russian conference abstracts on the level of their cognitive structure and language, and E. to provide some tentative explanations of the cultural and ideological backgrounds underlying these rhetorical and textlinguistic preferences. F. to provide some tentative explanations how the inherited cognitive patterns of Slavic writers interplay with the acquired stereotypes of English scientific discourse in the abstracts they construct in English. These texts, hybrid from the viewpoint of their cultural shaping, G. can be regarded as evidence of the transition period typical of both sociopolitical and intellectual life of Ukraine and other states of the former Soviet Union. H. As a result, this study raises a broader question: To what extent is it necessary to adopt the English conventions of this genre in order to be accepted and recognized by international fora?

I. This issue will be discussed in connection with the pedagogical implications arising from the findings and observations of this study.