

## 5 Writing up research: the Abstract

An Abstract (sometimes referred to as a synopsis) is a brief summary of a thesis or journal article. You will probably be given instructions by your institution or department on how long your thesis Abstract should be. If not, ask your supervisor for advice.

5.1 At the beginning of your thesis, you will probably need to include an Abstract. These typically include some or all of the following elements.

Purpose	Conclusion	Results	Introduction	Methods
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- What is the most likely order of these elements?
- Although the Abstract will come near the beginning of your thesis, it may be the last section that you write. Why do you think this is?

5.2 Put the sentences in these Abstracts from journal articles in order. Then identify which elements from 5.1 are included in each abstract. Work individually and then compare answers in pairs.

### Abstract 1

- Students' pre-instructional ideas were investigated through the use of several student-supplied-response (SSR) surveys, which asked students to describe their ideas about topics such as what is a star, how is starlight created, how are stars formed, are all stars the same, and more.
- The results from more than 2,200 responses suggest that although students often have some initial knowledge about stars, their knowledge is often incomplete or incorrect in important ways that could negatively impact instructional objectives.
- This study investigated the beliefs about stars that students hold when they enter an undergraduate introductory astronomy course for nonscience majors.

Bailey, J. M. et al. (2009). College students' pre-instructional ideas about stars and star formation. *Astronomy Education Review*, 8.

**Abstract 2**

- A** Compared to their European counterparts, the American public has been characterized as relatively unknowledgeable and indifferent about genetically modified foods.
- B** If these results are any indication, moral and ethical issues will dominate any discussion of foods derived from a mixture of animal and plant genes.
- C** However, participants tended to be familiar with debates surrounding benefits, risks and moral issues associated with agricultural biotechnology applications.
- D** To evaluate these claims, six focus groups were held in three Arkansas cities to: (1) determine the extent of knowledge the public possesses about genetically modified foods; (2) detail perceived benefits and risks associated with agricultural biotechnology applications; and (3) explore lay perceptions about the genetic modification process itself.
- E** Findings also showed that while participants were not overly concerned about combining genes between plants, they were concerned about inserting animal genes into plants.
- F** Participants demonstrated partial knowledge, and tended to overestimate the number of genetically modified foods.

Knight, A. J. (2008). Perceptions, knowledge and ethical concerns with GM foods and GM process. *Public Understanding of Science*, 18, 177–188.

5.3 a Complete this Abstract with phrases from the box. The expressions in bold are typical of particular Abstract elements.

analysis also demonstrated  
 results showed  
 was conducted

purpose of this work was to  
 these results it may be stated  
 a significant role

The 1 \_\_\_\_\_ **determine** if public communication of science and technology (PCST) has any influence on people's decision to become dedicated to scientific research.

*Purpose*

For this reason, a national **survey** involving 852 researchers from all disciplines 2 \_\_\_\_\_ in Argentina.

*Methods*

The 3 \_\_\_\_\_ **that** the factors affecting scientific vocation are many, and that, regardless of differences in gender, age or discipline, the greatest influence on the decision to go into scientific research is exerted by teachers.

*Results*

The 4 \_\_\_\_\_ **that** different manifestations of PCST (science books, press articles, audiovisual material, and activities such as visits to science museums) **play** 5 \_\_\_\_\_ in awakening the vocation for science.

From 6 \_\_\_\_\_ **that** PCST – in addition to its function of informing and forming citizens – exerts a significant influence in fostering scientific vocation.

*Conclusions*

Stekolschik, G. et al. (2010). Does the public communication of science influence scientific vocation? Results of a national survey. *Public Understanding of Science*, 19, 625–637.



**Study tip**

Certain words and expressions are commonly used in particular elements of Abstracts. It can be useful to make a note of these to use in your own Abstracts.