Library and Learning Services

Academic Skills and Development

Quick guide to

Writing Effective Abstracts

What is an abstract?

An abstract is a short and concise overview of a longer piece of writing (e.g. a dissertation or a journal paper) or a conference presentation. The features of abstracts may vary depending on their purpose, but there are some general principles below which will apply to most.

Why is an abstract important?

The purpose of abstracts is to give the readers a quick overview of what is coming, often to help them decide whether they want to invest more time reading your work or attending your presentation. For journal article abstracts, for example, it is also an opportunity to promote your research. Useful tip! When doing a literature search, it can be a good idea to first read the abstracts of the papers you have found to get an overall idea of their focus and methodology. This will help you decide whether you need to read the whole paper.

Features of good abstracts

- Abstracts written for academic purposes are often 200-300 words long, but different departments/conferences/journals have different criteria, so always check what is required.
- They should be clear, concise and to the point.
- They should contextualise your work by giving some background, clearly explain the focus and aims of your work, give a brief overview of the method/s used and provide a summary of your main conclusions.
- For research in progress, abstracts can be used to highlight your research area or to indicate why the research has been written or what problem it might be trying to solve (Becker & Denicolo, 2012).
- For journal papers, key word searches are often used to find potential research articles, so consider including specific key words in your abstract to ensure that your article is selected for further reading.
- As a general rule of thumb, keep abbreviations and citations to a minimum.

Three examples - demonstrating one from each faculty

They are not definitive but provide a useful indication of what a good abstract may look like in your subject area. Note! Always check to see if you have been given specific details of what should be included within your abstract.

Example 1 *from FEPS (accessed via SurreySearch, Surrey Masters Dissertations)*
Title: ***Computational Modelling of Small-pixel CdZnTe Detector for Nuclear Medicine Imaging Applications. By Charalampos Nikolaou***

Context - Principle aims - Main methods used - Findings and limitations

Research is being conducted to develop alternatives that address some of the limitations in the performance of the scintillation gamma camera, which currently is the most widely used detector in nuclear applications. Small-pixel compound semi conductors appear to be the most promising alternatives to scintillation detectors. The aim of this dissertation is to present the results of a project on computational modelling of a small-pixel cadmium zinc telluride detector for nuclear medicine applications. This project was conducted as part of a broader research group's work, the HEXITE collaboration, which develops pixelated semiconductor detectors for high energy X- and gamma-ray imaging applications. A detector model was developed with the Monte Carlo method, which was implemented with an analytical method for modelling charge sharing effects and the noise performance of the readout electronics. In addition, an experiment was conducted using HEXITEC detector in order to validate the computational model. The comparison between simulation and experimental results showed that this model, despite including some idealised parameters, could provide a useful tool for recognising the performance of the detector response. However, certain limitations were very difficult to be solved analytically; hence alternative methods should be followed for more accurate and realistic results. A Finite Element model was developed for that purpose, but time limitations did not allow a complete and accurate model to be created for this dissertation.

Example 2 from FHMS (from the Surrey Undergraduate Research Journal)
Title: ***Effects of Chewing Gum on Heart Rate: A Physiological Stress Indicator. By Carys Deeley***

Context - Principle objectives - Main methods used - Findings - Further indication of content

Previous findings have concluded that chewing gum can reduce self-reported levels of stress and moderate physiological stress responses, including brain activity and salivary cortisol levels. This study aimed to establish whether similar findings for the stress alleviating property of chewing gum could be obtained

by measuring participants' heart rate, pre-and post-stress inducing task, using a mixed experimental design. Participants were given 12 anagrams and 12 arithmetic problems to solve within a 5-minute period in order to elicit stress. During the task, half the participants chewed one piece of gum whilst the other half did not chew gum. It was hypothesised that those in the chewing gum condition would experience a smaller increase in heart rate. However, the findings suggested that chewing gum does not moderate an individual's heart rate increase in response to a stressful situation. Potential explanations for these findings are presented in this article and suggestions for further research are also discussed.

Example 3 from FASS (from the Surrey Undergraduate Research Journal)
Title: ***Exploring the Differences in Waste Management Strategies in Different Types of Hotels. By Yulia Lazareva***

Context - Principle aims and objectives - Main methods used - Findings - Implications

Waste management in hotels is of critical importance to daily operation of the business. However, it is often an overlooked process. This article explores which types of waste management strategies are more and less commonly adopted in UK hotels. It also evaluates whether there is a difference between the types of waste management strategies implemented in different categories of hotels, based on their ownership and level of service. The aim is to identify recommendations on how waste management should be approached at different types of hotels. Data was collected from online reports and hotel websites. Overall, 52 hotels were selected through convenience sampling. A Chi-squared analysis was performed in order to identify differences between the types of hotels in relation to the waste management strategies they implemented. The results showed that recycling was the most widely adopted waste management strategy, with waste prevention and reuse methods being considerably underutilised. No statistically significant differences were found between the hotels' level of service and ownership and the type of waste management strategies they adopted. This suggests that a universal approach should be taken when studying, applying and promoting sustainable waste management strategies to the hotel industry.

References:

Becker, L. and Denicolo, P. (2012). Publishing journal articles. London: SAGE.

Deeley, C.A.R. (2016). 'Effects of chewing gum on heart rate: a physiological stress indicator. Surrey Undergraduate Research Journal, 2(2).

Greetham, B. (2009). How to write your undergraduate dissertation. Basingstoke: Palgrave Macmillan.

Lazareva, Y. (2016). 'Exploring the differences in waste management strategies in different types of hotels'. Surrey Undergraduate Research Journal, 2(2).

Nikolaou, C. (2014). Computational modelling of a small-pixel CdZnTe detector for nuclear medicine imaging applications. Masters dissertation. University of Surrey.