

GRADUATE RESEARCHER KNOWHOW

WRITING ABSTRACTS: ACTIVITIES

Activity 1

Read these opening sentences. What discipline/s do these abstracts 'belong' to? Remember, some papers are written by multidisciplinary teams.

Abstract opening sentence	Discipline/field
This paper compares operational efficiency of major cargo airports in the Asia Pacific region.	
Physical unclonable functions (PUFs) are increasingly used for authentication and identification applications as well as the cryptographic key generation.	
This paper documents the behaviour of corporate treasurers who are involved in the decision-making process in the areas of cash, inventory, accounts receivable....	
In Australia, laments for the dearth of Australian literature in secondary school and university contexts have frequently surfaced in public debate, yet there has been less attention paid to student perspectives.	

Activity 2

What are these opening sentences about? What is their intention?

Opening sentences	Key intention
This paper compares operational efficiency of major cargo airports in the Asia Pacific region.	
Physical unclonable functions (PUFs) are increasingly used for authentication and identification applications as well as the cryptographic key generation	
This paper documents the behaviour of corporate treasurers who are involved in the decision-making process in the areas of cash, inventory, accounts receivable....	
In Australia, laments for the dearth of Australian literature in secondary school and university contexts have frequently surfaced in public debate, yet there has been less attention paid to student perspectives.	

Activity 3

Abstract 1

1a **This paper documents the behaviour of corporate treasurers** 1b who are involved in the decision-making process in the areas of cash, inventory, accounts receivable, accounts payable and risk management 1b **during the global financial crisis.** (2) Using a survey questionnaire, (3) we attempt to find out if working capital managers are prone to certain heuristic-driven biases, (4) such as loss aversion, high confidence level, anchoring and self-serving biases. (5) Our findings show that these professionals exhibit signs of behavioural biases. (6) Although the biases lead to sub-optimal decisions in certain areas of working capital management (WCM), they can also be desirable attributes in other aspects of WCM. (7) We propose a profile of a good working capital manager.

Source: Bora, R.V., Zhao, Y., Moosa, I., Graham, M., (2014). "A behavioural finance approach to working capital management". *The European Journal of Finance*, RMIT University Research Repository.
URL: <https://researchbank.rmit.edu.au/view/rmit:28858>

Activity 4

Abstract 2

(1) In Australia, (2) laments for the dearth of Australian literature in both secondary school and university contexts have frequently surfaced in public debate, (3) yet there has been less attention paid to student perspectives. (4) This article discusses (5) a small-scale survey undertaken with creative writing students enrolled in Contemporary Australian Writing at RMIT University (6) to capture their views about Australian literature. (7) The results of this survey indicate that a hybrid approach based on techniques derived from both creative writing and literary studies appears to have a positive effect on the attitudes of students towards Australian literature.

Keywords: Australian literature, creative writing, literary studies

Source: Magner, B. (2015). "Not all gumnuts and outback': Exploring the attitudes of creative writing students towards Australian literature". *Text*, March issue. URL: <http://www.textjournal.com.au/april15/magner.htm#joh>

Activity 5

Abstract 3

(1) This paper compares operational efficiency of major cargo airports (2) in the Asia Pacific region. (3) The multi-dimensional scaling cluster analysis by R-square method was used as the benchmarking tool (4) to provide airport management with a means to examine various aspects of their operational efficiency against those of other airports. (5) Ten operational efficiency factors for the clustering and efficiency estimation of airports in the Asia Pacific region were used (6) in a regression model (7) to overcome the complexity of a multi-dimensional scaling approach. (8) The resulting classification is used (9) to identify the efficiency benchmarks of leading air cargo airports, (10) with particular implications for Incheon airport in Korea.

Keywords

Asian Pacific Cargo Airports; Operational Efficiency Index; Multidimensional Scaling Analysis; Benchmarking Practices; Regression Model

Source: Chung T., Ahn, W., Jeon, S., and Thai, V.V. (2015). "A benchmarking of operational efficiency in Asia Pacific international cargo airports". *The Asian Journal of Shipping and Logistics*. Vol. 31, 1, pp 85-108.

Activity 6

Abstract 4

(1) Physical unclonable functions (PUFs) (2) are increasingly used for authentication and identification applications as well as the cryptographic key generation. (3) An important feature of a PUF is the reliance on minute random variations in the fabricated hardware to derive a trusted random key. (4) Currently, most PUF designs focus on exploiting process variations intrinsic to the CMOS technology. (5) In recent years, progress in emerging nanoelectric devices (6) has demonstrated an increase in variation as a consequence of scaling down to the nanoregion. (7) To date, emerging PUFs with nanotechnology have not been fully established, but they are expected to emerge. (8) Initial research in this area aims to provide security primitives for emerging integrated circuits with nanotechnology. (9) In this paper, we review emerging nanotechnology-based PUFs.

Keywords: physical unclonable functions, hardware security, nanoelectronic devices, nanotechnology, reconfigurable PUF, strong PUF.

Source: Gao, Y., Ranasinghe, D.C., Al-Sarawi, S.F., Kavehei, O. & Abbott, D. (2016). 'Emerging Physical Unclonable Functions With Nanotechnology'. *IEEE Access*, Vol. 4, pp 61-80.

Activity 7

Abstract 5

(1) To report the case of a 73 year old male with low back pain presenting to a chiropractic teaching clinic in whom an abdominal aortic aneurysm (AAA) was fortuitously found on plain film radiography. (2) CLINICAL FEATURES - The patient presented with a 3 week history of sudden onset low back pain of minimal-to-moderate severity, which he attributed to walking. The physical examination findings, including an unremarkable abdominal examination, suggested a diagnosis of acute mechanical low back pain. Plain film radiographs demonstrated an AAA measuring 8.5 cm in transverse diameter. In a retrospective file review, clinical risk factors for AAA were present.(3) INTERVENTION AND OUTCOME - The patient was referred to his general medical practitioner and subsequently to a vascular surgeon. He underwent surgical repair with Dacron graft prosthesis. His back pain resolved the day after surgery. (4) CONCLUSION - AAA may present as low back pain, and thus it is important to actively exclude the condition in 'at risk' patients. Risk factors include male patients 65 years and older presenting with abdominal and/or low back pain, a significant smoking history, increased weight, cardiovascular disease, vascular claudication, chronic obstructive airway disease, and a first degree relative with AAA. Patients at risk need urgent referral for appropriate imaging and/or vascular surgical opinion.

Keywords: aneurism, abdominal, low back pain, chiropractic

Source: Crawford, C. (2003). "Abdominal aortic aneurysm presenting as low back pain: a case report." *Chiropractic Journal of Australia*, Vol.33, no. 3, pp. 83-88.

Activity 8

Choose TWO of the abstracts above and list their grammatical subjects (at the start of each sentence).

Sentence subjects (themes)

Abstract:	Abstract:

Activity 9

Select the appropriate verb tense (present simple or past simple) in the following abstract:

An increase in storm frequency and intensity (1) *is / was* expected for the Mediterranean area. The aim of this study (2) *is / was* to assess the risk of soil erosion in sub-basin croplands in Tuscany, Italy. We (3) *explore / explored* the potential response of soil erosion patterns to changes in temporal distribution and intensity of rainfall events, land-use, and soil conservation management practices by analyzing various scenarios. Most soil erosion (4) *is / was* associated with a limited number of intensive to extreme rainfall events. An analysis on a sub-hourly basis (5) *is / was* carried out using the SWAT model. Our analysis (6) *highlights / highlighted* three specific management strategies that may help in preventing or reducing cropland erosion. We (7) *predict / predicted* that these strategies could reduce erosion by up to 25% in the studied area over the next ten years.

Source: Wallwork, A. (2013). *English for academic research: grammar exercises*. New York: Springer Science + Business Media. DOI: 10.1007/978-1-4614-4289-9, p.109.

Activity 10

1. Choose THREE of the abstracts from activities 3-7.
2. Identify the **verb tenses** used in each sentence.
3. Can you explain their function?
4. Are there any verbs that would be more effective with a change of verb tense?

Abstract a	Abstract b	Abstract c

Activity 11

A. Download FIVE (5) abstracts related to your research topic from different journals.

OR

Select FIVE (5) abstracts from ONE high-ranking journal in your field.

B. For each abstract, note and/or mark the following:

1. Order of presentation: the function or purpose of each sentence.
2. Opening sentence – starter points/function.
3. Sentence subjects: Use of 'I' or 'we'; 'this paper'; Participants...
4. Verb tenses in each sentence.

C. Are there any obvious differences in the abstracts? Can you explain why?

Activity 12

1. Follow the information you gathered in Activity 11.
2. Write an Abstract related to your current research, or a topic of interest.

OR

3. Find a high ranking journal in your field of research.
4. Write an abstract to the house style of the journal.

Ongoing Activity

Practice summarising your research as in abstract form. This will help you to develop your academic voice.