What Makes an Effective Abstract in Sport Science?

HONGYOU LIU1  CHANG HUAN2  JESUS VICENTE GIMENEZ-GALANES1
1 Faculty of Physical Activity and Sport Science, Polytechnic University of Madrid, SPAIN
2 Qufu Normal University, CHINA

Published online: March 25,  2013
(Accepted for publication February 15, 2013)

DOI:10.7752/jpes.2013.01009;

Abstract
Writing an efficient abstract is always a difficult and significant work in academic writing. What kinds of abstracts are well reputed in sport science? To answer this question, 20 abstracts from top journals of sport science were analyzed in the current research. The number of words and rhetorical moves were studied to assess the structures of the abstracts. Meanwhile, the key clauses, citations, the use of first person pronoun, the adoption of abbreviations and acronyms, hedging and the main tense were included in the analysis of the writing skills. Results have show: (1) Almost all of the abstracts were non-structured, and the length varied a lot, but the average word count was about 210-220; (2) the use of writing skills, such as key clauses, citations and hedging differed depending on the preference of the journal where the abstract appeared, and the main tense was selected based on the context of the abstract. In most cases, abbreviations and acronyms were allowed to be used, while the first person pronoun was always avoided.

Key words: Sport Science, Papers, Abstracts, Writing Skills

Introduction
To a large degree, whether a paper could be admitted or not is initially determined by the quality of its abstract. It pelays a crucial role in international scientific communication and gives the basic information of the paper, so its quality could convince or ruin the interest of reviewers and readers to explore the rest of the paper. What is called for in an effective abstract in the field of sport science? This article tries to give some specific instructions by analyzing the abstracts from two of the most reputable journals in sport science -- European Journal of Sport Science and Journal of Sports Sciences (hereinafter referred to as EJSS and JSS respectively).

The aims of this study were: (1) to investigate the structure and writing skills of the abstracts from the above two journals; (2) to compare the differences of their demands for abstracts; and (3) to provide some guidelines for authors and translators to formulate abstracts in the field of sport science.

Methodology
Respectively, 10 abstracts of recently published articles from the two journals were chosen as the objects of the current research. Two perspectives of the abstracts were analyzed in the study: “structures” and “writing skills”. Firstly, the number of words and rhetorical moves were taken into the previous aspect. Secondly, the key clause, citations, the use of first person pronoun, the use of abbreviations and acronyms, hedging and the main tense were included in the analysis of the later aspect.

Results

1. Structures of Abstracts

<table>
<thead>
<tr>
<th>Journals</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EJSS</td>
<td>10</td>
<td>129</td>
<td>343</td>
<td>219.7</td>
<td>71.3</td>
</tr>
<tr>
<td>JSS</td>
<td>10</td>
<td>146</td>
<td>290</td>
<td>211.3</td>
<td>40.6</td>
</tr>
</tbody>
</table>

It could be clearly seen from Table 1 that average words of abstracts from both the journals were about 210-220. However, with the maximum of 343, minimum of 129 and the standard deviation of 71.3, the EJSS had definitely more variety on word numbers than JSS (SD. = 40.6).
Rhetorical moves

Normally, the rhetorical moves of an abstract include: (1) background or introduction; (2) purposes; (3) methods; (4) results; (5) conclusions or suggestions. The abstract that is arranged according to the rhetorical moves (often with the indication of the moves) is named “structured abstract”.

Table 2 Rhetorical Moves of Abstracts

<table>
<thead>
<tr>
<th>Rhetorical Moves</th>
<th>EJSS Frequency</th>
<th>Percent</th>
<th>Rhetorical Moves</th>
<th>JSS Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)-(2)-(4)</td>
<td>1</td>
<td>10</td>
<td>(2)-(3)-(4)</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>(3)-(4)-(5)</td>
<td>2</td>
<td>20</td>
<td>(3)-(4)-(5)</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>(1)-(2)-(3)-(4)</td>
<td>2</td>
<td>20</td>
<td>(1)-(2)-(3)-(4)</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>(1)-(2)-(3)-(5)</td>
<td>1</td>
<td>10</td>
<td>(1)-(3)-(4)-(5)</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>(1)-(2)-(4)-(5)</td>
<td>1</td>
<td>10</td>
<td>(2)-(3)-(4)-(5)</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>(2)-(3)-(4)-(5)</td>
<td>2</td>
<td>20</td>
<td>Total</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>(1)-(2)-(3)-(4)-(5)</td>
<td>1</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Both journals seemed not to favor structured abstracts, for only one out of the 20 was structured. What is more, they preferred different “free-style” abstracts. Most of abstracts from EJSS contained the “background or introduction” and “purposes” parts. While the JSS emphasized a more straightforward approach: to clarify the methods and results directly in abstracts. Meanwhile, the abstracts from EJSS were written more freely than that from JSS, for their rhetorical moves were more widely distributed (see Table 2).

2. Writing Skills

Table 3 Using of Different Writing Skills in the Abstracts

<table>
<thead>
<tr>
<th>Writing Skills</th>
<th>EJSS Used</th>
<th>Not Used</th>
<th>JSS Used</th>
<th>Not Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Clause</td>
<td>3</td>
<td>7</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Citation</td>
<td>0</td>
<td>10</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>First Person Pronoun</td>
<td>1</td>
<td>9</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Abbreviations/Acronym</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Hedging</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

Key clause

A key clause in an abstract refers to the first sentence which plays the role of capturing readers’ interest and attention to the text. It would not have to be the key sentence that concludes the main meaning of the text. From Table 3, it could be seen that EJSS seems to welcome this kind of writing, while it did not work in JSS, for none of the abstracts from JSS adopted this skill.

Citation

According to the “Cambridge Advanced Learner’s Dictionary”, citation is defined as “a word or piece of writing taken from a written work”. From the fact that only one of the twenty abstracts had included citations, it seemed both journals did not like citations in their abstracts.

First person pronoun

First person pronoun refers to the pronouns of “I”, “we”, “me” and “us”. In the academic tradition, the avoiding the use of first person pronoun is considered as being objective. It can be seen from Table 3, although it had not been forbidden, first person pronoun was rarely used in the abstracts of the two journals.

Abbreviations/Acronym

An abbreviation is a short form of a longer word, while an acronym is a word composed of the first letters of the words it refers to. Table 3 indicated that abbreviations and acronyms were fully acceptable when necessary in both journals.

Hedging

Hedging is to avoid stating a point too definitely by qualifying it, especially in academic writing. Examples of hedging: adverbs (possibly, perhaps), modal verbs (could, might, may). Table 3 revealed that the
journals’ attitudes to hedging seemed to be totally different. The skill was prevalently used in EJSS, but rarely undertaken in JSS. It sounds that JSS preferred assured ideas, viewpoints, conclusions and suggestions.

Main tense

Table 4 Main Tense Used in the Abstracts

<table>
<thead>
<tr>
<th>Main Tense</th>
<th>Journal</th>
<th>Present</th>
<th>Past</th>
<th>Present + Past</th>
</tr>
</thead>
<tbody>
<tr>
<td>EJSS</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>JSS</td>
<td>0</td>
<td>8</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Choosing the right tense is not always a straightforward issue in academic writing, for different choices may generate different meanings. Generally, the experiment based research would most likely choose the past tense while the literature based ones would most likely choose the present. Table 4 shows that the main tense used in abstracts from EJSS were more flexible, while past tense was more frequently adopted in abstracts from JSS.

Suggestions

Given the analysis above, although the length and framework are not firmly restricted, a non-structured abstract with 210-220 words seems to be welcomed in sport science. It is recommended to apply the writing skills, such as key clause, citations and hedging, depending on the preference of the journal where the abstract would most likely appear. It is also important to select the correct main tense based on the context of the abstract. The abbreviations and acronyms are allowed to be used in most cases, while it is highly suggested to avoid using the first person pronoun.

Acknowledgements

The first author is funded by the China Scholarship Council (CSC). Additionally, the authors would like to thank Professor Sami A. Garabedian from Lebanese American University and Miss Dong Jiqing from Heriot-Watt University for their valuable comments on this paper.

References


Appendix

Analyzed abstracts:


