CONSIDERING FINDINGS IN ACADEMIC PAPER

Summary. The objective of the paper is to analyze the ways in which findings are presented in humanitarian and exact sciences in peer-reviewed international academic papers. The subject of the presented study is structural peculiarities of an academic paper on the example of fifteen papers from peer-reviewed academic journals in the fields of biochemistry, cellular and molecular biology and literature, literary criticism, cultural studies, etc. The methods of the study are a descriptive and a comparative ones; the method of contextual analysis is also used. In the findings of the study different approaches in posing findings in an academic paper have been considered. The results of the study are: 1) Introducing the “Results” Section by the scholars of humanitarian and exact sciences is different: the results in humanitarian academic papers are more generalized than those in exact sciences; 2) The structure of humanitarian academic papers differs from the structure of exact sciences papers: it does not consist of all the components which make up academic paper (it can be without conveying the “Results” and the “Discussion” Sections); 3) The exact sciences academic papers include the structure of all the components of academic paper: Introduction, Materials and Methods, Results, Discussion and Conclusion; 4) There are exact sciences academic papers which do not present the findings of the study in the “Results”, “Discussion”, “Conclusion” Sections as separate ones. The “Results” and the “Discussion” Sections can be combined in one section. Practical value of the given paper is as follows: the offered study can be used by PhD students and scholars working on academic papers to be published in peer-reviewed international journals.

Key words: academic paper, academic paper components, the “Results” Section, the “Discussion” Section, the “Conclusion” Section, peer-reviewed journal, PhD students.

Problem statement. Working on an academic paper is one of the main aspects of scientific work. An academic paper represents certain issues on a specific topic of scientific research. Nowadays submitting scientific publications to the peer-reviewed international journals is not only the requirement of time, but also personal wish of a scholar. Participation in international events and conferences gives the opportunity to be enriched with new experience, share knowledge and considerably increase scholars’ professional level.

Connection with previous studies. Writing skills competence is still the object of scientific interest among the researchers. There is a large number of scientific works and studies devoted to academic writing among Ukrainian and foreign scholars. These are the names of such prominent and well-known scholars as T. Yakhontova, O. Cherniavska, L. Zilberman, K. Moore, C. Norris, T. Kotze, C. Coffin, J. Swann etc. Academic writing teaching in institutions of higher education in Ukraine is of particular interest as it is of a great significance in international communication. Academic writing is also of particular importance due to the common European higher education area; in terms of international exchange development and academic mobility [23].

It is also worth mentioning that teaching staff from Oles Honchar Dnipro National University (Department of Foreign Languages for Humanitarian Specialties) together with the staff from four prominent universities from Kyiv, Lviv, Kharkiv and Mykolaiv take part in Erasmus+ EU Project “Structuring Cooperation in Doctoral Research, Trans-
ferrable Skills Training, and Academic Writing Instruction in Ukraine’s Regions” /DocHub/. The result of this mutual cooperation and fruitful work is the developing of course syllabus “Advanced English for Academic Communication”.

**Purpose and tasks of the study.** The purpose of the presented paper is to focus on writing a detailed description of how to present the findings of the research work and how to prepare namely the “Results” Section of an academic paper as “the requirements for scientific publications in order to reflect the main results of scientific work” [24]. The task of the paper is to scrutinize fifteen academic papers in humanitarian and exact sciences academic journals (“International Journal of Language and Linguistics”, “Advances in Biochemistry”, “Science Journal of Chemistry” for the period of 2017-2018), define and trace the patterns of presenting the findings in an academic paper: separately or in one paragraph, combining the “Results” and “Discussion”, or “Discussion” and “Conclusion” Sections together.

**The main body of the study.** It is worth pointing out that the requirements for the scientific publications vary in the Ukrainian peer-reviewed academic journals and international ones. Besides, many academic disciplines have different guidelines for organizing an academic paper. One should always check over the basis layout for the paper he/she is working on [11]. Traditionally, the components of an academic paper for the Ukrainian peer-reviewed journals are as follows: Introduction where scientific development of the analyzed question is presented; theoretical and methodological basis of the academic research. In the latter part the latest scientific studies are reviewed; Objective of the paper, Main body, Conclusion and References. It is worth pointing out that an academic paper for publishing in international academic journal contains more components. According to European standards, the components of an academic paper are the following: Introduction, Problem statement, Analysis of recent researches and publications, Objective of the paper, Object of analysis, Methods or methodology research, Results, Discussion, Conclusion; tables or figures (optional) and References. In order to correspond to today’s time and enter European scientific world, Ukrainian learned society and scholars tend to follow European norms as for structuring academic papers. Thus, in the “Introduction” Section the formulation of the problem under study is presented. This section may be presented as “inverted pyramid”: to start broad and narrow down to a specific thesis or research question” [11]. The basic idea of scientific publication (with new consideration of the problem under study, complementing already known approaches) is formulated in the Objective paragraph of the paper. The bulk contains a statement of the author’s analysis, ideas and facts. The “Methods” or “Methodology” Section provides comprehensive instructions and explanations regarding the analysis or experiment. Detailed description of the experiment design is also provided in the “Methods” Section. According to the experts on academic writing, this section “justifies the research done by either showing that the author has done his/her homework and/or has a clear understanding of research methods” [11]. The “Results” Section of the study is expressed briefly, clearly and concisely. This section relies on primary research and catalogues the findings of the study or experiment [11]. If an academic paper is devoted to the analysis in the field of exact sciences, tables, figures, pie-charts and graphs are enclosed to help perceive the proposed information. It is also expedient to add, the graph material can be enclosed not only when presenting findings in exact sciences academic paper, but also in humanitarian ones. In the “Discussion” Section the significance of an academic paper findings are explained. This section “posit an interpretation of the results that is reasonable and precise” [11]. Finally, the “Conclusion” Section summarizes the main results of the analysis with a projection on the prospect of further research. The author of the paper should indicate the
significance of the major interpretation as the “Conclusion” Section should “reinforce the major claims or interpretation in a way that is not mere summary” [11].

The length of an academic paper in most scientific journals is about 20–25 pages or 5000–7000 words. Hence, the length of the “Introduction” Section is 500–1000 words, “Methods or Methodology” is 500–1000 words, the “Results” Section is about 1000–1500 words, “Discussion” Section is 1000–1500 words and “Conclusion” Section is about 1000 words. From T. Kotze’s point of view, the “Introduction” and “Discussion” Sections along with the title, keywords, abstract “are perhaps the most important” elements of an academic paper as they are the “doors and windows” through which a reader is most likely to access the article” [5, p. 3].

Let us turn to the analysis of the fifteen academic papers from the peer-reviewed international academic journals “International Journal of Language and Linguistics”, “Advances in Biochemistry” and “Science Journal of Chemistry” to trace if all of the components of an academic paper for peer-reviewed journals are presented and how the findings of the research in philological, chemical and biochemical issues are demonstrated: in the “Results” Section separately, if the “Results” Section is combined with the “Discussion” Section or the “Discussion” Section is united with the “Conclusion” Section. It is interesting to note, “there is no fixed recipe for presenting the findings of a study” [5, p. 53].

Proceeding from theoretical works of experts dealing with academic writing, the “Results” Section should contain the following elements: summary of key findings; logical sequence of findings presentation; availability of tables, figures, graphs, diagrams. Having scrutinized fifteen academic papers, it is worth mentioning, each paper has abovementioned elements. The findings are presented in a systematic and logical way. It is also necessary to add that in most papers of exact sciences, findings are demonstrated not only in a text form, but also with tables, diagrams, drawings, graphs and figures than in papers. The given non-textual elements facilitate the perception of information. The “Results” Section in all analyzed academic papers begins with the text information and with the reference to the numbered and entitled tables, graphs and figures. Graphic elements serve as additional information without duplicating the text.

It is properly noted by the scholars, on the one hand, the work on the “Results” Section may seem to be “the easiest part to write in theory”; it may not cause difficulties, because it is about the author’s own achievements and findings, his/her independent research and originality of thoughts. On the other hand, summarizing information in the “Results” Section can be complicated, and “a little tricky, because it is very easy to include too much information and bury the important findings” [17]. Working on an academic paper he/she should be mindful and “keep an eye on the details, because, when writing an academic paper, the devil is in the details” [5, p. 1]. According to T. Kotze, who quotes J. Summers’s standpoint in his work “Guidelines on Writing a First Quantitative Academic Article”, “you do not have to be an award winning novelist or rousing poet to report the results of a well-conceptualised and executed study. You only need to be organised, accurate, clear and concise in your writing” [5, p. 1].

There is no single viewpoint among the specialists on the methodology of an academic paper writing how to submit the “Results”, “Discussion” and “Conclusions” Sections (we mean separately or in one paragraph) as these sections are closely connected.

From the scholars’ point of view, presentation of the “Results” and “Discussion” Sections “may be less or more complex sections of writing” [19]. When the author represents these sections as separate paragraphs, he/she can focus on his/her own findings. Scholars believe that findings “can not be united into the “Results” and “Discussion” Sec-
It is also a disputable question on how to present the “Discussion” and “Conclusion” Sections in an academic paper as “it is not always easy to distinguish the “Discussion” and “Conclusion” Sections [25, p. 118]. The difference between these sections is “more likely conventional and depends on commonly accepted standards of a certain field of study” [25, p. 127].

The table below “Findings Presentation in Humanitarian and Exact Sciences Academic Papers” demonstrates the findings presentation in the “Results”, “Discussion” and “Conclusion” Sections, if they are used by the authors of the academic papers and in which way: separately in the “Results” Section or being combined in the “Results” and “Discussion” Sections. The first seven papers refer to humanitarian fields and the rest eight papers inhere to exact sciences field. Thus, we may note, in 1 out of 7 philological papers findings are presented separately in the “Results” Section. Moreover, not all the components required for academic papers are presented. In 4 out of 8 exact sciences papers findings are presented separately in the “Results” Section. The 10th, 11th, 13th and 14th academic papers do not have the “Results” and “Discussion” Sections, but the findings are illustrated in the combined sections “Results” and “Discussion”. In 15 out of 15 academic papers the “Conclusion” Section is revealed, and in none of the papers the “Discussion” and “Conclusion” Sections are combined. It is an obvious fact that the studied exact sciences academic papers are more structured in depicting the research than philological papers. Such difference in structure and usage of academic paper components depends on the sphere of the scientific research, subject of the study and subjective author’s approach to academic paper writing.

Table 1

<table>
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<tr>
<th>Title of the article</th>
<th>Ways of Findings Presentation</th>
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<tr>
<td></td>
<td>Results Section</td>
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<tr>
<td>Academic Paper 1. A Comparative Study of a Multi-Dimension/Multi-Feature Approach Between Chinese Debate and Speech</td>
<td>–</td>
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<tr>
<td>Academic Paper 2. Translation and Adaptation in Dissemination of Foreign Literary Works: A Case Study of Robinson Crusoe</td>
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<td>Academic Paper 3. An Analysis of “Beauty of Death” in Edgar Allen Poe’s Poetry</td>
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<td>Academic Paper 4. On Rhetorical Functions of Nar-</td>
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<tr>
<td>Academic Paper 8.</td>
<td>Antioxidant, Antiquorum-Sensing and Antibiofilm Activities of Balanitesaegyptiaca (L.) Del. (Balanitaceae) and TerminaliamacropteraGuill. andPerr. (Combretaceae)</td>
</tr>
<tr>
<td>Academic Paper 9.</td>
<td>Biochemical Study of the Effects of Insulin Resistance on Sex Hormones in Men and Women Type-2 Diabetic Patients / Meisan-Iraq</td>
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<tr>
<td>Academic Paper 11.</td>
<td>Synthesis of n-Butyl Lactate by Transition-Metal-Substituted Phosphotungstic Acid Salt</td>
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<tr>
<td>Academic Paper 12.</td>
<td>Consideration of Contamination Status of Soils within the Vicinity of Automobile Workshops in Warri, Delta State, Nigeria</td>
</tr>
<tr>
<td>Academic Paper 14.</td>
<td>Phytochemical Screening, Chemical Composition and Antioxidant Activity of Leaves and</td>
</tr>
<tr>
<td>No.</td>
<td>Academic Paper 15. Polymorphism of the Beta Gene in Homozygous Sickle Cell Patients in Senegal and Its Influence on the Main Complications of the Disease</td>
</tr>
</tbody>
</table>

When working on the “Results” Section, it is important to comment on the findings which, according to the author of the paper, could not be achieved during the study or experiment, as expected. They should not be ignored, one should “document them, then state in the “Discussion” Section”, explaining “why you believe a negative result emerged from your study” [14]. This aspect mainly concerns such specialties as “Chemistry”, “Organic Chemistry”, “Biochemistry”, etc. in which laboratory experiments can be carried out. Submission of the “Results” Section without indicating “negative” results not only devalues the research work, but it is also considered to be a spoiled scientific experiment and “extremely bad science” [18]. The abovementioned information gives us the grounds to understand how important it is to pay special attention to the description and characteristics of the negative results of the study or experiment, because, in fact, this will be the material for writing “a more engaging”, interesting and “significant “Discussion” Section [18; 9]. So, we should not be afraid of highlighting “negative results”.

The information provided in the “Results” Section must be substantiated, clear, concise and objective. Repetitions and explanations should be avoided as “it is necessary to provide the results of the research without their interpretation or evaluation; instead, the “Discussion” Section should be referred to [24]. When presenting the findings, the author should provide enough details to properly justify the conclusion “to enable the reader to understand exactly what you did in terms of data analysis and why” [5].

Depicting the findings in the “Results” Section, it is expedient to provide the most important, verified facts and objective data, it is unnecessary to provide inaccurate calculations and unconfirmed information, the author of the academic paper should avoid discussions (as there is the “Discussion” Section), repetitions. It is necessary to clarify the value and significance of your research.

Based on the aforementioned analysis, the following aspects should be inserted in the “Results” Section when presenting findings:

1. The results of the study must be precise, concise and clear.
2. All facts should be submitted in chronological order.
3. The results of the analysis presented in a text form should be supplemented with tables, graphs, drawings and other non-textual elements.
4. Each drawing and table must be numbered and entitled.
5. Required links to the tables, charts, figures etc. should be indicated in the text of an academic paper. Graphic material should not duplicate the text, but only serve as a supplement.
6. Tables by order should be placed either after the references or in the text of the study (depending on the requirements for the publications in peer-reviewed academic journals).

**Conclusion.** Consequently, we can draw the conclusion that findings presentation in an academic paper should be clear and concise. It should demonstrate sufficient background information, describing what has been done and what has been achieved. The most important findings must also be mentioned. The significance of the research, dealing
with unexpected outcomes should be pointed out as well. Based on conducted analysis of fifteen academic papers in humanitarian and exact sciences field, namely in the peer-reviewed international academic journals, such as “International Journal of Language and Linguistics”, “Advances in Biochemistry” and “Science Journal of Chemistry” it has been concluded that the differences in presenting the “Results” Section by the scholars are as follows: 1) the results in humanitarian academic papers are more generalized than those in exact sciences; 2) humanitarian academic papers have different structure from that of exact sciences papers: they do not include all the components which make up an academic paper (such as “Results” and “Discussion” Sections); 3) the exact sciences academic papers are structured with all of the components of an academic paper: Introduction, Materials and Methods, Results, Discussion and Conclusion; 4) there are exact sciences academic papers which do not present the findings of the study in the “Results”, “Discussion”, “Conclusion” Sections as separate ones. The “Results” and “Discussion” Sections can be combined in one section. Taking into consideration aforementioned aspects, working on writing an academic paper to be published in peer-reviewed international academic journal can be “challenging, but very fulfilling, endeavour” [5, p. 80].

Perspectives of the study. The presented paper can be useful not only for PhD students as a guidance on an academic paper preparation for being published in peer-reviewed international journals, but it can also arouse interest of those who are eager to advance their academic writing skills. Extensive elucidation of the “Result” Section in the presented paper induces us to reveal another academic paper’s components in further research.

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ПРО ДЕЯКІ ОСОБЛИВОСТІ СКЛАДОВОЇ «РЕЗУЛЬТАТИ ДОСЛІДЖЕННЯ» У МЕЖАХ СТРУКТУРИ НАУКОВОЇ СТАТТІ

Анотація. Мета статті визначається потребою ґрунтовного аналізу такої складової міжнародної наукової статті як «Результати дослідження». Об’єкт вивчення – частина «Результати дослідження», що є одним з основних компонентів академічного письма. Підход визначається різноманіттям вимог до структурних особливостей академічної статті на прикладі п’ятнадцяти наукових статей, опублікованих у міжнародних наукових журналах. Висновки містять узагальнення
Щодо поглядів лінгвістів на складову «Результати дослідження», яка є вагомою структурною одиницею академічної статті. Результати дослідження: 1) складова «Результати дослідження» потрактовується науковцями по-різному: представники гуманітарного спрямування схильні до узагальнень; 2) філологічні наукові розвідки відрізняються навіть за структурою від статей з галузі точних наук: за- галом не презентуються компоненти, що входять до складу наукової статті (наприклад, відсутні такі складові як «Дискусія» та «Результати дослідження», самі результати подано в частині «Висновки»); 3) у наукових статтях, створених представниками точних наук, наявні всі компоненти статті: вступ, матеріали та методи, результати, обговорення та висновки; 4) аналіз наукових статей зазначив, що результати дослідження в галузі точних наук подаються у висновках, а такі складові як «Результати дослідження» та «Дискусія» у деяких статтях або відсутні загалом або об’єднані. Практична значимість даного дослідження полягає в тому, що його результати можуть зацікавити студентів, здобувачів наукового ступеня «Доктор філософії», а також дослідників, які подають свої винаходи до міжнародних академічних рецензій наукових видань.


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НЕКОТОРЫЕ ОСОБЕННОСТИ СОСТАВЛЯЮЩЕЙ «РЕЗУЛЬТАТЫ ИССЛЕДОВАНИЯ» В РАМКАХ СТРУКТУРЫ НАУЧНОЙ СТАТЬИ

Аннотация. Цель статьи определяется необходимостью детального анализа части международной научной статьи «Результаты исследования». Объект изучения – часть «Результаты исследования», которая является одной из основных составляющих академического письма. Предмет представленного исследования – структурные особенности академической статьи на примере пятнадцати научных статей, опубликованных в международных рецензируемых академических журналах в областях биохимии, клеточной и молекулярной биологии, литературы и культурологии. При анализе применялись описательный и сравнительный методы исследования, а также метод контекстуального анализа. Результаты исследования: выявлены различные подходы к изложению результатов исследования в научной статье. Выводы: 1) составляющая «Результаты исследования» демонстрируется учеными по-разному: представители гуманитарного направления склонны к обобщению; 2) структура филологической статьи отличается от структуры статьи точных наук: не представлены все составляющие академической статьи (например, отсутствуют такие части, как «Дискуссия» и «Результаты исследования», а результаты анализа представлены в части «Выводы»); 3) научные статьи, представленные исследователями в области точных наук, состоят из всех компонентов, а именно: вступление, методы исследования, результаты, дискуссия и выводы; 4) по результатам проведенного анализа было выявлено, что результаты исследования в области точных наук представлены в «Выводах», а такие составляющие статьи, как «Результаты исследования» и «Дискуссия» в некоторых статьях не представлены или объединены. Практическая ценность данной статьи состоит в том, что ее результаты могут заинтересовать студентов и ученых степени «Доктор философии», а также исследователей, которые по- ют результатов своих научных трудов в международные рецензируемые научные издания.


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