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Analysis of Stylistic and Grammatical Errors in PhD Students´ Research Paper Manuscripts

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The ability to publish research papers is a must for scientists nowadays. Ideally, at the very beginning of their career, young researchers, PhD students, should be instructed in writing research papers and should get feedback on their texts. In this study, the first manuscripts from 22 doctoral students, non-native English speakers, 223 pages were analysed for errors in grammar, spelling, punctuation, and style. For each type of error and each student, the average per page was calculated. The most frequent errors were identified in using articles, formal features, missing information, and the use of inappropriate words. Individual students showed significantly different levels, which reflected their previous language training and the approach (responsibility) to completing the task. The results will be used to modify the course in Academic Writing (more attention paid to the most frequent errors) and individual work with students.

Keywords: academic writing, scientific writing, research paper, PhD student, error

INTRODUCTION

Importance of publishing in English

The last decades have brought increased requirements on scholars and scientists regarding publications. "Publish or perish" aphorism has become a daily reality of researchers. As early as 2013, it was put as "… academics are experiencing rising pressure to increase international publication" (Ingvarsdóttir & Arnbjörnsdóttir, 2013: 123), and since then, the requirements have even escalated. Indeed, without publishing their results, researchers are not recognized. Simply, being able to write for the scientific community is necessary nowadays.

Researchers in their early careers have to face many challenges in this context, e.g. how to design research, formulate persuasive arguments coherently and clearly, or, on the language level, form sentences and use correct grammar in their texts. Constructing a research paper thus needs to be based on research with satisfactory results, much reading, thinking, organizing ideas and writing several drafts of the text to reach acceptance of the manuscript by a journal (Ferguson et al, 2011).

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PhD students as novice researchers are supposed to be able to design experiments relevant to the given goal, and eventually write a research paper independently. This is a challenging task in the beginning; however, if students are guided through the whole process, they will be able to manage.

Because the majority of published expert texts are in English, it is logical that students should develop their skills, including writing, in this language. Even native speakers often have problems in academic writing, as Ferguson et al (2011) states. Logically, an even more difficult situation is for non-native speakers. They are often hindered by the lower level of English and skills that would enable them to formulate statements in a form understandable to their scientific community. The insufficiency reflects in the errors they make (Richardson et al, 2021). However, as said above, writing for an international audience is one of the basic requirements for research workers.

Previously, it was stated that "English holds a near monopoly of published research", which is "a situation unlikely to change in the future." (Galloway & Rose, 2015: 234). This statement was later supported by Mauranen (2015: 31): "… it is of course undeniable that English as an academic language plays a central role in all domains where international concerns are at stake …", highlighting the importance of this language. Even at universities where English is not the native language, the idea that a "good researcher" also means a reasonable level (proficiency) in English has been increasing (Olsson & Sheridan, 2012).

Academic and scientific writing

Academic and scientific writing require skills in organizing ideas and formulating thoughts clearly, accurately and briefly. These are the principles demanded by scholarly journals and are even more pronounced by those with a high impact. Each section of the paper has certain requirements, structure and function (Swales & Feak, 2012). Should it be the formulation of the title, condensed ideas in the abstract and their organization, or categorization of thoughts into appropriate sections, all these require not only expert knowledge in the discipline but also more general knowledge of academic and scientific style. (Note: The fundamental difference between academic and scientific writing can be formulated this way: the former deals with standard features in various academic disciplines, while the latter is field-specific and presents results of particular research.)

One example of the scientific writing course offered to PhD students can be found at the Swedish University of Agricultural Sciences, where students are guided through the publishing process from general guidelines for the target journal. Then, they are instructed on preparing the manuscript by effectively utilizing author guide information regarding the presentation style. Finally, the described course focuses on the process of revising and resubmitting a manuscript, including the guidelines for preparing response letters to referees and editor(s), and revising the manuscript itself.

Another approach to improving PhD students´ writing skills is described in Zhang & Hyland´s (2021) study. In longitudinal research on an example of two students, they followed the effects of community feedback in the context of becoming a member of the disciplinary community, including scientific writing.

To improve their style, students must read relevant texts to get familiar with the vocabulary and obtain expert knowledge. However, they also need to follow and analyse papers from the language and style points of view and then apply the knowledge in their writing. The importance of scientific writing is also proved by Durmuşoğlu Köse et al (2019), who dealt with Turkish graduates and academics.

Practising scientific writing, however, is a demanding task. It requires students´ mental energy and much time since it is very complex. This complexity originates from the fact that the author has to formulate the thesis, provide adequate support for it, and organize the ideas logically from the reader´s viewpoint (Alsamadani, 2010). A further aspect is also giving the paper structure, checking the consistency and language accuracy, and proofreading the draft carefully to ensure error-free writing. Also, Musa (2010) supports the idea that writing is a difficult skill to learn as many components must be considered, such as spelling and punctuation, the use of appropriate technical and academic vocabulary, rules of grammar, or an appropriate style. In this view, early-stage researchers, i.e. PhD students, need to polish individual meta-cognitive skills, including critical thinking in the perception of information, justification of claims, solving problems and making decisions, among others.

Thaiss (2019) divides the writing process into several stages: i) reading to improve writing, ii) writing to learn, iii) drafting, iv) getting feedback, v) revising, and vi) editing. Each phase of a writer´s process contributes to the whole, and each is necessary. These stages should be included in the course for beginning scientists. Unfortunately, university education in general, even at a PhD level, includes little or no scientific writing instruction (Lang et al, 2022).

Scientific writing errors

To specify the expectations of journals where researchers can publish, Kirub (2014) points out the requirements placed on a good scientific paper. These are: i) an accurate description of the research, ii) clear and understandable formulations, iii) use of a suitable style, iv) no jargon or slang, v) adequate illustrative material, and vi) no plagiarizing.

Clear and understandable formulations are often ruined by errors in the text. Analysing types of errors is a valuable tool to improve student's English skills, as said by Zafar (2016). This was also confirmed by Ilani (2016), whose opinion is that if errors are well detected and categorized, they can be an efficient tool in the individual student´s development and contribute to their elimination.

As early as 1971, Richards categorized errors identified among learners of English as a second language this way: i) over-generalization, ii) ignorance of rule restriction, iii) incomplete application of rules, and iv) false concepts hypothesized. These, however, only embrace one aspect of errors; other aspects, like vocabulary or misspelling, are not mentioned. In 1974, Corder classified errors from a more general point of view into four categories: i) omission of some required element; ii) addition of some unnecessary or incorrect element; iii) selection of an incorrect element; and iv) ordering of the elements.

An essential category of errors is created by grammatical ones. Basically, there are two important concepts related to grammar: morphology (formation of words, their structure

and relationships between them), and syntax dealing with the structure of sentences, relations between sentence units, the internal structure of phrases and relations between them (Saxton, 2010). Sinka (2009) specifies the most frequent problems as "the sequence of words and punctuation marks, and linking simple sentences into compound sentences". When connecting sentences and linking them with the rest of the text, errors appear quite frequently.

Lin et al (2020) classify the types of grammatical errors into more categories: omission (missing word), misformation (a wrong form of the word), misuse (a similar word used, not suitable in the context), repetition (using a word, phrase, or clause more than once in a short passage), vocabulary (a wrong word used), the structure of the sentence, misordering (wrong processing of linguistic information), coherence/cohesion (linking elements of a text together), and others.

Other imperfections can also be identified in texts. Wallwork (2016) deals with general aspects of academic written English and points out some types of faults, e.g. redundancy. Thaiss (2019) also deals with this specific inaccuracy in style – wordiness, which means using unnecessary words. Another source of errors can be breaking the rule of parallel structure, i.e. repeating a chosen grammatical form within a sentence (e.g. infinitives, or – *ing* forms, not mixing them in one clause).

A different classification of errors is done by Richards and Schmidt. They distinguish errors into interlingual and intralingual ones. Interlingual errors are those caused by transferring features of the mother tongue (L1) into the second language (L2), e.g. grammatical, lexical, and pragmatic errors. Intralingual errors, on the other hand, are based on overgeneralisations in the target language (Richards & Schmidt, 2002), i.e. on disregarding restrictions of the given rule, lack of application of the rule, and wrong creation of the rules where the knowledge is not complete. They identify four basic types of errors: i) orthographic errors – misspelling, homophones; ii) phonological errors (these, however, are not applied in writing); iii) lexico-semantic errors – use of an unsuitable word in the context (*effect* x *affect*); iv) morpho-syntactic errors – e.g. use of the plural for uncountable nouns, wrong part of speech, inappropriate use of tenses, wrong word order, use of *It is* instead of *There is*, use of prepositions and articles (in both cases omitted, redundant, wrong), missing subject–verb agreement. These categories were later detailed by Strunk (2011) and developed into a number of items:

- unsuitable level of formality (inappropriate register)
- inconsistent style (preposition at the end, shortened form, …)
- division into paragraphs (a paragraph contains more, or less than one topic)
- paragraph structure (topic sentence, support, closing; cohesion, unity)
- division into sentences (sentence contains either more, or less than one idea)
- sentence structure (against functional sentence perspective)
- too much passive
- statements in negative forms
- wordiness
- too long or short sentences in succession
- non-parallel structure

- illogically changing tenses
- unsuitable word
- use of jargon, pretentious words (*fascinating*)
- lack of objectivity (giving the author´s opinion)
- unclear formulation
- syntax
- reference
- repeated words (should be replaced with synonyms).

This Strunk´s (2011) overview was the basis for the qualification of errors in our present study.

Publishers´ requirements

As written above, the accuracy of language, i.e. error-free text, is a fundamental requirement of publishers. In scientific writing, the conventions are highly standardized and guaranteed by journals (Galloway & Rose, 2015). Ingvarsdóttir & Arnbjörnsdóttir (2013: 123) claim that in international publications "… English as a Native Language writing standards seem to be the only accepted norm".

Olsson and Sheridan showed how high-impact journals deal with possible language imperfections in the text. Some are very strict, saying: "Manuscripts may be editorially rejected, without review, based on poor English or lack of conformity to the standards". (Olsson & Sheridan, 2012: 8).

From the above, it is clear that only research papers with clear and accurate language have a chance to be accepted for publication. Some publishing houses offer editing services, of course, for a charge, which means additional expenses for the author. This fact also supports the requirement to instruct PhD students in developing the skills for publishing.

In the submission process, some scientists fail to follow the author guidelines set by the publisher, the result of which is often the rejection of the paper. This is a frustrating experience for writers because they have spent a lot of time and energy constructing the paper. Therefore, the authors should pay attention to the details required by the journal.

In the guidelines, sometimes even the use of tenses is prescribed, such as the consistency in using them in individual sections. Another issue can be the (in)consistency in the use of English variety, i.e. British and American English (*center* x *centre*, *color* x *colour*, etc.). Even if these are minor mistakes that do not change the meaning, they can disturb readers and can spoil the image of the author and his/her intellectual maturity, which discredits them.

Some research papers deal with the structure and other features of research papers, e.g. lately, the first sentences in introductions were analysed (Alanazi & Alqarni, 2022). This very detailed approach, however, is not ideal for beginning authors. What can serve as instruction and is the most popular source for graduate students is the textbook by Swales and Feak (2012), which gives step-by-step guidelines for constructing a research paper, including suitable language structures for each section.

As said above, writing and presenting their results is an integral part of researchers in their early careers, when they still have little or no experience in publishing. Keeping the importance of scientific writing skills in mind, at Tomas Bata University in Zlín, PhD students at some faculties are offered a regular course, the outcome of which is a complete research paper suitable for publication in an international journal. This approach reflects an effort to enable students to undergo a hands-on process of constructing the first manuscript and submitting it for publication under the guidance of an experienced teacher. Developing skills in scientific writing positively affects not only students´ ability to publish, but also the production of impacted publications at the University.

It is inevitable that in the texts of PhD students, some imperfections appear, even if they have obtained the relevant instruction. From the above, it can be understood that there is a need to analyse what types of errors individual learners make. Ellis (1994) divides the process of analysing errors into five stages: sample collection, error identification, classification, explanation and evaluation. The first three steps were also applied in our present study; the remaining two were included in the follow-up course.

To the best of the author´s knowledge, few empirical studies dealing with the issue of errors in the first research paper of doctoral students have been lately published. One exception, with some limitations, may be Rustipa et al (2023), who concentrated on tenses choices and rhetorical patterns of unpublished scientific articles. Aspects of scientific writing were also followed by Suprihatin et al (2023), but attention was paid to instructional textbooks here. Some previous studies focused on texts with general topics, e.g. Hamid & Doan (2014), and were done during the teaching process. Melikhova & Skorobogatova (2020) deal with undergraduate students´ writing, also on more general topics. Only one aspect of writing, grammar, was studied by Alghazo & Alshraideh (2020). Lately, a reflection on writing a study was published by Yang (2023), but the paper is devoted to the student–supervisor cooperation, not the errors in writing. An analysis of university students´ writing was also described by Gardner et al (2019), where students were in different years of study and different disciplines. In our research, the sample was more homogenous and the task was much more complex. The topics were very technical and students had, besides the language side, to follow the individual publisher´s requirements. These texts were collected and analysed to identify errors in doctoral students´ first manuscripts and to apply the findings in further instruction.

METHOD

Sample description

The corpora for error analysis was created from the first versions of research papers which PhD students wrote as one of the requirements in the course of Academic Writing (AW) in the summer term 2021/2022. Totally 223 pages were collected and analysed. The authors were doctoral students at Tomas Bata University in Zlín, Czech Republic, primarily first-year students. As can be seen from Table 1, the sample incorporated 22 participants (9 of them were females and 13 males, making the contribution of males slightly higher than that of females. However, it must be noted that the gender variable is not considered in this study since it did not show any differences in a preliminary

analysis). Three authors were international students (2 Algerians and 1 Indian), the others were Czech. Regarding the specialization, 21 were from technological fields (polymers/biopolymers, environment, food technology, mechanical engineering), and 1 was from humanities, namely pedagogy. The students´ age group ranged from 24 to 45 years, except for one (older) part-time student. The students had gone through a course of AW (2 semesters, 2 lessons a week), at the beginning, they proved level B2 by CEFR.

Table 1
Students´ nationality and lengths of manuscripts

Student´s number	Nationality	Manuscript´s pages	Student´s number	Nationality	Manuscript´s pages
1	Czech	10	13	Czech	10
2	Czech	4	14	Czech	13
3	Czech	8	15	Algerian	13
4	Czech	10	16	Czech	18
5	Czech	4	17	Algerian	11
6	Czech	12	18	Czech	8
7	Czech	8	19	Czech	11
8	Czech	13	20	Czech	11
9	Czech	7	21	Czech	13
10	Czech	12	22	Indian	14
11	Czech	7			
12	Czech	6	Total		223

Course description

To specify the previous training of the authors of the texts, we will describe the course in more detail. The compulsory course of Academic Writing has been taught at Tomas Bata University for about 15 years. The course is realised as hands-on sessions, where students complete a set of writing tasks starting from simple definitions, through process description, data commentary and other types of text, to writing individual sections of a research paper and finally joining them into a compact text, according to the requirements of the journal where they could potentially submit the manuscript. During the course, students learn academic and technical vocabulary connected with their topics, i.e. part of the instruction is scientific-writing aimed, and this knowledge is individually applied to the student´s specific topic.

The course supports their self-confidence in reporting research and develops strategies for dealing with the whole publishing process. It starts with principles and guidelines for academic reading, which is necessary for further writing. The central part, however, is academic and scientific writing (SW) and is based on Swales & Feak – Academic Writing for Graduate Students, 2012. This book is organized from a general approach to AW, through specific types of text used in academia, to constructing a research paper. Thus, the outcome of the course is a complete paper manuscript. However, in completing the task, the students have to go beyond simply writing the manuscript; they also have to find a suitable existing peer-reviewed journal and follow the publisher´s guidelines and requirements. This way, they go through the complete process of writing and publishing scientific text on their research.

Another feature of this part of the course is the supervisor´s participation in the paper´s content. An advantage in the process is that the teacher of AW/SW is also familiar with

the field of technology, including specific vocabulary, because of her multiple education fields.

Thus, the student starts this task by specifying the topic (not the title!) and discussing the most suitable journal with the supervisor. Here he or she gets the fundamental decision factors in selecting the best-suited publisher. Then, they find the corresponding Author Guidelines (which can be called slightly different, but the content is the same). These guidelines are followed from the very beginning of the writing process to avoid further wasting time on modifications. Students can use any tools to produce perfect text in writing: spell checker, dictionaries, etc.

Methodology

Our study endeavoured to find out the most frequent mistakes that each of the students makes in the field-specific paper; thus, the method of error analysis was used. The types of errors were categorized in a preliminary study and are specified in the Results and Discussion section. For their identification, some ideas (those relevant to AW) from Strunk (2011) were used.

The process of error analysis was the following: When students submitted the first version of the complete paper in printed form, the teacher anonymized and carefully read them, analysed individual types of errors and indicated them in a simple method of frequency recording, separately for each student and each type of mistake. The mistakes of each type were then calculated. The corpus was collected during the summer semester of 2021/2022.

For individual manuscripts, also the number of pages was noted. The pages were calculated as the number in the format required by the publisher, or the final version of the manuscript in the standard format (1,800 characters with spaces per page). Then, the average number of mistakes for each student and each type of error was calculated per page. The results are presented in the Results and Discussion section.

FINDINGS AND DISCUSSION

Based on our previous experience and preliminary analysis, different types of errors were set. From the original 36 individual types, finally, 23 were chosen. Some of the original types were joined, some appeared only once or twice in the total amount of texts; thus, these were deleted. Students used a British or American variety of English, as required by the publisher, but in any case, the manuscript was checked for language variety consistency.

The errors were divided into four main categories: grammar, spelling, punctuation, and style. In each of these categories, a different number of sub-categories were identified. The first category included errors in singular-plural agreement and the use of prepositions and articles. The second group contained misspelt words or homophones, and the third one comprised commas, full stops, apostrophes, font consistency, and capitalization. Increased attention was paid to the last category – style - the cornerstone of academic writing. This was divided into several sub-categories. A more detailed description of the error types is given in the following table, including some examples or explanations:

Table 2
Types of errors

Error No	Error type	Example, explanation
1.	prepositions	wrong/missing/extra; wrong form (*in to*)
2.	singular x plural disagreement	subject and verb not in accordance (*medium are, media was*)
3.	articles	missing/extra/unsuitable article
4.	spelling	misspelt words, homophones (*and x end, abreviation of samples* (probably spell checker not used)
5.	punctuation, fonts	commas (in the wrong place, in defining relative clauses), full stops (a full stop before a citation), apostrophes, superscripts, decimal commas, capitalization not consistent; font inconsistency
6.	level of formality	inappropriate register; contractions (*isn´t*), missing *that* in object clauses, sentence-final preposition, direct questions
7.	consistency of style	several long or short sentences in succession; British and American Englishes mixed; formal and informal styles combined
8.	paragraphs	division - more, or less than one topic in one paragraph, structure, cohesion; several consecutive short paragraphs
9.	sentence unity	the sentence contains more, or less than one idea
10.	sentence structure	against functional sentence perspective, i.e. organization of the information (*theme – rheme*), word order, missing subject or verb, two subjects, figure (number) at the beginning, sentence not finished
11.	use of passive	too often used, or absent where it should be, incorrect form (missing *be*), wrong form of the main verb
12.	wordiness	extra words, not necessary for the meaning (*blue colour*)
13.	use of tenses	tenses in individual sections not suitable for the given purpose; inconsistent tenses, past perfect for the experiment results; present continuous tense for general statements Note: wrong use of tenses was calculated for each appearance.
14.	unsuitable words	non-parallel structures (inf. x *-ing*); unsuitable part of speech (verb x gerund x noun x adjective x adverb); word with a different meaning/use (*except* x *beside*)
15.	unclear formulation	unclear formulation (*from 15-25 parts*); the name of "Czech Ministry of Education" mangled
16.	use of citations and references	missing citation with very concrete information, the wrong numbering of citations, inconsistent form (numbers vs. author + year), no latest source in references
17.	the same words repeated	Note: not every repetition was calculated; in the same paragraph repetition calculated only once
18.	missing words	unclear ideas
19.	extra words	words that should not be in the sentence from the structure point of view (different from wordiness)
20.	author guidelines of the target journal not followed	long conclusion instead of the required short one; general statement in conclusion instead of in intro; ideas not in the correct section; numbering of sections, comments and the figure do not match
21.	trivial/unsuitable/ repeated information	unsuitable info (*inch* instead of the required SI unit); the same idea repeated more times; figure caption both inside and below the figure
22.	missing information	the gap in the previous research not specified; missing accurate specification of samples, details of the experiment, statistical treatment of data; in discussion – missing comparison with previous research, differences between individual samples not explained
23.	wrong use of abbreviations, symbols	abbreviations not explained, not introduced at first appearance, not in the same form, introduced in abstract but not used any more there, introduced more times, not used consistently; unknown symbols not explained; full words instead of symbols (*second* x *s*); inconsistent symbols (subscript x common font)

The text analysis results are given here from two points of view: by the type of errors, and by students. The purposes were: In the former case, to indicate the frequency of individual types of errors and in future activities in the course to deal more with them; in the latter case, to pay attention to individual students with a higher number of errors. To get comparable results, the frequency was calculated per page as an average ± standard deviation.

The results provide insights that could contribute to more beneficial guidance in the mentioned AW course. They can help the teacher understand what linguistic aspects are problematic for students in scientific writing and practice them, as also stated in Khatter´s study (2019).

Figure 1 presents types of errors as they appear in all manuscripts. As can be seen, the average number of errors (No 24) was 0.47±0.35. This high standard deviation clearly shows that the numbers are spread over an extensive range. The most frequent errors were No 3, articles (1.39 per page), 5, punctuation, fonts – more formal aspects of the text (0.89 per page), 22, missing information (0.82 per page) and 14, inappropriate words (0.81 per page). The errors can be categorized into two groups: level of English and writing in general, and organization of ideas and vocabulary in the specific field. The frequency of the first group of errors can be reduced by some drill, either at school or, preferably, individually by self-study on exercises recommended by the teacher, and the other types by writing.

The errors could have several reasons. They frequently reflect literal translation from the L1 into English (L2) – mother tongue interference, e.g. use of articles. Interlingual errors occur when learners transfer their syntactic knowledge into the use of L2. Errors in the word form included confusion of adjectives and adverbs, nouns and adjectives, -*ed* and -*ing* adjectives, which means a lack of vocabulary knowledge (Khatter, 2019). The errors in pluralization comprised omission of the plural morpheme *'s'* or incorrect pronoun. In texts, a lack of subject-verb concord was also identified, e.g. missing the (-*s*) 3rd person singular marker.

Another cause of errors can be intralingual, i.e. misuse of rules of the target language, such as overgeneralisation, ignorance of rule restriction, insufficient application of rules, and false concepts hypothesised (Richards, 1971).

The other edge of the scope, minimum frequency, is occupied by No 6, level of formality (0.05 errors per page), 9, sentence unity (0.08 per page), 11, use of passive (0.11 per page), and 7, consistency of style (0.13 per page). This finding indicates that students have acquired the knowledge from the course in academic/scientific writing, as these aspects were covered in the course. It proves that most of the course content is suitably designed and brings students the desired knowledge.

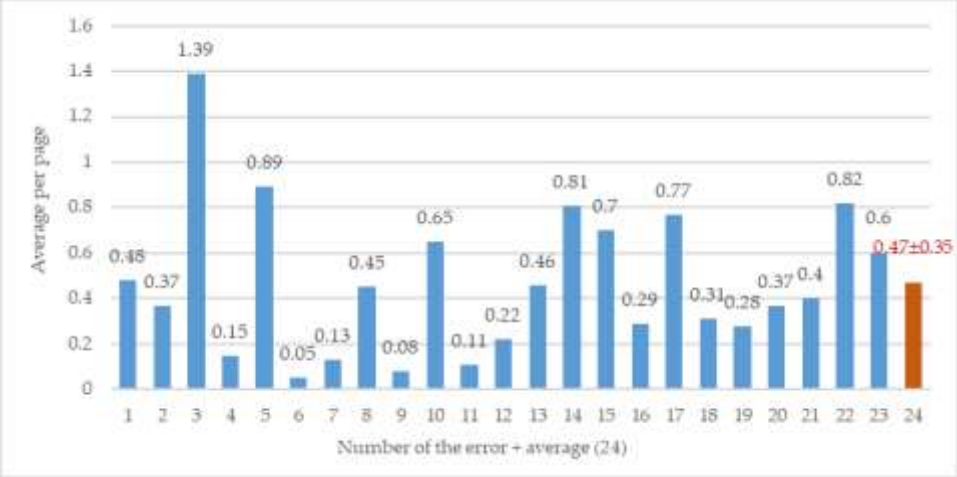

Figure 1
Frequency of individual errors per page

The other aspect of the research was identifying the individual student´s gaps in their knowledge. The overview is given in Figure 2. From the data, we can very carefully guess the effect of nationality on the number of errors created. This carefulness is caused by the fact that there were only three international students, which is about 14% of the participants. All these students were in the better half, i.e. made fewer mistakes in the text. This was partly expected as for these students; the knowledge of English is vital because this language is the only means of communication in a foreign environment.

Regarding individual students, the highest number of errors was identified for student No 5, as much as 40.25 per page. This number, however, may be questioned by the very few pages of the manuscript (only 4 pages, which is common in the student´s field). The most frequent errors were in articles and formal features, such as punctuation and fonts. The second least successful student was No 20, with 26.82 errors per page. Here the most common error types were 17 and 14, i.e. repeated and inappropriate words, unclear formulations, and 15, articles. The third and fourth results are very close, students No. 7 and 16, with 17.13 and 16.89 per page, respectively. Also here, the most frequent errors were in articles.

The best results, on the other hand, were reached by student No. 15, with only 2.31 errors per page (an international student), with only few mistakes, mainly in not following precisely the publisher´s guidelines. The second-best text was submitted by student No 3 (4.88 errors per page), with prevailing flaws in articles. The third best position is occupied by student No 4, with 5.7 errors per page; again, articles were the main problem. The next among the best students was No 10, with 6.08 errors per page. This was a specific case; the errors were more or less evenly distributed among the categories.

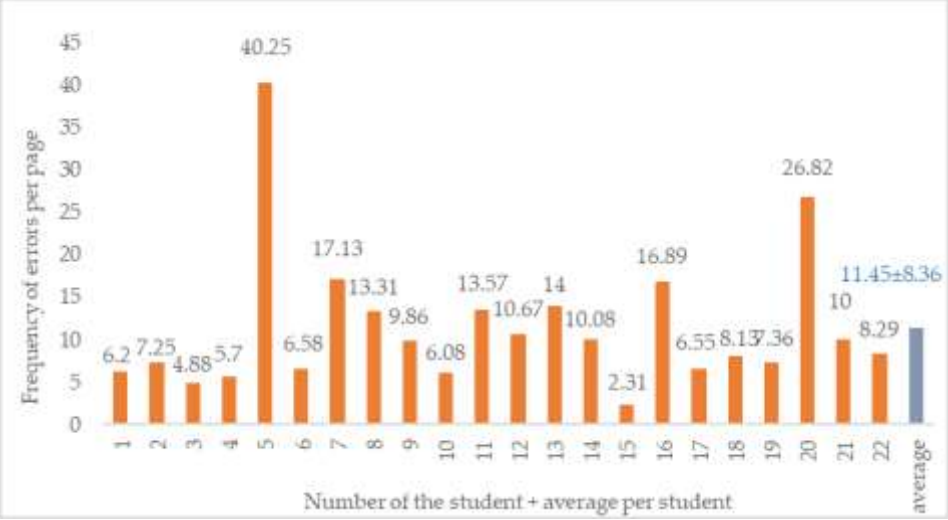

Figure 2
Frequency of errors for individual students

As given above, the crucial problem in students´ use of language and style for scientific writing is using articles. This is quite understandable for domestic students since in the Czech language, no articles are used.

The difference in the number of errors indicates that the teacher´s individual feedback to each student is necessary in this context. As reported earlier, this should lead to improved students´ self-regulated strategies, (Yang et al, 2023). The mentioned feedback, however, is not simple. It should deal with linguistic and genre knowledge, knowledge of the discipline (specific vocabulary and argumentative strategies), the readiness to accept and understand the teacher´s assessment, but also the ability to control emotions (Yu & Liu, 2021).

It is crucial to keep in mind that not only students but also the teacher learns from the feedback he/she provides. It develops their capacity in teaching disciplinary literacy (Seah et al, 2022).

CONCLUSION

Our very practically oriented research has revealed how (in)accurate texts PhD students can construct as their first research paper. From the corpora of 223 pages analysed, the following can be concluded:

- Even after the Academic Writing course, these post-graduate students still face writing problems, may it be in sentence construction, style, coherence and cohesion, or following paper guidelines given by the publisher of the target journal.
- In some cases, students apparently used Google translate, or translated from their mother tongue word-by-word, as seen from non-English sentence structures.

- Individual students need specific attention in various language aspects. This could be done by assigning corresponding tasks for self-study.

From a more general point of view, the research approved that

- Even if the basic rules are followed, the styles in individual disciplines differ.
- What is "in style" seems to change through the years. However, the level of formality is still quite important in research articles, as Hyland & Jiang (2017) proved.
- In the analyses of similar texts, the suitability of language means must be considered in context. Thus, it would not be correct to recommend only one way of formulation in general; the only 'it depends' approach is correct.

The research limitations may be given by a relatively small sample of texts. On the other hand, it covered all the participants in the course. Another drawback might be seen in assessing the texts by only one teacher since each instructor might emphasize specific ways while de-emphasizing others. However, one assessor assured a consistent approach.

In future, after applying the findings in modifying the course of Academic Writing, a similar study can be carried out and the impact of implemented changes followed. Another interesting direction can be searching for the causes of errors; however, this is beyond the present study scope.

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