

## Lithuanian academic phrase usage in bachelor's theses of five main fields of science

### *Lietuviešu akadēmisko frāžu lietojums piecu zinātņu nozaru bakalaura darbos*

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The aim of this study is to discuss Lithuanian academic phrase usage in students' writings of five main fields of science: Biomedical sciences (B000), Physical sciences (P000), Human sciences (H000), Social sciences (S000), and Technology-engineering (T000). The research is based on material collected from data corpus that was constructed for the project "Phraseme research in student writing and interactive list of phrasemes".

Lithuanian researchers have so far focused on automatic identification of Lithuanian multi-word expressions, as well as on preparation of general corpora or databases and lists of collocations. While English- and German-speaking students can use specific lists of academic words, phrases, and online academic phrase banks, as well as training (learning) platforms that help to write research articles, to date, just one similar interactive tool has been established in Lithuania.

The study will focus on discussing the most frequently used academic words and phrases and their types. Firstly, phrases will be classified according to the structural parts of the research text: introduction, sources of delivery, description of methodology, presentation of results, discussion, and conclusions (cf. Swales 1990, 2004). Next, the research relies on Hyland, 2008a classification of functions of lexical bundles, with the focus on research-oriented lexical bundles. At the end of the research, a variety of phrases will be analysed.

**Keywords:** academic phrases; bachelor's thesis; Biomedical sciences; Human sciences; Physical sciences; Social sciences; Technology-engineering.

## 1. Introduction

The aim of this study is to determine the use of academic words (further on – AW) in students' written texts, namely – bachelor thesis (written in Lithuanian at different Lithuanian universities, 2010–2016). The article discusses academic phrase usage in

bachelor thesis of five main fields of science: Biomedical sciences (B000), Physical sciences (P000), Human sciences (H000), Social sciences (S000), and Technology-engineering (T000). Besides, this study examines collocations or other multi-word phrases used within these works, which perform specific pragmatic (discourse) functions.

The following objectives have been identified to accomplish the aim:

- 1) to determine the most common AW used in the graduates' academic writing;
- 2) to identify words that collocate with the AW identified in the specific parts of text;
- 3) to analyse the type and function of commonly used word combinations or collocations in the graduates' academic writing.

The research is based on material collected from a data corpus, which was constructed for the project "Phraseme research in student writing and interactive list of phrasemes" (Lith. "Studentų darbų fraziškumo tyrimas ir interaktyvusis frazemų sąvadas"). The project focused on identification of the most frequently used phrases and their types as well as analysis of the variety of phrases used, variations of phrase forms and range of types, their frequency in texts of different subject areas and in separate parts of texts. The corpus consists of 1200 students' writings.

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## 2. Previous research

The academic or scientific language in Lithuania has been studied in various aspects. For example, Alaunienė (2005) discusses the structure and expression of academic texts. Attention is drawn to the syntactic features of scientific texts (Bitinienė 2000, 2009) and intertextuality (Bitinienė 2005). Damošius (2007) studied the expression of evaluation in texts of scientific style.

There are not many studies based on databases in Lithuania. One can mention the work by Šinkūnienė "The Features of the Discourse of the Lithuanian Humanities and Social Science" (2014), as well as comparative studies of the authorial presence and hedging, modality, and self-citation (Šinkūnienė 2010, 2011, 2015; Linkevičienė, Šinkūnienė 2012; Šinkūnienė, Van Olmen 2012; Mur Dueñas, Šinkūnienė 2016) and adverbialization in Lithuanian academic discourse (Smetona, Usonienė 2012), that are based on comparative databases made by the authors themselves or the corpora of the Lithuanian scientific language (<http://coralit.lt>).

Lithuanian researchers have so far focused on automatic identification of Lithuanian multi-word expressions, as well as on preparation of general corpora (Vytautas Magnus University, [http://mwe.lt/en\\_US/](http://mwe.lt/en_US/)) or databases and lists of collocations (<http://tekstynas.vdu.lt/page.xhtml?id=dictionary-db>).

The analysis of the academic vocabulary (both individual words and regular text-generating phrases) has not been researched widely so far. There is a pronounced lack of research concerning the peculiarities of phrasemes (recurrent word sequences, also known as lexical bundles, chunks, clusters, or multi-word units) of scientific articles and academic written works (essays, course papers, bachelor's, master's theses, etc.). Here, one can mention "Studentų darbų fraziškumas" (Zubaitienė, Judžentytė-Šinkūnienė, Gudavičienė, Plaušinaitytė, Volungevičienė 2020), – the study that is focused on academic vocabulary and formulaic language in undergraduate student writing in the Lithuanian language. Such studies abroad are plentiful (cf. Gledhill 2000; Oakey 2002; Biber, Conrad & Cortes 2003, 2004; Cortes 2004, 2013; Aktas, Cortes 2008; Hyland 2008b, 2012; Granger, Paquot 2009; Hyland, Tse 2007; Paquot 2010).

### 3. The methodology of the research

To explore lexical bundles, their frequencies, and the number of texts in which they were used, *Antconc 3.5.0* (Anthony 2015) was used in this study. It was used to identify and concordance lexical bundles, as well as to find the number of texts used within each bundle.

*Antconc 3.5.0* is a freeware corpus analysis toolkit for concordancing and text analysis (<http://www.laurenceanthony.net/software/antconc/>). Among its useful features, it can identify lexical bundles of different lengths and frequencies in small or large corpora. By giving it a set of commonly used key words, which usually collocate with certain clusters and bundles such as articles, prepositions, anticipatory it, modals, etc., and deciding on the minimum optimal frequency and the required number of words in clusters, this program can find and display all lexical bundles in corpora of different sizes with their actual frequencies. The concordance also makes it possible to see clusters in actual textual context within which they had originally been used.

Students' works sections were identified by using explicit headings or section markers employed by the authors. The texts were also stripped of headings, footers, captions, citations, tables, and figures prior to inclusion into the final corpus.

After the most frequent words in the researched fields of science were established, the number of instances they occur in academic phrases was determined and, finally, academic collocations (lexical bundles) were identified.

First, all the collected material in this study will be classified according to the structural parts of the academic text: *introduction*, *sources of delivery* and *description of methodology*, *presentation of results*, *discussion*, and *conclusions*, as discussed by Swales (1990, 2004).

Next, functions of academic lexical bundles will be discussed by adopting Hyland's terminology: *participant-oriented*, *text-oriented*, and *research-oriented* functions (see Hyland 2008a).

## 4. Research of Lithuanian academic vocabulary, collocations, and their functions

The research was performed based on corpora made of 100 randomly chosen bachelor's theses. Each field of science (Biomedical sciences (B000), Physical sciences (P000), Human sciences (H000), Social sciences (S000), Technology-engineering (T000)) is represented in it by 20 bachelor theses. As stated above (see section 3), *Antconc 3.5.0* was used to explore the most frequently used AW and their combinations with other (academic) words, i.e. lexical bundles.

### 4.1. The most frequent AW and lexical bundles

According to the research, the most frequent AW and their forms occurring in the list of 100 bachelor theses are: *darbo* 'work.GEN.SG', *tyrimo* 'research.GEN.SG', *duomenų* 'data.GEN.PL', *duomenys* 'data.NOM.PL', *sudaro* 'consists of', *metu* 'during', *teigti* 'to state', *remiantis* 'based on', *atveju* 'case.INS.SG', *skaičius* 'number', *nustatyta* 'established', *respondentų* 'respondent.GEN.PL', *rezultatai* 'results', *atlikti* 'to perform', *teigia* 'states', *siekiant* 'achieving', *priklauso* 'belongs to', *svarbu* 'it is important', *nustatyti* 'determine', *darbų* 'work.GEN.PL', *sistemas* 'system.GEN.SG', *informacijos* 'information.GEN.SG', *analizė* 'analysis', *įtakos* 'influence.GEN.SG', *rodo* 'shows', *darbas* 'work', *gauti* 'to achieve', *darbe* 'work.LOC.SG', *informacija* 'information', *sistema* 'system', *duomenis* 'data.ACC.SG', *tikslas* 'aim', *įvertinti* 'to evaluate', *informaciją* 'information.ACC.SG', *tyrimas* 'research', *matyti* 'to see', *daryti* 'to do', *būdu* 'way.INS.SG', *tyrimų* 'research.GEN.PL', *padeda* 'helps', *dalies* 'part.GEN.SG', *lyginant* 'comparing', *rasta* 'it was found', *darbą* 'work.ACC.SG', *dalyje* 'part.LOC.SG', *kiekis* 'amount', *duomenimis* 'data.INS.PL', *naudojamas* 'used', *pateikti* 'to give', *svarbus* 'important', *įtaką* 'influence.ACC.SG', *bakalauru* 'bachelor.GEN.SG', *tiriamųjų* 'the observational objects/subjects', *nurodo* 'points out', *problema* 'problem', *leidžia* 'allows', *išsiaiškinti* 'to make it clear', *rasti* 'to find', *naudojant* 'by using', *literatūros* 'literature.GEN.SG', *medžiagų* 'material.GEN.PL', *metodas* 'method', *pagalba* 'help.INS.SG', *kokybės* 'quality.GEN.SG', *naudojami* 'used', *atsižvelgiant* 'considering', *siekiama* 'aimed'.

The most frequent lexical bundles with the first five words *darbo* 'work.GEN.SG', *tyrimo* 'research.GEN.SG', *duomenų* 'data.GEN.PL' and *duomenys* 'data.NOM.PL', *sudaro* 'consists of' that appear in most or all bachelor theses according to the same research are:

- (1) *Darbo autorius/autorė* 'the author of the work', *darbo tikslas* 'the aim of the research', *bakalauru darbo* 'bachelor's theses.GEN.SG', *darbo uždaviniai* 'objectives of the research', *darbo objektas* 'the object of the research', *darbo dalyje* 'in the section of theses'.
- (2) *Tyrimo metu* 'during research', *tyrimo rezultatai* 'research results', *tyrimo metodai* 'methods of the research', *tyrimo objektas* 'object of the research', *tyrimo duomenys* 'data of the research'.

- (3) *Duomenų bazė* ‘database’, *duomenų analizė* ‘data analysis’, *statistinių duomenų* ‘statistical data.GEN.PL’.
- (4) *Gauti duomenys* ‘received data’, *pateikiami/pateikti duomenys* ‘provided data’, *duomenys rodo/parodė* ‘data shows/showed’, *duomenys atskleidžia* ‘data reveals’, *statistiniai duomenys* ‘statistical data’.
- (5) a. *Darbą sudaro.*  
‘Thesis consists of.’
- b. *anketą/klausimyną sudaro.*  
‘The questionnaire consists of.’

Academic phrases in combination with verbs and other predicative words are frequent, as well:

- (6) a. *Teigti galima/galime.*  
‘It is possible to state.’
- b. *x teigia, kad.*  
‘x states that.’
- (7) a. *Siekama/siekiant išsiaiškinti/įvertinti/nustatyti.*  
‘Seeks to find out/to evaluate/to establish.’
- b. *svarbu paminėti/nustatyti/išsiaiškinti.*  
‘It is important to mention/to establish/to find out.’

Statements are usually formulated in the following way: something is emphasized, the purpose of the research is defined, and reference to sources is provided.

To summarize all analysed phrases, it is evident that the most frequent phrases help to describe the authorship of the research or work, goals and objectives, structure, data analysis, presentation methods and results.

## 1.2. Academic phrases according to the structural parts of the text

When academic phrases in academic texts are analysed, it is very important to establish the part of the text they appear in. As it was mentioned in *The methodology of the research* of this paper, Swales (1990, 2004) establishes four structural parts specific to research articles in English, that is:

- 1) Introduction.
- 2) Sources of delivery and description of methodology.
- 3) Presentation of results.
- 4) Discussion and conclusions.

This classification was also chosen in this study when analysing the five main fields of science. Therefore, all collected material will be reviewed according to these structural parts of the academic text.

### 1.2.1. Introduction

The purpose of the introduction is to show what one is doing in his/her writing. It is also helpful to explain why and how he/she is doing it. There are usually three main

parts in the introduction. The most common description is given by Swales (1990, 137–165):

- 1) Establishing a research territory: showing that the general research area is important, central, interesting, problematic, or relevant in some way, introducing and reviewing items of previous research in the area.
- 2) Establishing a niche: indicating a gap in the previous research by raising a question about it or extending previous knowledge in some way.
- 3) Occupying the niche: outlining purposes or stating the nature of the present research.

The current research revealed a number of academic phrases used in an introduction of bachelor theses:

- (8) *tyrimo/darbo pradžioje* ‘at the beginning of the research/bachelor’s thesis’, e.g.:  
*Darbo pradžioje buvo suformuotos amiloidinės fibrilės.*  
‘At the beginning of the work, amyloid fibrils were formed.’ (P00004\_VU\_2015\_149.txt)
- (9) *darbe analizuojama/atkleidžiama/apžvelgiama* ‘in this work is analysed/revealed/reviewed’, e.g.:
  - a. *Darbe analizuojama Neries upės cheminė-ekologinė būklė Lietuvos teritorijoje.*  
‘The work analyses the chemical and ecological status of the Neris River in the territory of Lithuania.’ (P00006\_2013\_VU\_101.txt)
  - b. *Pirmoje darbo dalyje bus apžvelgiama viešojo sektoriaus projektų vertinimo praktika Lietuvoje.*  
‘The first part of the thesis will review the practice of evaluating public sector projects in Lithuania.’ (S00004\_2010\_ISM\_118.txt)
- (10) *darbe pristatomi (duomenys)* ‘data is presented in this bachelor’s theses’, e.g.:  
*Trečioje dalyje yra pristatomi demografinių duomenų rezultatai [...]*  
‘The third part presents the results of demographic data [...]’ (S00003\_2011\_LSU\_12.txt)
- (11) *darbe pateikiamas (tyrimas)* ‘the research is provided in this bachelor’s thesis’, e.g.,  
*Remiantis būtent šiais indikatoriais ir buvo atliktas šiame darbe pateikiamas tyrimas.*  
‘On the basis of these indicators, a study presented in this thesis was performed.’ (S00003\_2011\_LSU\_12.txt)
- (12) *siekiami išsiaiškinti/įrodyti/nustatyti/įvertinti/patikrinti* ‘on purpose to identify/to prove/establish/evaluate/verify’, e.g.:
  - a. *Tyrimė siekta išsiaiškinti darbdavių požiūrį į buvusį kalinį, jo profesionalumą ir galimybę siekti karjeros.*  
‘The study sought to identify employers’ attitudes towards a former prisoner, his professionalism and career opportunities.’ (S00005\_2013\_SU\_90.txt)

- b. *Empirinėje dalyje buvo siekiama išsiaiškinti[,] koki poveikį turės taikyta speciali kvėpavimo pratimų programa.*  
 ‘The empirical part sought to find out what effect the special breathing exercises program would have.’ (B00006\_2012\_SU\_17.txt)
- (13) *tyrimo objektas* ‘the object of the research’, e.g.:  
*Darbo objektu pasirinkti Šiaulių mieste ir rajone esantys vandens telkiniai: Rėkyvos, Ginkūnų, Talšos ežerai, bei Švedės ir Prūdelio tvenkiniai.*  
 ‘The water bodies located in Šiauliai city and in the Šiauliai district (Rėkyva, Ginkūnai, Talša lakes, and the Švedė and Prūdeliai ponds) are chosen as the object of the research.’ (B00001\_2012\_SU\_32.txt)
- (14) *tyrimo naujumas* ‘novelty of the research’, e.g.:  
*Tyrimo naujumas siejamas su religinę savanorystę bei piligrimystę analizuojančių straipsnių trūkumu Lietuvoje.*  
 ‘The novelty of the research is related to the lack of articles analysing religious voluntarism and pilgrimage in Lithuania.’ (S00003\_2013\_LSU\_7.txt)
- (15) *tyrimo aktualumas* ‘relevance of the research’, e.g.:  
*Tyrimo aktualumą nulemia tai, kad pastaraisiais metais augo pagrindinių kuro rūšių, kuriuos naudoja CŠT, [,] kainos.*  
 ‘The relevance of the research is determined by the fact that in recent years, the price of the main types of fuel used by DHT have been growing.’ (S00004\_2014\_SU\_21.txt)

The analysis showed that the novelty and relevance of the work, as well as the object of the research are discussed in the introductory parts. There are links to the structure of the work (*darbo pradžioje* ‘at the beginning of the research/bachelor’s thesis’, *pirmoje dalyje* ‘in the first part of the thesis’, *empirinėje dalyje* ‘in the empirical part of the thesis’) and the research process (*darbe analizuojama/atkleidžiama* ‘in this work, [...] is analysed/revealed/reviewed’, *pristatomi duomenys* ‘data is presented in this bachelor thesis’). Going back to the description given by Swales, it is obvious that the presented phrases mostly outline the purpose or state the nature of the research.

#### 4.2.2. Sources of delivery and description of methodology

The methodology section describes the steps followed in conducting the study and the materials used in each step (Swales 1990, 120–121; 166–170). It clearly describes these materials and procedures, demonstrating to the reader that the research has been carried out appropriately and the results are reliable.

The following academic phrases help to define the method and the material of research: *tyrimo medžiaga* ‘research material’, *tyrimo šaltiniai* ‘sources of research’, *naudoti šaltiniai* ‘used sources’, *ankstesni tyrimai* ‘previous research’, *medžiaga rinkta* ‘the material was collected’, *tyrime dalyvavo* ‘this study involved’, *empiriniai metodai* ‘empirical methods’, *taikomi/taikyti/naudoti metodai* ‘used methods’, *statistiniai/statistikos metodai* ‘statistical methods’, *duomenų analizės metodai* ‘data analysis methods’, *tyrimo metodai* ‘methods of research’, *darbo metodai* ‘methods of



bachelor's theses', *šiuolaikiniai metodai* 'contemporary methods', *tyrimui pasirinkta* 'for this study, [...] is chosen', *tyrimui atlikti (naudojama)* 'to perform the research'.

The following are the examples of the variety of academic phrases:

- (16) *Darbe naudotus šaltinius galima suskirstyti į kelias grupes [...]*  
 'The sources used in the thesis can be divided into several groups [...]'  
 (H00005\_2011\_SU\_106.txt)
- (17) *Tyrimui pasirinkta 500 sudėtinių tarinių, kurie buvo rasti rašytinėje reklamoje.*  
 'The research sampled 500 compound predicates, which were found in written advertising.'  
 (H00004\_2010\_LEU\_74.txt)
- (18) *Tyrimui atlikti buvo naudojamas dviejų tipų dumblas.*  
 'Two types of sludge were used for the study.'  
 (T00004\_2016\_KTU\_17.txt)
- (19) *Atliekant tyrimą buvo išdalinta 112 anketų.*  
 '112 questionnaires were distributed during the study.'  
 (B00010\_2016\_VU\_54.txt)
- (20) *Tyrimas buvo atliktas 2013 metais.*  
 'The study was conducted in 2013.'  
 (B00009\_2014\_SU\_20.txt)
- (21) *Tyrime dalyvavo 20 ikimokyklinio amžiaus vaikų, sergančių kvėpavimo takų ligomis.*  
 'The study involved 20 preschool children with respiratory diseases.'  
 (B00006\_2012\_SU\_17.txt)
- (22) *Šiame darbe taikyti tyrimo metodai: literatūrinė apžvalga, statistinis duomenų apdorojimas, fenologinis augalų stebėjimas, ūglių augimo stebėjimas, uogų morfometrinių matavimas.*  
 'The research methods used in this theses are: literary review, statistical data processing, phenological plant observations, observation of shoots growth, morphometric measurements of berries.'  
 (B00004\_2010\_ŠU\_90.txt)
- (23) *Atsižvelgiant į tyrimo uždavinius, pasirinkti šie tyrimo metodai: atvejo analizė ir stebėjimas.*  
 'Depending on the research objectives, the following research methods were chosen: case study and observation.'  
 (B00006\_2016\_UK\_96.txt)
- (24) *Tyrimo metodai: 1. Mokslinės literatūros analizė. 2. Testavimas. 3. Eksperimentas. 4. Matematinė statistinė analizė, naudojant Microsoft Office Excel programą.*  
 'Research methods: 1. Analysis of scientific literature. 2. Testing. 3. Experiment. 4. Mathematical statistical analysis using the Microsoft Office Excel program.'  
 (B00001\_2015\_SU\_34.txt)

As can be seen, such phrases highlight the types of methods, steps and nature of the selection of materials or sources.



### 4.2.3. Presentation of results

The results section of the report clearly describes the results of the study (Swales 1990, 170). It is usually presented both in diagrams and text.

The following compounds are used when discussing performance: *tyrime pastebėta* ‘the research revealed’, *tyrimo metu* ‘during the research’, *tyrimas apima* ‘the research scopes’, *atlikta analizė parodė* ‘the performed analysis revealed’, *šioje dalyje apžvelgiama* ‘this section overviews’.

Specific examples of their use are given below:

- (25) *Tyrimo metu nustatytos įmonėje naudojamos komunikacijos priemonės ir jų naudojimo dažnumas pateiktas 2.2 lentelėje.*  
 ‘The communication tools used by the company during the research and the frequency of their use are presented in Table 2.2.’ (S00003\_2012\_SU\_6.txt)
- (26) *Tiriamoji medžiaga rodo, kad tremties lyrikos kalboje pasitaikantys ilgiausi skiemenys yra sudaryti iš šešių element.*  
 ‘The research material shows that the longest syllables in the language of exile in the lyrical language are composed of six elements.’ (H00004\_2013\_LEU\_78.txt)
- (27) *Tiriant pastebėta, kad kai kurių medžių visos kekės yra palyginti trumpos, bet nuo pamato gausiai šakotos, o vaisių koteliai trumpi.*  
 ‘During the research, it was observed that the forks of some trees are relatively short, but from the base are abundantly branched, and the fruit stalks are short.’ (B00004\_2012\_ŠU\_114.txt)
- (28) *Duomenys rodo, kad suaugusieji vengia vartoti daug cukraus ir saldumynų (39,21 %), limiting the importance of content of salt in foods was highlighted by one third of respondents.*  
 ‘Data show that adults avoid using a large amount of sugar and confectionery (39.21 %), limiting the importance of content of salt in foods was highlighted by one third of respondents.’ (B00009\_2014\_SU\_19.txt)
- (29) *Taigi, apžvelgus ekonominę situaciją, galime pastebėti tendenciją, jog 2009 metai buvo sunkiausi šaliai ir jos verslams – sumažėjęs BVP ir padidėjusi infliacija mažino vartojimą [...]*  
 ‘Thus, looking at the economic situation, we can see the tendency that 2009 was the most difficult for the country and its businesses – the reduced GDP and the increased inflation reduced consumption [...]’ (S00003\_2014\_ISM\_18.txt)

It is evident that when discussing the results, phrases with the forms of the verbs *nustatyti* ‘to determine’, *pastebėti* ‘to observe/notice’, *rodyti* ‘to show’ are used, which reveal how and in what ways the research is carried out and how the research data is presented.

#### 4.2.4. Discussion and conclusions

The discussion section redescribes the results (Swales 1990, 170). The most frequent steps for the discussion section are background information, statement of results, (un)expected outcome, reference to previous research, explanation, exemplification, deduction and hypothesis, recommendation (Swales 1990, 172–173). The main purpose of the conclusion is to show that the main purpose of the piece of writing has been achieved (Swales 1990, 170).

Researched Lithuanian bachelor theses revealed the following phrases, typical for the current structural part: *tyrimas buvo atliktas* ‘the study was conducted’, *tyrime nustatyta* ‘during the study, it was found’, *daromos išvados* ‘conclusions are drawn’, *galima daryti tokias išvadas* ‘the following conclusions can be drawn’, *apibendrinant galima pasakyti* ‘to sum up, it can be said’, *analizė/duomenys parodė* ‘analysis/data showed’, *buvo nustatyta* ‘it was found’.

These phrases are common to various fields of science:

- (30) *Išnagrinėjus literatūrą ir atlikus tyrimą pateikta tema, galima daryti tokias išvadas [..]*  
 ‘After examining the literature and after performing research of the subject matter, the following conclusions can be drawn [..]’ (H00007\_2015\_SU\_31.txt)
- (31) *Apibendrinant galime daryti išvadą, kad pasaulyje yra labai daug įvairių korupcijos diagnostikos būdų.*  
 ‘To sum up, we can conclude that there are many different types of corruption diagnostics in the world.’ (S00001\_2015\_VU\_76.txt)
- (32) *Tačiau gauti duomenys parodė, kad mėginiuose iš ežerų, kurie buvo imti žiemą[,] titnagdumblių gausumas yra didesnis negu mėginiuose, kurie buvo imti rudenį.*  
 ‘However, the obtained data showed that in samples from lakes that were taken in winter, the abundance of dwarf ingots is higher than in the samples taken in the autumn.’ (B00001\_2012\_SU\_32.txt)
- (33) *Atlikus gautų duomenų analizę, paaiškėjo, jog visi trys preparatai pasižymėjo ypač dideliu efektyvumu, kadangi priemonių veiksmingumas buvo didesnis negu 95 %.*  
 ‘The analysis of the obtained data showed that all three preparations were particularly effective, since the efficacy of the measures was higher than 95 %.’ (B00001\_2014\_SU\_45.txt)

Only the phrases with the word *išvada* ‘conclusion’ are particularly characteristic to the conclusion section. Other phrases are found both in the presentation of the discussion and the conclusions.

#### 4.3. Phrases and their language functions

As it was stated before (see 2.3), according to Hyland, lexical bundles comprise these broad types: research-oriented (ideational), which help writers to structure their

activities and experiences of the real world (*at the beginning of, at the same time, in the present study*), text-oriented (textual), concerned with the organization of the text and its elements as a message (*on the other hand, these results suggest that, in the next section*), and participant-oriented (interpersonal), which focus on the writer or reader of the text (*may be due to, it is possible that, should be noted*) (Hyland 2008a, 13–14; Salazar 2014, 18).

#### 4.3.1. Research-oriented bundles

Research-oriented academic phrases according to their semantics can be classified into several subclasses: location (time/place), procedure, quantification, description, and topic.

The most frequent academic phrases identifying location (time/place) are: *darbo pradžioje* ‘at the beginning of the work’, *šiame tyrime* ‘in this research’, *teorinėje/praktinėje dalyje* ‘in the theoretical/practical part’, e.g.:

- (34) *Teorinėje dalyje aptariamos formaliojo rišlumo klasifikacijos normos, recenzijos žanro sampratos.*  
‘The theoretical part (in the theoretical part) deals with the norms of formal coherence classification, the concept of the review genre.’ (H00004\_2012\_LEU\_79.txt)
- (35) *Antrajame skyriuje analizuojama Lietuvos medinio paveldo apsaugos raida.*  
‘The second chapter analyses (in the second chapter) the development of the Lithuanian wooden heritage protection.’ (H00005\_2011\_SU\_106.txt)
- (36) *Tyrimas buvo atliktas 2011 m. vasario–2012 sausio mėn.*  
‘The study was performed in February 2011–January 2012.’ (B00003\_2012\_SU\_50.txt)

The most frequent procedure identifying academic phrases are: *tyrimo tikslas* ‘the aim of the research’, *tyrimo uždaviniai* ‘objectives of the research’, *tyrimo metodai* ‘methods of the research’, *kokybinė turinio analizė* ‘qualitative content analysis’, *išsikelti/įgyvendinti tikslą* ‘to set/to perform the aim’, *naudoti programą* ‘to use a program’, *pateikti lentelėje/diagramoje/paveiksle* ‘to provide in a table/diagram/figure’, e.g.:

- (37) *Todėl savo darbe išsikėlėme tikslą – nustatyti ir įvertinti slaugos problemas po kojų venų operacijos.*  
‘Therefore, in our work, we set ourselves the aim to identify and evaluate nursing problems following a leg transplant operation.’ (B00010\_2016\_VU\_53.txt)
- (38) *Siekiant įgyvendinti šį tikslą iškelti tokie uždaviniai [...]*  
‘In order to achieve this aim, the following objectives were raised [...].’ (B00001\_2014\_SU\_45.txt)
- (39) *Taikant kokybinės turinio analizės metodą, siekiama išryškinti pagrindinius požymius, bruožus, savybes, kurie atspindėtų svarbiausius turinio aspektus.*

- ‘The method of qualitative content analysis aims at highlighting the main features, qualities, characteristics that reflect the most important aspects of the content.’ (H00007\_2012\_SU\_14.txt)
- (40) *Gauti tyrimo duomenys susisteminti kompiuterine programa Microsoft Office Excel.*  
 ‘The obtained survey data is systematized by means of Microsoft Office Excel program.’ (B00001\_2014\_SU\_45.txt)
- (41) *Susisteminta medžiaga pateikiama diagramų ir žemėlapių pavidalu*  
 ‘The syndicated material is presented in the form of charts and maps’ (P00006\_2013\_VU\_101.txt)

The most frequent quantification identifying academic phrases usually are: *darbo imtis* ‘the sample of the thesis’, *tyrimo imtis* ‘the scope of the research’, *tyrime dalyvavo* ‘the research involved’, *anketą/klausimyną sudaro* ‘the questionnaire consists of’, e.g.:

- (42) *Tyrimo imtį sudarė 108 vaikinai ir 72 merginos.*  
 ‘The sample was made up of 108 males and 72 females.’ (B00009\_2014\_SU\_20.txt)
- (43) *Tyrime dalyvavo iš viso 180 respondentų, 108 vaikinai, 72 merginos, iš 8 klasių, kurių amžius svyravo tarp 13-15 metų.*  
 ‘The study was attended by over 180 respondents, 108 male students, 72 girls from 8 classes aged between 13 and 15 years.’ (B00009\_2014\_SU\_20.txt)
- (44) *Anketą sudarė 29 klausimai, pirmoje anketos dalyje respondentai turėjo pateikti savo demografinius duomenis (lytis, amžius, ūgis, svoris). Antroje dalyje klausimai buvo sudaryti apie sveikatą bei mitybą, paskutinėje dalyje buvo klausama apie fizinį aktyvumą ir aktyvų laisvalaikį.*  
 ‘The questionnaire consisted of 29 questions, in the first part of the questionnaire, the respondents had to provide their demographic data (sex, age, height, weight). In the second part, the questions were about health and nutrition; the last part asked about physical activity and active leisure time.’ (B00009\_2014\_SU\_20.txt)
- (45) *Klausimyną sudaro šeši atviri klausimai.*  
 ‘The questionnaire consists of six open questions.’ (S00007\_2011\_SU\_102.txt)
- (46) *Visi gauti duomenys apibendrinami ir pateikiami 1 dendrogramoje ir 17 paveiksluose.*  
 ‘All the data obtained are summarized and presented in 1 dendrogram and 17 figures.’ (H00004\_2013\_LEU\_78.txt)
- (47) *Iš surinktų duomenų matyti, kad didžiąją respondentų dalį sudaro moterys (85,3 %), ir tik nedidelė dalis – vyrai (14,7 %).*  
 ‘The collected data show that the majority of respondents are women (85.3 %), and only a small part – men (14.7 %).’ (B00009\_2014\_SU\_25.txt)

Description identifying academic phrases, as the pilot research showed, normally are: *darbo struktūra* ‘the structure of the thesis’, *darbas susideda* ‘the thesis is composed of’, *darbą sudaro* ‘the thesis consists of’, e.g.:

- (48) *Ši bakalauro darbą sudaro: santrauka lietuvių kalba, įvadas, 2 skyriai, išvados, naudotos literatūros sąrašas (45 šaltiniai), santrauka anglų kalba, priedai.*  
 ‘This bachelor’s work consists of: a summary in Lithuanian, an introduction, 2 chapters, conclusions, the list of used literature (45 sources), a summary in English, appendixes.’ (B00006\_2014\_SU\_8.txt)

The academic phrases identifying topic, according to the same study, are: *darbo tema/objektas* ‘topic/object of the thesis’, *darbo naujumas* ‘novelty of the thesis’, *darbo aktualumas* ‘relevance of the thesis’, e.g.:

- (49) *Darbo objektas – recenzijos žanro tekstai (formaliojo rišlumo aspektas).*  
 ‘The object of the thesis is the reviews of genre texts (formal aspect of cohesion).’ (H00004\_2012\_LEU\_79.txt)

As can be seen, research-oriented phrases define the space and nature of the research, i.e. what the problem of the research is, how much and what kind of material is analysed, etc.

#### 4.3.2. Text-oriented bundles

Text-oriented academic phrases can also be classified into several subclasses – there can be (Hyland 2008a, 13–14):

- 1) transitional signals;
- 2) resultative signals;
- 3) structuring signals;
- 4) framing signals.

Transition signals usually tend to be: *viena vertus* ‘on the one hand’, *kita vertus* ‘on the other hand’, *be to* ‘besides’, *palyginti su* ‘comparing to’, e.g.:

- (50) *Taigi, vertinant šį teiginį, remiantis daugumos nuomone, galima teigti, kad darbuotojai nėra apsisprendę, ar jų darbas yra įvertinamas aukščiausių vadovų. Kita vertus[,] manančių, kad jų darbas nėra įvertinamas aukščiausių vadovų yra daugiau, nei manančių priešingai.*  
 ‘Therefore, in assessing this statement, according to the majority opinion, it can be argued that employees unsure whether their work is judged by senior executives. On the other hand, thinking that their work is not appreciated by the supreme leaders is more than the perception of the opposite.’ (S00003\_2012\_SU\_6.txt)
- (51) *Palygn[ę] gautus duomenis su literatūroje aprašomais rezultatais, matome, jog dalis literatūroje minimų miego trukdžių sutampa su gautais tyrimo rezultatais.*

‘Comparing the obtained data with the results described in the literature, we find that the part of the literature that mentioned sleep disturbances coincides with the results of the study.’ (B00010\_2016\_VU\_54.txt)

The examples of resultative signals as found during the pilot research are: *buvo nustatyta* ‘it was established’, *kaip matyti iš tyrimo medžiagos* ‘as it is evident in the research material’, e.g.:

- (52) a. *Kaip matyti iš atlikto tyrimo rezultatų, pacientų judėjimas po osteosintezės operacijos yra problematiškas.*  
 ‘As the results of the study show, the movement of patients after osteosynthesis surgery is problematic.’  
 b. *Tyrimo rezultatai parodė, kad iš dalies pasitvirtino iškelta hipotezė.*  
 ‘The results of the research showed that the hypothesis was substantiated partly.’ (B00010\_2016\_VU\_54.txt)

The third group of text-oriented academic phrases is structuring signals, which are represented by such phrases as: *šiam tyrimo* ‘in this research’, *kitame skyriuje* ‘in the next chapter’, *kaip matyti iš paveikslėlio/schemos* ‘as it is seen from the figure/scheme’, e.g.:

- (53) *Ankstesniame skyriuje buvo išanalizuota minėtos priemonės sovietmečiu. Šiame poskyryje bus apžvelgta kaip visa tai pasikeitė nepriklausomos Lietuvos laikais ir kokia padėtis yra dabar, kokios įvyko transformacijos, tąsa ir pan.*  
 ‘In the previous section, the measures were analysed in the Soviet Union. This section will look at how all this has changed in the time of independent Lithuania and what the situation is now, what happened in the transformation, continuation, and so on.’ (H00005\_2011\_SU\_106.txt)

The last class of text-oriented academic phrases is framing signals, which, based on the pilot corpora, is represented by: *atsižvelgiant į tai* ‘taking into account’, *remiantis tuo* ‘based on’, *išskyrus* ‘except’, e.g.:

- (54) *Atsižvelgiant į numatytus tyrimo uždavinius ir probleminį klausimą, tyrimui pasirinkta atvejo analizė ir stebėjimas.*  
 ‘Taking into account the intended tasks of the research and the problematic issue, the case analysis and observation were chosen for the research.’ (B00006\_2016\_UK\_96.txt)
- (55) *Kadangi archeologinė medžiaga analizuojama remiantis tik pagrindiniais ir, galima sakyti, baziniais teiginiais bei interpretacijomis, rezultatai tai atspindi – jie yra apibendrinantys, o ne visapusiškai išaiškinantys.*  
 ‘As the archaeological material is analysed on the basis of the main and, perhaps, underpinning statements and interpretations, the results are reflected in it – they are generalizations rather than fully explanatory.’ (H00005\_2015\_VU\_82.txt)

Text-oriented phrases show how the research description is constructed, i.e. in which parts of the text it is presented, how they are interrelated, which aspects of

the research the author wants to highlight or emphasize, how the obtained data are analysed and compared, etc.

### 4.3.3. Participant-oriented bundles

Participant-oriented (interpersonal) academic phrases represent the last of functions. This group, as the two discussed above, consists of several kinds of phrases. They can express:

- 1) stance features;
- 2) engagement features.

Stance features are expressed mainly by these academic phrases: *tai galėtų lemti* ‘this could be a cause of’, *gali būti* ‘can be’, *gali turėti įtakos* ‘may be affected’, *tyrimui gali būti naudingi* ‘research can be useful’, *galima daryti prielaidą* ‘it can be assumed that’. Engagement features are represented by such academic phrases: *dėmesys turi būti atkreiptas* ‘attention must be drawn’, *galima pastebėti* ‘it can be noticed’, e.g.:

- (56) *Tai galėjo turėti įtakos natūraliai tyrimo aplinkai bei tiriamiesiems.*  
‘This could have had an impact on the natural environment and research subjects.’ (H00007\_2013\_SU\_12.txt)
- (57) *Todėl galima daryti prielaidą, kad skirtingų metodų taikymas reikšmingos įtakos rezultatams neturėjo, duomenys labiausiai galėjo skirtis dėl titnagdumblių sezoninės vystymosi dinamikos.*  
‘Therefore, it can be assumed that the application of different methods did not have a significant effect on the results; the data were most likely to differ due to seasonal development dynamics.’ (B00001\_2012\_SU\_32.txt)
- (58) *Šios anketos užpildymas kai kuriems studentams galėjo padėti atkreipti dėmesį į savo lytinę elgseną ir savivertę, pamatyti galimas problemas šiose srityse bei geriau pažinti save.*  
‘Completing this questionnaire for some students could help pay attention to their sexual behavior and self-esteem, to see possible problems in these areas and to get to know more about themselves.’ (S00006\_2016\_LSMU\_84.txt)
- (59) *Pastebėtina, kad dauguma straipsnių rašyta ne istorikų, o kitų specialybių asmenų, pvz.[.] architektų, restauratorių, todėl priskirti prie kokios nors istoriografijos paradigmos jų neįmanoma.*  
‘It is noteworthy that most of the articles were written by non-historians, by persons of other specialities, for example, architects, restorers, and therefore they cannot be attributed to any paradigm of historiography.’ (H00005\_2011\_SU\_106.txt)
- (60) *Apibendrinant Panevėžio krašto senkapiuose atrastų monetų duomenis galima pastebėti, kad didžiąją dalį monetų sudaro smulkaus nominalo monetos.*  
‘Summarizing the data of the coins found in the ancient Cape of Panevėžys, it can be noted that the majority of coins consist of small denomination coins.’ (H00005\_2014\_SU\_29.txt)



Participant-oriented phrases reveal the researcher's approach to the study and evaluation of the study.

## Conclusions

The research revealed that most of the academic phrases can be attributed to the sections, which present the research and methodology of bachelor's theses. The easiest to identify are research-oriented academic phrases.

Several problems and further research directions have also emerged. Firstly, it is difficult to distinguish the main and other forms of an academic word and determine how they should be listed in the electronic list of academic phrases. The choice of the main form influences both the structure of the collocation and the grammatical type. Secondly, the phrases are different in composition and length. Sometimes, a few collocations can be included in the phrase, which should be isolated and discussed separately. Thirdly, a small corpus does not allow differentiation of phrases by field of science. It is more suitable for describing universal, most frequently used phrases.

The future research directions could be, as follows:

- 1) Comparison of the academic phrases used in different fields of science (comparative analysis of sub-corpora).
- 2) Comparative analysis of lexical bundles and longer academic phrases in bachelor's theses and in master's theses.
- 3) Analysis of collocations and longer phrases of student written papers and scientific articles.
- 4) Distribution of collocation/longer phrases in different parts of the work/study.
- 5) Overlapping of lexical bundles/longer phrases in different parts of theses/research.

## Abbreviations

|     |                |
|-----|----------------|
| ACC | accusative     |
| AW  | academic words |
| DAT | dative         |
| GEN | genitive       |
| INS | instrumental   |
| LOC | locative       |
| NOM | nominative     |
| PL  | plural         |
| SG  | singular       |

## References

1. Aktas, Rahime Nur, Cortes, Viviana. 2008. Shell nouns as cohesive devices in published and ESL student writing. *Journal of English for Academic Purposes*. 7, 3–14. <https://doi.org/10.1016/j.jeap.2008.02.002>

2. Alaunienė, Zita. 2005. Akademinių tekstų struktūra ir jos raiška. *Žmogus ir žodis: didaktinė lingvistika*. 7(1), 63–67.
3. Biber, Douglas, Conrad, Susan, Cortes, Viviana. 2003. Lexical bundles in speech and writing: an initial taxonomy. *Corpus linguistics by the Lune: a festschrift for Geoffrey Leech*. Wilson, Andrew, Rayson, Paul, McEnery, Tony (eds.). Frankfurt: Peter Lang, 71–93.
4. Biber, Douglas, Conrad, Susan, Cortes, Viviana. 2004. *If you look at...: Lexical bundles in university teaching and textbooks*. *Applied Linguistics*. 25 (3), 371–405. <https://doi.org/10.1093/applin/25.3.371>
5. Biber, Douglas. 2006. *University Language. A Corpus-Based Study of Spoken and Written Registers*. Amsterdam/Philadelphia: John Benjamins Publishing Company. <https://doi.org/10.1075/scl.23>
6. Bitinienė, Audronė. 2000. Vientisiniai mokslinio stiliaus sakiniai. *Kalbotyra*. 48–49(1), 19–27.
7. Bitinienė, Audronė. 2005. Mokslinis stilius ir jo intertekstualumas. *Žmogus ir žodis*. 1, 68–72.
8. Bitinienė, Audronė. 2009. Sakinių siejimo priemonių vartojimas mokslinio stiliaus tekstuose. *Žmogus ir žodis*. 11(1), 21–26.
9. Cortes, Viviana. 2004. Lexical bundles in published and student disciplinary writing: Examples from history and biology. *English for Specific Purposes*. 23, 397–423. <https://doi.org/10.1016/j.esp.2003.12.001>
10. Cortes, Viviana. 2013. ‘The purpose of this study is to’: Connecting lexical bundles and moves in research article introductions. *Journal of English for Academic Purposes*. 12, 33–43. <https://doi.org/10.1016/j.jeap.2012.11.002>
11. Damošius, Saulius. 2007. Vertinimo raiška mokslinio stiliaus tekstuose. *Lituanistica*. 53 (4), 51–62.
12. Gledhill, Christopher. 2000. *Collocations in Science Writing*. Tübingen: Gunter Narr.
13. Granger, Sylviane, Paquot, Magali. 2009. In search of a General Academic Vocabulary: A corpus-driven study. *Options and Practices of L.S.P practitioners Conference Proceedings*. Katsamposaki-Hodgetts, Kallia (ed.). Heraklion: University of Crete Publications, 94–108.
14. Hyland, Ken. 2008a. As can be seen: Lexical bundles and disciplinary variation. *English for Specific Purposes*. 27, 4–10. <https://doi.org/10.1016/j.esp.2007.06.001>
15. Hyland, Ken. 2008b. Academic clusters: text patterning in published and postgraduate writing. *International Journal of Applied Linguistics*. 18(1), 41–62. <https://doi.org/10.1111/j.1473-4192.2008.00178.x>
16. Hyland, Ken. 2012. Bundles in academic discourse. *Annual Review of Applied Linguistics*. 32, 150–169. <https://doi.org/10.1017/S0267190512000037>
17. Hyland, Ken, Tse, Polly. 2007. Is there an “academic vocabulary”? *TESOL Quarterly*. 41(2), 235–253.
18. Linkevičienė, Nijolė, Šinkūnienė, Jolanta. 2012. Asmeniniai įvardžiai mokslo kalboje. *Kalbotyra*. 64, 78–102. <https://doi.org/10.15388/Klbt.2012.7662>
19. Mur Dueñas, Pilar, Šinkūnienė, Jolanta. 2016. Self-reference in research articles across Europe and Asia: A review of studies. *Brno Studies in English*. 42(1), 71–92. <https://doi.org/10.5817/BSE2016-1-4>
20. Oakey, David. 2002. Formulaic language in English academic writing: A corpus-based study of the formal and functional variation of a lexical phrase in different

- academic disciplines. *Using Corpora to Explore Linguistic Variation. Studies in Corpus Linguistics*. 9. Reppen, Randi, Fitzmaurice, Susan M., Biber, Douglas (eds.). Amsterdam/Philadelphia: John Benjamins Publishing Company, 111–29. <https://doi.org/10.1075/scl.9.08oak>
21. Paquot, Magali. 2010. *Academic vocabulary in learner writing: From extraction to analysis*. London, New York: Continuum. <https://doi.org/10.1080/00437956.2019.1708590>
  22. Salazar, Danica. 2014. *Lexical Bundles in Native and Non-native Scientific Writing: Applying a corpus-based study to language teaching*. Amsterdam/Philadelphia: John Benjamins Publishing Company. <https://doi.org/10.1075/scl.65>
  23. Smetona, Antanas, Usonienė Aurelija. 2012. Autoriaus pozicijos adverbialai ir adverbializacija lietuvių mokslo kalboje. *Kalbotyra*. 64(3), 124–139. <https://doi.org/10.15388/Klbt.2012.7664>
  24. Swales, John Malcolm. 1990. *Genre Analysis: English in Academic and Research Settings*. Cambridge: Cambridge University Press. <https://10.1075/z.184.513swa>
  25. Swales, John M. 2004. *Research Genres: Explorations and Applications*. Cambridge: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9781139524827>
  26. Šinkūnienė, Jolanta. 2010. Autoriaus pozicijos raiška asmeniniais įvardžiais rašytiniame akademiniam diskurse. *Filologija*. 15, 124–141.
  27. Šinkūnienė, Jolanta. 2011. *Autoriaus pozicijos švelninimas rašytiniame moksliniame diskurse: gretinamasis tyrimas*. Humanitarinių mokslų daktaro disertacija. Vilnius: Vilniaus universitetas.
  28. Šinkūnienė, Jolanta. 2014. *Lietuviškojo humanitarinių ir socialinių mokslų diskurso ypatybės: mokslo studija*. Vilnius: Vilniaus universiteto leidykla.
  29. Šinkūnienė, Jolanta. 2015. Neepisteminis modalumas lietuvių ir anglų mokslo kalboje: kiekybiniai ir kokybiniai vartosenos ypatumai. *Kalbotyra*. 67, 131–154. <https://doi.org/10.15388/Klbt.2015.8946>
  30. Šinkūnienė, Jolanta. 2016. The modal verb *galėti* ‘can/could/may/might’ in academic Lithuanian: distribution, frequency and semantic properties. *Kalbotyra*. 69, 205–222. <https://10.15388/Klbt.2016.10373>
  31. Šinkūnienė, Jolanta, Van Olmen, Daniël. 2012. Modal verbs of necessity in academic English, Dutch and Lithuanian: epistemicity and/or evidentiality. *Darbai ir Dienos*. 58, 153–181.
  32. Zubaitienė, Vilma, Judžentytė-Šinkūnienė, Gintarė, Gudavičienė, Eglė, Plaušinaitytė, Lina, Volungevičienė, Skaistė. 2020. *Studentų darbų fraziškumas*. Vilnius: Vilniaus universiteto leidykla. <https://doi.org/10.15388/vup-book-0003>

## Kopsavilkums

Ši darba mērķis ir aplūkot lietuvišu akadēmisko frāžu lietojumu piecu galveno zinātņu jomu studentu rakstos. Pētījuma pamatā ir materiāls, kas ekscerpēts no projekta „Frāzes izpēte studentu rakstos un interaktīvais frāžu saraksts” datu korpusa.

Lietuvišu pētnieki līdz šim pievērsušies lietuvišu daudzvārdu izteicienu automātiskai identificēšanai, kā arī vispārīgu korpusu (datubāzu) un kolokāciju sarakstu sagatavošanai. Angļu un vācu valodā runājošie studenti var izmantot konkrētus akadēmiskos vārdus, frāžu un tiešsaisītes akadēmiskos frāžu banku sarakstus, kā arī mācību platformas, kas palīdz rakstīt pētnieciskos darbus. Lietuvā ir tikai viens līdzīgs interaktīvs saraksts.

Darbā galvenā uzmanība pievērsta visbiežāk lietoto akadēmisko vārdu un frāžu un to veidu analīzei. Pirmkārt, frāzes klasificētas pēc pētījuma teksta strukturālajām daļām: ievads,

pētāmā materiāla avoti, metodoloģijas apraksts, rezultātu izklāsts, diskusija un secinājumi (sal. Swales 1990, 2004). Tālāk pētījums balstās uz leksikas kopu funkcionālu klasifikāciju (Hyland, 2008a), tuvāk pievēršoties pētnieciski orientētām leksikas kopām. Pētījuma nobeigumā analizēta frāžu daudzveidība, izvērtējot arī biežāk lietoto frāžu pareizību.

Pētījumā konstatēts, ka lielākā daļa akadēmisko frāžu attiecināmas uz sadaļām, kurās tiek prezentēti bakalaura darbu pētījumi un metodoloģija. Visvieglāk identificējamās ir pētnieciski orientētas akadēmiskās frāzes.

Pētījuma gaitā iezīmējušās arī vairākas problēmas, kas vienlaikus ir arī stimuls turpmākiem pētījumiem. Pirmkārt, ir grūti noteikt, kā elektroniskajā sarakstā būtu jāuzskaita akadēmiskajās frāzēs ietilpstošo vārdu formas. Pamatformas izvēle ietekmē gan kolokācijas struktūru, gan gramatisko veidolu. Otrkārt, akadēmiskās frāzes atšķiras pēc sastāva un garuma. Treškārt, neliels korpuss neļauj diferencēt frāzes pa zinātnes jomām. Tas ir vairāk piemērots universālu un arī visbiežāk lietoto frāžu aprakstīšanai.

**Atslēgvārdi:** akadēmiskās frāzes; bakalaura darbs; biomedicīnas zinātnes; humanitārās zinātnes; fiziskās zinātnes; sociālās zinātnes; tehnoloģiju inženierija.