Correlation of cognitive abilities and translation skills of phraseological units

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This study focuses on the main mechanisms of recognition and decoding of phraseological units. The concepts of "discourse", "phraseological unit" and "cognition" have been investigated. By analyzing phraseological units' structure we have determined two ways of translation: phraseological translation and non-phraseological translation. Three main stages in the process of cognitive skills formation for recognition and adequate translation of phraseological units in the text on military themes were researched: the initial stage, the intermediate stage and autonomous stage. The hypothesis of our study is that the degree of recognition and adequacy of translation of phraseologies at military discourse depends on the cognitive skills formation upon subjects that were verified by the experiment conducted at the Bohdan Khmelnytskyi National Academy of the State Border Guard Service of Ukraine, which involved 75 cadets. The result of the experiment confirmed that there are close correlations between the level of cognitive skills formation and the degree of phraseology recognition and the correctness of their translation and between success in English and the degree of phraseology decoding and the correctness of their translation.

Keywords: *phraseological unit, decoding, recognition, military discourse, cognition*

1 Introduction

Military discourse is gaining popularity around the world and has a significant impact on society. It is characterised by constant development of sublanguage of war (military conflicts) and language tracking in martial mediatisation. These are the reasons why military discourse is in focus in linguistics. Its analysis relies upon the notion of discourse and its specifics in the warfare area.

The purpose of our study is to analyse various notions such as "discourse", "military discourse", "phraseological unit" and "cognition". Also we formulated the aim to study ways of phraseological units decoding, understanding and translation.

The hypothesis of our research paper is that the degree of recognition and adequacy of translation of phraseological units at military discourse depends on the cognitive skills formation of subjects.

The relevance of the research is determined by the development of interest toward the issues of language, culture and mentality connection. Despite the fact that the phraseology of the military sphere has been in the centre of attention of various authors (Arnol'd 1973; Bybee 2010; Cowie 1998; Hudkova 2015; Fernando 1996; Kudryavtseva 2009; López 2018; Makkai 1972; Maslova 2017; Musolff 2016; Mokienko 2005; Seidl & McCordie 1978; Shojaei 2012; Stojan & Mijić 2019; Yarmolinets et al 2017) the problem of connection between cognitive skills and translation of phraseological units has not been investigated.

Hoey determined that the concept of "discourse" is a type of communicative activity that manifests itself in various forms and takes place within a certain communication channel

(2001: 54–60). Kibrik pointed out that discourse analysis is a linguistic discipline that studies three main issues: the taxonomy of discourses, discursive structure, and discursive factors influencing more local phenomena (2015: 595). By discourse, it is legitimate to understand not only written but also oral speech, which is socially marked and caused by certain communicative situations (Shekhovskaya 2020: 87–89).

This point of view is supported by the research of Arutyunova, who in part IV of her book "The Language and the World of Man" under 'discourse' understands speech "immersed in life" (2017: 380). The author emphasizes the importance of having a communicative situation that reflects the characteristic features of a particular type of discourse. Thus, according to Shekhovskaya, discourse, being a multilevel phenomenon, is variable since it can reflect subjective mental models of the context (2020: 87).

Today, the military industry is closely interconnected with other areas. The defining feature of the military sphere, which distinguishes it from other spheres of society, is that it operates only to ensure the security of the state, its citizens and property, including cultural heritage. From this point of view, the sphere of military life is one of the main providers of new vocabulary of any language in general and English in particular. This is due to the fact that recently the attention of mankind has been focused on the fight against terrorism, wars and military conflicts. Thus, military phraseology is a source of new word formations and phrases that are spread in general literary speech. In this context, it is important to study the phraseology of the military sphere in terms of a new direction of linguistics–cultural linguistics, which takes an approach to the study of language through the prism of the consciousness of the bearers of a particular culture.

Military discourse is a certain subsystem of speech of the relevant professional group which focuses on military texts that exist in combination with psychological, pragmatic and socio-cultural features of activity. Military discourse can be divided into monologue (reports, orders) and dialogic (communication between servicemen) types.

2 Method

Military discourse refers to a status-oriented type of discourse, which should be considered as a linguistic interpersonal interaction of a certain professional group or as a subject-to-subject communication between people who realize their status-role opportunities within established social institutions (Karasik 2000, 2002).

Military discourse is a powerful source not only of phraseology but also idioms, which later find their counterparts in the everyday speech of both military and civilian.

According to Averbukh – phraseology is stable, capable of reproducing combination of words or sentences with a completely or partially rethought meaning (2009: 72). "Unlike a free phrase, in a phraseological unit the lexical meaning is not each word individually, but the whole phrase" (Renner 2020: 2–3). The characteristic features of phraseology are imagery, stability of the structure and composition of phraseological units, the ability to reproduce in language, the integrity of semantics and emotional and stylistic colour.

Military discourse contains lots of phraseological units but there is still no unambiguous interpretation of it in modern linguistics. Various concepts are used to define phraseology, namely phraseological unit, constant phrase, phraseological inversion, idiom, idiomatic phrase and others.

Phraseological units that arise during the activities of this professional category, over time, gradually become common speech. This is due to the fact that despite the resignation, ex-servicemen in later life continue to use established phrases to describe (identify) certain life situations or phenomena during interpersonal communication (Terriff, Terry, Osinga & Farrell 2010: 89). The phraseological unit is "stable reproducible combinations of words of different structural types with a single combination of components, the meaning of which arises as a result of semantic transformation of the component composition" (Chernyisheva 1970: 13), "ready-made language units that are recalled from memory in the process of communicative activity, independent parts of language, due to certain qualities." (Fernández-Alcaina & Čermák 2018: 79)

Some scholars believe that phraseological units can convey the expressiveness and emotional coloration of a speaker's speech or condition. In particular, Mokienko (2005: 48) notes that a bright characteristic feature of phraseology is "the ability to create sensory images of objects and phenomena".

Usually it is difficult to recognize and correctly translate a phraseological unit.

An important feature of phraseological units is considered to be a partial or complete reinterpretation of the words meaning included in the phraseology and to establish a correspondence between the meaning of a phraseological unit and the process, phenomenon, characteristic it describes. The reinterpreted meaning is any change of the literal meaning. The reinterpreted nature of the meanings of phraseological units is established by the so-called "superimposition" of the meaning of the phenomenon it describes on a given combination of words, which could form the basis of this unit. If such a process is complicated, then the method of comparing a phraseological unit with the literal meaning of the components of the same phraseology is used.

It should be noted that partial and complete reinterpretation may also be inherent in variable and authorial phrases, but the nature of such reinterpretations will differ from the reinterpreted meaning of the phraseological unit.

Phraseological units are considered to be a rather complex lexical category for translation; this is due to a number of reasons.

First of all, words with a free meaning lose their permanent semantic meaning and gain a new meaning when they become components of a phraseological unit. Therefore, it will be insufficient to select a match for each component of the phraseology. Sometimes it is difficult for a translator to recognize an idiom in a text, which can lead to its literal translation. In that respect, Akbari (2013: 32–41) stated that such a translation will contribute to the wrong perception of the situation and information by the recipient. It should be noted that if a translator is not competent in translating phraseological units, it will be difficult for him to find analogue in his native language. And even if the equivalent of a phraseological unit is found in the native language, it happens that this analogue may not correspond to the context. It is important to take into account that such situations in two comparable languages, in our case, Ukrainian and English, may have different evaluative connotations. The high degree of national specificity is also one of the reasons for the difficulty of translating phraseological units, because in this case the translator should adapt to the language and culture of the recipient. Shojaei (2012: 1220–1229) investigated that the external similarity of phraseological units, which have different semantics, can also lead to erroneous associations and incorrect translation.

Most researchers dealing with these issues (Dmitrieva et al 2005: 147) distinguish 2 main groups–phraseological and non-phraseological translations, which, in turn, include four main ways of recognizing and translating figurative phraseology.

I. Phraseological translation

1. The method of phraseological equivalent. This method is used for reliable translation of phraseology from one language to another; such an equivalent translation should match the structural composition of the components, and also helps to preserve the full range of basic values of the translated unit. A phraseological unit must have the same connotative and denotative meaning. There should be no differences in semantics, metaphoricity or emotional colouring between the corresponding phraseological units. In addition, phraseological units must have a number of lexical and grammatical common features: the same grammatical category, usability, close links between words. At the same time, another striking feature should be the absence of any national colour (For example, *to play with fire, to bear one's cross). It means that these idioms will have the same meaning, emotional colour, structural composition of components in both languages either English nor Ukrainian without any features corresponding history, national tonality etc.*

As a rule, there are no so many phraseological equivalents. They are most often found in the roles of international phraseological units, and are usually borrowed in both languages from a third, such as Greek or Latin. However, the researcher Komissarov (2001: 170) believes that sometimes borrowing of the same phraseological unit in two languages may vary and such phraseological units often become "erroneous friends of the translator". Here is the following example: *to throw dust in the eyes*. Such a phraseological unit means *to deceive* and a literal translation will be *to boast*, the presented translations have a different semantic load (Manser 1994: 347; Warren 1994: 401).

2. The method of phraseological analogue (relative phraseological analogue). If there is no a phraseological equivalent, the task is to choose a phraseological unit with the same figurative meaning, which would be based on the same meaning. The phraseological unit should be selected in such a way as to preserve the stylistic and emotional meanings of phraseological units. However, phraseological units in the Ukrainian language will not be exact analogues of phraseological units in the English language. Often they do not match the emotional meanings. The English phraseology *"Jack of the trades"* refers to a person who can do things skilfully and translates as *"a handyman"* (Kirkpatrick & Schwatrz 1993: 137). But the same idiom in the Ukrainian language will not be a suitable analogue in English, because such idioms do not match the psycho-emotional load. Thus, in the Ukrainian language such an idiom is understood as a skilled person and has a positive orientation, and when translated into English ”*master of none*”, this phraseology is perceived as a person who spoils everything that is undertaken (Gulland, Hinds-Howell & David 1986: 88; Cowie, Mackin & McCaig 1993: 134).

II. Non-phraseological translation (also called descriptive translation)

Using such methods of translation, the phraseological unit is translated not only by phraseological but also by lexical means. This type of translation is used in cases where any type of phraseological translation cannot be used. The use of such a translation is difficult to

call full, because in its implementation it is impossible to avoid loss. In this context, "losses" means expressiveness, connotations, imagery and shades of meaning. Translators use such translation only in cases of exceptional requirement.

1. Tracing. Tracing of phraseological units or textual method is used by translators only when it is impossible to convey the expressive-emotional and semantic-stylistic content of a particular phraseological unit, and the figurative basis of the phraseological unit must be shown, so as a result of this tracing translators get an expression which is quite easily perceived by the reader and does not create any unnaturalness.

An important feature for the use of this method is the sufficient motivation of the value of a phraseological unit by the values of its constituent components. Therefore, tracing is used in cases where the literal translation of a phraseological unit will be able to convey to the reader not the meaning of the individual components of phraseology, but the true role of the whole unit. This method is used by translators in the case of the appearance in speech (oral or written) of figurative phraseology, which managed to preserve its metaphor. Tracing is also used for proverbs that do not have a specific subtext. The translator should also make sure that the reader or recipient understands such a translation correctly. Striking examples of such a method in military discourse are the following phrases: '*cross examination' (in Ukrainian - kros ekzamen)*; '*head of the government' (in Ukrainian - holova uriadu),*the same meaning in Ukrainian (Maxwell, McEnery & McCregor 1998: 30).

Tracing often becomes not a simple operation of transferring the meaning of the original form of a phraseological unit into the language of the translator. There are many transformations of phraseological units. This applies to the number of words in a phrase, changes in their distinctive forms, changes in the order of words in phrases, as well as the syntactic status of the components of a phraseological unit: '*maldistribution of costs'*, which will translate *incorrect distribution of costs.*

Most often this type of translation is used in the translation of literary texts. Translating literary texts, there are often problems of adequate and correct translation of a phraseological unit, so it is difficult for translators to find an equivalent that would most clearly convey not only the meaning of phraseology, but also its emotional colour.

2. Lexical translation. Lexical translation is usually used when in the source language a certain concept is expressed by a phraseological unit, and in the language into which the translation is carried out by a lexeme. Thus, in English, verbs expressed by phrases can be easily conveyed by their lexical analogue: '*catch cold'–to get sick, 'as lively as a cricket'–to laugh.*

This type of translation quite successfully performs its function in dictionaries, briefly indicating the semantic meaning of the phraseological unit. But at the same time, translators strive to ensure that the translation of a phraseological unit acquires a "phraseological appearance" or at least an expressiveness and emotional colour that is close to the original. Thus, when translating phraseological units, we should find "phraseological" translation or try to translate its elements and convey their emotional load. Thus, recognition and correct adequate translation of phraseology is a very complex and relevant issue in the study of English. A lot of researchers (Mahmoodi et al 2015: 3834; Szcześniak 2018: 170–171) say that incorrect understanding of the semantic load and perception of the phraseological unit in general and in military affairs in particular, can lead to negative consequences both in communication and in the execution of certain commands, motivation for specific actions.

Therefore, it is important to investigate whether the cadets of higher military educational institution develop the ability not only to recognize phraseological unit in the text while studying English, but also to translate them correctly, whether there is a connection between these skills and the level of personal cognitive sphere of higher education.

The emergence of "cognition" concept is closely intertwined with cognitive psychology, which gave rise to such areas of humanities as psycholinguistics, cognitive linguistics, and philosophy of consciousness. The learning of a pupil, student or cadet cannot be imagined without his cognitive skills. The modern education system performs various functions, including the development of memory, thinking, attention and other abilities. One of the main reasons for the unsatisfactory success of students, including in English, is the low level of cognitive skills. When considering issues related to the cognitive sphere of the individual, it is worth talking about the qualities and skills that are subconsciously used in the process of language acquisition. Bruner investigated in his work the role of cognitive skills in the study of foreign languages (1983: 24). Obuhova highlighted the stages of formation of new skills during cognitive activity and noted that in each of them a person can be developed only certain skills inherent in each of these stages (2006: 46).

When organizing the process of learning a foreign language, it is necessary to adhere to the basic provisions of cognitive theory, namely:

- a prerequisite for effective foreign language learning is the development of logical thinking. Learning should not be based only on "memorizing" rules and language units, to achieve the result it is necessary to look for logic between the existing rules and the use of language units. Then the process of learning a foreign language will be effective.

- learners should take an active part in the language learning process, not be passive observers. In this case, the teacher should take a differentiated approach, be sure to take into account the individual psychological characteristics and interests of each.

- during training in order to achieve the maximum possible results, teachers and learners should be involved in the process of mutual knowledge, fruitful interaction, joint work and mutual understanding (Hudkova 2015: 21–23).

During their future professional activities, cadets will use English to communicate with various participants in the border process. Therefore, its study is an important issue that should be given due attention in the organization of training. In order to achieve a high result in the formation of speech skills and communication skills in English, future border guards are taught the discipline "Foreign language of professional communication", the main task of which is to train highly qualified officers capable of fluent English in the performance of official duties. When solving professional tasks, the officer solves certain speech tasks, including proof, approval, characteristics, evaluation and refutation. To increase the efficiency of his activity, he needs to think about what style of speech to use, how exactly to design certain phrases, which is directly related to mental activity.

The professional activity of a border guard officer involves communication with entities that cross the border legally or illegally, with border guards of neighbouring countries, with the local population. Therefore, it is important to teach the cadet not only to communicate in English, but also so that he can recognize phraseological units in speech translate them correctly taking into account the cultural characteristics of another communicator and be able to correctly use phraseology in communication. This issue is also quite relevant in terms of implementing NATO standards in military affairs and cooperation with officers of foreign military structures. Incorrect use and translation of phraseological

expression in the process of communicative activity of the military can lead to a misunderstanding of the team or the action it may have, both moral and material damage.

The process of formation of cognitive skills for recognition and adequate translation of phraseological units in the text on military themes goes through three main stages:

1. The initial stage–there is an awareness of the task (recognition of phraseological units), as well as focusing on information about the structure of the phraseological unit and the features of its translation in the context of the sentence;

2. The intermediate stage includes the use of certain techniques that help to quickly remember the previous material and methods of quick understanding of new material, correction of errors, as well as actions involved in mental activity;

3. Autonomous stage provides automatic reproduction of the processed material. This stage is characterized by performing actions without errors and increasing the speed of recognition and translation of phraseological units in the text (Eysenck 2001: 148).

Analysis of the content of future professional tasks, features of the cognitive sphere of cadets, the ability to adequately translate military texts and their success in a foreign language, we hypothesized a relationship between the level of cognitive skills of future border guards and the degree of recognition of phraseological units and adequate translation in military texts.

3 Experiment

The experimental method is an important tool for obtaining reliable information about trends in linguistics and research in various fields of linguistics.

According to Selivestrova linguistics can develop more dynamically if there is a clear distinction between the hypotheses tested during the experiment and the provisions that have already been proven (1990: 53).

There are two main features of the experiment–reproducibility and the presence of conditions that are controlled. The experimental methods used in language make it possible to study the facts and features of language in conditions controlled by the researcher. At the present stage of linguistics development, the lexical meaning of a word, its semantic structure, sound-symbolic meaning, as well as synonymous series are most often studied with the help of such methods. According to Radder in total, there are more than 30 basic experimental techniques. Each of them has both advantages and disadvantages (2003: 124).

Investigating the factors that influence the final results of the experiment, Goroshko (2001: 283–284) first of all speaks about the form of the associative experiment, which can be both oral and written. The next important question is the personality of the experimenter, his behaviour. The third factor in the reliability of the experiment, the researcher considers the circumstances surrounding the experiment. An important factor is also the validity of the results of experimental research, which is in direct proportion to the psychophysiological and social characteristics of the respondents. It is quite difficult to process the obtained results, because they require interpretation and formalization (mathematization), which involves the use of methods of mathematical statistics (Goroshko, 2001: 283–284).

According to Rudenko et al (2009: 384) "the equipment of scientific research with adequate mathematical methods, i.e. the level of its mathematization, indicates the innovative nature of a particular scientific field in modern conditions". And it is hard to disagree with that.

In the field of linguistics, there has long been a special methodology for conducting experiments and research using different types of materials for the analysis of specific linguistic phenomena. This technique was proposed by Bartmiński (1998: 63–83). He believes that any linguistic analysis should be based on information extracted from various sources, for example, questionnaire materials and the texts themselves.

During experiment we used texts with phraseological units, for example: *Only three hours before he had to deliver his verdict, and he still hadn't made up his mind. Big Ben had struck eight times. But still he was none the wiser. By the time he returned to the bathroom to brush his teeth, the scales of Justice still hadn't come down on either side. Just after Big Ben chimed nine, he slipped back into his study and went over his notes in the hope that the scales would finally tilt to one side or the other, but they remained perfectly balanced.*

Questionnaire materials were also used:

(1)   *Find appropriate definition of the phraseological units:*
1.   *To give a birth to …*
a)   *deliver a baby*
b)   *to become a God father*
c)   *to become pregnant*
d)   *to be born*
2.   *To pick up the pieces …*
a)   *to break something into pieces*
b)   *to bring something to the whole*
c)   *to go faster*
d)   *to try to make a situation better after something bad has happened*

In order to confirm the validity of the hypothesis that the degree of recognition and adequacy of translation of phraseological units depends on the cognitive skills formation of subjects the experiment was conducted at the Bohdan Khmelnytskyi National Academy of the State Border Guard Service of Ukraine, which involved 75 cadets (3 groups). The experiment lasted from September 2020 to June 2021 on the base of higher educational establishment. All cadets were training for obtaining Bachelor Degree at different educational courses (2–4) of State Border Protection Faculty, Law Enforcement Faculty, Operational and Service Activity Support Faculty. Participants of experiment were informed about experiment conduction and agreed their personal data to be used. Experiment included 2 parts (oral and written). Oral part consisted of questionnaire on determination level of IQ based on Slosson's test. The Slosson's Intelligence test (SIT) is easily administrated test to measure intelligence. Nowadays usage of this test became widespread. The SIT is considered to be individually administrated kind of a test which is composed of primarily verbal questions which are organized in order of difficulty. The point from which the test starts varies greatly depending on general abilities and age of each individual and it stops when failure occurs. The SIT states that this test is developed for the usage of teachers, psychologists, social workers and other people who work and need to evaluate individuals' intelligence level. An individual Quotient (IQ) determines comparing the number of mental age credit received from correct test responses to the individual's chronological age. For example, an individual of average intelligence would be expected to answer test questions correctly up to a difficulty level equal

to his chronological age, while an individual with above-average intelligence would be able to answer test items rank order in difficulty above his chronological age (Gard 1986: 4).

Written part included worked out by the authors' tasks: texts with phraseological units and definitions of phraseological units. There were 2 variants of tasks. Each included 2 texts with 20 phraseological units (to be recognized) and 10 multiple-choice tests for phraseological units' decoding. For each correct answer cadets could get 1 point, general point for the test was 30 points (Appendix 1).

Bartmiński (1998: 63–83) approach was implemented during our experimental study, namely empirical information was collected based on the analysis of the degree of recognition and adequacy of translation of phraseological units by cadets in texts.

In addition to this task, the level of cognitive skills of future officers was determined on the basis of standardized methods (interviews, observations, questionnaires, testing) and analysis of the results of their cognitive activity (results of writing modular tests, passing an examination session, etc.).

The results of the experimental study of 3rd year cadets are presented in Table 1.

Table 1: The results of the experimental study (3rd year cadets)

№	Member code experiment	Indicator of the formation of cognitive skills	Average grade point in English	Number of recognized phraseologies (out of 30 units)	Number of correctly defined phraseological units
1	M.N.	120	4.32	24	18
2	R.A.	140	4.8	28	13
3	G.K.	110	3.65	17	16
4	Sh.V.	100	3.21	8	7
5	R.N.	115	3.87	21	17
6	N.M.	90	2.95	9	4
7	K.B.	80	2.62	6	2
8	H.P.	105	3.45	16	13
9	M.A.	115	4.25	22	18
10	O.H.	120	4.65	23	20
11	S.L.	100	3.4	10	10
12	Ch.R.	140	4.78	26	21
13	B.S.	130	4.51	26	20
14	B.N.	80	2.76	4	3
15	D.O.	90	3.28	8	3
16	L.K.	100	3.75	14	8
17	K.O.	95	3.48	9	7
18	Z.A.	100	3.5	11	7
19	B.P.	110	4.28	17	16
20	T.D.	75	2.95	5	5
21	P.A.	110	4.42	17	15
22	F.E.	95	3.1	10	8
23	O.O.	120	3.9	21	19
24	V.Z.	100	3.12	11	10

| 25 | I.S. | 100 | 3.28 | 12 | 11 |

An analysis of Table 1 shows the correlation between the degree of recognition and the correctness of determination of phraseological units in texts, number of correctly defined phraseological units, the level of formation of cognitive skills and the success of cadets in the discipline. It should be noted that similar results were obtained for the other two study groups of 2 and 4 courses. To explain the results, the formula given in (2) was used:

(2) $h = (Xmax–Xmin):n = (140–75):5 = 13, h = 0.436,$
    where h–is the length of interval,
    n–is the number of intervals,
    $Xmax$, $Xmin$–indicators of the formation of cognitive skills.

We determined 5 levels of cognitive skills which were related with average grade in English: high, sufficient, medium, low and insufficient (Table 2).

Table 2: Levels of cognitive skills

	Indicator of the formation of cognitive skills	Average grade point in English	Correct answers
High level	127–140	4.364–4.8	25–30
Sufficient level	114–127	3.928–4.364	19–24
Medium level	101–114	3.492–3.928	13–18
Low level	88–101	3.056–3.492	7–12
Insufficient level	75–88	2.62–3.056	0–6

In order to establish the closeness of the identified correlations, the methods of mathematical statistics were used, namely the method of rank correlation, which allows establishing the strength and direction of such a relationship between two features (Sidorenko 2002: 27). The result of the application of this method is based on the calculation of the Spearman rank correlation coefficient r_s according to the formula with corrections in the presence of the same ranks:

(3)
$$r_s = 1 - \frac{6 \cdot \sum d^2 + T_a + T_b}{N \cdot (N^2 - 1)},$$

where $\sum d^2$ –the sum of the squares of the differences between the ranks, T_a, T_b – amendments to the same ranks, N –number of participants in the experiment.

    Empirical values of the rank correlation coefficient calculated from the results of the experiment are presented in Table 3.

Table 3: The results of the calculation of empirical values of Spearman's rank correlation coefficient in establishing correlations between the studied traits

Type of correlation	Empirical value of the criterion r_s	Critical value of the criterion r_s	Conclusion
Between the level of formation of cognitive skills and the degree of recognition of phraseology	$r_s = 0.9239$		Close direct correlation Hypothesis confirmation at the level of statistical significance $p \le 0.01$
Between the level of formation of cognitive skills and the correctness of the translation of phraseology	$r_s = 0.8708$	$r_s = \begin{cases} 0.49\ p \le 0.05 \\ 0.51\ p \le 0.01 \end{cases}$	Close direct correlation Hypothesis confirmation at the level of statistical significance $p \le 0.01$
Between success in English and the degree of recognition of phraseology	$r_s = 0.9114$		Close direct correlation Hypothesis confirmation at the level of statistical significance $p \le 0.01$
Between success in English and correct translation of phraseology	$r_s = 0.8957$		Close direct correlation Hypothesis confirmation at the level of statistical significance $p \le 0.01$

The analysis of Table 3 shows that there are close correlations between the level of formation of cognitive skills and the degree of recognition of phraseological units and between success in English and the degree of recognition of phraseology and the correctness of their translation. The obtained results confirmed our hypothesis that the degree of recognition and adequacy of the translation of phraseological units of military discourse depends on the formation of cognitive skills of subjects.

4 Conclusion

Our goal was to analyse various notions such as "discourse", "military discourse", "phraseological unit", "cognition" and to study ways of phraseological units decoding, understanding and translation. The main types of translation are phraseological (method of phraseological equivalent; method of phraseological analogue) and non-phraseological translations (tracing; lexical translation).

Analysing the content of future professional tasks, features of the cognitive sphere of cadets, the ability to adequately translate military texts and their success in a foreign language, we hypothesized a relationship between the level of cognitive skills of future border guards and the degree of recognition of phraseological units and adequate translation in military texts that was confirmed during the experiment.

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APPENDIX 1

A variant of the test

1. Define all possible phraseological units from the following texts:

Although Lord Chancellor was exhausted, and drained from what had *taken place* that night, enough adrenalin was still pumping through his body to ensure that he was unable to sleep. *On the one hand …*how he hated those clichéd words. *On the one hand*, Harry Clifton had been born three weeks before before his closest friend, Giles Barrington: fact. O*n the other hand,* Goles Barrington was unquestionably the legitimate son of Sir Hugo Barrington and his lawfully wedded wife, Elizabeth: fact. Maisie Tancock *gave birth* to Harry on the 28th day of the ninth month after she'd admitted having a dalliance with Sir Hugo Barrington while they were on a works outing to Weston-super-Mare. Fact. On the other hand, if he did *come down in favour of* Harry …. .he finally dozed off, only to be woken by a gentle tap on the door at the unusually late hour of seven o'clock. He groaned, and his eyes remained closed while he counted the chimes of BigBen. Only three hours before he had to *deliver his verdict,* and he still hadn't *made up his mind.* Big Ben had struck eight times. But still he was *none the wiser. By the time* he returned to the bathroom to brush his teeth, the scales of Justice still hadn't come down on either side. Just after Big Ben chimed nine, he slipped back into his study and went over his notes *in the hope* that the scales would finally tilt to one side or the other, but they remained perfectly balanced.

2. Find appropriate definition of the phraseological units:

1. To give a birth to …
a) *Deliver a baby*
b) *To become a God father*
c) *To become pregnant*
d) *To be born*
2. To pick up the pieces …
a) *to break something into pieces*
b) *to bring something to the whole*
c) *to go faster*
d) *to try to make a situation better after something bad has happened*
3. To take by surprise …
a) *to present a surprise*
b) *to happen to (someone or something) unexpectedly*
c) *to except a surprise*
d) *to start an attack unexpectedly*
4. The last straw …
a) *the last decision*
b) *something that was developed lately*
c) *stop doing something in order to get a benefit*
d) *the last of a series that brings one beyond the point of endurance*
5. Call a spade a spade …

a) *to call a thing by its right name however coarse*
b) *to be in charge or control*
c) *to be linear*
d) *to hold responsibility*

6. Get one's priorities straight …
a) *to be the main in the family*
b) *to understand what things are most important for one to do*
c) *to put one's interest on the first place*
d) *to feel oneself much more important than others*

7. Bang heads together…
a) *to beat people around*
b) *to offend*
c) *to use angry or forceful methods to control or punish people*
d) *to shout at people*

8. Turn a blind eye …
a) *to be oblivious*
b) *to refuse to do something because of naughtiness*
c) *to be blind and dumb*
d) *to be blind*

9. To come to a halt …
a) *to stop*
b) *come to an end*
c) *to be presented in the court*
d) *to turn out to be*

10. Below the belt …
a) *near the knees*
b) *unfairly*
c) *insincere*
d) *naked*

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