INSTRUMENTAL AND INTEGRATIVE MOTIVATION IN TEACHING ENGLISH FOR MEDICAL PURPOSES

INSTRUMENTALNA I INTEGRATIVNA MOTIVACIJA U NASTAVI ENGLESKOG KAO JEZIKA MEDICINSKE STRUKE

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Summary

Introduction. The aim of this paper is to determine the degree and type of motivation for learning English for specific purposes in the first year medical students of the Faculty of Medicine Novi Sad. The paper presents the results of the research on instrumental and integrative motivation carried out in a sample of 61 first year medical students of the Faculty of Medicine in Novi Sad. Material and Methods. The paper is based on a survey carried out during the summer semester of 2017/18. An anonymous survey was conducted through a questionnaire that investigated instrumental and integrative motivation. In addition, the questionnaire included questions on the year of study, semester, number of years of learning English and regularity of attendance. Results. The results are presented in a table and the answers are expressed in percentages. The results were analyzed in two segments, based on the type of motivation that was tested. The research confirmed the hypothesis that medical students had high levels of instrumental motivation, mostly focused on their further advancement in the profession. The research also showed a strong integrative motivation of the respondents and their interest in the elements of culture and civilization of the target language. Conclusion. In conclusion, the possible impacts of this research on practical English teaching for medical purposes should be considered in order to provide guidance for further research. Key Words: Students, Medical; Teaching; Motivation; Language; Education, Medical; Surveys and Questionnaires

Sažetak

Uvod. Cilj ovog rada je da se utvrdi stepen i vrsta motivacije u učenju engleskog jezika struke kod studenata prve godine medicine na Medicinskom fakultetu Novi Sad. Rad je zasnovan na anketi sprovedenoj tokom letnjeg semestra 2017/2018. školske godine. Anketna ispitivanka je izvedena putem upitnika kojim se istražuje instrumentalna i integrativna motivacija. Pored toga, upitnik je sadržao i podatke o godini studija, polu, broju godina učenja engleskog jezika i redovnosti pohađanja nastave. Rezultati. Rezultati istraživanja prikazani su tabelarno i odgovori studenata izraženi su u procentima. Rezultati su analizirani u dva segmenta na osnovu vrste motivacije koja je testirana. Istraživanje je potvrdilo hipoteze o visokom stepenu instrumentalne motivacije kod studenata medicin, koja je u najvećoj meri usmerena na njihovom daljem napretku u struci. Istraživanje je pokazalo i snažnu integrativnu motivaciju ispitanika i zainteresovanost za elemente kulture i civilizacije ciljnog jezika. Zaključak. U zaključku se razmatraju mogući uticaji ovog istraživanja na praktičnu nastavu engleskog kao jezika medicinske struke i daju smernice za dalja istraživanja. Ključne reči: studenti medicine; predavanje; motivacija; jezik; medicinsko obrazovanje; ankete i upitnici
students have towards learning a foreign language, both general as well as the language of the profession, has been a dynamic field of research in the last decades. Most of the studies were focused on the concept of motivation and attitude, obviously under the influence of the Gardner model, within the framework of which the attitude was considered a subcategory of the broader concept of motivation [1–3]. According to Dörnyei [4], motivation affects the basic dimensions of human behavior, its direction and magnitude (intensity). In addition to the attitudes, the concept of motivation is inextricably linked with the analysis of the needs of foreign language learners in the sense that if the program is more suited to the students, no matter whether it was a general or a language of the profession, the motivation and the final success in its accomplishment will be greater [5, 6].

The motivation of medical students to learn English as a language for specific purposes of medical profession has not been studied in our country. English as a language for medical purposes is largely different from other fields, primarily from humanities, but also natural sciences, since, on the vocabulary level, it has a much higher percentage of the words of Latin and Greek origin. Additionally, a large number of modern medical terms in Serbian are usually borrowed from English, often in a form that is not regular or systematized. This may at first glance lead to the conclusion that a greater percentage of the words of English origin are known or recognizable to the student of English for medical purposes, but may often result in the acquisition of incorrect forms and structures. At the same time, a large percentage of professional publications that are required for specialization are often available only in English, which further motivates students to improve both the general and medical English. The aim of this paper is to examine the degree of instrumental and integrative motivation of the first year medical students at Novi Sad University in learning English for medical purposes.

Motivation

Motivation is in the focus of a great deal of studies and research since it largely affects the acquisition of any foreign language. It is often mentioned by language teachers when they talk of success and failure to learn a foreign language [4]. Even though there are a lot of definitions of motivation, which is “not a simple construct” [7], Dörnyei tried to define it as the “dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritized, operationalized and successfully or unsuccessfully acted out” [8].

Abbreviations

ESP – English for Specific Purposes
ESL – English as a second language

Development of motivation research

Research on motivation in foreign language learning has been developing rapidly since the 1960s. The first significant results in this field were published by Gardner and Lambert in Canada in 1959. Within the Socio-psychological research period (1959 - 1990), the work of Gardner et al. had a decisive influence on the understanding of the role of motivation in learning a foreign language. They standardized techniques for measuring the broad range of motivation components based on socio-psychological approach and studied motivation as a complex system of different factors and attitudes. Probably the most important contribution they made is the identification of integrative and instrumental motivation [1]. The student is instrumentally motivated when learning the language to pass the exam, get a job, advance in his/her career, and use it when traveling abroad. Integrative motivation, on the other hand, encompasses his/her desire and motivation to identify or integrate into the community of the language he/she studies [9]. The main reasons for learning a foreign language are assimilation with the community and culture of the target language, with the possible powerful emotional interest in the speaker of that language. This dichotomy of motivation (instrumental and integrative) has also been expanded with the term orientation, taking into account whether the context of language learning is oriented towards academic learning and careers, or to the social and cultural model [10]. Gardner [7] also claimed that, when considering the roots of motivation for learning a foreign language in a school context, motivation must be considered not only at the educational level (as any other subject), but also in a cultural context, which is generally not relevant to the majority of other subjects of study. Most language teachers believe that motivation is a key factor in language acquisition. The importance of motivation in learning English cannot be disputed [10, 11]. The importance of motivation in the process of learning a foreign language is explained by Gardner [12] in the following way: “If a student is motivated, he or she has a reason (motive) to participate in relevant activities, to invest effort, to be persistent, dedicated to tasks, show the desire to achieve his/her goal, enjoying the activities, etc.” In the analysis of 75 studies dealing with motivation, Magsoret and Gardner [13] concluded that “motivation is more associated with success in learning a different language than any other factor.”

The research of motivation during the 1990s is characterized by work on cognitive theories in the psychology of education. During this period of learning a foreign language, motivation is called the cognitive period, and it brings a different view of the role of motivation, now from the cognitive aspect. The key aspects of motivation are viewed as two-fold, as the interaction of two trends: (a) the individual’s estimate of one’s own abilities, poten-
Table 1. Results of a questionnaire on the instrumental and integrative motivation of the first year students of medicine at the Faculty of Medicine in Novi Sad

| Question                                                                 | 1. | 2. | 3. | 4. | 5. | 6. |
|-------------------------------------------------------------------------|----|----|----|----|----|----|
| 1. Learning English is a pleasure for me, not an obligation.           | 3.2% | 4.9% | 39.3% | 29.5% | 22.9% |
| 2. I feel that knowing English will be beneficial for my future career. | 3.2% | 6.5% | 21.3% | 68.8% |
| 3. The feeling of pleasure after successfully learning English language skills is enough to motivate me to learn. | 4.9% | 3.2% | 39.3% | 36% | 16.4% |
| 4. I want to learn English well in order to achieve better overall results during my studies. | 3.2% | 3.2% | 11.4% | 42.6% | 39.3% |
| 5. While learning English I like to acquire new knowledge connected with my future profession. | 3.2% | 8.2% | 6.5% | 26.2% | 22.9% | 32.7% |
| 6. I want to learn English well in order to watch movies without subtitles. | 4.9% | 9.8% | 26.2% | 24.6% | 34.4% |
| 7. I want to learn English in order to enroll at the master/PhD studies abroad. | 1.6% | 9.8% | 22.9% | 29.5% | 36% |
| 8. I want to learn English because it is important for me to acquire wide general education. | 3.2% | 1.6% | 19.6% | 44.2% | 31.1% |
| 9. I am learning English solely because it is a compulsory subject in the curriculum. | 41% | 29.5% | 19.6% | 3.2% | 1.6% | 4.9% |
10. I want to learn English well in order to read literature in the English language. Želim da dobro naučim engleski jezik da bih pratio/la književnost engleskog govornog područja. 26.2% 9.8% 26.2% 14.7% 6.5% 16.4%

11. I want to learn English in order to find a job abroad. Želim da dobro naučim engleski jezik da bih pronašao/la posao u inostranstvu. 4.9% 3.2% 24.6% 39.3% 27.8%

12. I want to learn English in order to find a well paid job. Želim da dobro naučim engleski jezik da bih pronašao/la dobro plaćen posao. 3.2% 41% 24.6% 31.1%

13. I am learning English as it will be beneficial during my studies. Učim engleski jer će mi koristiti tokom studija. 6.5% 8.2% 16.4% 36% 32.7%

14. While learning English I like to learn about the way of life and the civilization of the English speaking cultures. Kroz učenje engleskog jezika volim da učim i o načinu života i civilizaciji naroda sa engleskog govornog područja. 9.8% 4.9% 16.4% 29.5% 24.6% 19.6%

15. Getting a high grade in the exam is my primary motivation to learn English. Postizanje dobre ocene na ispitu najvažniji mi je podsticaj za učenje engleskog. 8.2% 16.4% 22.9% 22.9% 24.6% 4.9%

16. I want to learn English in order to watch television shows in English without subtitles. Želim da dobro naučim engleski jezik da bih mogao/la da pratim televizijske emisije na engleskom jeziku bez titlova. 9.8% 9.8% 32.7% 14.7% 32.7%

17. I want to learn English for further specialization within my profession abroad. Želim da dobro naučim engleski jezik da bih se u okvirima posla stručno usavršavao/la u inostranstvu. 1.6% 3.2% 27.8% 32.7% 34.4%

18. I want to learn English to be able to communicate with people from the English speaking countries. Želim da dobro naučim engleski jezik kako bih mogao/la da razgovaram sa ljudima sa engleskog govornog područja. 3.2% 4.9% 42.6% 49.1%

19. I want to learn English to be able to find my way when traveling abroad. Želim da dobro naučim engleski jezik da bih mogao/la da se snaden kad putujem u inostranstvo. 1.6% 3.2% 32.7% 62.2%

20. I want to learn English language terminology used in my profession. Želim da dobro naučim izraze na engleskom jeziku koji se koriste u mojoj struci. 1.6% 3.2% 37.7% 57.3%
tials and limits, past achievements, as well as various aspects of task execution and maintenance of goals (values, beliefs, difficulties); and (b) the desire to narrow down the perspective of foreign language learning motivation, and to present concrete examples of functioning in language learning [14, 15].

The process-oriented period, which emerges after 2000, is focused on changes in motivation within the globalized world. When we analyze the motivation for foreign language learning today, it certainly cannot be the same as a few decades ago. In this sense, the motivation to learn English is largely different from that of earlier epochs, because English language in the process of globalization has earned a higher status and become more widespread. During this period, research by Dörnyei [16], Lamb and others highlights the need for reinterpretation of the classic Gardner term integrativeness. Also, a clear boundary between integrative and instrumental motivation has almost disappeared today. Lamb [17] points out that “integrative and instrumental motivation are difficult to distinguish as distinct concepts: contacts with Westerners, computer usage, understanding of pop poets, studying abroad, travel, career advancement – all of these pursuits are interrelated, and are also associated with English as an integral, central part of the process of globalization which transforms societies and has a crucial impact on the lives of people”.

**Related research**

There are numerous studies aimed at determining the influence of motivation on the acquisition of a foreign language. Al-Tamimi and Shuib [18] published their research on the motivation and attitudes of students of the Petroleum Engineering studies towards learning English at Hadhramout University Of Sciences And Technology, Yemen. The result of their research, which included three motivational constructs (instrumental, integrative and personal), showed the dominant role of instrumental motivation for students in learning English, although personal motivation is also noticeable. On the other hand, Zanghar’s research [19], conducted among university students in Libya, showed a somewhat stronger impact of integrative motivation, but did not establish the correlation between motivation and success in learning. Unlike this study, a study conducted in Spain [20] showed a positive correlation between motivation, motivational teacher strategies, and students’ success in teaching foreign languages. The research conducted in Iran [21] has shown that motivation is a dynamic category, i.e. changing the nature and level over time. Similar conclusions have also been reached in Daftarifard and associates research [22], which also investigated the impact of motivation among university students in Iran. The research of Khansir and associates [23] shows a strong correlation between the socio-economic status of students and the motivation for learning a foreign language. Numerous studies on the role of motivation in foreign language learning have been conducted in Croatia [24, 25]. These authors studied individual differences regarding the affective characteristics of students, including motivation, attitudes and emotions towards learning English. The research included 2137 students of elementary and high schools, and showed a more positive attitude of high school students towards learning a foreign language. Martinović and Poljaković [26] conducted a research study at the University of Zadar among students studying (ESP), and the results showed the strongest impact of instrumental motivation, although integrative motivation was also highly ranked. A recent study by Pavlić, Takač and Berk [27] studied three components of motivation for learning English (pragmatic-communicative, affective and integrative) among students of secondary vocational schools and grammar schools, and the results showed that affective motivation is the strongest factor in their sample.

Earlier studies of motivation in English language teaching in our country [28–30] found that the motivation of students studying general English as a second language (ESL) is different from the motivation of those who study ESP. In teaching ESP, a significantly higher level of instrumental motivation was established compared to the integrative motivation. This difference is especially conspicuous among non-university students, whose language learning is closely related to the future needs of the profession. Similar conclusions have been drawn in recent studies of motivation among students of economics [31] and students of information technologies [32].

**Material and Methods**

This study was based on an anonymous survey conducted during the summer semester of 2017/18. The instrument of motivation research was a slightly adapted questionnaire, which was already used to test the motivation of students of natural sciences in teaching ESP [28]. The questionnaire contained 20 questions that tested instrumental and integrative motivation. In addition, it also contained questions about the year of studies, the number of years of English language learning before enrolling in the university, and whether the students attended classes regularly, occasionally or rarely. The questions in the survey dealing with different aspects of instrumental and integrative motivation were randomly ordered in the questionnaire. The answers were arranged on a scale of one (I absolutely disagree) to six (I absolutely agree), with three positive and three negative possible answers. The survey offered 12 questions which referred to instrumental and 8 to integrative motivation. The survey was conducted anonymously at the end of summer semester 2017/18 at the amphitheater of the Faculty of Medicine, the University of Novi Sad, in the presence of teachers, the authors of this paper. All 61 students that participated in the survey were in their first year of medical studies at the Faculty of Medicine in Novi Sad, attending English as a compulsory subject. All surveyed students regularly at-
tended English language classes, and their number of years of learning English as a foreign language before the university ranged from 6 to 15. Most of the students had studied English for 8 – 12 years, while a small number of them studied shorter or longer than that: two of them 6, and four of them 14 or 15 years. Due to the fact that students came from different secondary schools, different educational profiles and from different backgrounds, it was expected, given the great inconsistency in the number of years of learning English, and therefore the different level of knowledge, that the results would also show a certain degree of inconsistency in terms of instrumental and integrative motivation.

Results

The results of the research are shown in Table 1. The table lists all the 20 questions from the questionnaire in the order in which students responded to them. Their answers were scored on a scale of 1 to 6, and the results are shown in percentages.

Discussion

The following part of the paper analyzes the results obtained in our research based on the medical students’ responses on the existence and degree of instrumental and integrative motivation for learning English.

Instrumental motivation

The research unambiguously showed an extremely high level of instrumental motivation. Namely, as much as 98.2% of the respondents expressed their desire to learn medical terminology in English (57.3% absolutely agreed, and 37.7% agreed with this statement). Very high results were also found in relation to statement No. 2 (students believed that they would benefit from knowing English during their future career) and statement number 17 (students expressed the desire to learn English in order to continue their professional training abroad). A slightly lower but still high percentage of students were motivated to learn English in order to find a well-paid job or a job abroad (statements 11 and 12). Motivation for learning in order to achieve better success in their studies was also high (statements 13 and 7), where it is noticeable that students recognized that their knowledge of English would be useful in their master’s and doctoral studies. It is extremely important to point out that less than 10% of students expressed motivation to learn English only because it was obligatory in the curriculum (statement No. 9), and that a relatively small number of students stated that they found getting a good grade at the exam the most important factor for learning English (statement 15).

Integrative motivation

By analyzing the results of the research on integrative motivation, its expected lower level than the previously analyzed instrumental motivation was confirmed. Most respondents expressed a motivation to learn English in order to communicate with people in English speaking countries (statement 18), and to make it easier for them to travel abroad (statement 19). A large number of students emphasized the feeling of satisfaction after successfully mastering the English language as a sufficient incentive for learning (statement 3), as well as the fact that learning English was a pleasure and not just a commitment (statement 1). A significant number of students were motivated to learn English in order to be able to watch movies (statement 6) and to watch television shows in English without subtitles (statement 16). A smaller number of students pointed out the desire to learn about the way of life and civilization of the people from English speaking countries (statement 14) as a factor of motivation, while most students have responded negatively to the statement that they wanted to learn English in order to read literature in English.

The results of the study confirmed its basic hypothesis, the dominant role of instrumental motivation in learning English as a language for medical purposes. Nevertheless, a very high degree of integrative motivation has been also determined, which is in line with the contemporary research in this field, showing that the boundaries within this classical division are getting thinner. It has been confirmed that the students are mostly motivated by the need to acquire professional terminology and to follow professional content in English in order to further improve in the field of medical science. Due to limited space, it was not possible to make a detailed statistical analysis of the results, including the correlation between factors such as gender and type of motivation, as well as the correlation between years of learning and motivation. All these topics could be the subject of further research and the analysis of the degree and type of motivation of medical students in English language teaching.

Conclusion

In this paper, we have confirmed the presence and degree of instrumental and integrative motivation for learning English among students of the first year of medicine at the Faculty of Medicine Novi Sad. The research showed an extremely high degree of not only instrumental but also integrative motivation, which confirmed our initial hypothesis. Such results should be taken into account when developing curricula for teaching English as a language for medical purposes and in designing materials and methods. Since a great deal of research points out motivation as one of the most important factors for successful foreign language learning, teaching materials and programs should be consistent with the degree and type of motivation of future learners in order to achieve optimal results in language learning.
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