

<sup>1</sup>Rizakhoyayeva G.A.<sup>a</sup>, <sup>1</sup>Saipullayeva M.A., <sup>2</sup>Akeshova M.M., <sup>2</sup>Nyshanova S.T.,  
<sup>3</sup>Bingöl Zekeriya

<sup>1</sup>Khoja Akhmet Yassawi International Kazakh-Turkish University, Turkistan, Kazakhstan

<sup>2</sup>International University of Tourism and Hospitality, Turkistan, Kazakhstan

<sup>3</sup>Ministry of Culture and Tourism, Culture and Tourism Expert, Muğla, Türkiye

## MOBILE-ASSISTED LANGUAGE LEARNING IN TRAINING TOURISM SPECIALISTS

Rizakhoyayeva Gulnara Abdumajitovna, Saipullayeva Makhinur Abdimutalipovna, Akeshova Madina Murzakhanovna, Nyshanova Saltanat Tynybekovna, Bingöl Zekeriya

**Mobile-assisted language learning in training tourism specialists**

**Abstract.** Tourism is now recognized as a form of travel and leisure that directly contributes to the economic development of a country. It plays a significant role in the world economy. A new specialization in vocational education is being developed to train competent professionals for regional tourism development. Countries and neighboring regions are now receiving more attention as a result of the growing importance of regional tourism. Future tourism professionals need to know the best tourism destinations, the political and economic climate in the region, local tourism destinations, the political and economic climate in the region, local tourism strategy and growth trends, and the historical and cultural heritage of the region. With this knowledge, future tourism professionals will be better prepared to contribute to the growth and success of the industry. In order to enhance foreign language learning for those who will work in the tourism industry in the future, universities are utilizing state of the art methods. In addition, taking into account the complexity of tourism activities and global tourism trends is necessary for their practical application. The aim of the study was to investigate the peculiarities of foreign language skills development with the help of mobile technologies for future specialists in the field of tourism. Students' attitudes towards the use of mobile technologies for foreign language learning in tourism education were positive, in line with the objective, no significant differences were found between the academic year, level or gender of the participants.

**Key words:** mobile assisted language learning, foreign language communication, digital society, tourism activities, travels applications.

Ризаходжаева Гульнара Абдумажитқызы, Махинур Сайпуллаева Абдимуталипқызы, Акешова Мадина Мурзахановна, Нышанова Салтанат Тыныбековна, Бингол Зекерия

**Туризм саласындағы мамандарды дайындау кезінде мобильді құрылғыларды пайдалана отырып, тілдерді үйрену**

**Аңдатпа.** Туризм елеңдік экономика үшін өте маңызды және қазіргі уақытта елдің экономикалық дамуына тікелей ықпал ететін саяхат пен демалыс түрі ретінде қарастырылады. Кәсіптік білім беру саласында еңірлік туризмді дамыту үшін білікті мамандар даярлайтын жаңа мамандандыру пайда болады. Аймақтық туризмнің маңыздылығының артуына байланысты қазіргі уақытта елдер мен көршілес аймақтарға көбірек көңіл бөлінуде. Болашақ туризм мамандары туристер үшін ең жақсы бағыттар, аймақтағы саяси және экономикалық жағдай, жергілікті туристік Стратегия және өсу тенденциялары, сондай-ақ аймақтың тарихи және мәдени мұрасы туралы білуі керек. Осындай білімнің арқасында туризм саласындағы болашақ мамандар туризмнің дамуы мен табысына өз үлесін қосуға жақсы дайын болады. Университеттер туризм саласындағы болашақ мамандарға шет тілдерін оқыту сапасын арттыру үшін түрлі инновациялық тәсілдерді қолданады. Сонымен қатар, оларды практикалық қолдану туристік қызметтің күрделілігін және туризмді дамытудың жаһандық заңдылықтарын ескеруді талап етеді. Зерттеудің мақсаты мобильді технологиялардың көмегімен туризм саласындағы болашақ мамандардың шет тілін меңгеру дағдыларын дамыту ерекшеліктерін зерттеу болып табылады. Қойылған мақсатқа сәйкес студенттердің туристік білім беруде шет тілін үйрену үшін мобильді технологияларды қолдануға деген көзқарасы туралы оң нәтижелер алынды және оқу жылы, қатысушылардың деңгейі мен жынысы арасында айтарлықтай айырмашылықтар табылған жоқ.

**Түйін сөздер:** шет тілдерін мобильді оқыту, шетел тіліндегі коммуникация, цифрлық қоғам, туристік қызмет, туристік қосымшалар.

Ризаходжаева Гульнара Абдумажитовна, Махинур Сайпуллаева Абдимуталиповна, Акешова Мадина Мурзахановна, Нышанова Салтанат Тыныбековна, Бингол Зекерия

**Изучение языка с помощью мобильных устройств при подготовке специалистов в сфере туризма**

**Аннотация.** Туризм имеет огромное значение для мировой экономики и сегодня рассматривается как одна из форм путешествий и отдыха, которая вносит непосредственный вклад в экономическое развитие страны. В сфере профессионального образования появляется новая специализация,

которая готовит квалифицированных специалистов для развития регионального туризма. В связи с растущим значением регионального туризма все больше внимания уделяется странам и соседним регионам. Будущие профессионалы в области туризма должны знать о ведущих туристических направлениях, политической и экономической обстановке в регионе, местной стратегии туризма и тенденциях роста, а также об историческом и культурном наследии региона. Обладая такими знаниями, будущие специалисты по туризму будут лучше подготовлены к тому, чтобы внести свой вклад в развитие и успех туризма. Университеты используют различные инновационные подходы для повышения качества преподавания иностранных языков для будущих профессионалов туризма. В то же время их практическое применение требует учета сложности туристической деятельности и глобальных закономерностей развития туризма. Цель исследования – изучить особенности развития навыков иностранного языка у будущих профессионалов туризма с использованием мобильных технологий. В соответствии с поставленной целью были получены положительные результаты об отношении студентов к использованию мобильных технологий для изучения иностранных языков в туристском образовании, при этом не было выявлено значимых различий между учебным годом, уровнем и полом участников.

**Ключевые слова:** мобильное обучение иностранным языкам, иноязычная коммуникация, цифровое общество, туристическая деятельность, туристические приложения.

**Basic provisions.** Language learning is a hot topic for travel industry experts, as it may be necessary to successfully communicate with holidaymakers and work with partners around the world. A new method known as language learning with mobile devices is being used to facilitate language learning. Language learning with mobile devices opens up opportunities for exciting, personalized and contextually relevant language learning. Tourism professionals can easily access language learning resources, improve their communication abilities and track their progress using mobile technology. Professionals can capitalize on this strategy by sharpening their language skills and staying up to date with industry developments. Incorporating mobile technology into language learning can help tourism industry professionals advance their careers, improve customer service and collaborate with other professionals in the field.

**Introduction.** In the educational system, important components of the development of students' qualification in tourism and excursion services are determined by the methodological guidelines on the standards of higher professional education. The skill set of a tourism specialist, such as adaptability to new information, interpersonal and communication skills, tolerance and foreign language skills, are important factors that determine the quality of his/her education and his/her ability to apply it professionally. In the future, tourism industry professionals should be able to take advantage of mechanical advances and new programs in their field according to the rules of exhibition for students.

The Tourism Development Programmer in Kazakhstan wants to make the country's tourism product more competitive and realize its full potential. This will be done in several ways such as:

Improving the level of tourism services;

Creating language abilities among tourism industry employees to further develop speech abilities;

Achieving world-class computerized mastering and computerized improvement of fundamentals and management;

Modernization of advanced stages in the tourism industry to improve the tasks and quality of customer support.

Kazakhstan organizes various events such as the “Kazakhstan Creative Tourism Forum” and the “International Tourism Forum” to promote the country's scientific and technological achievements. These events are aimed at strengthening the country's position as a global tourist destination and introducing these achievements into the tourism sector.

Tourism has a significant impact on people's ability to learn about new places, cultures and traditions by introducing them to them. This in turn contributes to the development and maintenance of people's sense of self-determination and identity. To really succeed in the tourism industry, experts need to be able to provide unfamiliar guests with accurate and complete data about an area. This includes the effective use of the latest information technology. Kazakhstan has the potential to effectively develop its tourism industry and enhance its global position as a tourist destination by implementing these strategies and engaging in relevant activities [1].

There are several objective systemic problems that should be addressed. For instance, it is important to select the most sensible programming and versatile applications for showing unknown dialects to experts in the tourism industry. Moreover, selecting the most suitable portable innovation offices for understudies during autonomous verification is another important problem [2].

Furthermore, it is still unclear how to develop comprehensive concepts for enhancing tourism product creation by utilizing mobile technology and mobile learning resources for foreign language learning.

Subsequently, extra research is anticipated to explore the features of exercise planning in unknown dialect of understudies when utilizing universal applications during interaction and transport of tourism industry administrations.

The main aim of this research study is to find out how future tourism industry experts acquire foreign language skills through mobile technology.

The review suggested that integrating modules or units into unknown dialect preparing experts in the tourism industry, giving understudies the opportunity to actively participate in the creation and planning of specific portable accomplishments, will create new conditions that improve the improvement of attractive expert unknown dialect abilities and suitable abilities (e.g., meaningful correspondence in unknown dialect, skillful entrepreneurial exercises, cooperation, smart leadership abilities, and active training).

**Literature review.** Modern education has undergone a significant transformation in the last decades. Surviving childhood in the age of computerization with consistent access to PCs and mobile phones, understudies are now being educated in the so called “Digital Generations”.

With improvements in hardware, software and feature sets, teachers and students now have significantly more options when it comes to using mobile phones as a learning tool. Students are now given greater access.

There are many platforms for learning, including mobile and web-based applications. Mobile phones and remote innovation will drive further development. This technology is now at the center of all aspects of society’s existence, including commerce, education, transport and the economy. Researchers and educators interested in the continued use of universal advances such as mobile phones and tablets to educate campers are expanding.

With the increasing availability of computers and mobile phones, education has changed dramatically over the last decade. Students can now enhance their learning anytime and anywhere thanks to the availability of various learning platforms, including mobile and web-based applications.

According to our initial survey, student travelers in Kazakhstan are interested in learning via mobile device. In addition, the growing number of mobile device owners in the country provides an opportunity for mobile learning to become more accessible.

Although learning via mobile phones is considered useful, it is important to consider the viability of this approach. Critiques and evaluations of understudies will be crucial in deciding the outcomes of portable learning.

Consequently, it is crucial to focus on their encounters and ideas to guarantee that versatile learning is interesting and beneficial to their learning outcomes.

Titova’s study demonstrated the potential of mobile technologies in education to provide easy and ubiquitous access to smartphones, tablets and laptops. According to Titova, the introduction of mobile technologies and mobile learning in education allows teaching aids in various academic fields to have greater didactic potential [3].

Degteva supported this point of view, emphasizing that portable innovations create a useful platform for understudies and teachers to collaborate. They can quickly access resources for projects, research and studies, which makes them a useful educational tool [4].

Binbasioglu further emphasizes the unique features of mobile learning. By offering a subjectively new configuration for presenting and sending content, as well as the ability to see it disconnected, m-learning fundamentally improves the cognitive experience [5].

Finally, Tyagi, Singh and Jain dive into the potential and possibilities of portable advances and augmented reality to improve the travel industry. Their research showed that mobile technology and augmented reality play a crucial role in enhancing the competitiveness and tourism attractiveness of selected regions across the country [6].

The limitations of mobile application adoption in the tourism industry are the subject of this study. Some of the obstacles are high development costs, competing applications with similar functionality and dependence on the Internet.

According to Aniskin, Busygina and Zamara, the intensity of use of computer ICT and automated accounting systems by managers of tourist services tends to determine the efficiency of their professional activities [7].

In addition, the authors assumed that profoundly gifted expert in the tourism industry should actively use universal applications, alone or in combination with other data and correspondence innovations, to coordinate and manage the tourism industry, disregarding place and time. Overall, this study demonstrates the potential of mobile apps to improve tourism services, but also recognizes the barriers and limitations that need to be overcome to realize their full potential.

Maduku discussed the factors that influence the effectiveness of mobile travel apps. These include support from municipal and state authorities, marketing firms, financial resources, environmen-

tal and epidemiological circumstances and other factors [8].

Linking the booking option to the hotel's official website or mobile apps is one of the most effective marketing strategies. This makes possible a mobile guest identification system using push notifications from the operator. Thanks to this universal mechanism, visa information is entered into the administrative structure, which simplifies the check-in process. The mobile solution speeds up the process, but the receptionist still has to confirm the guest's check – in. Researchers said this time was about 30 seconds.

Ammirato, Felicetti, Linsalone and Carlucci used experimental information to confirm the significant impact of digitalization on the social sphere of the tourism industry, affecting both interest and supply [9].

The authors of the study note that the new mobile services made possible by advances in digital technology have made it easier for tourists to communicate with people from different cultures. In addition, these achievements have triggered the development of new economic business models.

The researchers examine the different service options provided by mobile application services in this area and emphasize the important aspects of mobile technology for cultural tourism. For example, the authors depict recurring designs in specific universal applications (Booking.com, Priceline) dealing with room bookings. They also describe their experiences with smart rooms based on facial recognition, smart security and voice control.

Using cloud storage technology, hoteliers in these situations are getting customer information. To increase customer loyalty, hoteliers are “customizing” rooms for visitors even before they arrive.

Mobile travel application, according to Volodchenka, Lantsova and Mironova, involved the use of content and functionality to maintain contact with customers, remotely resolve any abnormal situations, promptly resolve questions and concerns, and offer “hot” excursions and tours [10]. Moreover, a versatile application also addressed a specific software element whose usefulness and appearance are enhanced with the exceptional capabilities of a particular area.

In a nutshell, these advanced applications provide hotel guests with a more personalized and immersive experience and meet the diverse requirements of today's travelers.

Although the potential and possibilities of portable learning are recognized, Spatar-Kozachenka, Morozan and Petrienko found that there are difficul-

ties in understanding these possibilities and implementing them in the training of future tourism industry professionals [11].

The solution is to modify the current teaching method that teachers use in higher education. This modification is necessary because Kazakhstan's tourism development strategy and professional standards for tourism professionals stipulate that the system of educational tasks based on mobile applications should include a section in which teachers review specific digital resources relevant to job functions.

Future tourism professionals will have a deeper understanding of the latest mobile learning tools and their potential application in the tourism industry if they ensure that the selected digital resources are accurately matched to the required job functions.

Performing the various tasks of interface matching, object location, and content direction for a universal application is fundamental. These efforts are crucial to align the user interface of the mobile application with the learning objectives and specific requirements of tourism professionals in their future positions.

In addition, the instructive climate of the universal application should help in methods to improve the tourism industry in Kazakhstan while taking into account the specific needs of tourism industry managers, visit administrators, tourism services, local attendants, hotel managers, and the end customers of their administrations [12].

**Methods and organization of the study.** An employee's ability to communicate in foreign language is an essential part of his/her professional competence in tourism. Numerous innovative approaches are being implemented in higher education institutions to improve the level of foreign language teaching to potential specialists in tourism. However, when implementing them in practice, it is necessary to take into account the global strategy of tourism development and the specifics of tourism activity.

The aim of the study is to investigate the characteristics of future tourism sector specialists to improve their foreign language proficiency by using mobile technology.

The study used a single data collection method and was categorized as descriptive research. Description is an important aspect of the scientific process in general and pedagogical research in particular [13]. Convenience sampling was used to select participants based on their convenience. Convenience sampling constitutes non-random (non-probability) sampling [14].

The sample group consisted of third year and final year students studying at the International University of Tourism and Hospitality, including students from different countries and cultures. 39 junior participants and 29 senior students participated in the study, including 32 females and 36 females. A special questionnaire was conducted among third and fourth year students, and the results were analyzed in terms of percentages. The study provided conclusions, recommendations for future research, and brief summary of results based on theoretical analysis and practical research.

**Results and Discussion.** The study covered general information about the students, like gender and level of qualification. The questionnaire used a five-point Likert scale to categorize the respondents' level of agreeing or disagreeing with each item. The respondents' answers were classified into the following categories: "strongly agree, agree, neutral, disagree, and strongly disagree". The reliability of the presented questionnaire (0,849, greater than, 0,600) indicates its usability. Table 1 shows the reliability of the scale.

Table 1 – Reliability of the scale

Cronbach's Alpha	N of Items
0,849	13

In analyzing the data obtained in Part 1, it was found that the sample consisted of 39 females and 29 males. Depending on the level of English,

35 students had an intermediate level of English, and 33 students had a pre-intermediate level of English.

Table 2 – Demographic information

Gender	39 female	29 male
Level of English	35 intermediate	33 pre-intermediate

The findings obtained from the data analysis of this study are presented in this section. In the presentation of the results of the quantitative data, the study questions are mentioned. Results related

to the research question: To what extent are tourism students aware of the concept of mobile-assisted language learning? Table 2 shows the exact results.

Table 3 – The results of Mann-Whitney U test

	gender	N	Mean Rank	U	P
MALL	male	29	35,07	428,900	0,246
	female	39	32,29		

The aim of this study is to compare the development of learners' mobile-assisted language learning with a regional focus according to gender differences. The results of the questionnaire showed that there was no statistically significant difference between male and female participants' regionally oriented development of mobile-assisted language learning. However, the scores of the female partici-

pants were slightly more digital than females. Finally, in order to determine the answer to the study question, the Mann-Whitney U test was applied to the data to investigate the characteristics of building foreign language proficiency in future tourism industry professionals using mobile technology according to the students' enrolment years. The results of the Mann-Whitney U test are shown in Table 4.

Table 4 – The results of Mann-Whitney *U* test

	participants	N	Mean Rank	U	P
MALL	Junior	32	37,07	5,147	0,265
	Senior	36	54,15		

As seen in Table 3, there is no significant difference between the mean ranks of the two groups in terms of mobile technology use. As a result, according to the rank averages, it was observed that the mobile technology usage levels of the third year students were lower (MR=37, 07), while the rank averages of the final year students (MR=54, 15), were higher than the scores of the third year students.

The positive impact of mobile learning on the foreign language training of tourism professionals was the subject of discussion among the participants in the mobile learning experiment. They emphasized the development of how understudies could interpret the portable economy and its importance in a digital society. Portable innovation was seen as vital for intercultural correspondence and the promotion of multiculturalism. It also enabled instantaneous transmission of data across the globe, which was of great importance to traffic management associations. The utilization of “contactless” advancements in travel industry projects was seen to improve operations and save costs. Future experts will take a useful part in these advances, which will make the area more attractive to unfamiliar travelers [15].

On the other hand, some potential drawbacks were also noted. These memorable cut down jobs open doors to the tourism industry, immature communication abilities and the distracting impact of mobile phones on understudies’ adherence to academic subjects. By integrating multilingual portable applications into the present travel exercises, a travel typology was created as a response to further develop professional training in unknown dialects for travel industry experts in Kazakhstan.

**Conclusion.** To summarize, while the use of portable advances offers tremendous advantages in the tourism industry, there are also potential disadvantages that should be considered. Mitigating these negative effects and maximizing the potential tourism benefits of innovative mobile technologies may be the aim of future research.

The idea of studying language through mobile applications is becoming ubiquitous in dif-

ferent spheres, especially in the tourism industry. Be that as it may, research and understanding of this issue is lacking, undermining public acumen and commitment to the issue. The proposed class structure is expected to address this hole by focusing on the plan and improvement of multilingual universal applications clearly defined for tourism industry activities. This system allows experts to improve their skills in the tourism industry, including understanding buyer needs and finding ways to fulfil them. Soft skills such as project management, communication, teamwork, problem solving and presentation are also emphasized. The program includes part such as ventures, group training and mental exercises to develop these abilities. In addition, professionals can use the system to organize tours and itineraries based on their theoretical knowledge to stimulate real work functions.

Despite the possible advantages of portable training in tourism, there are several obstacles related to focusing on members, considering dependence on unfamiliar organizations, significant costs, specialized frustrations in remote regions and difficulties with coordination.

However, addressing these obstacles is a strategic imperative given the rapid advances in mobile connectivity and the expansion of the mobile work market. This is particularly important in relation to preparing for an unfamiliar language for travel industry experts, as aligning common sense exercises during planning and utilizing specific universal innovations improves overall growth opportunities.

In conclusion, the research study participants recognized that there are a number of challenges to overcome, but they also recognized the importance of these obstacles in advancing technological advances and facilitating effective mobile learning experiences for professionals working in the tourism industry.

**Acknowledgments.** This research is funded by the Science Committee of the Ministry Science and Higher Education of the Republic of Kazakhstan (Grant No. AP19678230).

## References

- 1 Rizakhojayeva G., Baltabayeva A., Abubakirova A. Intercultural Communication in the Great Silk Road Tourism Regions. Conference: Tourism and Cultural Heritage CongressAt: Turkey, Marmaris, 2019. – pp. 46-49.
- 2 Volodchenko V. S. et al. Analysis of the mobile application market in the tourism industry // Questions of science and education. – 2019. – №. 33. (83). – pp. 109-113.
- 3 Titova S.V. Mobile learning today: strategies and prospects // Bulletin of Moscow University. Series 19. Linguistics and intercultural communication. – 2012. – №. 1. – pp. 9-23.
- 4 Degteva K.S. Mobile applications in modern mathematical education // Education, innovation, research as a resource for community development. – 2018. – pp. 48-54.
- 5 Binbasioglu H., Turk M. Mobile technology acceptance among Turkish travelers // Digital Marketing Strategies for Tourism, Hospitality, and Airline Industries. – IGI Global, 2020. – pp. 111-140.
- 6 Tyagi P. et al. Tourist Experiences Through Mobile Augmented Reality // 2022 International Conference on Electronics and Renewable Systems (ICEARS). – IEEE, 2022. – pp. 1605-1610.
- 7 Aniskin V.N., Busygina A.L., Zamara E.V. Optimization of the process of training tourism specialists in the digital economy // Azimuth of scientific research: pedagogy and psychology. – 2019. – Vol. 8. – №. 1 (26). – pp. 29-32.
- 8 Maduku D. K. Antecedents of mobile marketing adoption by SMEs: Does industry variance matter? // Journal of Organizational Computing and Electronic Commerce. – 2021. – Vol. 31. – №. 3. – pp. 222-249.
- 9 Ammirato S. et al. Digital business models in cultural tourism // International Journal of Entrepreneurial Behavior & Research. – 2022. – Vol. 28. – №.8. – pp. 1940-1961.
- 10 Volodchenko V.S. et al. Analysis of the market for mobile applications in the tourism industry // Issues of science and education. – 2019. – №. 33 (83). – pp. 109-113.
- 11 Spatar-Kozachenko T.I., Moroza O.V., Petrienko N.S. Current problems of professional training in the field of tourism and hospitality in Russia and abroad // Service plus. – 2018. – T. 12. – №. 3. – pp. 44-51.
- 12 Pavelyev I. G. et al. Digital service as a driver for the promotion of hospitality services in inclusive tourism // Competence. – 2022. – №. 4. – pp. 36-39.
- 13 Siedlecki S. L. Understanding descriptive research designs and methods // Clinical Nurse Specialist. – 2020. – Vol. 34. – №.1. – pp. 8-12.
- 14 Sedgwick P. Convenience sampling // Bmj. – 2013. – Vol. 347. DOI: <https://doi.org/10.1136/bmj.f6304>
- 15 Rizakhojayeva G. A. et al. Formation of communicative competence of future specialists in tourism // Man in India. – 2017. – Vol. 97. – №.25. – pp. 107-121.

<p><b>Хат хабарга арналган автор (бірінші автор)</b> Ризаходжаева Гульнара Абдумажитовна – PhD докторы, қауымдастырылған профессор, Қожа Ахмет Ясауи атындағы Халықаралық қазақ-түрік университеті, Түркістан қ., Қазақстан, e-mail: <a href="mailto:gulnara_rizahodja@mail.ru">gulnara_rizahodja@mail.ru</a> ORCID: <a href="https://orcid.org/0000-0002-6791-243X">https://orcid.org/0000-0002-6791-243X</a></p>	<p><b>Автор для корреспонденции (первый автор)</b> Ризаходжаева Гульнара Абдумажитовна – доктор PhD, ассоциированный профессор; Международный казахско- турецкий университет имени Ходжи Ахмеда Ясави; г. Туркестан, Казахстан, e-mail: <a href="mailto:gulnara_rizahodja@mail.ru">gulnara_rizahodja@mail.ru</a> ORCID: <a href="https://orcid.org/0000-0002-6791-243X">https://orcid.org/0000-0002-6791-243X</a></p>	<p><b>The Author for Correspondence (The First Author)</b> Rizakhojayeva Gulnara Abdumajitkizi – PhD, Associate Professor; Khoja Akhmet Yassawi International Kazakh-Turkish University; Turkestan, Kazakhstan, e-mail: <a href="mailto:gulnara_rizahodja@mail.ru">gulnara_rizahodja@mail.ru</a> ORCID: <a href="https://orcid.org/0000-0002-6791-243X">https://orcid.org/0000-0002-6791-243X</a></p>
--	---	---