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**«ҒЫЛЫМ ЖӘНЕ БІЛІМ – 2017»**

студенттер мен жас ғалымдардың  
XII Халықаралық ғылыми конференциясының  
БАЯНДАМАЛАР ЖИНАҒЫ

**СБОРНИК МАТЕРИАЛОВ**

XII Международной научной конференции  
студентов и молодых ученых  
**«НАУКА И ОБРАЗОВАНИЕ – 2017»**

**PROCEEDINGS**

of the XII International Scientific Conference  
for students and young scholars  
**«SCIENCE AND EDUCATION - 2017»**



14<sup>th</sup> April 2017, Astana



**ҚАЗАҚСТАН РЕСПУБЛИКАСЫ БІЛІМ ЖӘНЕ ҒЫЛЫМ МИНИСТРЛІГІ  
Л.Н. ГУМИЛЕВ АТЫНДАҒЫ ЕУРАЗИЯ ҰЛТТЫҚ УНИВЕРСИТЕТІ**

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The proceedings are the papers of students, undergraduates, doctoral students and young researchers on topical issues of natural and technical sciences and humanities.

В сборник вошли доклады студентов, магистрантов, докторантов и молодых ученых по актуальным вопросам естественно-технических и гуманитарных наук.

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construction. According to the most conservative estimates, the energy saving costs of a house built on the principles of a "passive" house using heat-saving technologies are reduced by 70%.

Based on this concept, it can be said that green construction and green settlements are one of the ways to solve the raw dependence of Kazakhstan, and will also contribute to the adoption of Kazakhstan as a developed country.

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### LINGUISTICS AND PSYCHOLOGY: ARE MULTILINGUAL SPEAKERS MORE SELF-CONFIDENT, INTELLECTUAL AND SUCCESSFUL?

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People are different, some people prefer to be in the limelight, speaking out loudly and freely expressing their thoughts, while others, conversely, keep their emotions under control and are very shy. Taking into account fast developing environment we must be communicative and skillful to achieve our short- and long-term goals. Nowadays, more than half of the world's population is bilingual or multilingual [1]. Psychologists, who research differences in personality, ignore individual's linguistic knowledge. There is a lack of multidisciplinary research in linguistics and psychology. Segalowitz writes that it came close 40 years ago, but then it floated apart [2]. This research is set to look at new connection between linguistics and psychology.

There are some advantages of learning new languages. It is believed that learning another language is beneficial for many reasons. This research tests the following research questions/hypotheses – “Are multilingual speakers more self-confident, intellectual and successful than monolingual ones?”

Before answering the research questions we need to define the terms “personality”, “self-confidence”, “intellectual” and “successful”. **Personality** is the more or less stable and enduring organization of person's character, temperament, intellect and physique which determines his unique adjustment to the environment [3, 239].

Self-confidence is being secure in yourself and your skills [4]. The term “intellectual” was chosen because it is well understood in most countries, and is widely used in the context of clinical and policy applications. The term “intellectual” does not refer to a unitary characteristic “but rather is an umbrella term that includes cognitive functioning, adaptive behaviour, and learning that is age-appropriate and meets the standards of culture-appropriate demands of daily life” [5, 177]. Within the context of this article we define “successful person” as an individual who has good achievements in career and studies.

The great majority of Kazakhstan's citizens are bilingual, since Kazakh language is a state

language and Russian is a language of interethnic communication. Bilingual people are more adapted to life situations and conflict management. Also, these people often work better and faster than monolingual people do. Bilingual people have a large flow of blood to the brain; Moreover, cognitive control affects their neurological functions. We should note that monolingual speakers have improved long-term memory and concentrated attention. Researchers have also found a relationship between bilingualism and intelligence. When students are introduced to a new language through courses in a second language, they could present a greater cognitive and linguistic flexibility. Bilinguals have also developed more flexibility in thinking and tend to have higher intelligence. The advantages of a person's bilingualism have been seen across a variety of domains, such as creativity, self-confidence, problem solving and perceptual cognition [6]. For example, we can take the experiment conducted in the Academies of Translators of Sweden. Students had to study new languages with high complexity. These languages are Russian, Arabic and Dari. It was necessary to study the language every day for many hours. In the course of the study scientists monitored the medical students, who also, intensely study. All the participants underwent the brain MRI at the beginning and at the end of the experiment (3 months later). At the end of the experiment it was found that students who studied medicine had no change compared to those who studied languages. In their turn the part of the brain responsible for learning new knows (hippocampus) increased in size [3]. Relying on this experiment and researching this topic, we decided to conduct a survey. We have used "Quantitative research method – Survey". Quantitative method emphasizes objective measurements and the statistical, mathematical or numerical analysis of data collected through polls, questionnaires, and surveys, or by secondary data analysis, manipulating pre-existing statistical data using computational techniques. Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon. This survey was conducted among the students which live in student's house №6 of L.N. Gumilyov Eurasian National University (the ENU). Our respondent's total number is 100 students. Our survey contains 21 questions. There are several categories of questions:

1. General statistical questions (which include gender, age, ethnicity, citizenship, the respondent's faculty and the year of study);
2. Questions to reveal the fluency in English;
3. Questions about studying foreign languages;
4. Questions, clarifying the respondents' attitudes towards the multilingual policy of Kazakhstan;
5. Questions aimed at testing the research hypotheses, i.e. "multilingual speakers are more self-confident, intellectual and successful than monolingual ones".

The age of the respondents is from 17 till 22. They are future specialists of different professions. Firstly, we decided to find out respondents' knowledge of English (Question 9). According to the results, we can say that all of the respondents speak English [Table 1].

**Table 1. Q9**

| <b>Q9. How would you assess the level of your English language knowledge?</b> | <b>N of respondents</b> |
|---|-------------------------|
| Beginner  | 5                       |
| Elementary  | 14                      |
| Pre-Intermediate  | 23                      |
| Intermediate  | 27                      |
| Upper-Intermediate  | 19                      |
| Advanced  | 12                      |

We have analyzed the survey results in 3 groups:

- 1) questions about the process of learning English;
- 2) questions to answer our research question;
- 3) questions about assessing the trilingualism policy in Kazakhstan.

Group 1. Questions about the process of learning English. The first question about the process of learning English is Question 10 [Table 2].

**Table 2. Q10.**

| <b>Q10. How much time do you think is necessary to master English fluently?</b> |                               |
|---|-------------------------------|
| <i>Options</i>  | <i>N and % of respondents</i> |
| 6 months  | 17                            |
| 1 year  | 36                            |
| 1-2 years   | 30                            |
| 2-3 years   | 7                             |
| More than 3 years   | 9                             |
| It is impossible to know English fluently                                       | 1                             |

The Table 2 shows that one third of the respondents think that 1 year is enough to master English fluently, whereas 30 % consider a person needs 1-2 years to speak English very well. 1 %, i.e. 1 respondent (Elementary level) is pessimistic and chooses the option 'It is impossible to know English fluently'.

The second question about the process of learning English is Question 14 that tests the importance of English language for the respondents (How important is English for you?). The result shows quite optimistic outcome [Table 3].

**Table 3.Q14**

| <b>Q14. How important is English for you?</b> |                         |
|---|-------------------------|
| <i>Options</i>                                | <i>% of respondents</i> |
| Not particularly important                    | 4%                      |
| On average                                    | 13%                     |
| Very important                                | 83%                     |

The Table 3 indicates that English is important for the vast majority of the respondents, despite their English language proficiency. Only 4 % chooses the option 'Not particularly important', 13 % of the respondents find English important on average. Finally, 83 % of the respondents think English is very important for them. None of the students with upper-intermediate and advanced English have chosen the options 'Not particularly important' and 'On average'.

The next questions related to the process of learning English are Question 17 'Do you think that people need to study abroad in order to know English fluently?' and Question 19 'Would you like to leave your own country in order to live abroad?' [Table 4].

**Table 4. Q 17 and Q 19**

|   |      |  |      |
|---|------|--|------|
| Q17. 'Do you think that people need to study abroad in order to know English fluently?' |      | Q19. 'Would you like to leave your own country in order to live abroad?' |      |
| Yes   | 41 % | Yes  | 2 %  |
| No  | 59 % | No   | 31 % |
|   |      | Only for temporary residence   | 67 % |

More than a half of the respondents think that people need to study abroad in order to know English fluently. That is evidenced with the Q19, 67 % of the students want to live abroad only for temporary residence, whereas a mere 2 % want to leave Kazakhstan and live abroad.

Group 2. Questions aimed at testing the research hypotheses about self-confidence, intelligence and success. The first question of group 2 seeks the connection between students' knowledge of English language and their self-confidence in front of a big audience [Table 5].

**Table 5. Q18.**

|   |          |            |             |              |               |          |
|---|----------|------------|-------------|--------------|---------------|----------|
| Q.18 Can you freely express your thoughts in front of a big | Beginner | Elementary | Pre-Interm. | Intermediate | Upper-Interm. | Advanced |
|---|----------|------------|-------------|--------------|---------------|----------|

|   |     |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|-----|
| audience?   |     |     |     |     |     |     |
| Yes, I can (without difficulties)                           | 20% | 21% | 30% | 67% | 63% | 50% |
| It is a little bit difficult for me                         | 80% | 50% | 56% | 26% | 32% | 34% |
| No, I cannot express my thoughts in front of a big audience |     | 29% | 14% | 7%  | 5%  | 16% |

As it is seen from Table 5, the students with English language knowledge of intermediate level and above feel comfortable and more confident delivering public speech (67%, 63% and 50%, respectively), compared to the students of beginner (20%), elementary (21%) and pre-intermediate (30%).

The next questions of Group 2 are questions 20 and 21 which reveal the respondents' knowledge of foreign countries, how well informed they are about foreign countries [Table 6].

**Table 6. Q20.**

|  |                          |   |
|--|--------------------------|---|
| <b>Q.20. Which country do you see in the picture? (the UK)</b> |                          |  |
| <i>Levels</i>  | <i>Correct answer, %</i> |   |
| Beginner   | 20%                      |   |
| Elementary   | 43%                      |   |
| Pre-intermediate   | 78%                      |   |
| Intermediate   | 85%                      |   |
| Upper-intermediate   | 88%                      |   |
| Advanced   | 83%                      |   |

According to the results depicted in Table 6, the vast majority of the respondents with English language knowledge of Pre-Intermediate (78%), Intermediate (85%), Upper-Intermediate (88%), and Advanced (83%) answered correctly, compared to the students with lower level of English fluency (Beginners - 20%, Elementary - 43%). Table 7 below analyses the answers to the similar Question 21.

**Table 7. Q21.**

|   |                          |  |
|---|--------------------------|--|
| <b>Q.21. Where is this monument located? (The US)</b> |                          |  |
| <i>Levels</i>   | <i>Correct answer, %</i> |  |
| Beginner  | 20%                      |  |
| Elementary  | 42%                      |  |
| Pre-intermediate                                      | 61%                      |  |
| Intermediate  | 67%                      |  |
| Upper-intermediate                                    | 68%                      |  |
| Advanced  | 67%                      |  |

The picture in Table 7 shows a large monument. This famous monument is located at the entrance of the Park Disneyland and it is located in the state of California. We have the same result as the previous question. The majority of the respondents with higher level of English language proficiency chose a correct option, whereas the just beginners of English have poor knowledge of the US and its sightseeing. The results show that the students with above pre-intermediate English language skills are more intellectual and possess more knowledge about foreign countries: their

culture and peculiarities.

The next questions of Group 2 seek to find connection between foreign language knowledge and success. Question 12 asks the purpose of possessing English language skills [Table 8].

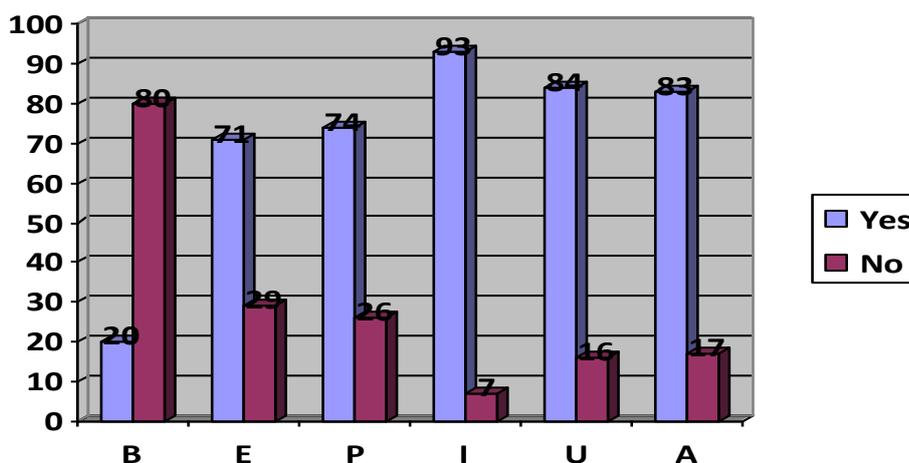
**Table 8. Q12**

| “In your opinion, what do we need English for?” | Beginner | Elementary | Pre-Interm. | Intermediate | Upper-Interm. | Advanced |
|---|----------|------------|-------------|--------------|---------------|----------|
| “For my profession”                             | 20%      | 64%        | 4%          | 74%          | 8%            | 9%       |
| “For myself”                                    | 20%      | 14%        | 18%         | 8%           | 8%            | 16%      |
| “Both options”                                  | 60%      | 22%        | 78%         | 18%          | 84%           | 75%      |

The results show that the students think knowing English is important for professional and personal purposes. The majority of Elementary-level (64%) and Intermediate-level (74%) students have chosen English is necessary for professional purpose, whereas the vast majority of the remaining 4 levels have ticked both options.

Question 13 is a logical continuation of the previous question that asks the students whether knowledge of English is a sign of success for a specialist. We expect to get the confirmative answer to the question since a qualified specialist should know a foreign language to be competitive in the labour market [Diagram 1].

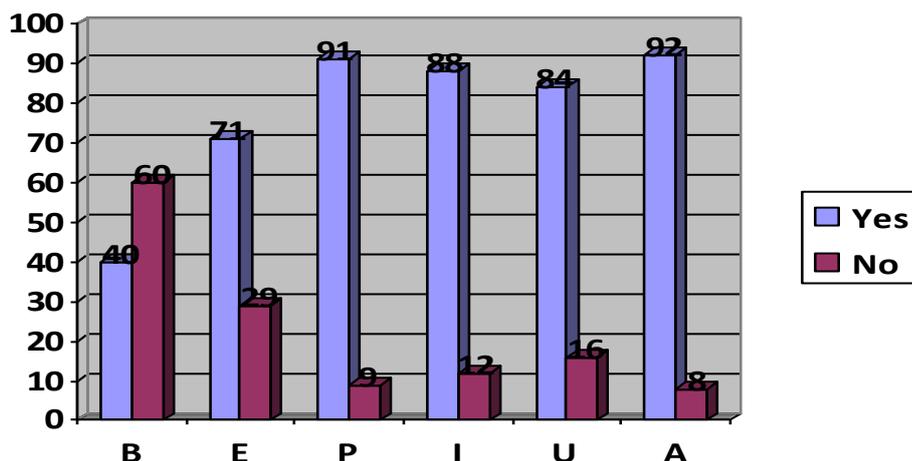
**Diagram 1. Q13.** “Do you think knowledge of English is a sign of success for a specialist?”



The levels of English knowledge are abbreviated in the diagram. For example, ‘B’ stands for Beginner. The results show that the majority of the students with above Elementary level consider knowledge of English is a sign of success for a specialist. On contrary, 80 % of Beginners think it is not a key to success.

Question 16 is another point to test the role of English in achieving success. The tendency is the same as in Q13. The vast majority of respondents have indicated that the student with English language skills can achieve more than one who does not know English. However, 60 % of Beginners have chosen the option ‘No’ [Diagram 2].

**Diagram 2. Q16.** “Do you think that the student who knows English well can reach more achievements than the one who doesn’t know it?”



Group 3. Assessing the trilingualism policy in Kazakhstan. Multilingualism is advantageous in many ways. Knowledge of languages broadens our mind and intelligence, contributes to personal and professional development. It is evidenced with the survey results - 97% of the respondents support trilingualism in Kazakhstan [Pie-chart 1].

**Pie-chart 1. Q.11**



Overall, the language policy of Kazakhstan is developing in the right direction. The trilingualism policy, which includes learning and knowing three languages – Kazakh, Russian and English, is a way our President N.A. Nazarbayev set to pursue. “Kazakhstan has to know its official language – the Kazakh language. The Russian language is the language of our big neighbor and one of the six UN languages. This language enabled us to access the great Literature:, the great culture...Every language is wealth for a person,” says the President “We need the English language to enter the global arena. 85% of 10 million books published in the world are in English. Nowadays science, new and information are written and spread in English.” [7]. Our survey results show that our youth support the trilingual policy pursued in Kazakhstan. We understand knowing foreign languages we can step forward together with the advanced global community. Moreover, our research proves that multilingual people are more self-confident, intellectual and successful than monolingual ones. Multilingual society of Kazakhstan contributed to human capital, our personal and professional development. We argue that quantitative multidisciplinary research into linguistics and psychology, especially into individual differences may not explain the whole picture of the matter. Therefore, in future we plan to research this topic using qualitative research method which

will provide more explanation and interpretation.

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### **PUTONGHUA AND DIALECTS IN CHINESE LANGUAGE**

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Chinese languages, also called Sinitic languages, Chinese Han, principal language group of eastern Asia, belonging to the Sino-Tibetan language family. Chinese exists in a number of varieties that are popularly called dialects but that are usually classified as separate languages by scholars. More people speak a variety of Chinese as a native language than any other language in the world, and Modern Standard Chinese is one of the six official languages of the United Nations. Chinese now has earned itself greater status in the World. The official language of China is the Mandarin, which is the very name of '*Hanyu*' or '*Putonghua*', belonging to Sino-Tibetan.

Chinese national policy stipulates regional and cultural autonomy with freedom for each dialect group to use its own language, but this freedom is subject to the prior interest of creating a single national language.

Prior to the twentieth century, Chinese governments of the imperial period seem to have taken little notice of language problems. The sociolinguistic situation which prevailed for many centuries, wherein governmental business was carried out either in the written literary language or in the oral lingua franca based on the speech of the imperial capital, served the practical needs of the government quite well.

In general, the communist government which took power in 1949 continued the linguistic policies of the former regime, expressing strong support for a single báihuà as the common written language was further strengthened, and the use of Putonghua was curtailed altogether. Little official action on the language reform front was taken until the mid-1950s. Among the resolutions of the National Script Reform Congress which met in October 1955 were suggestions concerning reform and simplification of the traditional logographic script, as well as suggestions about promoting the study of national language, now officially called Putonghua (Mandarin Chinese) ‘the common language’ [1, 422–425].

In 1956 the State Council issued an official directive ordering the teaching of putonghua (Mandarin Chinese) in schools beginning from the autumn of the same year; in addition, it contained broad instructions on how putonghua was to be promoted in various areas of national life