



Copyright © 2021 by Academic Publishing  
House Researcher s.r.o.

All rights reserved.

Published in the Slovak Republic

European Journal of Contemporary Education

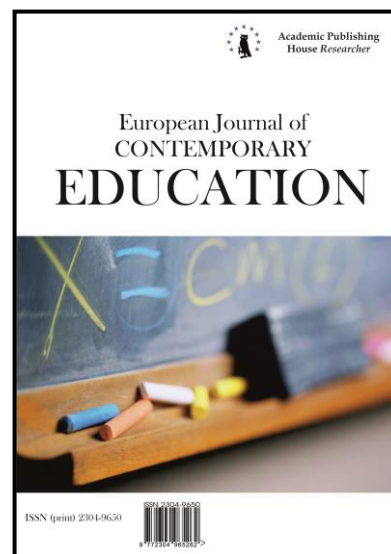
E-ISSN 2305-6746

2021, 10(1): 173-186

DOI: 10.13187/ejced.2021.1.173

[www.ejournal1.com](http://www.ejournal1.com)

**IMPORTANT NOTICE!** Any copying, reproduction, distribution, republication (in whole or in part), or otherwise commercial use of this work in violation of the author(s) rights will be prosecuted in accordance with international law. The use of hyperlinks to the work will not be considered copyright infringement.



## **The Formation of Students' Personality at Peter the Great St. Petersburg Polytechnic University: Attitude to University and Attitude to Future Profession**

Tatiana A. Baranova <sup>a</sup>, Dmitriy A. Mokhorov <sup>a</sup>, Aleksandra M. Kobicheva <sup>a,\*</sup>, Elena Yu. Tokareva <sup>a</sup>

<sup>a</sup>Institute of Humanities, Peter the Great Saint-Petersburg Polytechnic University, St. Petersburg, Russian Federation

### **Abstract**

This paper aims to evaluate students' attitude to University and their future profession as well as determine the influence of the University on these indicators. For our research, we used qualitative and quantitative data. To collect the data, we conducted two surveys of students in 2018 and 2020 (N<sub>1</sub> = 179; N<sub>2</sub> = 198). Also, we carried out the Pearson correlation analysis. Results on students' survey showed that their attitude to the University and attitude to future profession improved during their education. According to the students' answers on open questions, the most influential factors are academic faculty and project activities of the University. The Pearson correlation analysis showed the positive influence of the University on the students' attitude to the future profession. This study can be useful for further research on the formation of students' personality, its components, and correlation between them. By identifying the influence of personality components on its development, it is possible to develop more individual skills to achieve personal, professional success. In our research, we attempted to combine and analyze different criteria of personal perception of University and future carrier, how it was changing during the learning process and how University could influence the students' attitude to the future profession.

**Keywords:** the formation of personality, higher education, attitude to a future profession, attitude to university, personal self-determination.

### **1. Introduction**

Nowadays such important aspect as the formation of student's character becomes an essential task of any University. The creation of a student's character is a process of changes in the student's personality that occur for various reasons, leading to qualitative changes over time, which take shape in its features, qualities, properties comparable with the model of a graduate of a higher educational institution.

---

\* Corresponding author

E-mail addresses: [kobicheva92@gmail.com](mailto:kobicheva92@gmail.com) (A. M. Kobicheva)

A personality, like everything specifically human in the psyche, is formed and revealed in the course of active interaction with the external and objective environment, through the assimilation or appropriation by an individual of a socially developed experience. After all, as a result of this development, the formation of new motivations and needs, their transformation and subordination. It is impossible to achieve this by simple adaptation – these would be motives that are known, but not really working.

It includes the development of crucial skills for the 21st century specialist such as emotional intelligence, problem-solving skills, critical-thinking skills, teamwork, digital skills, etc. (Almazova et al., 2018; Baranova et al., 2019a). Moreover, the formation of students' personality contains the positive attitude to the future professional field and overall engagement of students during the educational process as well as understanding its importance (Evseeva et al., 2020; Baranova et al., 2020).

The formation of the future specialist's personality in higher education is a complex and multifaceted process, the success of which is ensured, first of all, by its organization and planning, creation of external and internal conditions for the development and intensive manifestation of the necessary qualities, enrichment of students' knowledge, skills and abilities.

The core objective of the modern University is to build the close connection with students, elaborate and organize efficient educational programs fostering the most favourable environment for students' personality development (Piskun et al., 2018). There are a lot of various ways to achieve this goal, for instance, the introduction of innovative project-based courses in the curricular, arrangement of professional and career forums and conferences, participation in international programs and internships, support of internal students' communities and organization of cultural events and concerts (Baranova et al., 2019b).

The result of professional training is an adequate attitude of the person to the profession, that is, the formed mechanisms of professional self-regulation and psychological readiness for work. A competent specialist is a specialist of a special class, capable of achieving the highest mastery as a result of realizing his natural potential, due to the harmonization of his individual psychophysiological innate capabilities with the requirements of the profession. A competent specialist makes maximum use of his personal qualities that contribute to success in work, and localizes those that counteract success.

Peter the Great St. Petersburg Polytechnic University does the best for its students so they have possibility not only gain professional knowledge and enhance professional skills but also form their own personality with personal opinion and ability to think critical on various issues. Through a variety of professional and social projects and events students expand their worldview and learn how to make right choices as well as solve everyday problems. At the same time the University teaches them to be socially responsible and be able to defend their position in life.

The primary purpose of this paper is to evaluate students' attitude to University and future profession as the substantial indicators of student's personality formation and their self-determination in life. Also, we would like to assess the influence of University on these indicators.

#### 1.1. Literature review

Over the last few decades, a growing body of research has revealed the role of personality traits in influencing and shaping student behaviour in various disciplines (Costa, McCrae, 1992; Chamorro-Premuzic, Furnham, 2003; Furnham et al., 2003; McCrae, Costa, 2003; Komarraju, Karau, 2005; Komarraju et al., 2009).

A person can be defined as a sui generis reflection of factors affecting the emotions, thoughts and behaviour of a person (Schwartz, Bilsky, 1987; Razinkina et al., 2019; Pozdeeva et al., 2019). A person is constantly influenced by internal and external factors and consists of physical, intellectual, spiritual, general and trained abilities, instincts, emotions, desires, habits, way of thinking and any kind of behaviour such as perception and attention. In this regard, when evaluating a person's personality, it can be argued that a person reflects not only the features of such a person, but also the characteristics of society and groups of such a person and the entire human race at a certain level (Shalley et al., 2004; İrengün, Arikboğa, 2015).

The Big Five model of personality (conscientiousness, neuroticism, extraversion, openness, and agreeableness) (Goldberg, 1992) has been revealed as a robust approach to conceptualizing and assessing personality traits (Kappe, van der Flier, 2010; Rizvanović, 2018). Among the five dimensions, good faith is the best predictor of academic success according to many researchers.

Conscientious students often have better academic results because they are characterized by an organized, disciplined, persistent, and accurate way of learning (Zhao, Seibert, 2006; Rosander, Bäckström, 2011; De Feyter et al., 2012). A meta-analysis showed that conscientiousness most strongly correlates with the performance of university students (O'Connor, Paunonen, 2007; Richardson et al., 2012; Vedel, 2014).

Compared with the above two personality traits, empirical evidence on the prognostic role of extraversion, openness, and pleasantness in academic performance is mixed (O'Connor, Paunonen, 2007). Trapmann, Hell, Hirn, and Schuler's (Trapmann et al., 2007) meta-analysis showed that these three traits were not related to academic performance at the university, while a Vedel's (Vedel, 2014) meta-analysis found that both openness and pleasantness indicators correlated mainly with students' average scores. Extraversion describes individuals who are social, assertive, and talkative (Komarraju et al., 2011; Da Costa et al., 2015). Many researchers have reported no or even negative correlation between extraversion and academic performance among university students (Rosander, Bäckström, 2011; Komarraju et al., 2011; De Feyter et al., 2012; Furnham et al., 2013; Poropat, 2009).

The behaviour and attitude of the person around his/her family, friends and classmates is essential. Life is the constant effort of a living being to adapt to his background with such behaviour and attitude (Jafri et al., 2016). Therefore, a person adapts through reactions to changes in his/her environment in this dynamic process with these behaviours and attitudes (Geçtan, 1995). University life is especially crucial in this process, because the late adolescent influences the environment, and in his / her university life, the environment affects the late adolescent (Kaufman et al., 2016).

The recent increase in demand for higher education worldwide, the globalization of the labour market and the ease of international movement have led to the emergence of a higher education market based on competition and the need to manage universities as brands (Ajzen, Fishbein, 1977; Gürol, Atsan, 2006; Zakharova et al., 2019). Universities had to position themselves as different and desirable brands and increase their image in the eyes of interested parties due to this competition (Chapleo, 2007; Chapleo, 2010; Schee, 2011). Students' loyalty to the university includes both a sense of community and a desire to continue relations with the university (Crosby et al., 1990; Sung, 2008). In their study, Hennig-Thurau et al. (Hennig-Thurau et al., 2001) found that a loyal student might continue to support his or her academic institution even after graduating (a) by providing financial support, such as donations or research projects; (b) through word-of-mouth promotion to other prospective students, and (c) by offering cooperation such as student placements or visiting lectures. The perceived work of the university will affect the affective assessment (attitude) of students to the university. Hence; The attitude to the department mediates the relationship between academic performance at the university: (1) academic performance in education, (2) academic performance of teachers, (3) academic performance, (4) career prospects of graduates, (5) general environment, (6) compatibility with students, (7) the physical environment and loyalty to the university: (a) commitment to the university, (b) a sense of community with the department, (c) a sense of community with the university.

Research on university branding has identified many different factors that determine a positive brand image, student satisfaction, and university success. Some of these studies and their results are as follows. LeBlanc and Nguyen (LeBlanc, Nguyen, 1999) conducted a study of university students and identified six different values that students gained from universities. These were functional values associated with future career development and good value obtained relative to tuition fees, symbolic values associated with reputation, social values associated with fellow students, epistemic values associated with acquiring knowledge and education, and finally, emotional values associated with self-realization.

Researches by Cuthbert (Cuthbert, 1996) and O'Neill and Palmer (O'Neill, Palmer, 2004) have shown that the driving force behind student satisfaction at the university is the learning process (course delivery mechanisms, quality of courses and teaching, interpersonal relationships, etc.), and the students were mainly concerned with the knowledge and confidence of the teachers, as well as the warm relations and empathy they gave. University appearance (architecture, campus) was also one of the factors that students considered, but comparatively less important for satisfaction.

On the other hand, research by McAlexander et al. (McAlexander et al., 2004) found that there are peripheral aspects and opportunities of the university that students consume, such as cafes and residential areas that have a significant impact on university assessments. Similarly, in their study, Duarte et al. (Duarte et al., 2010) found that the atmosphere of social life at a university was an important predictor of a positive university image as well as job opportunities. Ali-Choudhury et al. (Ali-Choudhury et al., 2009) created a 10-piece list of the university brand: educational identity, educational location, employment opportunities for graduates, visual imagery, general atmosphere, reputation, sports and social facilities, learning environment, course availability, and community connections. Finally, a study by Mainardes et al. (Mainardes et al., 2013; Volodarskaya et al., 2019) concluded that a university environment, motivating lessons and easy university bureaucracy were key expectations of university students.

## 2. Materials and methods

For our research, we have chosen students studied on the humanitarian, educational programs (linguistics, PR and advertising, law). We conducted two online surveys to evaluate students' attitude to University and future career.

Firstly, we surveyed the first-year bachelor students in the second semester of 2018. Students passed the survey in their accounts on the online educational platform of the University. The participation was voluntary. The response rate for the online survey was around 71,6 % (179 students finished the survey). In 2020 these students being on the 4th year of study undergone the same survey again. The response rate rose to 79,3 % (198 students completed the survey).

The surveys included two main categories – attitude to the University and attitude to a future profession, which consist of 12 items measured by Likert scale and two open questions (only for the second survey) – Table 1.

**Table 1.** Survey questions

No	Items	Type of data
<b>Attitude to the University</b>		
1	Are you ready to continue your studies at SPbPU?	quantitative
2	If you had to choose a university again, would you choose the university you are currently studying in again?	quantitative
3	Are you ready to recommend the university to others for study?	quantitative
4	Does the level of the educational process organization satisfy you?	quantitative
5	Do you consider studying at SPbPU as prestigious?	quantitative
6	Are you satisfied with the results of studying at the university?	quantitative
<b>Attitude to the future profession</b>		
1	Are you ready to study and develop in your speciality after graduation?	quantitative
2	If you had to choose a profession again, would you choose the speciality you are currently studying in again?	quantitative
3	Do you have a desire to work in your speciality after graduation?	quantitative
4	Are you ready to recommend this profession to others?	quantitative
5	Have your ideas about the chosen profession changed during your studies at the university?	quantitative
6	Do you think it will be easy for you to get a job in your specialty after graduation?	quantitative
<b>Open questions on attitude to the University and the future profession</b>		
1	What influenced you, your perception and attitude to the university mostly?	qualitative
2	What influenced you, your perception and attitude to the future profession mostly?	qualitative

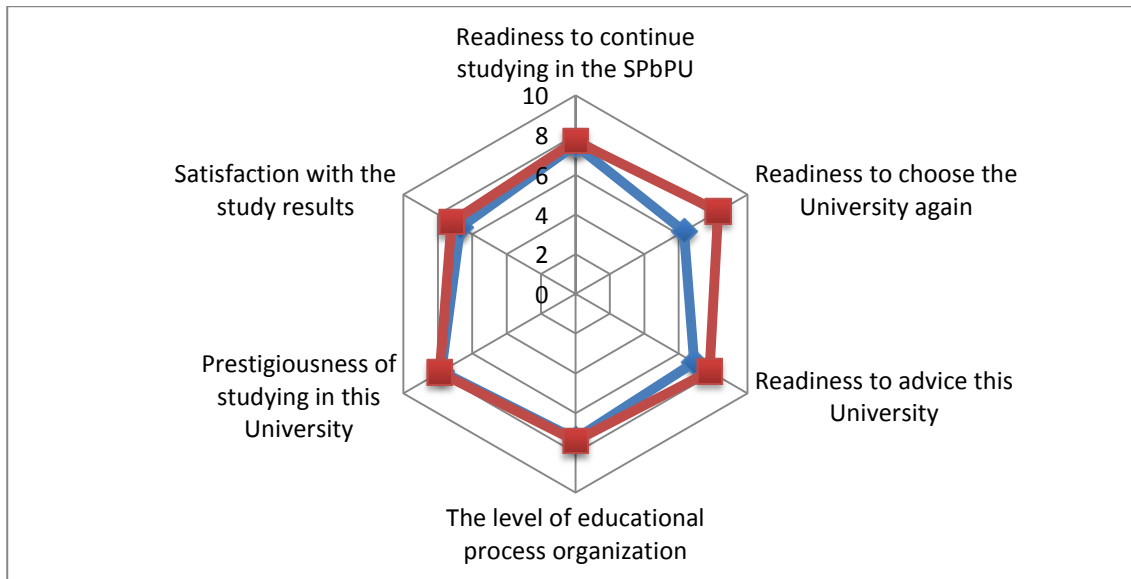
Thus, the obtained data allowed us to make a qualitative and quantitative analysis of obtained results. The research questions are the following:

- 1) If the university influence students' attitude to the future profession?
  - 2) If students' attitude to the University and their attitude to future profession are correlated?
- For the analysis descriptive statistics and independent samples t-test were used.

### 3. Results

#### 2.1. Online survey on attitude to the University

As we wrote before, we conducted two online surveys with a difference of 2.5 years for the same students to evaluate their attitude to University. The results of 6 items measured by 10 point Likert scale are presented in Figure 1.



**Fig. 1.** Students' attitude to the University

According to the results obtained, we can note that students' attitude to University improved during 2.5 years of study. We conducted a t-value analysis of the results that are presented in the Table 2.

**Table 2.** Descriptive statistics (students' attitude to university indicators)

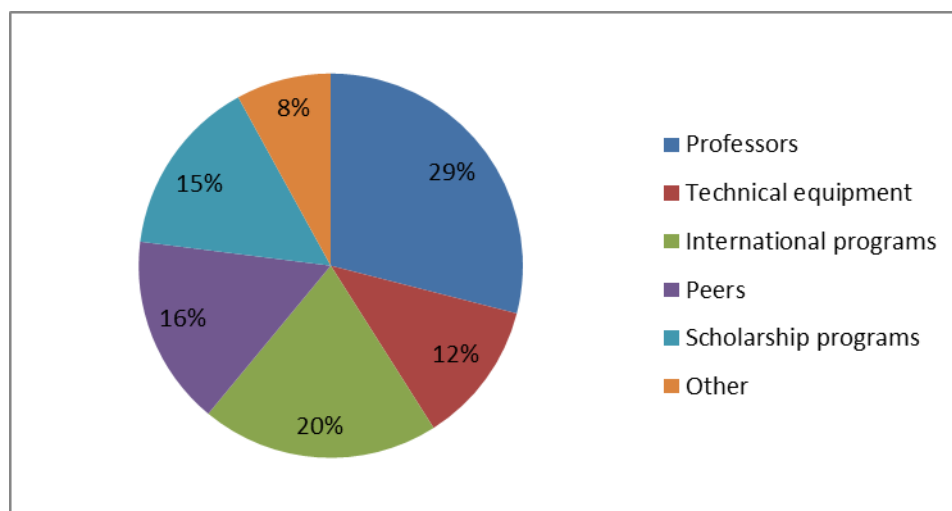
Items	Survey	Results (average mean)	SD	t-value
1. Readiness to continue studying in the SPbPU	2018	7,5	0,71	2,31*
	2020	7,7	0,77	
2. Readiness to choose the University again	2018	6,3	0,8	7,9 ***
	2020	8,3	0,79	
3. Readiness to advice the University	2018	6,9	1,01	6,42 ***
	2020	7,8	0,95	
4. The level of educational process organization	2018	7,3	0,87	1,89
	2020	7,4	0,88	
5. Prestigiousness of studying in the University	2018	7,8	0,94	1,91
	2020	7,9	0,9	
6. Satisfaction with the study results	2018	6,7	0,89	3,2**
	2020	7,2	1,07	

Note: \* p < 0,05; \*\* p < 0,01; \*\*\*p < 0,001

The analysis showed that the most significant differences were in results of the following indicators – “Readiness to choose the University again” and “Readiness to advice this University”. Due to t-value test the differences in such indicators, as “The level of educational process organization” and “Prestigiousness of studying in this University” were not significant.

In general, all indicators are quite high that shows the positive attitude to University. The significant difference in indicators means that University had a great influence on students during their study years.

Students answered open questions only during the second survey in 2020. On the open question “What influenced you, your perception and attitude to the University mostly?” students answered differently. Still, it was possible to determine the most frequent answers, which are indicated in [Figure 2](#).



**Fig. 2.** The answers on the question “What influenced you, your perception and attitude to the university mostly?”

Among all the answers, we selected the five most common criteria: academic faculty, technical equipment of the university, the presence of international programs, student relationships, and various scholarship programs. Many students noted that the attitude towards the university is closely connected with professors. The attitude of professors to their disciplines/courses, their manner of teaching, lecturing and interest in the discipline forms the perception of not only the discipline but also the professor himself, who is the face of the university.

Answers on open question showed that some students believe that the attitude towards the university depends on the team in which the teaching takes place. The relationship with peers motivates students to attend university, creates an atmosphere in the university and affects students' development.

12 % of respondents indicated that the technical equipment of the university, modern devices in classrooms and timely restoration favourably affect the attitude towards the university: "it is always nice to study in a building with modern classrooms and use advanced technologies in the learning process."

Other students responded that international and scholarship programs influence attitude towards the university. Even when entering the university, these factors were decisive for such respondents. The university is the start of adulthood and allows students to choose their personal development path. Thus, it is important that the university can provide a wide range of opportunities for students. Many students are interested in international internships and double degrees. Other students seek grants and scholarships to develop their projects in parallel with their studies. Such opportunities have a beneficial effect on the attitude towards the university, and the desire to continue studying there.

Students noted that when choosing a university, they were guided by the availability of necessary educational programs, the university rating and accessibility for admission. However,

after three years of study, students realized that when they think about the university, they primarily remember the teachers. Students wishing to study abroad rank the university by the number of international programs, the prospects of obtaining a double diploma and foreign internships. The results obtained correlate with findings in the works of Cuthbert (Cuthbert, 1996) and O'Neill and Palmer (O'Neill, Palmer, 2004). Also, unlike many previously studied works (Almazova et al., 2018; Baranova et al., 2019; Sung, 2008; Crosby et al., 1990; Hennig-Thurau et al., 2001), the results of our study noted the importance of both the educational process and the appearance of the University.

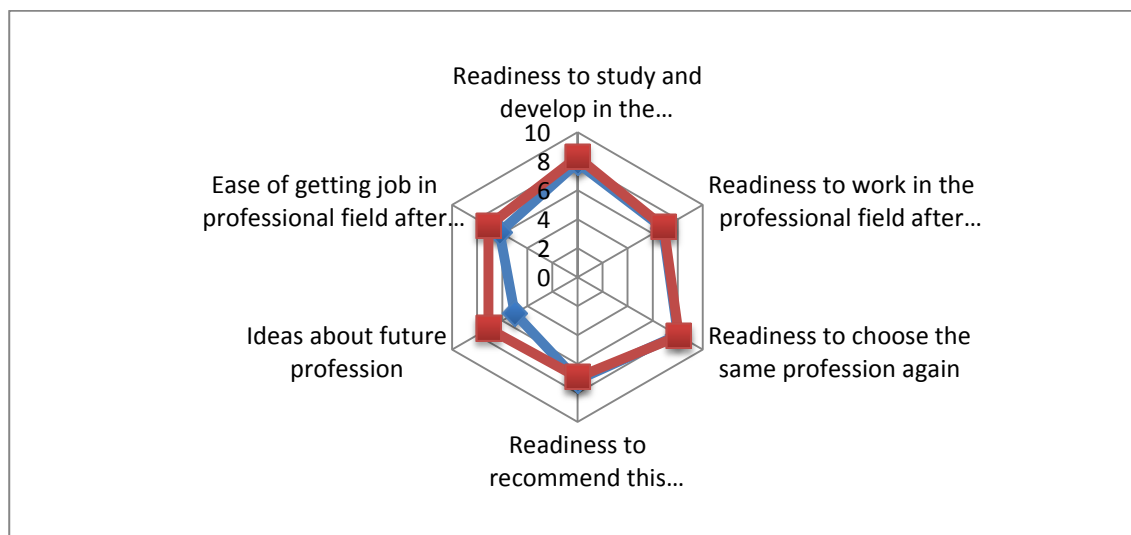
One student noted: "My attitude towards the university has changed a lot over the last two years of study, because at the end of the 3rd year exciting disciplines appeared with excellent teachers who have practical experience in the field of my future speciality. So, not my favourite university became for me the best place to learn."

The results of the study show that a positive attitude of teachers has a positive effect on student performance and development. This, in turn, clearly indicates that especially teachers overcome the boundaries of the classroom in the educational life of people, and it is obvious how effective they can be throughout the student's life. Some students said that teachers are the second most crucial factor in determining personality development after parents. We should not forget that children take an example to follow in the learning process. Therefore, perhaps the behaviour and attitude of teachers, with whom they spend most of their time besides their parents, affect the development of their personality and, therefore, whether they will be successful or not. Thus, it is teachers who are more likely to shape the student's attitude to the University.

## 2.2. Online survey on attitude to future profession

The choice of profession plays a significant role in shaping the personality of the student. However, this choice is one of the most difficult in human life. We can often characterize a person by his profession.

The survey on students' attitude to future profession included six items – "Readiness to study and develop in the professional field after graduation", "Readiness to continue working in the professional field", "Readiness to choose the same profession again", "Readiness to recommend this profession to others", "Ideas about future profession" and "Ease of getting a job in the professional field after graduation". The results are shown in Figure 3.



**Fig. 3.** Students' attitude to the future profession

All indicators have grown except for item "Readiness to recommend this profession to others". We can connect it with the fact that students became more aware about the future profession and answered the question more conscious.

We conducted a statistical analysis of survey results obtained in 2018 and in 2020 to identify significant differences in students' attitude to the future profession (Table 3).

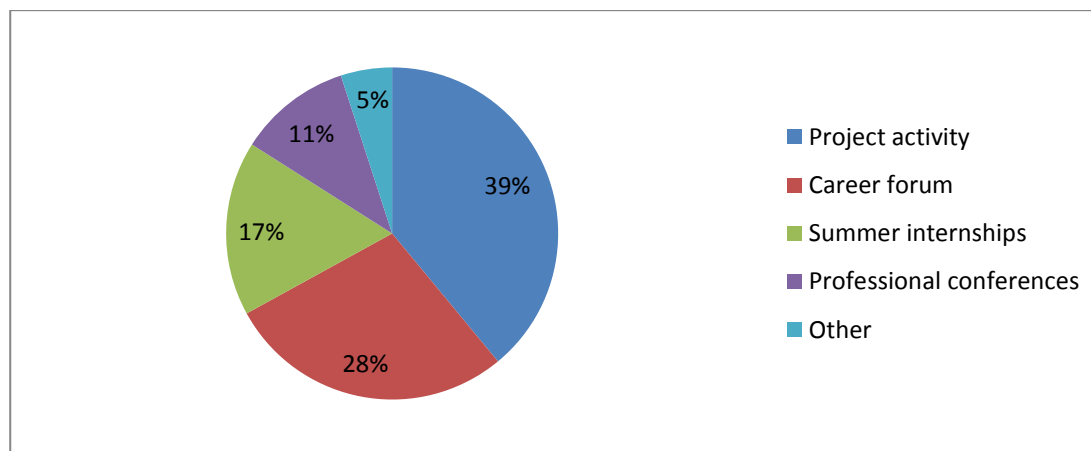
**Table 3.** Descriptive statistics (students' attitude to university indicators)

Items	Survey	Results (average mean)	SD	t-value
1. Readiness to study and develop in the professional field after graduation	2018	7,9	1,07	3,1*
	2020	8,3	0,99	
2. Readiness to continue working in the professional field	2018	6,8	0,87	1,95
	2020	6,9	0,91	
3. Readiness to choose the same profession again	2018	8,0	1,11	1,87
	2020	8,1	0,95	
4. Readiness to recommend this profession to others	2018	7,1	1,17	2,17*
	2020	6,9	1,01	
5. Ideas about future profession	2018	5,0	0,92	7,94***
	2020	7,1	0,9	
6. Ease of getting a job in the professional field after graduation	2018	6,2	0,89	6,44***
	2020	7,1	0,87	

Note: \*  $p < 0,05$ ; \*\*  $p < 0,01$ ; \*\*\* $p < 0,001$

According to the t-value test the difference between such indicators as “Ideas about future profession” and “Ease of getting job in professional field after graduation” were significant (the significance level was set to 0,001). These results can be explained by the fact that by the 4th year of study students have accumulated enough experience and knowledge that make them feel more confident about future profession.

The open question on attitude to future profession was the following “What influenced you, your perception and attitude to the future profession mostly?”. The results are in [Figure 4](#).



**Fig. 4.** The answers on the question “What influenced you, your perception and attitude to the future job mostly?”

Students' answers were divided into main categories, reflecting the impact of student learning at the university on their attitude to the future profession. Most students believe that project activities in the learning process contribute to a better understanding of the future profession, allows you to try yourself "in business".

According to the open question many respondents expressed confidence that participation in career forums and professional conferences allows them to communicate with representatives of the chosen profession and understand how people live after receiving this speciality, what kind of job, lifestyle and income they have. Participating in such events, students fall into the professional community, of which they will become a part in the future.

Career forums are trendy among students, as all students are in a hurry to find their first job, to try and feel how they will work after university. Not all students find employment opportunities there,



but many get acquainted with representatives of the chosen profession, find out the requirements for potential employees, and also study existing companies in the market, identifying large players and possibly acquiring a dream company where they would like to work after graduation.

Some respondents noted that summer internships at universities or partner companies allow them to try work in the professional field, understand how everything happens from the inside, decide on the final choice of a profession and gain useful, practical skills. Summer internships are also desirable as students hope to stay in the company following a course. Also, such an internship allows you to understand better what the work in the chosen speciality is, to apply the acquired knowledge, which also forms the perception of the future profession.

Students note that university studies have little to do with the future profession since most of the subjects studied contain a large amount of technical information that does not reflect the reality of future work. Therefore, all activities related to practical knowledge and skills are actively perceived by students and shape their attitude to the future profession. It explains the particular interest of students in project activities, various summer internships and career forums.

2 % of students surveyed noted the negative impact of the university on the perception of the future profession. Students point out that boring activities scare them away and make future work less attractive. Some students replied that they were faced with the desire to change their chosen profession and get an education in another speciality.

Having studied the early studies of other authors (De Feyter et al., 2012; Komarraju et al., 2011; Furnham et al., 2011; Poropat, 2009; Jafri et al., 2016), one can notice the distinctive features of the perception of the future profession among students in Russia: focus on quick employment, interest in career forums, conferences and labor communities.

### 2.3. Correlation analysis

To answer the second research question, we implemented the Pearson correlation investigation of students' attitude to University and their future profession. We implemented the analysis based on the second survey data (students' attitude to the University and the future profession results). The correlation analysis shows the interdependence between these two critical groups of factors that reflect the level of the students' personality formation. Our main goal was to confirm the influence of university and students' attitude to it on students' attitude to the future profession. The results of the correlation analysis are reflected in Table 4.

**Table 4.** Correlation analysis of students' attitude to the University and the future profession

		Students' attitude to future profession					
Students' attitude to the University		Readiness to study and develop in the professional field after graduation	Readiness to continue working in the professional field	Readiness to choose the same profession again	Readiness to recommend this profession to others	Ideas about future profession	Ease of getting a job in the professional field after graduation
	Readiness to continue studying in the SPbPU	0,63***	0,17	0,30**	0,61***	0,21*	0,66***
	Readiness to choose the University again	0,33**	0,20*	0,27*	0,32**	0,09	0,52***
	Readiness to advice the University	0,34**	0,28*	0,19	0,4***	0,15	0,39**
	The level of educational process organization	0,42***	0,19	0,37**	0,39**	0,27*	0,24*

Prestigiousness of studying in the University	0,31**	0,11	0,41***	0,51***	0,19	0,51***
Satisfaction with the study results	0,44***	0,16	0,39**	0,34**	0,17	0,17

Note: \*  $p < 0,05$ ; \*\*  $p < 0,01$ ; \*\*\*  $p < 0,001$

According to the results gained the items have a positive correlation. The strongest relationship is between such indicators as “Readiness to continue studying in the SPbPU”, “The level of educational process organization”, “Satisfaction with the study results” and “Readiness to study and develop in the professional field after graduation”. The relationship between “Readiness to choose the University again” and “Readiness to recommend this profession to others” as well as between “Prestigiousness of studying in the University” and “Readiness to continue working in the professional field” is quite weak. We can also note that items on “Readiness to study and develop in the professional field after graduation” and “Readiness to recommend this profession to others” are substantially influenced by all items on the attitude to the University. The obtained results confirm the influence of the University on students’ attitude to the future profession.

#### 4. Discussion

Practical experience allows us to argue that one of the main ways to manage the self-improvement of students of higher educational institutions is through targeted modelling and development of situations for independent cognitive activity. In these situations, students always face the need to actively expand and apply existing knowledge, skills and abilities to cope with conditions that require from them manifestations of professionally essential qualities.

Our study is devoted to assessing the attitude of students to the Peter the Great St. Petersburg Polytechnic University and the future profession, since these factors have a great influence on the formation of the personality of young people. It can be concluded:

1. The analysis showed that during the training, the attitude of students to the University and their chosen profession increased. This is primarily due to the fact that students are becoming more familiar with the aspects of the profession.

2. Qualitative data in the form of answers to open questions allowed us to better understand the students' attitude to the educational institution, their expectations in the field of their future career. The study revealed that the teaching staff has the greatest influence on the perception of the university and the formation of attitude towards the educational institution. This is due to the fact that communication with teachers takes most of the students' time. Teachers pass on their knowledge and their experience and become an example for students. Talking about the university, students primarily remember the teachers. After all, the level of professional training of a student, his knowledge and attitude to the university depends on the teacher.

3. The formation of attitude towards future professions is a more complex issue. There is a wide variety of points of view that determine the most influential factors. Students of the Polytechnic University highlight primarily project activities. This is due to the fact that only by trying to work on a project, you can evaluate activities close to real professional conditions and understand the attitude towards a future profession.

As in many studies in this field, our work indicates factors of the students' personality formation. Researchers have recently pointed out the wide range of criteria that influence on person, its behaviour and attitude to life (Chamorro-Premuzic, Furnham, 2003; Trapmann et al., 2007; Geçtan, 1995). The Big Five model of personality (Goldberg, 1992) laid the foundation for our study. Studies (Kappe, van der Flier, 2010; Rizvanović, 2018) on the correlation of this model with the academic achievements of students are the basis for studying the student's personality.

Unlike some other researches (Komarraju et al., 2011; Furnham et al., 2013; Poropat, 2009), we have identified several factors that seem to us the most influential. We did our research in stages, studying the factors separately. At the moment, in our past studies, we have already studied students' engagement, the development of crucial skills such as problem-solving skills, critical-thinking skills, team work, digital skills, etc. (Almazova et al., 2018; Baranova et al., 2019a). Our

paper is devoted to study students' attitude to University, future profession and how these factors influence on students' personality. Our study is characterized by a correlation between students' attitude to the University and the future job.

However, even when researchers use the same methodology (i.e., surveys), there is variation in how students' personality is defined. For example, some of the researchers focus primarily on behaviours such as effort, homework, and attendance. In contrast, other studies include items related to emotional dimensions such as relationships with teachers and accurate way of learning. In our study we made an attempt to combine and analyse different criteria of personal perception of University and future carrier, how it was changing during the learning process and how University could influence the students' attitude to future profession.

According to the gained results, we can affirm that students' personality is significantly impacted by University, in particular on students' perceptions of their future profession. Moreover, students' attitude to the University and their attitude to the future profession are correlated, so it can be concluded that the University should carefully build the communication with students during the whole education period as it contributes to the formation of students' personality. Moreover, the experiment confirms the fact that Peter the Great St. Petersburg Polytechnic University created favourable conditions within the educational process for the successful formation and development of the student's personal qualities.

The theoretical work of other scholars in this field has been a useful resource for planning and designing, and we expect that our study will provide something of value for future researchers, too. Of course, there are some limitations in our study, as it does not take into account an influence on the choice of University and future profession such factors as parental recommendations, the availability of financial opportunities to study at the desired university and the prestige of the profession.

In our further research we are going to evaluate students' academic and psychological resilience as another component of students' personality.

## 5. Conclusion

It can be concluded:

1. The analysis showed that during the training, the attitude of students to the University and their chosen profession increased. This is primarily due to the fact that students are becoming more familiar with the aspects of the profession.
2. Qualitative data in the form of answers to open questions allowed us to better understand the students' attitude to the educational institution, their expectations in the field of their future career. The study revealed that the teaching staff has the greatest influence on the perception of the university and the formation of attitude towards the educational institution. This is due to the fact that communication with teachers takes most of the students' time. Teachers pass on their knowledge and their experience and become an example for students. Talking about the university, students primarily remember the teachers. After all, the level of professional training of a student, his knowledge and attitude to the university depends on the teacher.
3. The formation of attitude towards future professions is a more complex issue. There is a wide variety of points of view that determine the most influential factors. Students of the Polytechnic University highlight primarily project activities. This is due to the fact that only by trying to work on a project, you can evaluate activities close to real professional conditions and understand the attitude towards a future profession.

## References

- Ajzen, Fishbein, 1977 – Ajzen, I., Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*. 84(5): 888-918. DOI: <https://doi.org/10.1037/0033-2909.84.5.888>
- Ali-Choudhury et al., 2009 – Ali-Choudhury, R., Bennett, R., Savani, S. (2009). University marketing directors' view on the components of a university brand. *Public Nonprofit Mark*. 6(11): 11-33.
- Almazova et al., 2018 – Almazova, N., Andreeva, S., Khalyapina, L. (2018). The integration of online and offline education in the system of students' preparation for global academic mobility. In D.A. Alexandrov, Y. Kabanov, O. Koltsova, A.V. Boukhanovsky, & A.V. Chugunov (Eds.)

Proceedings of the 3rd International Conference on Digital Transformation and Global Society. *Communications in Computer and Information Science*. 859: 162-174. Springer: Cham, Switzerland.

[Baranova et al., 2019a](#) – Baranova, T.A., Kobicheva, A.M., Tokareva, E.Y. (2019). Does CLIL work for Russian higher school students? The comprehensive analysis of experience in St-Petersburg Peter the Great Polytechnic University. In *ICIET 2019: Proceedings of the 2019 7th International Conference on Information and Education*. 140-145. Association for Computing Machinery. DOI: 10.1145/3323771.3323779

[Baranova et al., 2019b](#) – Baranova, T.A., Tokareva, E.Y., Kobicheva, A.M., Olkhovik, N.G. (2019). Effects of an integrated learning approach on students' outcomes in St. Petersburg Polytechnic University. In *ICDTE 2019: The 3rd International Conference on Digital Technology in Education. ACM International Conference Proceeding Series*. 77-81. Association for Computing Machinery. DOI: 10.1145/3369199.3369245

[Baranova et al., 2020](#) – Baranova, T., Kobicheva, A., Olkhovik, N., Tokareva, E. (2020). Analysis of the communication competence dynamics in integrated learning. In: Anikina Z. (eds) *Integrating Engineering Education and Humanities for Global Intercultural Perspectives. IEEHGIP 2020. Lecture Notes in Networks and Systems*, vol 131. Springer, Cham. DOI: 10.1007/978-3-030-47415-7\_45

[Chamorro-Premuzic, Furnham, 2003](#) – Chamorro-Premuzic, T., Furnham, A. (2003). Personality traits and academic examination performance. *European Journal of Personality*. 17: 237-250.

[Chapleo, 2007](#) – Chapleo, C. (2007). Barriers to brand building in UK universities?. *Int. J. Nonprofit Volunt. Sect. Mark.* 12: 23-32. DOI: 10.1002/nvsm.271

[Chapleo, 2010](#) – Chapleo, C. (2010). What defines 'successful' university brands? *International Journal of Public Sector Management*. 23(2): 169-183.

[Costa, McCrae, 1992](#) – Costa, P.T., Jr., McCrae, R.R. (1992). NEO PI-R: Professional manual: Revised NEO PI-R and NEO-FFI. 1992, Odesa, FL: Psychological Assessment Resources.

[Crosby et al., 1990](#) – Crosby, L., Evans, K., Cowles, D. (1990). Relationship quality in services selling: an interpersonal influence perspective. *Journal of Marketing*. 54(3): 68-81. DOI: 10.2307/1251817

[Cuthbert, 1996](#) – Cuthbert, P.F. (1996). Managing service quality in HE: is SERVQUAL the answer? Part 2. *Managing Service Quality*. 6(3): 31-35.

[Da Costa et al., 2015](#) – Da Costa, S., Páez, D., Sánchez, F., Garaigordobil, M., Gondim, S. (2015). Personal factors of creativity: A second order meta-analysis. *Revista de Psicología Del Trabajo y de Las Organizaciones*. 31(3): 165-173. DOI: 10.1016/j.rpto.2015.06.002

[De Feyter et al., 2012](#) – De Feyter, T., Caers, R., Vigna, C., Berings, D. (2012). Unraveling the impact of the Big Five personality traits on academic performance: The moderating and mediating effects of self-efficacy and academic motivation. *Learning and Individual Differences*. 22(4): 439-448. DOI: 10.1016/j.lindif.2012.03.013

[Duarte et al., 2010](#) – Duarte, P.O., Alves, H., Raposo, M.B. (2010). Understanding university image: a structural equation model approach. *International Review on Public and Nonprofit Marketing*. 7: 21-36. DOI: <https://doi.org/10.1007/s12208-009-0042-9>

[Evseeva et al., 2020](#) – Evseeva, L.I., Shipunova, O.D., Pozdeeva, E.G., Trostinskaya, I.R., Evseev, V.V. (2020). Digital learning as a factor of professional competitive growth. In T., Antipova, & A. Rocha (Eds.), *Digital Science 2019. Advances in Intelligent Systems and Computing. WorldCIST'20*. 1114: 241-251. Springer. DOI: [https://doi.org/10.1007/978-3-030-37737-3\\_22](https://doi.org/10.1007/978-3-030-37737-3_22)

[Furnham et al., 2003](#) – Furnham, A., Chamorro-Premuzic, T., McDougall, F. (2003). Personality, cognitive ability, and beliefs about intelligence as predictors of academic performance. *Learning and Individual Differences*. 14: 49-66.

[Furnham et al., 2013](#) – Furnham, A., Nuygards, S., Chamorro-Premuzic, T. (2013). Personality, assessment methods and academic performance. *Instructional Science*. 41(5): 975-987. DOI: 10.1007/s11251-012-9259-9

[Geçtan, 1995](#) – Geçtan, E. (1995). Psikodinamik psikiyatri ve normal dışı davranışlar. Remzi Kitap Evi, İstanbul.

Goldberg, 1992 – Goldberg, L.R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*. 4(1): 26-42. DOI: 10.1037//1040-3590.4.1.26

Gürol, Atsan, 2006 – Gürol, Y., Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education + Training*. 48(1): 25-38. DOI: <https://doi.org/10.1108/00400910610645716>

Hennig-Thurau et al., 2001 – Hennig-Thurau, T., Langer, M. F., Hansen, U. (2001). Modeling and managing student loyalty: an approach based on the concept of relationship quality. *Journal of Service Research*. 3(4): 331-344. DOI: <https://doi.org/10.1177/109467050134006>

İrengün, Arıkboğa, 2015 – İrengün, O., Arıkboğa, Ş. (2015). The effect of personality traits on social entrepreneurship intentions: a field research. *Procedia – Social and Behavioral Sciences*. 195: 1186-1195. DOI: 10.1016/j.sbspro.2015.06.172

Jafri et al., 2016 – Jafri, M.H., Dem, C., Choden, S. (2016). Emotional intelligence and employee creativity: moderating role of proactive personality and organizational climate. *Business Perspectives and Research*. 4(1): 54-66. DOI: <https://doi.org/10.1177/2278533715605435>

Kappe, van der Flier, 2010 – Kappe, R., van der Flier, H. (2010). Using multiple and specific criteria to assess the predictive validity of the Big Five personality factors on academic performance. *Journal of Research in Personality*. 44(1): 142-145. DOI: 10.1016/j.jrp.2009.11.002

Kaufman et al., 2016 – Kaufman, S.B., Quilty, L.C., Grazioplene, R.G., Hirsh, J.B., Gray, J.R., Peterson, J.B., DeYoung, C.G. (2016). Openness, intellect, and creativity. *J Pers*. 84: 248-258. DOI: 10.1111/jopy.12156

Komarraju, Karau, 2005 – Komarraju, M., Karau, S.J. (2005). The relationship between the big five personality traits and academic motivation. *Personality and Individual Differences*. 39: 557-567. DOI: <http://dx.doi.org/10.1016/j.paid.2005.02.013>

Komarraju et al., 2009 – Komarraju, M., Karau, S.J., Schmeck, R.R. (2009). Role of the Big Five personality traits in predicting college students' academic motivation and achievement. *Learning and Individual Differences*. 19(1): 47-52. DOI: <http://dx.doi.org/10.1016/j.lindif.2008.07.001>

Komarraju et al., 2011 – Komarraju, M., Karau, S.J., Schmeck, R.R., Audic, A. (2011). The Big Five personality traits, learning styles, and academic achievement. *Personality and Individual Differences*. 51(4): 472-477. DOI: 10.1016/j.paid.2011.04.019

LeBlanc, Nguyen, 1999 – LeBlanc, G., Nguyen, N. (1999). Listening to the customer's voice: examining perceived service value among business college students. *International Journal of Educational Management*. 13(4): 187-198.

Mainardes et al., 2013 – Mainardes, E., Alves, H., Raposo, M. (2013). Portuguese Public University student satisfaction: a stakeholder theory-based approach. *Tertiary Education & Management*. 19(4): 353-372.

McAlexander et al., 2004 – McAlexander, J.H., Koenig, H.F., ve Schouten, J.W. (2004). Building a university brand community: the long-term impact of shared experiences. *Journal of Marketing for Higher Education*. 14(2): 61-79.

McCrae, Costa, 2003 – McCrae, R.R., Costa, P.T. (2003). Personality in adulthood: A five-factor theory perspective (2nd ed.). New York: Guilford Press.

O'Connor, Paunonen, 2007 – O'Connor, M.C., Paunonen, S.V. (2007). Big Five personality predictors of post-secondary academic performance. *Personality and Individual Differences*. 43(5): 971-990. DOI: 10.1016/j.paid.2007.03.017

O'Neill, Palmer, 2004 – O'Neill, M. A., Palmer, A. (2004). Importance-performance analysis: a useful tool for directing continuous quality improvement in higher education. *Quality Assurance in Education*. 12(1): 39-52.

Piskun et al., 2018 – Piskun, O.E., Ababkova, M.Y., Leontyeva, V.L. (2018). Biological feedback method to facilitate academic progress. *Teoriya i Praktika Fizicheskoy Kultury – Theory and practice of physical culture*. 10: 45-47. DOI: 2-s2.0-85054062411

Poropat, 2009 – Poropat, A.E. (2009). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin*. 135(2): 322-338. DOI: 10.1037/a0014996

Pozdeeva et al., 2019 – Pozdeeva, E.G., Shipunova, O.D., Evseeva, L.I. (2019). Social assessment of innovations and professional responsibility of future engineers. *IOP Conference Series: Earth and Environmental Science*. 337: 012049. DOI: <https://doi.org/10.1088/1755-1315/337/1/012049>

Razinkina et al., 2019 – Razinkina, E., Pankova, L., Trostinskaya, I., Pozdeeva, E., Evseeva, L., Tanova, A. (2019). The problem of influence of the educational environment on students' managerial competence. *E3S Web of Conferences*. 110: 02097. DOI: <https://doi.org/10.1051/e3sconf/201911002097>

Richardson et al., 2012 – Richardson, M., Abraham, C., Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. *Psychological Bulletin*. 138(2): 353-387. DOI: [10.1037/a0026838](https://doi.org/10.1037/a0026838)

Rizvanović, 2018 – Rizvanović, N. (2018). Motivation and personality in language aptitude. In S.M. Reiterer (Ed.). *Exploring language aptitude: Views from psychology, the language sciences, and cognitive neuroscience*. 101-116. Springer. DOI: [10.1007/978-3-319-91917-1\\_6](https://doi.org/10.1007/978-3-319-91917-1_6)

Rosander, Bäckström, 2011 – Rosander, P., Bäckström, M., Stenberg, G. (2011). Personality traits and general intelligence as predictors of academic performance: A structural equation modelling approach. *Learning and Individual Differences*. 21(5): 590-596. DOI: [10.1016/j.lindif.2011.04.004](https://doi.org/10.1016/j.lindif.2011.04.004)

Schee, 2011 – Schee, B.A.V. (2011). Students as consumers: programming for brand loyalty. *Services Marketing Quarterly*. 32(1): 32-43.

Schwartz, Bilsky, 1987 – Schwartz, S. H., Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*. 53(3): 550-562. DOI: <https://doi.org/10.1037/0022-3514.53.3.550>

Shalley et al., 2004 – Shalley, C. E., Zhou, J., Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*. 30(6): 933-958. DOI: [10.1016/j.jm.2004.06.007](https://doi.org/10.1016/j.jm.2004.06.007)

Sung, 2008 – Sung, M.Y. (2008). Toward the model of university image: the influence of brand personality, external prestige, and reputation. *Journal of Public Relations Research*. 20(4): 357-376.

Trapmann et al., 2007 – Trapmann, S., Hell, B., Hirn, J.O.W., Schuler, H. (2007). Meta-analysis of the relationship between the Big Five and academic success at university. *Zeitschrift für Psychologie – Journal of Psychology*. 215(2): 132-151.

Vedel, 2014 – Vedel, A. (2014). The Big Five and tertiary academic performance: A systematic review and meta-analysis. *Personality and Individual Differences*. 71: 66-76. DOI: [10.1016/j.paid.2014.07.01](https://doi.org/10.1016/j.paid.2014.07.01)

Volodarskaya et al., 2019 – Volodarskaya, E.B., Grishina A.S., Pechinskaya, L.I. (2019). Virtual Learning Environment in Lexical Skills Development for Active Vocabulary Expansion in Non-Language Students Who Learn English. *2019 12th International Conference on Developments in eSystems Engineering (DeSE)*, Kazan, Russia, pp. 388-392.

Zakharova et al., 2019 – Zakharova, I., Kobicheva, A., Rozova, N. (2019). Results analysis of Russian students' participation in the online international educational project X-Culture. *Education Science*. 9: 168. DOI: <https://doi.org/10.3390/educsci9030168>

Zhao, Seibert, 2006 – Zhao, H., Seibert, S.E. (2006). The Big Five personality dimensions and entrepreneurial status: A meta-analytical review. *Journal of Applied Psychology*. 91(2): 259-271. DOI: <https://doi.org/10.1037/0021-9010.91.2.259>