The role of personal competition of the technical university graduate in the local labour market

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Abstract. In terms of market relations the problem of competitiveness is revealed through the relationships of various subjects of economic activity. Many researchers study it at the interdisciplinary level. However, graduate's personal competitiveness in the labour market is understudied scientifically. When graduates of a technical university enter the local labour market, this factor becomes the main one. Therefore, the issue of assessing the level of young specialists' personal competitiveness is very relevant. The paper concerns with the social phenomenon of personal competitiveness including both personal and acquired components. During this particular study on the personal competitiveness of Yaroslavl State Technical University (YSTU) students' level, we defined the role of the technical university graduate personal competition in the local labour market. The purpose of the study is to assess the role of personal competitiveness of YSTU students in the local labour market during their employment. The objective of the study was to identify the motivation of employment as a factor of personal competitiveness. The main hypothesis is the assumption that at employment stage the level of personal competitiveness is the main factor determining the competitiveness of YSTU graduates. The most appropriate research method is the method of sociological survey through Google forms. The validity of the results was ensured by the sample size of 10% of sampling population size. The results of the empirical research presented made it possible to achieve the study goal and confirm its general hypothesis. Based on the data obtained, the paper describes the level of personal competitiveness of YSTU students.

Keywords: competitiveness, labour market, personal competition, competence, personal competitive advantages, hereditary competitive advantages, imperfect competition, standard of living, relevance, motivation.

JEL codes: A14

For citation: Irina V. Popova & Marina B. Abramova & Elena O. Stepanova. (2023). The role of personal competition of the technical university graduate in the local labour market. *Journal of regional and international competitiveness*, 4(2), 83.

Introduction

The Russian higher education system is focused on training specialists with professional and general cultural competencies. They allow them to withstand competition in the labour market. Therefore, an important task of the Russian higher education system is to form the readiness of a university graduate to compete in this market. The level of competition for graduates of higher educational institutions is determined by the desire of young professionals to find a job in a speciality with a satisfactory level of salary. It compensates their the efforts spent on education. The enterprises are also interested in specialists who are capable of practical solutions to professional problems. The system of higher education cannot fail to respond to the requirements of the market. Therefore, it is developing in accordance with the demands of students, forming the qualities which allow students to apply knowledge, skills, and abilities necessary in their professional activity.

The basis of this process should be the formation of an idea that a graduate enters the labour market, primarily, as a job seeker. It requires both the university staff and the graduate himself to know the current





situation of employment at the local level. In accordance with the explanatory dictionary, the labour market is the processes through which workers and employers contact and resolve issues related to wages and working conditions.

The state of the labour market is constantly undergoing changes depending on the socio-political and economic development of the state and the region. In addition, it is necessary to take into account the impact of external and internal factors on the labour market. External factors include the crisis decline of social production, the structural restructuring of production, and the democratization of public life, etc. The internal ones include the demographic situation, migration, education, the existing system of training and retraining of personnel, etc. (Fayzullin & Fayzullin, 2006). According to researchers of the labour market, the price and amount due for cost of labour, which are the most important structural elements of its self-adjustment, the level of per capita consumption of the population, have not been brought into mutual correspondence in the labour market of Russia. It is a factor of the formation and acceleration of contradictions between supply and demand in this field. Increasing of the financial costs for the reproduction of labour resources, the expansion of free pricing boundaries, the growth of inflation, the violation of the principles of social justice led to a widening gap between the price of labour and its value. It contributed to a further decrease in the role of the self-adjustment mechanism based on value relations in a market economy. The deterioration of living standards led to an increase in the population's need for jobs which became a factor of «pressure» of labour potential on the labour market (Fayzullin & Fayzullin, 2020).

The open market captures the entire working-age population, including the workforce and vacancies registered with the employment service, as well as places in the vocational education system. Employers and employees interact directly or through intermediaries. The natural and climatic conditions, the insufficiently balanced distribution of productive forces led to the formation of uneven unemployment rate among various age groups in the Russian labour market. And the young people are particularly affected it.

Therefore, it is necessary to define the main components of the local labour market. They are as follows:

- the job market where a graduate can choose a place of employment more or less corresponding to his desires;

- the labour market, where more than one person can apply for the same job, which creates a competitive situation;

- the employee and the employer should be able to negotiate to coordinate their interests. Meanwhile, if employees are forced to agree to any working conditions, and employers accept any employee, there is no competitive environment (Kuteitsyna, 2011).

However, a ccompetition in the labour market is predetermined by the desire of workers to be in demand in it. In terms of the individual in the labour market, the concept of demand should be considered through the socio-professional one. Professional demand is a necessary condition for the efficiency of economic activity. The demand for specialists is performed in the context of the existing labour market.

According to E.V. Kharitonova (2011): «the socio-professional relevance of a personality can be defined as a meta-system of relations between three global components: society, personality, and profession, which is both a process and a result of a person's entry into socio-cultural and professional reality». The personal-activity approach by E.V. Kharitonova in determining the demand, allows us to pay attention to the effectiveness of a personal resources realization. However, in a socio-philosophical sense, the study of the demand essence as a need allows us to consider this phenomenon not only in terms of social interaction but also as a motivation for it. In accordance with the conclusions above, we can distinguish two levels of personality demand which can be primary (abstract) and secondary (specific) ones. Primary (abstract) demand is a depersonalized need for something. In the labour market it is characterized by the need for an employee as an abstract person who possess certain professional and personal qualities and the requirement for potential employees to meet the needs of the employer. The availability of a vacancy (demand in the labour market) generates applicants offers. The employer's interest in a particular applicant transforms the primary demand into a secondary one and assumes its demand in the labour market. Thus, secondary demand characterizes the personalized need for a certain applicant who has the most suitable personal qualities for the employer, and the requirement for

this applicant with the conclusion of an employment relationship. The secondary demand reflects a subjective position based on the opinion of a particular employer on the particular applicant. All mentioned above allows us to consider the demand for an applicant in the labour market as the employer's necessity for an applicant as a potential employee (Kharitonova, 2012).

Competition is one of the core factors of economic development. But the subjects of competition are still understudied. Most economic theories perceive competition as a non-subjective process. Competition analysis is not accompanied by competitor analysis. Apparently, therefore, there is not enough research on personal competitiveness in various spheres of human activity. Although this phenomenon accompanies the existence of mankind since the division of labour. There is still no consensus on this concept. Perhaps this phenomenon is not natural, but social. However, it is difficult to assess it.

Some scientists believe it is natural; others define the competition as a reaction to uncertainty and an attempt to form a certain and controlled system for eliminating this uncertainty. That is, not only the possible consequences of such actions, but even their motivating mechanisms are hidden from the eyes of the scientist. Secondly, the process of forming a classical scientific research – from a descriptive to a normative function – is very complicated. The absence of repetitive or reproducible phenomena made the process of scientific verification of forecasts in the field of competition, however, as well as any socio-economic phenomenon, problematic (Sorokin, 2012).

There are objective reasons and prerequisites for a diverse scientific study of competition as a public life phenomenon. For instance, the personal principle in the actions of economic entities is especially necessary when studying the problems of employment of university graduates. Such research can help educational organizations in compiling competence passports for graduates of management and entrepreneurship programs. The study of the competitive motivation, styles, and manners of competitive behaviour, competitive competencies, students' abilities and their personal qualities, significant for competitive actions can become the basis for the formation of readiness of the higher education institution graduate to compete in the labour market (Rubin, 2017).

Thus, in order to form the competitiveness of a graduate, it is necessary: on the part of the university – knowledge of the local labour market state, on the part of the student – the level of personal competitiveness. Graduates of the university in the labour market can be attributed to the category of labour resources experiencing difficulties when looking for a job. One of the reasons for this is insufficient competitive potential, including:

- economical crises;
- discrepancy between supply and demand in the labour market;
- poor graduate's life position;
- inconsistency of professional competences with the job requirements;
- discrimination in the labour market, etc. (Motova & Shcherbakova, 2012).

Methods

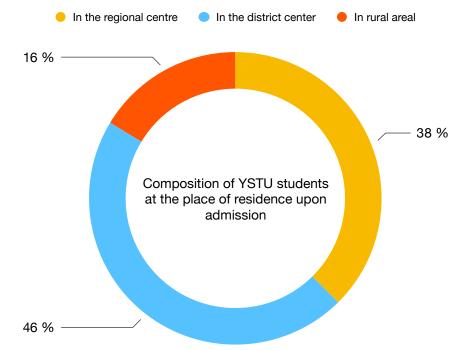
In order to assess the level of personal competitiveness of full-time undergraduate students of all specialities of Yaroslavl State Technical University, a Google questionnaire survey was performed. The sample size was 10% of the general sample. The purpose of the empirical study was to determine the level of personal competitiveness of the YSTU students. The subject is the relationship of the personal competitiveness level with the process of employment in the local labour market. The applicant's ability to get the desired job is related to his or her personal competitiveness. The first stage in which a university student's personal competitiveness manifests itself is his or her enrolment. The competitiveness of specialists in the labour market does not arise when a graduate starts looking for a job. It happens when the graduate, being an entrant, chooses a profession. At this stage, there is no awareness of entrants on the situation on the local labour market. There is no accurate interaction between employment agencies, employers, and educational institutions. The imbalance of supply and demand in the labour market is also related to all mentioned above.

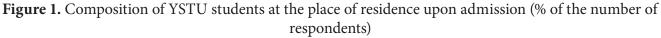
The hypothesis of the study was the assumption that at this stage the factor of the family financial

situation takes the first place among the factors determining the competitiveness of school graduates. The reason is the transition from a planned economy to a market economy over the past three decades. It has resulted in the impoverishment of a large part of the population. It has also formed a significant income gap between urban and rural population. Indeed, the preparation for the Unified State Exam provides mainly by the tutors. It is greatly affected the ability to compete for students of urban and rural schools when entering the university. The most of the young people choose a speciality with no thought about what professions are more in demand in the labour market, where they will work after graduation, how they will look for a job, etc.

Results

To verify this hypothesis, the survey included a set of questions. The first is: «Where was the school you graduated from?»





Source: composed by authors

According to the data obtained, 62.6% of those entering YSTU are graduates of the rural schools. Among the reasons why the choice of this university was made, the top three are:

- location of the university (52.9%);
- easy admission (51.2%);
- insufficient points for enter another university (25.3%).

The amount is more than 100% because the respondents could choose three options.

To support this hypothesis, we can also mention that 30.6% of students are studying and working at the time of the survey implementation. The main reason of their working is generally the option «I need money for a living, my parents can't support me» (59.3%).

Thus, summarizing the results obtained, we can define the financial factor as the major one. The financial situation of the family reduces the personal competitive opportunities in choosing an educational institution for graduates of rural schools. The low level of income, deficiency of permanent earnings do not allow parents to create favorable initial conditions necessary for their children career. Unfortunately, children who grew up in such families initially have low competitiveness in the labour market.

Considering the subjective component of the school graduates readiness level – future students – to compete in the labour market, the questionnaire contains the question: «When you entered the university, what was the most important for you?» (the amount is more than 100% because the respondents could choose

three options). Among the reasons why the choice of this university was made, the top three are:

- get a higher education (90.6%);
- the opportunity of self-actualization (65.6%);
- the possibility of easy employment (40.6%).

But during the studying students are changing their minds about the profession; the state of the labour market, and their own capabilities are changed, too. The second stage of personal competitiveness is the formation of readiness for employment. Employment refers to the process which is the selection of a workplace and the corresponding formalisation through the signing of an agreement with a specific employer. Indeed, employment is any process of getting a job both independently and with the help of special authorities .

Personal competitive advantages of each person can be divided into two categories: natural (hereditary) and acquired. Hereditary competitive advantages include:

- abilities;
- temperament;
- physical characteristics.
- Acquired personal competitive advantages include:
- business qualities (education, special knowledge, skills, and abilities, etc.);
- intelligence and culture;
- purposefulness of the activity motivation;
- character (attitude to work, to others, to oneself, to things, etc.);
- ability to manage the emotions;
- sociability.

Based on the selected competitive advantages, we can assume that the key factors affecting personal competitiveness in the labour market are: employee competence, motivation, and personal qualities.

The objective of the study was to identify the motivation of employment as a factor of personal competitiveness. In order to achieve it, the questionnaire contains the following question: «What are the goals of your future employment? (Point the most important option for you)». The results are as follows:

- permanent income (45.9%);
- the opportunity to self-actualization (37.2%);
- start own business (11.6%);
- other (5.3%).

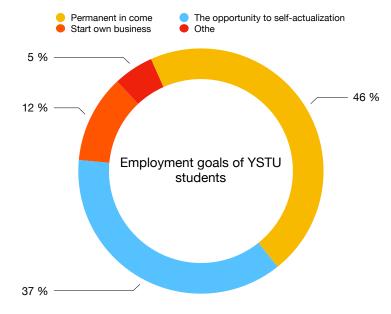


Figure 2. Employment goals of YSTU students (% of the number of respondents) *Source: composed by authors*

At the second stage, the importance of the self-actualization factor decreases. And occurs an

understanding of the relevance both theoretical and practical trainings. The assessment of the quality of this training gives students an idea of personal competitiveness and occupies one of the first places among the acquired personal competitive advantages. To obtain such an assessment, the questionnaire contains an indirect question: «What, in your opinion, most depends on the development of students' desire to work in the profession?» (the amount is more than 100% because the respondents could choose all the necessary options). The results are in descending order:

- on the quality of teaching special disciplines, when the classes show the connection of the acquired knowledge with the future profession (79.4%);

- on the possibility of employment on the profession (64.7%);

- on the possibility of career growth on the profession (60.0%);

- on the quality of teaching of all disciplines at the university (45.9%).

The results obtained allow us to conclude about understanding of the majority of YSTU students which competitive advantages in the labour market they will need.

The task of revealing the perceptions of students' needs for gaining competitiveness skills was accomplished with the help of the question: «What is important (not important) for you while studying at the university?» according to the option «important»:

- develop your abilities (92.5%);

- learn something new (90.1%);
- personal growth (88.4%);
- interest in the profession (84.3%);
- preparation for the future profession (83.2%);
- preparation for self- actualization in the profession (73.9%);
- interest in academic disciplines (69.3%);
- the opportunity to work by profession while studying (59.5%).

Indeed, 56.0% of students studying the discipline think about whether this knowledge will be needed in their future profession, which indicates their understanding of the personal competitiveness factors. Note, all the top ranked factors are attributed to acquired ones. Therefore, students expect the development of their competitive advantages from the conditions of study at the university.

To identify students' perceptions of the employment process, the questionnaire contains the following question: «What difficulties do you think you might encounter in finding a job?»

- absence of work experience (66.3%);
- lack of work opportunities in the labour market (9.8%);
- labour conditions at the enterprise (8,7%);
- poor self-presentation skills (11.6%);
- incompetence (10.5%).

According to the results, the students of all courses, including junior ones, are aware of discrimination against young people in the labour market due to the insufficient work experience. In order to assess the proportion of students solving the problem of their personal competitiveness in the labour market independently, the questionnaire contains the following options on the reasons that make them work: «I work in my future specialty, I gain experience» and «after graduation I will stay at this place to work». We summarize the similar in meaning answers; according to them, 35.6% of respondents have found a way out of the current unfair competition and are solving the issue of personal competitiveness without waiting for help from the state or the university.

The objective of the study was to compare the role of personal and acquired competitive advantages as perceived by the students. The structure of personal competitive advantages in the labour market was assessed using the question: «What requirements do you think employers impose on hired employees?» (the amount is more than 100% because the respondents could choose three options)

- responsibility (71.6%);
- diligence, efficiency (69.8%);

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- ability to communicate, sociability (57.4%);
- personal professional motivation (43,8%);
- initiative (30.2%);
- self-confidence (24.9%);
- perseverance (21.3%).

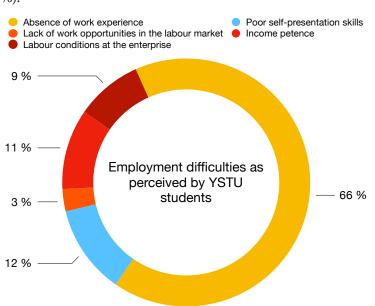


Figure 3. Employment difficulties as perceived by YSTU students (% of the number of respondents) *Source: composed by authors*

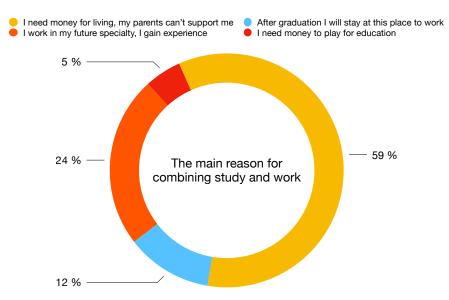


Figure 4. The main reason for combining study and work (% of the number of respondents) *Source: composed by authors*

The Russian labour market characteristic feature is imperfect competition, which was formed during the period of transition to market relations in the economy. «In the evolution (development) of the Russian labour market, two clearly defined stages are easily distinguishable: the first (1991-1998) was a reflection of a deep transformational recession, the second (1999-2008) – a vigorous post-transformational recovery. But on both, its behavior was «non-standard» (Kapelyushnikov, 2009). In the modern labour market, this type of competition is expressed by imperfect competitive behaviour of labour market actors on the one hand, and imperfect competitive conditions of the labour market on the other. The imperfection of competitive

behaviour on the labour market is caused by unfavourable conditions in which its participants act. It infringes the interests of the other actors. As the specifics of the labour market, the labour force is a commodity and the characteristic feature of an employee. Imperfection of competitive conditions in the labour market has a similar nature of its formation as imperfect competitive behavior and consists in non-fulfillment of the condition of mutual profitability of competition (Kravtsevich, 2018). In the Russian labour market, imperfect competition is characterising by the non-compliance of employees with the requirements imposed. The main indicative factors of imperfect competitive conditions are such components as salary, number of jobs, accumulated period of work, etc.

The objective of the study was to identify students' assessment of the imperfect competitive conditions existing in the local labour market. To obtain such an assessment, the questionnaire contains a question: «What is the main obstacle for you in order to make the profession you receive your own?» (the amount is more than 100% because the respondents could choose all the necessary options).

- salary (51.7%);
- number of jobs in the labour market, it is difficult to get a job in the specialty (44.8%);
- the quality of training in the specialty, lack of practice (27.6%);
- the quality of training in the specialty, the lack of theoretical knowledge (10.3%).

Market economy practice demonstrates the competitiveness and competence of a modern specialist are the fundamental qualities on which his or her personal and professional success entirely depends. Future workers' perceptions of career development in the profession additionally contribute to the opportunity to gain understanding of the YSTU students personal competitiveness level. To obtain such an assessment, the questionnaire contains a question: «What, in your opinion, can play a decisive role in your career growth?» (the amount is more than 100% because the respondents could choose all the necessary options). The following hierarchy is obtained:

- personal qualities, character traits (71.9%);
- qualifications, diploma of YSTU (59.4%);
- personal relations (34.4%);
- personal achievements during university studies (28.1%);
- work experience during study (28.1%);
- industrial practice, allowing to show themselves at the future place of work (28.1%).

To understand the students' motivation for a successful career, we present the results of a survey of YSTU graduates [8, p. 68]. The questionnaire contains a question: «What is an important condition for you for a successful career in the profession?»

| Index | According to the index «very important»(% of the number of respondents) in descending order |
|----------------------------------|---|
| Responsibility | 84.3 |
| Efficiency, diligence | 78.1 |
| Professionalism, competence | 78.1 |
| Personal professional motivation | 68.7 |
| Job interest | 68.7 |
| Striving for self-development | 65.6 |
| Purposefulness | 65.6 |
| Self-confidence | 53.1 |
| Communicative skills | 50.0 |
| High level of knowledge | 46.8 |
| Initiative | 40.6 |

Table 1 - Respondents' motivation for a successful career in the profession

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| Index | According to the index «very important»(% of the number of respondents) in descending order |
|---------------------------|---|
| Readiness for innovations | 40.6 |

Source: composed by authors

As can be seen, there is an increase in motivation to maintain a high level of personal competitive advantages in building a career in the profession after graduation when entering the labour market. Professional training ranks third, after responsibility and efficiency; a high level of knowledge occupies the penultimate position in the hierarchy. The explanation is that professional competitive qualities can be acquired during adaptation to the company's requirements for a young specialist, while personal competitive advantages will be paid attention to immediately and the company itself will not undertake their formation. According to the results obtained, most of the YSTU graduates understand it and develop the advantages of personal competition by themselves. However, it can also be interpreted as an assessment of the university's activity in developing graduates' readiness for the employability.

Conclusions

The study of the personal competitiveness level of university students is an important, but not sufficiently studied problem. The research allows us to confirm the main hypothesis. Therefore, at the stage of employment, among the factors determining the competitiveness of YSTU graduates, the main one is the level of personal competitiveness. The results obtained allow us to conclude about understanding of the majority of YSTU students which competitive advantages in the labour market they will need. According to the results, the students of all courses, including junior ones, are aware of discrimination against young people in the labour market due to the insufficient work experience. Therefore, we identify students' assessment of imperfect competitive conditions existing in the local labour market and obtain their hierarchy. It is as follows: salary – 51.7%; the number of jobs in the labour market, difficulty in getting a job in the specialty – 44.8%; the quality of training in the specialty, lack of practice – 27.6%; the quality of training in the specialty, lack of theoretical knowledge – 10.3%.

Awareness about the criteria determining the university graduates competitiveness in the labour market and the degree of their influence on the employment process. Indeed, it is possible to form a unified system of adaptation which increases the competitiveness of the individual. It will make the employment of graduates more effective. Taking into account the influence of economic, political, social, and other factors affecting the labour market, it is necessary to correct the objectives to manage the situation with the employment of university graduates in the local labour market. The main objective of competition development and employment of young specialists remains the creation of better conditions for professional and career implementation, as well as increasing the role of personal competitiveness in the labour market.

FUNDING

The work was done on a personal initiative.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHORS' CONTRIBUTION

Irina V. Popova – writing – original draft. Marina B. Abramova – data curation, formal analysis, validation. Elena O. Stepanova – conceptualization, project administration, writing – review & editing.

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Received 12.04.2023 Revised 15.05.2023 Accepted 21.05.2023