

PNP 2021
Personality in Norm and in Pathology**THE CORRELATION OF COMPETITIVENESS AND
MOTIVATION OF UNIVERSITY STUDENTS**

Sergey Yaroshenko (a)*, Peter Chernetsov (b)

*Corresponding author

(a) Chelyabinsk State University, Russia 129 Kashirinykh str., Chelyabinsk, Russia yaroshernik@mail.ru

(b) Chelyabinsk State University, Russia 129 Kashirinykh str., Chelyabinsk, Russia pich74@mail.ru

Abstract

The article deals with the problem of forming the competitiveness of university students, analyzes the content of the concept of "student competitiveness" and the components of the competitiveness of university students. Also, on the basis of theoretical analysis, the main features of the concept of "competitiveness of university students" are identified. The article deals with the diagnosis of the competitiveness of university students and the questionnaire method with the analysis of its positive and negative aspects in the diagnosis of the competitiveness of students. In the questionnaire "Evaluation of components of competitiveness of students in various areas of vocational training" there are three sets of questions reflecting the main components of competitiveness of higher education students: a motivational-volitional component (MVC), a component of key competencies (KC), a component of competitive qualities (CQL). The motivational structure of the personality and its components are revealed. The results of an experimental study of the correlation between the motivational structure of the personality and the components of students' competitiveness are presented. In the experiment, it was assumed that the components of the motivational structure of the personality correlate with the main components of competitiveness. The article analyzes the expression of the components of the motivational structure of the personality of a competitive university student of various professional directions.

2357-1330 © 2021 Published by European Publisher.

Keywords: Competitiveness of university students, components of student competitiveness, motivational structure of personality, questionnaire method



1. Introduction

In market conditions, any production of goods or services involves competition, or rather competitive. That is, it is a struggle for the consumer, the buyer by improving the characteristics of the product or service: quality, image attractiveness, demand, etc. If we consider education as a service from the point of view of market interaction, then these characteristics apply to it. Indicators of the competitiveness of education can be called its prestige in society, the demand for both applicants and the labour market. Thus, one of the most important components of controversial education is the competitiveness of university students.

The concept of the development of continuing adult education in the Russian Federation for the period up to 2025 emphasizes the relevance of improving the competitiveness of students.

2. Problem Statement

To effectively form the competitive spirit of university students, it is necessary to identify the correlation between the components of the competitiveness of students and the components of the motivational structure of the individual, since the general direction of activity and its effectiveness is determined by the meaning-forming motive or set of motives.

Many researchers pay attention to the fact that various components of the motivational structure or the sphere of personality play a great role in the formation of students' competitiveness and in professional development in general.

Motivation is an incentive to action, therefore, any activity, including professional, without significant, effective motives is doomed to formal implementation, leading to a decrease in its quality.

When achieving the goals of teaching, according to Pavlov (2017), the most significant for students can be the motives – cognitive, communicative, emotional, self-development, the position of the student, achievements, external. Ohanyan (2017) considers the factors that affect the competitiveness of university graduates, identifies the motivational component of the competitiveness of students: readiness for improvement, self-actualization; actualization of the need for social and professional status; desire for success. Vernienko (2018) highlights the motivation to achieve success as acmeological factors of the development of a competitive personality in the conditions of studying at a university.

The personality structure of a competitive student, according to Tserkovskiy et al. (2017), is interrelated with the motivation of affiliation and the motivation of success. From the point of view of Bubnova et al. (2018), it is necessary to take into account the influence of the motivational sphere of the value attitude to the profession for the competitiveness of students. Maksimova (2018) notes the correlation between the competitiveness of students and the motives for choosing a place of study, as well as the motives of teaching in general. Medvedeva and Shevtsova (2020) experimentally identify more international students with high achievement motivation and marked self-development motivation among students with high competitiveness.

Demenkova and Kurovsky (2017) note the correlation between the increase in students' competitiveness and the increase in motivation to study in basic disciplines. Statsenko (2019) speaks about the influence of positive educational motivation on effective professional development in his

research. Kurashinova (2017) in a theoretical study substantiates the correlation between achievement motivation and professional development.

From the point of view of Bura and Vesetiu (2019), the main components of the motivational sphere of a person are determined by activity, inclinations, adequacy, consciousness, expedient behavior, creativity, originality, humanity, responsibility.

Thus, we assume that the components of the motivational structure of the personality are interrelated with the main components of the competitiveness of students.

3. Research Questions

To reveal the content of the notion "competitiveness of students" and the components of competitiveness of University students, to consider the questionnaire as a method of diagnosing the competitiveness of University students and to analyze the expression of the components of the motivational structure of the personality of a competitive University student of various professional orientation.

4. Purpose of the Study

To purpose of this study is to experimentally study the relationship between the components of competitiveness of University students and the motivational structure of the personality.

5. Research Methods

The research methods are: theoretical analysis, generalization of practical and best practices, observation, questionnaires and methods of mathematical statistics of data processing.

In solving the problem of forming a competitive University student, an important role is played by the accuracy of diagnostics, which would take into account various personal and professional components.

Considering the problem of diagnosing the competitiveness of University students, we are faced with the fact that there are no common approaches, methods (tests, questionnaires) to assess the competitiveness of students. Existing methods of defining competitiveness are usually aimed at a specific specialty and this makes them unsuitable for measuring the competitiveness of students of other specialties and directions of training.

To solve the problem of assessing the competitiveness of University students in various directions of professional training, a universal tool (method or questionnaire) is needed.

Why did we choose the questionnaire as a method of empirical psychological and pedagogical research? To answer this question, it is necessary to clarify what exactly is understood in psychological and pedagogical research under the questionnaire.

Zagvyazinsky and Astakhov (2001) identify the following methods of empirical psychological and pedagogical research: the study of literature and other sources; observation; conversation; testing; the study of products of activity; evaluation; experiment; a survey in the form of an interview and a survey in the form of a questionnaire. They consider the questionnaire as a kind of survey in which the same goals

are set and achieved as in the interview, but based on the analysis of written responses of respondents (Zagvyazinsky & Astakhov, 2001). The questionnaire method is defined as a written survey of a significant number of people according to a certain scheme, which aims to collect mass (most often indicative), then statistically processed material for solving certain psychological problems.

The survey method, like any phenomenon, can be viewed from both a positive and a negative point of view. That is, there are pros and cons everywhere. The study of a significant number of students in a short period of time and obtaining objective data on a scientific problem on the basis of a questionnaire is a significant plus. This indicates the feasibility of using this scientific method on the problem of "The relationship between competitiveness and motivation of university students".

There is also a serious drawback of the questionnaire method. It is quite difficult to present the entire problem under study, taking into account all its components, on the basis of standard questions. The objectivity of the information will largely depend on the correctness of the questions in the questionnaire.

It is believed that the quality of the questionnaire questions can be improved as follows: the wording of the question should not be ambiguous, the question should not contain an answer; the information is not revealed by direct questions; the questionnaire should contain questions that verify the accuracy of the information (Zagvyazinsky & Astakhov, 2001).

To compile a questionnaire to assess the formation of competitiveness among University students in various directions of professional training, it is necessary to clearly understand the essence and content of this concept, which follows from its definition, which we revealed earlier with the formulation of our own position in understanding the competitiveness of University students.

In the questionnaire Evaluation of Components of Competitiveness of Students in Various Areas of Vocational Training (Yaroshenko, 2012) there are three sets of questions reflecting the main components of competitiveness of higher education students: a motivational-volitional component (MVC), a component of key competencies (KC), a component of competitive qualities (CQL).

The characteristics of the competitiveness of university students can be grouped into three blocks of questions:

- The 1st block of characteristics: ability to achieve success in professional activity in a competitive environment determined by motivation and will.
- The 2nd block of characteristics: related to key competencies.
- The 3rd block of characteristics: ability to mobilize individual and personal resources.

These characteristics are important to take into account when studying the competitiveness of a student in any field of professional training.

The dominant characteristics of the first block of the questionnaire are motivation and will. Competitiveness is a struggle with external obstacles, an effort to overcome internal contradictions, so, it is a well-developed strong-willed quality. Therefore, to determine the severity of motivation and will, we use some of the questions from the methods in the questionnaire Motivation for success and fear of failure and Self-assessment of willpower (Ilyin, 2003).

Questions on key competencies are included in the second block of the questionnaire.

From the point of view of Seer (2003), it is important to take into account the following key competencies in the professional training of students:

- Social competence – responsible independent behavior, with a high level of tolerance for different cultures and religions.
- Communicative competence – a high level of verbal and non-verbal communication mediated by information technologies.
- Social and information competence – understanding and application of information technologies in professional activities, as well as an objective assessment of public information in the mass media.
- Cognitive competence – personal growth based on a high level of education, continuous self-development and self-study.
- Special competence – a high level of preparation for professional activity (Seer, 2003).

The third block of the questionnaire contains questions that reveal the student's ability to mobilize individual and personal resources.

From the point of view of Andreev (2004), the most important qualities of a competitive personality are: clarity of goals and hard work, creative attitude to business and the ability to take risks, independence and the ability to be a leader, the desire for continuous self-development and stress resistance, the desire for continuous professional growth and the desire for high quality of the final product of their professional activity.

The questions of the third block of the questionnaire are based on Andreev's test What is the Level of Your Competitiveness? (Andreev, 2004). When answering the questions, the Respondent must choose one of three answers: "Yes", "Sometimes", "No". Each block of the questionnaire contains twenty questions. For example, some questions in the first block of the questionnaire:

- In the conditions of competition, I do not give up my activities, but strive for maximum results.
- Getting involved in the work, I hope for success.
- Active in the activity.

Example of some questions in the second block of the questionnaire:

- I am not afraid to take responsibility, jointly develop a solution and participate in its implementation.
- I am tolerant of different cultures.
- I treat people who profess different religions with understanding.

Example of questions in the third block of the questionnaire:

- I know exactly what I want and can achieve in the next two or three years.
- I know exactly what field of activity I can earn a decent amount of money in.
- I always have enough energy to finish what I started.

There are a total of 60 questions in the questionnaire.

When processing the results of the questionnaire, points for answering questions are calculated as follows: "Yes" - 2, "Sometimes" - 1, "No" - 0.

Interpretation of the results of the formation of competitiveness of University students in various directions of professional training:

- 0-40 points-low level.
- 41-80 points-average level.
- 81-120 points-high level.

It is also possible to perform the formation of the main components of competitiveness of University students (a motivational-volitional component, key competencies, a component of competitive qualities):

- 0-20 points-low level.
- 21-40 points-average level.
- 41-60 points-high level.

In the further study, we will diagnose the main components of the competitiveness of University students using this questionnaire (Yaroshenko, 2012).

To determine the motivational structure of the personality in the study, we use the "questionnaire of the motivational structure of the personality" by Gerbachevsky (Suntsova & Kozhevnikova, 2012).

6. Findings

In psychological and pedagogical research, the competitiveness of students is considered as an integrative property, quality or ability of the personality.

We adhere to the point of view that the competitiveness of a student is the ability to achieve success in professional activities in a competitive environment based on key competencies and resource mobilization of individual and personal qualities.

Based on the theoretical analysis of the concept of "competitiveness of university students", we distinguish its components:

- Achieving success in professional activity in a situation of competition, competition based on the strong-willed qualities of the personality and its motivation for success.
- Resources of individual personal qualities, the use of which is necessary for an effective strategy and tactics of professional actions in a competitive situation.
- Key competencies that allow to perform professional activities with high quality.

In the theoretical study of pedagogical management of professional training of competitive graduates in the conditions of the level education system in 2012, we came to the conclusion that the questionnaire reflecting the main components of the competitiveness of University students as a universal mechanism for diagnosing competitiveness will be the most correct (Repin & Yaroshenko et al., 2012). In the further study, we use the questionnaire "Assessment of the components of competitiveness of

University students in various directions of professional training", developed by Yaroshenko (as cited in Repin & Yaroshenko et al., 2012).

The motivational structure of a person is understood as a set of motives connected and conditioned by the meaning-forming motive of activity, which determines its general direction.

Gerbachevsky identifies fifteen components in the motivational structure of a person: internal motive, cognitive motive, avoidance motive, competitive motive, change of activity motive, self-esteem motive, significance of results, task complexity, volitional effort, assessment of the level of achieved results, assessment of one's potential, planned level of mobilization of efforts, expected level of results, regularity of results, initiative (as cited in Suntsova & Kozhevnikova, 2012).

We assume that the components of the motivational structure of the personality correlate with the main components of competitiveness. In other words, the expression of a certain component of the motivational structure of the individual can increase the level of one of the main components of the competitiveness of University students.

This theoretical assumption of the correlation between the components of competitiveness and the components of the motivational structure of the personality is presented in Table 1.

Table 1. Theoretical assumption of the correlation between the components of students' competitiveness and the components of the motivational structure of the personality

Components of the motivational structure of the personality	The correlation is positive (+) or negative (-) Component (MVC)	The correlation is positive (+) or negative (-) Component (KC)	The correlation is positive (+) or negative (-) Component (CQL)
Internal motive (IM)	+	+	+
Cognitive motive (CogM)	+	+	+
Avoidance motive (AM)	-	-	-
Competitive motive (CM)	+	+	+
Change of activity motive (CAM)	-	-	-
Self-esteem motive (SM)	+	+	+
Significance of results (SR)	+	+	+
Task complexity (TC)	+	+	+
Volitional effort (VE)	+	+	+
Assessment of the level of achieved results (AAR)	+	+	+
Assessment of one's potential (AOP)	+	+	+
Planned level of mobilization of efforts (LME)	+	+	+
Expected level of results (ELR)	+	+	+
Regularity of results (RR)	+	+	+
Initiative (I)	+	+	+

Diagnostics was carried out at students of the third and fourth courses of different directions of professional training of Chelyabinsk State University, the total number of students made 30 people

(Institute of education and practical psychology-15 students, Institute of Economics of branches, business and administration-15 students).

Spearman's rank correlation method was used to estimate the correlation relationship. Spearman's rank correlation coefficient is represented by the formula:

$$\rho = 1 - \frac{6 \cdot \sum d^2}{n(n^2 - 1)}$$

Where n - number of ranked features (indicators, respondents). D - difference between the ranks of two variables for each respondents.

After processing the data, we obtained the following results in Table 2.

The relationship is reliable if $r_{s \text{ empirical}} > r_{s 0.05}$, and even more reliable if $r_{s \text{ empirical}} > r_{s 0.01}$.

At critical values for $N = 30$,

$r_{s \text{ cr.}} = 0.36$ ($p < 0.05$),

$r_{s \text{ cr.}} = 0.47$ ($p < 0.01$).

Table 2. Theoretical assumption of the correlation between the components of students' competitiveness and the components of the motivational structure of the personality

Components of the motivational structure of the personality	The correlation is positive (+) or negative (-) Component (MVC)	The correlation is positive (+) or negative (-) Component (KC)	The correlation is positive (+) or negative (-) Component (CQL)
Internal motive (IM)	$r_s = 0.844$	$r_s = 0.821$	$r_s = 0.759$
Cognitive motive (CogM)	$r_s = 0.735$	$r_s = 0.736$	$r_s = 0.65$
Avoidance motive (AM)	$r_s = -0.585$	$r_s = -0.605$	$r_s = -0.498$
Competitive motive (CM)	$r_s = 0.82$	$r_s = 0.794$	$r_s = 0.713$
Change of activity motive (CAM)	$r_s = -0.549$	$r_s = -0.577$	$r_s = -0.472$
Self-esteem motive (SM)	$r_s = -0.276$	$r_s = -0.248$	$r_s = -0.223$
Significance of results (SR)	$r_s = 0.497$	$r_s = 0.54$	$r_s = 0.294$
Task complexity (TC)	$r_s = 0.306$	$r_s = 0.322$	$r_s = 0.403$
Volitional effort (VE)	$r_s = 0.723$	$r_s = 0.713$	$r_s = 0.587$
Assessment of the level of achieved results (AAR)	$r_s = 0.099$	$r_s = 0.07$	$r_s = 0.177$
Assessment of one's potential (AOP)	$r_s = 0.917$	$r_s = 0.911$	$r_s = 0.855$
Planned level of mobilization of efforts (LME)	$r_s = 0.698$	$r_s = 0.709$	$r_s = 0.607$
Expected level of results (ELR)	$r_s = 0.576$	$r_s = 0.56$	$r_s = 0.538$
Regularity of results (RR)	$r_s = 0.294$	$r_s = 0.326$	$r_s = 0.341$
Initiative (I)	$r_s = 0.62$	$r_s = 0.579$	$r_s = 0.553$

7. Conclusion

Thus, our assumption was partially confirmed. The relationship between such components of the motivational structure of the personality as "self-esteem motive", "assessment of the level of achieved results" and "regularity of results" was not confirmed for any component of students' competitiveness. The "task complexity" component also did not show a relationship with the "motivational-volitional component" and the "key competencies" component. The component "significance of results" is not

related to the component "qualities of a competitive personality". One of the reasons may be a small sample of the study.

In accordance with these results, we can talk about the importance of the components of the motivational structure of the personality in the formation of the competitiveness of University students of various professional orientation. The most pronounced correlation with the components of competitiveness of University students in the following components of the motivational structure of the personality: "internal motive" and "assessment of their potential". The remaining components ("cognitive motive", "avoidance motive", "competitive motive", "change of activity motive", "task complexity", "volitional effort", "planned level of mobilization of efforts", "expected level of results", "initiative") are to a lesser extent, but are also interrelated with the competitiveness of University students.

This study is not exhaustive and can be supplemented.

References

- Andreev, V. (2004). *Konkurentologiya. Uchebnyi kurs dlya tvorcheskogo samorazvitiya konkurentosposobnosti* [Education course for creative self-development of competitiveness]. Kazan: Information Technology Center. [in Rus.] <https://logos-press.ru/docs/konkurent.pdf>
- Bubnova, L. M., Losev, A. L., & Ternovskaya, O. V. (2018). *Motivaciya k obucheniyu kak faktor konkurentosposobnosti vypusknika kolledzha na rynke truda* [Motivation to study as a factor of competitiveness of a college graduate in the labor market]. Regional problems of economic transformation: integration processes and mechanisms of formation and socio-economic policy of the region. Proceedings of the IX International Scientific and Practical Conference. 2018. [in Rus.] <https://www.elibrary.ru/item.asp?id=37128017>
- Bura, L. V., & Vesetiu, V. V. (2019). *Problema struktury motivacionnoj sfery lichnosti* [The problem of the structure of the motivational sphere of the individual]. *Problems of modern pedagogical Education*, 65-1. [in Rus.] <https://www.elibrary.ru/item.asp?id=42395671>
- Demenkova, L. G., & Kurovsky, V. N. (2017). *Motivaciya studentov vuza k osvoeniyu bazovyh disciplin na osnove ih individual'nyh planov formirovaniya konkurentosposobnosti* [Motivation of university students to master basic disciplines on the basis of their individual plans for the formation of competitiveness]. *Bulletin of the Tomsk State Pedagogical University*, 12(189), 68-75. [in Rus.] <https://www.elibrary.ru/item.asp?id=30672568>
- Ilyin, E. P. (2003). *Motivaciya i motivy* [Motivation and motives]. Piter. http://t21010b.sch.obrazovanie33.ru/upload/iblock/a3f/Motivacia_y_motivy_Ilyuin.pdf [in Rus.]
- Kurashinova, A. H. (2017). *Motivaciya dostizheniya kak faktor professional'nogo stanovleniya* [Achievement motivation as a factor of professional development]. *Modern Scientist*, 4, 118-120. <https://www.elibrary.ru/item.asp?id=30095542> [in Rus.]
- Maksimova, Z. Y. (2018). *Konkurentosposobnaya lichnost' - trebovanie vremeni* [A competitive personality is a requirement of the time]. Mari State University. <https://www.elibrary.ru/item.asp?id=37051344> [in Rus.]
- Medvedeva, S. A., & Shevtsova, A. Y. (2020). *Lichnostnye faktory konkurentosposobnosti studentov psihologov* [Personal factors of competitiveness of psychology students]. *Modern Science*, 7(2). 277-282. <https://www.elibrary.ru/item.asp?id=43361264> [in Rus.]
- Ohanyan, K. K. (2017). *Motivirovannost' i orientirovannost' studentov kak faktory razvitiya konkurentosposobnosti vypusknikov vuzav* [Motivation and orientation of students as factors of development of competitiveness of university graduates]. SPbGEU Publishing House. <https://www.elibrary.ru/item.asp?id=30549681> [in Rus.]
- Pavlov, I. I. (2017). *Motivacionnye tekhnologii obucheniya v sisteme shkol'nogo obrazovaniya* [Motivational technologies of teaching in the school education system: an educational and

- methodological manual]. Yakutsk: Company Dani-Almas. Retrieved from <http://batyushkin.ru/wp-content/uploads/2018/08/Uchebno-metodicheskoe-posobie-MTO-25.05.20.pdf> [in Rus.]
- Repin, S. A., Tsiring, R. A., Yaroshenko, S. N., Antropova, L. G., Kurnosova, S. A., Kozin, A. M., & Chernetsov, P. I. (2012). *Pedagogicheskoe upravlenie professional'noj podgotovkoj konkurentosposobnyh vypusknikov v usloviyah urovnevoj sistemy obrazovaniya* [Pedagogical management of professional training of competitive graduates in the conditions of a level education system]. Publishing house "Polygraph-Master". [in Rus.] <https://www.elibrary.ru/item.asp?id=25890902>
- Seer, E. F. (2003). *Psihologiya professional'nogo obrazovaniya* [Psychology of vocational education]. Publishing house of NPO «MODEK». [in Rus.]
- Statsenko, E. R. (2019). Znachenie motivacii dlya studentov v processe professional'nogo stanovleniya (na primere fakul'teta iskusstv i servisa magu) [The importance of motivation for students in the process of professional development (on the example of the Faculty of Arts and Service of magu)]. *Problems of modern pedagogical education*, 63(3), 177-180. <https://www.elibrary.ru/item.asp?id=38165916> [in Rus.]
- Suntsova, Y. S., & Kozhevnikova, O. V. (2012). *Diagnostika professional'nogo stanovleniya lichnosti* [Diagnostics of professional formation of the personality]. Udmurt University Publishing House. <https://www.elibrary.ru/item.asp?id=25715884> [in Rus.]
- Tserkovskiy, A. L., Blednov, A. V., Gapova, O. I., Petrovich, S. A., Kasyan, O. A., Vozitel, I. I., & Skorikova, E. A. (2017). Akmeologicheskaya napravlennost' lichnosti studenta vgmu kak komponent ego konkurentosposobnosti [Acmeological orientation of the person of the student of Vitebsk state medical University as a component of its competitiveness]. *Bulletin of the Vitebsk State Medical University*, 16(6), 131-137. <https://www.elibrary.ru/item.asp?id=30714441> [in Rus.]
- Vernienko, L. V. (2018). Akmeologicheskie determinanty razvitiya konkurentosposobnosti studenta v usloviyah sovremennogo rynka trudantospobnosti [Acmeological determinants of the development of student competitiveness in the modern labor market]. *Territory of Science*, 2, 42-46. <https://www.elibrary.ru/item.asp?id=35545278> [in Rus.]
- Zagvyazinsky, V. I., & Astakhov R. (2001). *Metodologiya i metody psihologo-pedagogicheskogo issledovaniya* [Methodology and methods of psychological and pedagogical research]. Academy. http://ipkfp.nspu.ru/file.php/1/Zagvjazinskii_V.I._Atakhanov_R.-Metodologija_i_metody_PPI.pdf [in Rus.]