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**SELF-TRUST AND ACADEMIC MOTIVATION OF STUDENTS IN**  
**VIRTUAL EDUCATIONAL SPACE**

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**Abstract**

The paper presents the analysis of a theoretical and empirical study of self-trust and academic motivation of students in electronic educational communication. The situation of forced distance learning and pedagogical and social interaction in a pandemic has revealed some socio-psychological characteristics in the network communication of students. In new virtual educational space, new forms of cognitive, educational and social activity of students started to form, which quickly adapted to the prevailing conditions. The involvement of students in educational activities is determined by the level of self-trust, trust in teachers, close people and friends, educational institution and the world. The purpose of this research was to study the characteristics of self-trust and academic motivation of students. The survey method and mathematical methods of data processing were used in this research. The results of empirical research showed that, in the context of electronic communication among students, self-trust dominates over trust in other people and the world. In the structure of academic motivation of students, cognitive motivation prevails over achievement motivation, introjected and external motivation. Students are focused on new knowledge and gaining new experience and they strive to get satisfaction from educational activity. Self-trust is associated with academic motivation. Student trust in them and in other participants in the interaction contributes to the development of cognitive motivation and achievement motivation. Self-trust of students is associated with a sense of duty to oneself, family and friends.

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## 1. Introduction

The current epidemiological situation has accelerated the formation of a new educational virtual space in universities. The creation of an electronic educational environment allowed achieving certain goals of pedagogical influence such as the organization of independent cognitive activity of students, effective interaction of the subjects of educational process, visualization of subject content, organization of pedagogical process. As a result of distance education all the subjects of the educational process faced the need to adapt to new conditions of interaction. Moreover, the usual forms of activity significantly changed. In the virtual educational space, new forms of cognitive, educational and social activity of students occurred and a special “space of trust / distrust” emerged.

In this regard, the study of self-trust and academic motivation of students in the context of e-learning is of particular interest.

The success of students in educational program is provided by a number of psychological and pedagogical conditions such as the formation of positive motivation for the use of information and computer technologies in educational and professional activities, stimulation of the activity of a personality of a student in relation to the solution of educational problems through electronic teaching tools, provision of the psychological effectiveness of creative educational interaction of participants and development of self-trust.

In educational activities both students and teachers manifest “trust / distrust”. On the one hand, “trust / distrust” is expressed in relation to the content and method of education, and, on the other hand, to the way of student learning and scrupulosity in learning interaction. In the educational activity of students through electronic communication, “trust / distrust” is expressed in interest in various information resources, types of activities and attitudes towards people.

In order to solve educational problems, many students use alternative electronic educational resources. Electronic catalogs, libraries and specialized portals provide an opportunity to get necessary knowledge. A student can collect information in a limited time, but the quality of the received information depends on the chosen source. A positive result in the acquisition of high-quality information depends on the level of student confidence in the Internet resource.

The involvement of students in educational activities is determined by the level of self-trust, trust in teachers, close people and friends, educational institution and the world. Trust is the basis in relations between a person and society. It regulates relationships between people and affects the social behavior of a person.

## 2. Problem Statement

The main reasons in terms of electronic communication of students are as follows: cognitive reason, business reason, communication reason (communicative reason), corporate reason (cooperation reason); the reason of rest and game reason, the reason of self-affirmation, the reason of affiliation, the reason of self-realization and personality development (Arestova et al., 2017). The selected reasons determine the orientation of a personality in network activity.

The research on online studies of student academic motivation show that alternative information resources are viewed by young people as complementary to their education (Milligan et al., 2017). Students graduating from Internet courses are motivated by their interest in the content of the program and the desire to complete the program (Wang et al., 2015). The authors note that the motivation of students is determined by the awareness of the purpose and importance of the study of educational material (Kim et al., 2011). Students, searching for the necessary information in the Internet, face the anonymity inherent in the systems that provide services. This makes it difficult to build trust among users on the network (Urena et al., 2019). In the process of interpersonal interaction in the virtual space, the perception of other participants in electronic communication is similar to the perception of people in real life.

The virtual nature of space, time and social relations form special individual and personal expressions (Sungurova, 2018). A person, being in the virtual space, is guided by the principles of behavior acceptable to him, which may differ from the principles in real life. As in real life, trust determines the activity of a person in the Internet, but at the same time, there is a tendency towards more relaxed behavior (Sungurova et al., 2018). With a high level of trust in people and the world in the Internet, the range of actions of the participants in interaction expands.

The research problem is that self-trust and academic motivation are important components of student effectiveness in an electronic educational environment. Researchers mainly study individual aspects of trust and motivation in Internet communication, but they do not pay enough attention to the study of the specifics of the relationship between self-trust and academic motivation of students.

### **3. Research Questions**

The subject of this research is self-trust and academic motivation of students in a virtual educational space.

In the virtual space, self-trust of students is expressed in relation to themselves, other people, learning activities, communicative interaction and the world in cognitive activity. Trust is an important component of the psychological well-being of the personality of students.

Academic motivation of students in electronic communication is expressed in the desire for knowledge, new experience and achievement of goals. Academic motivation is associated with self-trust.

### **4. Purpose of the Study**

The purpose of this research is to study the characteristics of self-trust of students and academic motivation in the virtual educational space.

Electronic communication of students is aimed to acquire knowledge, abilities and skills, develop personal characteristics and professional competencies.

The accelerated development of the virtual educational space of universities contributes to the formation of interpersonal relations between students and a teacher (Dvoryatkina, 2017) and development of personal information culture (Harris, 2003).

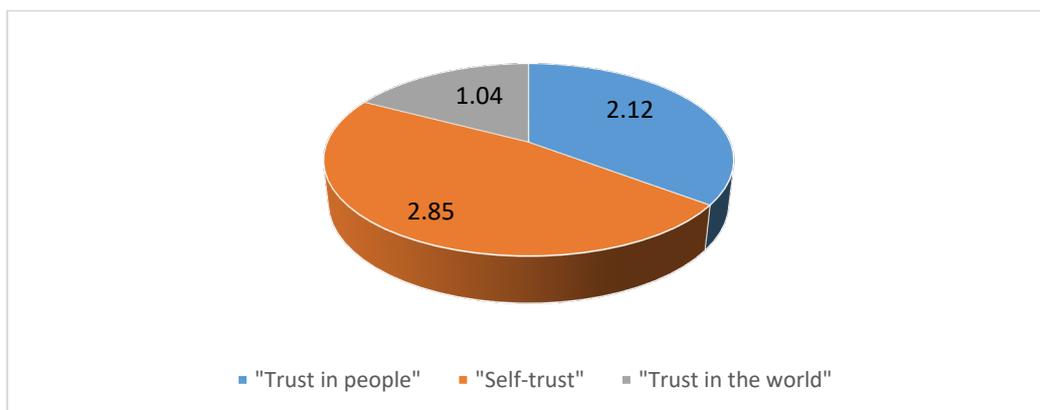
The study of the relationship between the self-trust of students and the motivation of educational activity is important for work in the field of psychological education, organization of educational interaction mediated by electronic technologies.

## 5. Research Methods

The authors conducted an empirical study of self-trust and academic motivation of students in the context of electronic educational communication. The sample was presented by 82 respondents. The average age of the participants was 20 years. The empirical research was carried out on the basis of the Peoples' Friendship University of Russia. In order to study self-trust, the “Methodology for the study of trust / distrust of a person in the world, other people and self-trust” was used (Ilyin, 2013). The “Academic Motivation Scale” (Gordeeva et al., 2014) made it possible to analyze the motivation for learning activities in the Internet. The study used the methods of mathematical data processing and computer analysis. The software: IBM SPSS Statistics Version 21 was used.

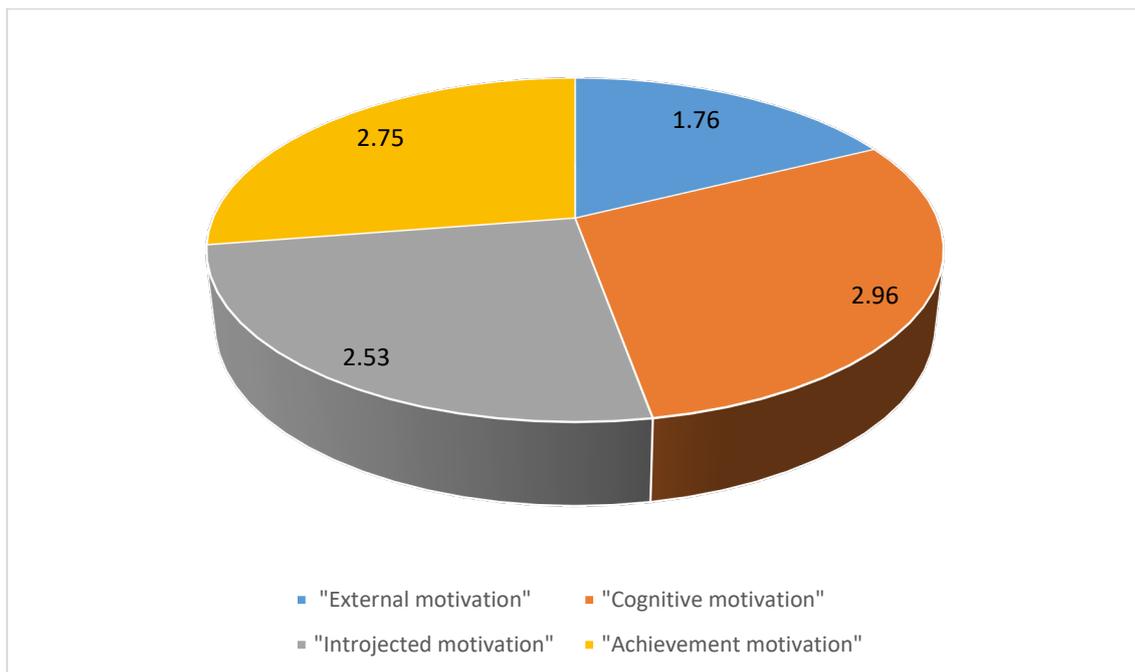
## 6. Findings

According to the results of the study of trust in the Internet, the values of the average ranks among students were revealed according to the scales “Methods of the study of trust / distrust of a person in the world, other people and self-trust” (Figure 01). “Self-trust” (2.85) is the dominant trend and demonstrates the ability of students to trust. Students aspire to analyze their activities and self-understanding. The scale “Trust in People” (2.12) measures trust in the behavior of another person in a specific and expected way. A low value on the scale “Trust in the world” (1.04) indicates distrust in the world, an unformed sense of security and safety, as well as a fear of the world not accepting the personality and lack of support for one's actions. Statistical analysis according to the Friedman test confirmed the significance of the presented trend ( $\chi^2 = 137.372$ ;  $p = 0$ ).



**Figure 1.** Average values of the scales of the questionnaire “Methods of the study of trust / distrust of a person in the world, other people and self-trust”

According to the results of the study of academic motivation of students in electronic education, the values of average ranks were revealed on the scales “Cognitive motivation” (2.96), “Achievement motivation” (2.75), “Introjected motivation” (2.53), “External motivation” (1.76). Statistical processing according to the Friedman test confirmed the significance of the presented trend ( $\chi^2 = 45.334$ ;  $p = 0$ ). Students are aimed to learn new things and demonstrate educational activity (Fig. 02). Most students strive to achieve their goals in educational activities. The desire to learn is associated with a sense of duty to oneself and close people. At the same time, the social requirements of society do not affect the motivation of students.



**Figure 2.** Average values of the scales of the questionnaire “Scale of academic motivation” in the conditions of virtual learning

This correlation analysis of the data using Spearman's rank correlation coefficient showed the following significant relationships:

- Between the scale “Trust in people” in the Internet and the scale “Cognitive motivation” ( $r_s = 0.230$ ,  $p \leq 0.05$ ). The more expressed trust of students in the participants in electronic communication, the more they are aimed to understand the world, gain new knowledge and acquire life competencies;
- Between the scale “Trust in people” in the Internet and the scale “Achievement motivation” ( $r_s = 0.229$ ,  $p \leq 0.01$ ). For students with developed trust in other people, the desire to achieve high results in educational interaction is more characteristic;
- Between the scale “Self-trust” in the Internet and the scale “Cognitive motivation” ( $r_s = 0.429$ ,  $p \leq 0.01$ ). Cognitive motivation is well developed among respondents with a pronounced self-trust;

- Between the “Self-trust” scale in the Internet and the “Motivation achievement” scale ( $r_s = 0.478, p \leq 0.01$ ). The higher the level of self-trust among students, the more expressed the desire for high results in educational activities;
- Between the scale “Self-trust” in the Internet and the scale “Introjected motivation” ( $r_s = 0.429, p \leq 0.01$ ). Self-trust of students is associated with a sense of duty to oneself, family and friends.

## 7. Conclusion

The analysis of the research results showed that under the conditions of electronic communication, self-trust of students dominates over trust in other people and the world. In the structure of academic motivation of students, cognitive motivation prevails over achievement motivation, introjected and external motivation. Students are focused on new knowledge and gaining new experience. They strive to get satisfaction from educational activity. Self-trust is associated with academic motivation. Student trust in them and other participants of interaction contributes to the development of cognitive motivation and achievement motivation. Self-trust of students is associated with a sense of duty to oneself, family and friends. Self-trust helps better understand yourself, your needs, interests and goals. A high level of self-trust and academic motivation contributes to effective communication with all participants of educational interaction.

## References

- Arestova, O. N., Babanin, L. N., & Voikunsky, A. E. (2017). *Motivating Internet Users*. [https://cyberpsy.ru/articles/internet\\_user\\_motivation/](https://cyberpsy.ru/articles/internet_user_motivation/)
- Dvoryatkina, S., Smirnov, E., & Lopukhin, A. (2017). New opportunities of computer assessment of knowledge based on fractal modeling. In *Proc. of the 3rd int. conference on higher ed. Advan. (HEAd/17)* (pp. 854–864). <https://doi.org/10.4995/head17.2017.5445>
- Gordeeva, T. O., Sychev, O. A., & Osin, E. N. (2014). Questionnaire “Scales of academic motivation”. *Psychological journal*, 4, 96–107.
- Harris, R. (2003). *Psychology of Mass Communications*. Prime-Euroznak.
- Ilyin, E. P. (2013). *Psychology of Trust*. Peter.
- Kim, K., & Frick, T. (2011). Changes in Student Motivation during Online Learning. *Journal of Educational Computing Research*, 44(1), 1–23.
- Milligan, C., & Littlejohn, A. (2017). Why study on a MOOC? The motives of students and professionals. *The International Review of Research in Open and Distributed Learning*, 18(2). <https://doi.org/10.19173/irrodl.v18i2.3033>
- Sungurova, N., Sysoeva, N., Glamazdin, I., & Kryukovskaya, G. (2018). Internet Technologies as a Means of Establishing Informative Preferences and Motivational attitudes of Natural Sciences Specialties Students. In *10th International Conference on Education and New Learning Technologies* (pp. 8898–8907). Palma.
- Sungurova, N. L. (2018). *Personal characteristics of students with different strategies of virtual interaction* [Monograph]. Peoples' Friendship University of Russia.
- Sztompka, P. (1999). *Trust: a sociological theory*. Cambridge University Press.
- Ureña, R., Kou, G., Dong, Y., Chiclana, F., & Herrera-Viedma, E. (2019). A review on trust propagation and opinion dynamics in social networks and group decision making frameworks. *Information Sciences*, 478, 461–475. <https://doi.org/10.1016/j.ins.2018.11.037>
- Wang, Y., & Baker, R. (2015). Content or Platform: Why Do Students Complete MOOCs? MERLOT. *Journal of Online Learning and Teaching*, 11, 17–30.