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INTERNET SPACE AND PERSONALITY DEVELOPMENT: CHALLENGES AND PROSPECTS

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Abstract. *The article provides a theoretical and empirical analysis of personal involvement in the Internet space. Basing on a considerable amount of the conducted research, the article gives the definition of the online world and substantiates its role in a modern person's life and activity. The aim of the conducted empirical research is to study personal characteristics of humanities students, involved and not involved in computer games. The research is based on a number of hypotheses: 1) considerable differences exist in personal characteristics of students with different levels of computer games involvement; 2) specific correlations between particular personal characteristics exist in a group of students with different levels of computer games involvement.*
As a result of the conducted research basic recommendations on the level of involvement diagnostics and Internet addiction prophylaxis as well as recommendations on applying the Internet space in contemporary higher education are formulated.

Key words: *Internet space, personal potential, Internet addiction, student personality.*

Introduction

Rapid informatization and digitalization of society is primarily aimed at improving the living conditions and meeting the informational needs of humanity. However, the trend of widespread introduction of information technologies has not only positive sides, but also negative consequences. The growing involvement of people in the virtual space has led to a narrowed range of interests, the replacement of real communication with virtual, as well as the inappropriate use of time resources. Psychological and pedagogical sciences are facing the problem of uncontrolled use of the Internet and dependence on it.

The virtual world is becoming an integral part of reality, and its potential to influence the human psyche cannot be underestimated. It is important for modern researchers to study both the positive (psychological, psychotherapeutic and developmental) and negative possibilities of the Internet space, as well as the features of personal self-realization in a virtual environment. The Internet, digitalization and informatization are an intangible environment that has a set of properties that allows us to consider this environment as an alternative to the physical world in psychological, social and economic terms (Soldatova G. U., Rasskazova E. I., & Nestik T. A. (2018; Mikhailova, 2018). The global Internet can significantly improve the quality of human life and destroy the adequate development of the psyche.

A number of modern researchers (Yee, 2006; Voiskunskiy, 2015; Belozerov, 2015; Stošić, 2015) believe that mediated activity in virtual worlds can meet the basic psychological needs of a person. For people with mobility problems, disabilities, physical or social isolation, communication in the virtual world can be an effective means of social self-rehabilitation.

A. S. Belozerov considers virtual space to be an alternative environment to the social and psychological problems of the real world. The researcher highlights several advantages that virtual space offers to a modern person: 1) subjective well-being; 2) friendly communities and strengthening

interpersonal relationships; 3) romantic relationships and positive emotions; 4) the state of group insight; 5) psycho - and self-therapy; 6) improving the social conditions of people with disabilities and people physically and socially isolated. According to the author, there is a "virtual reality anesthesia" for injuries and problems of the real world (Belozerov, 2015, p. 75).

It is obvious that the virtual world challenges modern people, involving the activity of the psyche and the activity of the individual into its space. The problem of Internet addiction and its impact on the self-realization of individual capabilities and abilities is one of the most relevant in modern psychological research.

The virtual world poses serious challenges to the institution of the family. More and more young people prefer to search for a couple through online dating. They spend a lot of time communicating with the opposite sex and using digital technology. Does this communication help transform into a real relationship and long-term real living together? Perhaps, in the near future, humanity will not need real close, friendly and sexual relationships at all. Therefore, there are risks that the family institution may disappear, and the family and *Homo sapiens* as a species will follow.

Digital technologies contribute to changing the way of various population groups' life-style. This is especially true for young people, especially those who experience difficulties in social interaction and social adaptation. Young people, who live in different countries and in different families, get withdrawn, closed, and lose ambition. The reasons for the emergence of socially infantile people are not only specific cultural features that stimulate this phenomenon, but also factors that influence digitalization, similar in different cultures. The availability of digital technologies has significantly transformed the life of the international community — traditional socialization has been replaced by digital socialization that is more acceptable for younger generations, allowing them to become even more active not in a real environment, but in a new "digital sociality" (Voiskunskiy & Soldatova, 2019).

In modern Russia, there are 87 million Internet users, which is 71% of the country's population. Of these, 62 million people go online every day, spending an average of 91-124 minutes per day there. Internet use among young people (16-29 years old) is close to the maximum value – 97%. At the same time, according to Russian studies, the prevalence of Internet addiction among adolescents reaches 4.3%, while Internet abuse was detected in 29.3% of cases (Soldatova, Rasskazova, & Nestik, 2018).

It is important to identify the criteria of Internet addiction and Internet involvement of modern users of different ages and social groups. It is equally important to identify the main online risks that young people may be exposed to, and to consider the main strategies for personal self-realization in the modern Internet space.

The purpose of our empirical research, conducted in 2018-19, was to study the personal characteristics of students of Humanities universities involved and not involved in computer games. The study was based on a number of hypotheses: 1) there are significant differences in the personal characteristics of students with different levels of involvement in computer games; 2) there are specific relationships of certain personal characteristics in a group of students with different levels of involvement in computer games.

Method of research

To test the hypotheses, we formed a sample of students of the II-IV year, which included 50 people involved in computer games (group 1), and 50 people not involved in computer games (group 2). The study involved students of Humanities of the II-IV courses of the Philology department at the Peoples' Friendship University of Russia: 51 young men and 49 girls.

The following methods were used in the study: 1) "Questionnaire for assessing the degree of enthusiasm for role-playing computer games" (Belovol, & Kolotilova, 2011); 2) A 16-factor personal questionnaire of R. B. Kettell* (form A); 3) test "Big five". A five-factor personal questionnaire by R. McCrae and P. Costa (Sergeeva, Kirillov, & Dzhumagulova, 2016).

Results

Using the method "Questionnaire for assessing the degree of enthusiasm for role - playing computer games" (E. V. Belovol, & I. V. Kolotilova, 2011), two groups of students were identified: group 1 — involved in computer games and group 2 — not involved in computer games.

The results of involved and not involved students' personal characteristics diagnostics using the method "A 16-factor personal questionnaire by R. B. Kettell" are shown in Figure 1.

There are obvious differences in some scales of R. B. Kettell's questionnaire. In the first group, we can observe higher scores on a scale of "*sociability*", higher scores on a scale of "*courage*," and in the second group, it is possible to notice higher rates on a scale of "*dreaminess*" and the less manifested results on a scale of "*concern*". Students with a high level of involvement in computer games are less sociable. Students with a low level of involvement in computer games are more determined.

In the group with a high level of involvement in computer games, the dreaminess scale is more pronounced, such indicators are characteristic of creative people with a well-developed imagination. It should be assumed that representatives of this group do not always obey social norms and are often immersed in themselves, in their ideas. Students with a high level of involvement in computer games are more careless, which may indicate that they tend not to always fulfill promises, they do not perceive social norms as binding. Students with a low level of involvement in computer games have an extroverted orientation, they are easier to contact, like to make acquaintances, and are sociable.

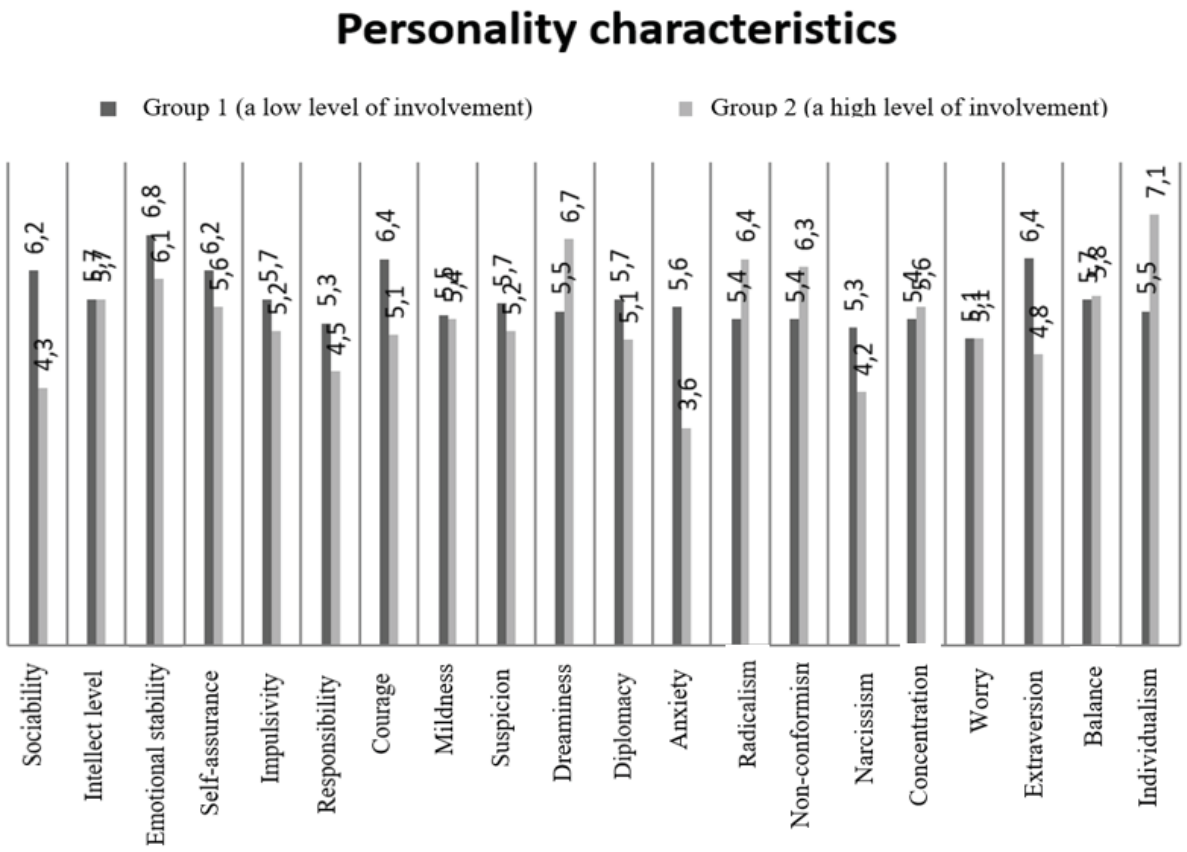

Fig. 1. Comparison of the index of personal characteristics in students involved and not involved in computer games using the method "A16-factor personal questionnaire by R. B. Kettell".

Group 1 (a low level of involvement)
Group 2 (a high level of involvement)
To determine the significance of differences, we performed mathematical and statistical processing of the obtained empirical data and calculated the Mann-Whitney U-criterion. The calculation results are shown in Table 1.

Table 1.
Results of significant differences in the personal characteristics of students involved and not involved in computer games, according to the method "A 16-factor personal questionnaire of R. B. Kettell»

Personal traits	Mann-Whitney u-critetion	p-level
Sociability	36,000	,000**
Courage	43,000	,001**
Anxiety	39,000	,000**
Narcissism	74,000	,044*
Extraversion	35,000	,000**
Individualism	49,000	,002**

Note: * - criteria indicators that are significant at the 0.05% level; * * - criteria indicators that are significant at the 0.01% level.

The results of students' personal characteristics diagnostics using the method "Multidimensional questionnaire "Big five test"» (R. McCrae, P. Costa) are shown in Figure 2.

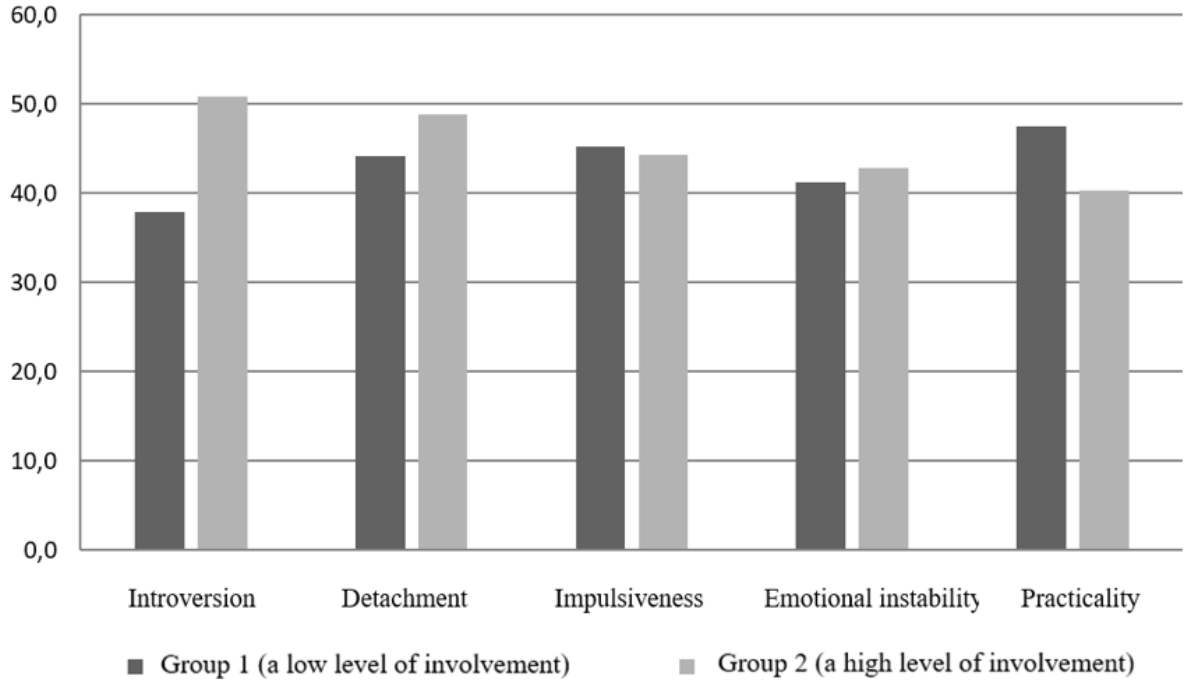

Fig. 2 - The results of students' personal characteristics diagnostics using the method "Multidimensional questionnaire "Big five test"» (R. McCrae, P. Costa)
Introversion
Detachment
Impulsiveness
Emotional instability
Practicality
Group 1 (a low level of involvement)
Group 2 (a high level of involvement)

The greatest difference between the groups involved and not involved in computer games was found in indicators of personal characteristics, such as: 'introversion/extroversion' and 'expressiveness/practicality'.

To determine the significance of differences, we performed mathematical and statistical processing of the obtained empirical data and calculated the Mann-Whitney U-test. As a result, statistically significant differences were obtained on such scales as: 'extraversion/introversion', 'attachment/isolation', 'expressiveness/practicality' (Fig.2).

The results of correlation analysis for all variables in groups with high and low levels of involvement using Spearman's rank correlation coefficient are presented in Tables 2 and 3.

Students who are not involved in computer games are focused on external communication, but are not prone to inflated self-esteem, independent in their actions, balanced and practice-oriented in their activities (Table 2).

Table 2. Results of correlation analysis of the group with low involvement in computer games

Scales of the 16-factor Kettell's questionnaire	Scales of the Five-factor questionnaire				
	Introversion	Detachment	Impulsiveness	Emotional instability	Practicality
Radicalism	0,365	**,757****	0,433	-0,197	0,147
Non-conformism	0,155	0,082	0,061	-0,155	-0,154
Narcissism	**-,533***	-0,16	0,235	0,242	0,234
Concentration	0,023	0,114	-0,209	0,475	-0,12
Anxiety	0,376	0,501	-0,105	0,198	0,098
Extraversion	**-,858****	**-,528***	-0,169	0,358	0,156
Balance	-0,436	0,006	0,081	0,283	**,633***
Individualism	-0,078	0,399	0,475	0,242	-0,041

Note: * - criteria indicators that are significant at the 0.05% level; * * - criteria indicators that are significant at the 0.01% level.

Students involved in computer games are introverted, soft-spoken, detached and balanced, but tend to be impulsive and undiplomatic, although they are also balanced and practice-oriented in their activities (Table 3).

Table 3. Results of correlation analysis of a group with high involvement in computer games

Scales of the 16-factor Kettell's questionnaire	Scales of the Five-factor questionnaire				
	Introversion	Detachment	Impulsiveness	Emotional instability	Practicality
Impulsivenes	-0,423	0,191	**,918****	-0,366	0,192
Responsibility	-0,354	-0,11	-0,284	0,053	-0,03
Courage	**-,762****	0, 243	0,188	-0,272	-0,092
Mildness	**,564***	-0,477	-0,344	0,286	-0,405
Diplomacy	0,412	0,21	**-,609****	0,216	0,061
Extraversion	**-,909****	0,162	0,308	-0,326	0,087
Balance	-0,385	**,599***	0,218	0,027	**,524***

Note: * - criteria indicators that are significant at the 0.05% level; * * - criteria indicators that are significant at the 0.01% level.

The results obtained can be used in the activities of practical psychologists when working with students involved in computer games, the development of various trainings, as well as to expand theoretical understanding of the psychological aspects of computer games and their impact on the individual personal characteristics of students of various specialties.

Conclusion

Currently, it is important to use the Internet space as a resource for developing the personal potential of modern generations. The activity of the subject acts as one of the criteria and regulatory mechanisms by which the activity is carried out. Various types of activity, including virtual activity, are prerequisites for innovation activity and a real expression of an individual's innovative potential. Therefore, modern teachers, psychologists and game developers need to jointly search for new stories to use virtual space for the benefit of personal development.

According to D. A. Leontiev, personal potential is the integral systematic characteristic of individual psychological characteristics of personality, the underlying ability of the person to come from sustainable internal criteria and benchmarks in their life and keep stability of semantic orientations and effectiveness of activity amid a changing external environment (Leontiev, 2011).

We define the potential of a person as an integrative combination of aptitudes, abilities, individual characteristics and personal qualities that provide the basis for the implementation of human capabilities in various activities (Mikhailova, 2018). Therefore, in the psychological and pedagogical support of the personal potential formation and development, it is important to use game scenarios of the virtual world for the formation and implementation of personal opportunities in a creative objective reality.

For effective use of Internet resources in academic, educational and practical psychological-pedagogical activity in the higher education system it is necessary to conduct scientific and educational work among all the participants of the educational process: 1) faculty (use of the Internet environment for didactic and educational purposes); 2) universities management (organization of educational environment of institutions using the possibilities of the Internet space); 3) parents on the problems of psychological and pedagogical mediation (prevention and main criteria of Internet addiction, online risks in the Internet space); 4) students (strategies for developing personal capabilities and optimizing self-realization in the Internet space).

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ИНТЕРНЕТ- ПРОСТРАНСТВО И РАЗВИТИЕ ЛИЧНОСТИ: ВЫЗОВЫ И ПЕРСПЕКТИВЫ

Аннотация: *В статье представлен теоретический и эмпирический анализ феномена вовлеченности личности в интернет-пространство. На основании анализа современных научных работ в статье дано определение виртуального мира, обоснована его роль в жизни и деятельности современного человека. Целью проведенного эмпирического исследования стало изучение личностных особенностей студентов гуманитарных вузов, вовлеченных и не вовлеченных в компьютерные игры. Исследование основывалось на ряде гипотез: 1) существуют значимые различия в личностных особенностях студентов с разным уровнем вовлеченности в компьютерные игры; 2) существуют специфические взаимосвязи определенных личностных характеристик в группе студентов с разным уровнем вовлеченности в компьютерные игры.*
В результате проведенного исследования сформулированы основные рекомендации по диагностике степени вовлеченности и профилактике интернет-зависимости, а также рекомендации по использованию интернет-пространства в практике современного обучения в высшей школе.

Ключевые слова: *интернет-пространство, потенциал личности, интернет-зависимость, личность студента*