



Research Article

© 2021 Ryzhanova et al..

This is an open access article licensed under the Creative Commons Attribution-NonCommercial 4.0 International License (<https://creativecommons.org/licenses/by-nc/4.0/>)

Received: 18 March 2021 / Accepted: 5 June 2021 / Published: 8 July 2021

High School Students' Dependence on Virtual Social Networks: Approaches to Socio-Pedagogical Prevention in Ukraine

Alla Oleksandrivna Ryzhanova

*Doctor of Pedagogical Sciences,
Sumy State Pedagogical University named after
A.S. Makarenko, Sumy, Ukraine*

Nanuli Zurabivna Potomkina

*PhD Student,
Kharkiv State Academy of Culture,
Kharkiv, Ukraine*

Angela Oleksandrivna Polyanichko

*Candidate of Pedagogical Sciences,
Sumy State Pedagogical University named after
A.S. Makarenko, Sumy, Ukraine*

DOI: <https://doi.org/10.36941/jesr-2021-0085>

Abstract

The article briefly investigates the features of the information age, which led to the transformation of the Homo Sapiens culture and led to the new types of addictions among the young generation. Scientists around the world are increasingly investigating the issue of high school students' dependence on virtual social networks as a key issue in the overall process of "Generation Z" cyber socialization. To confirm and update the matter, data from the sample ($N = 456$) were collected using a structured online questionnaire available in open cyberspace. The main goal was achieved during the investigating, namely – it has been identified and substantiated approaches to socio-pedagogical prevention of high school students' dependence on virtual social networks, which are: a multilevel approach, combining the efforts of social professionals and educators, parents, community, etc. in order to prevent addiction; moreover, it has been determined the necessity for spiritual and creative development, in improving the information culture of high school students, as well as in stimulating their subjectivity; it is also noted that this goal achievement is possible provided the active use of virtual tools and educational process diversification with interesting activities. Such approach can be the basis for the development of social and educational programs to harmonize the socialization of young people in modern conditions, both offline and online.

Keywords: adolescence, high school students, virtual social networks, Internet addiction, virtual social networks' dependence, socio-pedagogical prevention approaches, homo sapiens culture, quantitative research

1. Introduction

The information civilization formation has led to the globalization and digitalization of human culture and have created conditions in which the spontaneous component of human socialization prevails through cyber reality. Such a situation requires for the Homo Sapiens survival the acquisition of absent in phylogeny sociality types, namely: global, regional and virtual, socio-educational technologies to master which, unfortunately, are only being developed. This problem is especially relevant for high school students, who are to realize the global-virtual culture of the future, but without losing their own humanity and sociality of the real world. Scientific ground of tendencies of social and pedagogical prevention of adolescence dependence on virtual social networks is a basis of harmonization of youth socialization social and educational programs development in modern conditions both offline, and online to promote development of all types of high school students' sociality, necessary for human survival. However, this problem is insufficiently studied both in the Ukrainian socio-pedagogical scientific discourse and in the world in general.

2. Literature Review and Theoretical Framework

The results of the scientific works analysis of modern philosophers, culturologists, economists provide us with grounds to make a conclusion about the active formation of the mankind global culture with the Internet, which promotes the formation of global information space - a virtual one, the creator and user of which can be any person, any social entity (McLuhhan, 1964; Fukuyama, 1996; Giddens, 2000; Toffler, 2006; Harari, 2014; Peccei, 2013). The authors insist that the advent of information caused civilizational changes and radical transformations of the cultural space: global informatization; human adaptation to computer technology in almost all spheres of his life; actualization of cybersocialization as a new type of socialization; the dominance of the virtual component in the communication process. Social by nature, a person strives for self-actualization and self-realization, joining existing and forming new social communities (social networks), including in the virtual space through the fascination (Azza Abdel-Azim Mohamed, 2010) with virtual social networks which (are web services that allow you to create a public or semi-public profile in a particular system according to the algorithm of the mentioned service: to form your own list of users with whom you have common interests and hobbies; to share posts and describe events from your own life; monitor users of this network; share media files (e.g., photo, video, text etc.); get involved in mass challenges and events etc. Relevant for this problem studies of psychosocial development patterns in adolescence are covered by O. Bedlinskyi, I. Bekh, L. Bozhovych, E. Erikson, I. Kon, L. Vyhotskyi, etc., in addition, features of social development of young people in the conditions of globalization and informatization are depicted in scientific studies of O. Bilyk, A. Fotis, A. Karapetsas, C. Lee, N. Maksymovska, K. Montgomery, N. Potomkina, A. Ryzhanova, N. Zygouri etc. Currently, the process of cybersocialization (ie socialization in cyberspace) of young people is widely studied by the representatives of various sciences: philosophy (O. Havrylov, M. Sorotskyi, O. Yelkhova, etc.), psychology (N. Butrova, J. Lanier, O. Voiskunskyi etc.), pedagogy (V. Pleshakov, O. Vozniuk etc.), social pedagogy (O. Bilyk, O. Kudashkina, N. Maksymovska, A. Ryzhanova, A. Tadaieva etc.). Features of youth social interaction in virtual reality are studied by J. Cantor, J. Lanier, P. Valkenburg etc.; focus on the negative manifestations of cyber socialization, in particular on the types of Internet addiction: virtual game addiction and pathological gambling - K. Aimevov, R. Arjan, M. Griffiths, I. Goldberg, M. Orzack, etc.); virtual sexual dependence (N. Ameshyna, V. Yemelianenko, K. Young etc.) etc. It should be noted that the least studied is the dependence on virtual social networks, the description of which is presented mostly in the works of psychologists and physicians (O. Lopez-Fernandez, T. Ryan, A. Shorter, Basem Abbas Al Ubaidi, K. Young, etc.). It should be said that on contrary to the democratic educational approach of virtual social networks addiction pedagogical prevention, mentioned above are methods, used e.g. by the government of China Republic, where still applied the correctional programs to overcome addiction such as Chinese correctional camps with violation of the main human rights are prevail. Among others

could also be noticed correctional classes in Germany, etc. The preventive direction is represented mainly by theoretical developments in: medicine (K. Aimedov, O. Katkov, M. Orzack, etc.); psychology (J. Buchanan, M. Griffiths, D. Kuss, O. Lopez-Fernandez, J. O'Mara, M. Pistner, K. Young, T. Yurieva, etc.); social sphere (K. Hummel, V. Makhnovets, A. Abdel-Azim Mohamed, A. Ryzhanova, T. Veretenko, T. Zhuravel etc.). However, the general approaches of socio-pedagogical prevention of dependence on virtual social networks in adolescence and among high school students in particular remain insufficiently elucidated. For this reason, we consider it necessary to analyze the scientific sources considered in the literature review in more detailed manner in terms of virtual social networks and their detrimental impact on the social development of the younger generation.

3. Aim and Tasks

The purpose of the publication is to identify and substantiate approaches to socio-pedagogical prevention of high school students' dependence on virtual social networks, but at the same time, with the help of this prevention to acquire young promising types of sociality that will ensure the survival of Homo Sapiens in the current socio-cultural transformations. The tasks we have designated to accomplish the aim of the study are: 1) to generalize sociocultural changes of the information age (in the works of philosophers, culturologists, historians, etc.) that affect the dynamics of human social formation, in particular young people (works of psychologists, social educators, etc.); to analyze the world experience of the negative impact of dependence on virtual social networks of young people on the development of their sociality; 2) to conduct a diagnostic study among high school students in open virtual space; to make a comparative analysis of preventive and corrective measures in different countries that first entered the information society to extrapolate conclusions on the spread of this negative social phenomenon in Ukraine and developing pedagogical means of minimizing it.

4. Research Methods

The current study adopted the descriptive analytical and quantitative (questionnaire) method as primary tool for data collecting purposes to investigate the research questions. It was conducted a systematic research's inquiries in various journals, books and databases related to such spheres as education, social education, social work and preventive direction at various schools.

4.1 Population

The population includes high school students of both genders, aged from 15 to 18, who studied at high schools in Ukraine.

4.2 Sampling

The Sample included 461 high schoolchildren, namely 337 girls and 124 boys, who participated in open free online questionnaire conducted on the basis of Ukrainian schools.

4.3 Instrument

4.3.1 Questionnaire

The Chosen instrument for data collection was questionnaire aimed to collect statistic data on main purpose of using the social networks and internet, attitude of the participants and reveal the impact on them. The questionnaire survey consists of twenty-four questions adopted with a view to collect primary information about main purpose of using of social media, their positive and negative opinion about social media and the effects of social media on the physical and mental health of the participants

4.4 Timeframe

The above-mentioned Quantitative research was being conducted and publicly available in free online access during three months, namely in October, November, December in 2020.

5. Research Results

5.1 The negative impact of virtual social networks on the sociality of high school students

That is, for the first time in phylogeny, virtual social networks provide an opportunity for "everyone" to present themselves and their own lives to all mankind, avoiding various social restrictions. At the same time, they provide "anyone" with access to the life of everyone who uses virtual social networks, that, on the one hand, expand a person's social ties, helping to increase the effectiveness of socialization, and, on the other hand, allow intervention and manipulation of both individual and social consciousness. In essence, a VSN is an Internet community in which people interact, often through fictional profiles ("I" -virtual, which does not coincide with "I" -real), to satisfy their own, first of all, social needs. Moreover, Facebook's online social networks, such as Instagram, Facebook, and TikTok, are the types of virtual communities that have gained tremendous record popularity with people around the world over the past few years. Table 1. shows the results of our generalization of data from the site of public statistics Facebook (Ryan, 2015; Facebook, website 2020), which indicate an annual increase in the number of active users of the social network by 10-15%. Accelerate this growth, of course, the spread of the Covid-19 pandemic, as a result of which a significant part of the social life of the planet (educational, professional, political, religious, cultural and leisure, etc. activities) transferred to cyberspace, (distance learning, online –negotiations, video conferences etc.), moreover, real social communication is forcibly limited in most countries in order to preserve the health of the population.

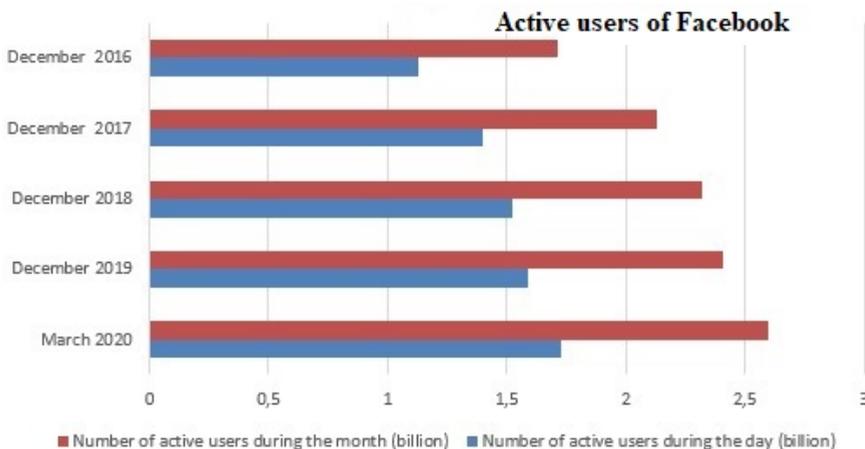


Figure 1:

However, virtual social networks do not only have the innovative ability to unite people, overcoming restrictions and boundaries, time frames, etc. (this contributes to the dynamics of the mankind global culture), but also - a unique opportunity for a new kind of enslavement - information slavery (virtual manipulation of individual and social consciousness, various virtual dependencies, etc.). Thus, the leading factor for the formation of a mankind democratic global culture is not so much information technology (although their role is extremely important) as new global values (myths, according to

Y. Harari), which would contribute to the consolidation and integration of humanity on a voluntary basis. We agree with Harari (2014), who proved that the survival and dominance of Homo Sapiens on Earth is due to its ability to overcome the limitations of other mammals to form social communities of no more than 150 people. This ability is provided by the ability of man to generate-assimilate values-myths and disseminate them through the mechanism of social education - purposeful (as opposed to spontaneous) process of socialization, which determines the social consolidation and integration of Homo Sapiens through the development of its sociality. In the information age, in the context of growing global problems, which can be solved only by combining the all-mankind potential, it is global sociality (based on other types of sociality: from family, ethnic, civic, etc. to regional) will enable new quality and cultural well-being information age through global social education, not the least role in which belongs to Information and communications technology (ICT), including virtual social networks. Economists (Fukuyama, 1996; Peccei, 2013) have proved that the stability of development and well-being of any society depend on human qualities, the individuals who form them, in particular on social trust. However, the highest level of social trust that people gained before the XX century was civic trust (based on overcoming selfishness of family, ethnicity, religion, politics, etc.). It was not until the middle of this century that the earthlings first began the process of building regional trust (the European Union), struggling to overcome civic selfishness and attempts to manipulate the subjects of unification in the face of the diversity of their socio-economic development. Not the least role in gaining regional and global trust (among other things, overcoming regional selfishness and manipulation) is played by education - the only social institution created by the state to harmonize the socialization process, increase the effectiveness of its targeted component and minimize the negative impact of natural information (e.g. socialization in virtual information space). However, even in education, today they are just beginning to develop technologies for socio-pedagogical (ie scientifically based socio-educational) prevention of virtual information enslavement, including human dependence on virtual social networks prevention, which is especially relevant for high school students - academically capable adolescent who will soon determine the development of their own country, region (Europe, Asia, Africa, etc.), and the mankind global culture.

In our opinion, the theories of Erikson (1996), Vyigotskiy (2005), and modern works of Bedlinskyi (2011), are key to determining the age limits of adolescence - 15-18 years, which take into account the physical transformations and the social situation of adolescence. In accordance with international (UN Convention on the Rights of the Child, Geneva Declaration of the Rights of the Child, etc.) and Ukrainian (Law of Ukraine "On Education" of 2017, Law of Ukraine "On Complete General Secondary Education" of 16.01.2020, etc.) legislation, this age period corresponds to high school education and the status of a high school student. Summarizing the mental characteristics of 15-18 year olds, we note that this age is characterized by physiological (intense changes in the body, leading to faster puberty and proximity to the level of a mature adult, etc.), mental (development of reflection as a conscious process internal position of an adult, etc.) and social (changes in value orientations through conscious assimilation of social norms and rules of relationships, the desire to be at the center of social life and be an active member of society, to be the engine of change and transformation, etc.) transformation. (Potomkina, 2019). Detailing the social development of this age group should emphasize the opinion of Erickson (1996) that peers are key objects in the structure of social relations of young people, the result of harmonious interaction with which is self-determination, devotion and loyalty, and focus on active identification "Social I" of youth.

The influence of the information society on the socialization of youth is actively studied by modern scientists. First of all, we note the scientific views of Lee & Conroy (2003), who argues for qualitatively new psychological formations in the youth of the information age, namely the spread of "clip thinking", which involves the ability to quickly switch from one visual object to another and mosaically collect information under time of monitoring sites and Internet platforms. That is, the areas of the brain associated with the "visual image" rather than the "word" are more active, as it was in the previous culture. It is clear that this was actively promoted by the natural features of young men and women - the desire to be at the center of social events, imitation of idols - and mass informatization

due to the dominance of ICT. Young people spend much of their life in the Internet, which opens access to virtual social networks. In view of this, we agree with the opinion of European scientists Valkenburg and Cantor (2001) that in the modern information society the issue of cyber socialization of young people is especially relevant, because it is youth, acting as the most active, motivated researcher and main user of new ICT, joins the national, European and global virtual space.

In our opinion, cyber socialization is a process of formation, development and self-realization of the virtual social "I" through assimilation (cyber adaptation), reproduction (cyber integration), improvement (cyber individualization) by the social subject of mankind virtual culture in the process of spontaneous and purposeful involvement in global information and a system of new virtual social connections and dependencies, which contributes to the development of virtual socialization and affects real socialization" (Ryzhanova, 2019). It is clear that cyber socialization, where natural processes predominate today, can have a negative impact on a person (deforming, destroying and enslaving his "I"), especially on the young person, whose values and social experience of protection are just being formed. By the way, the experience of protection against virtual aggression is now being acquired by all age groups of mankind at the same time, just the psychic features of young people make it impossible to sense virtual dangers, overcome the warning of the mind about cyber threats. Therefore, the world is growing concerned about the network activity of young people, more and more aware of the severity of the problem of youth dependence on virtual social networks. For example, the number of research and scientific articles is growing every year (e.g. Hashmi, analyzing "Generation Z" in Western Europe, Asia and The USA, argues that high school students are considered the most prone to various pathological deviations, in particular to new types of technological (Hashmi, 2013), Kirchev's manifestos "A Cyberpunk Manifesto" (1997), Lanier's "You are not a gadget" (2010), etc.; on various sites due to cases of mass suicide and violence related to online activity, showing movies and TV series ("13 Reasons Why", "Black Mirror", etc.). Scientists (Griffiths, Kuss, Rooij & Shorter, 2013; Lopez-Fernandez, 2019; etc.) confirm that one of the main reasons for the fascination of young men and women with VNSs is the psychological need for their acceptance by a group of peers: similar sites give them the opportunity to not only communicate with one another, but also to introduce yourself to a group of peers, and then receive feedback in the form of likes, comments, reposts, etc. In this way, the youth has the opportunity to clearly feel that they are part of like-minded people group, visualizing their network relationships and demonstrating their own popularity to others (number of subscribers, involvement in various groups, invitations to challenges, etc.). As early as the late 1990s, American scientists initiated the first serious discussions about pathological addiction to the Internet (e.g., shopping, gambling, cybersex, aimless surfing, communication) (Goldberg, 1997; Young, 2007) and suggested that the explosive growth of the Internet and social networks, in particular, can lead not only to such negative consequences as skipping classes, deteriorating relationships with family and friends, changes in mood and behavior among the younger generation, as well as Internet addiction. However, despite significant progress since then in the study of this problem, Internet addiction is still not recognized as a form of psychopathology under the DSM-5. In addition, we agree that any activity that an individual is overly enthusiastic about in real life, can acquire the features of pathological fascination mediated by the media, which leads to new types of virtual dependencies (Griffiths, Kuss, Rooij & Shorter, 2013). This is an important thesis to substantiate the approaches of appropriate prevention, but first, we analyze the results of a virtual survey of Ukrainian high school students to identify the relevance of the problem in our country.

5.2 Results of a virtual survey of high school students in Ukraine regarding their attitude to social networks

Identifying the most popular Internet social networks, relevant content and activities among Ukrainian high school students, a pilot study was conducted, using the author's questionnaire in electronic format on the Google-test platform. The questionnaire was made public on the social network Instagram. During the month, 456 Ukrainian high school students, including girls (68.9%) and boys (31.1%) aged

15-18, voluntarily took part in an anonymous survey. In our opinion, the following key generalizations of the virtual survey of high school students are noteworthy: 1) the first steps of the rating of popular virtual social networks are occupied by Instagram (87.1%), TikTok (61.8%) and Facebook (52.9%) (see Figure 2);

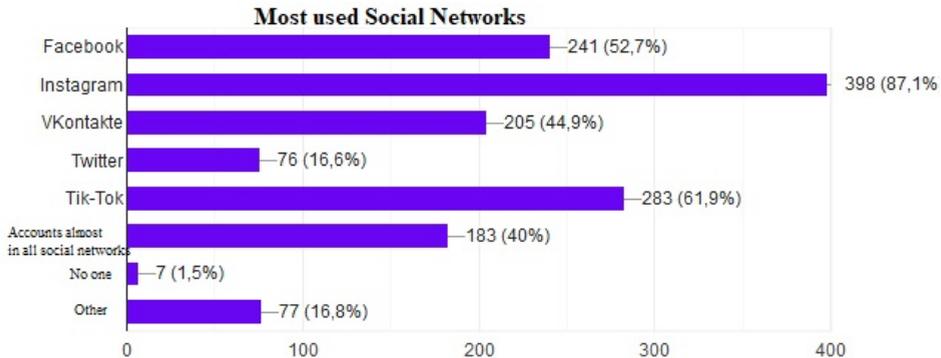


Figure 2:

The majority of users (80.7%) spend in virtual social networks from 2 to 6 hours a day, check their own news feed even during meals (56.8%) and secretly during lessons (11.4%) (see Figure 3);

Amount of time spent on social network activity



Figure 3:

46.6% of respondents expressed an urgent need to capture and publish interesting events from their own lives on social networks and 67% confirmed that they cannot do without a selfie in important places;

67% of respondents prefer entertaining content and 59.1% of content that contains motivational posts and stories from the lives of people who have achieved something outstanding;

It is noteworthy that only 8% prefer to communicate in cyberspace, while 37.5% - real and 53.4% say that they are equally active in both dimensions;

80.7% claim to use virtual social networks to find information about education / future profession / etc. (see Figure 4);

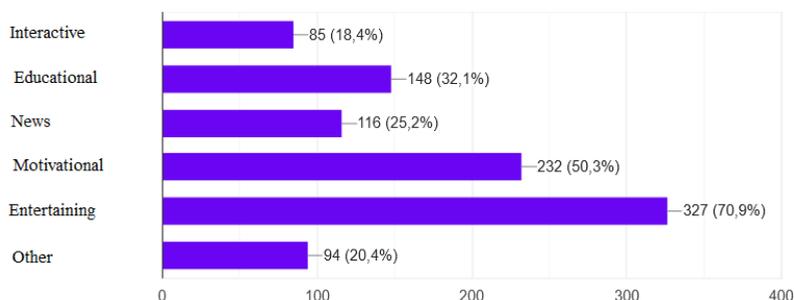


Figure 4: Social networking content that is the most interesting for high school students

Respondents' answers illustrated the same indicators of parents' interest in their children's virtual lives: 56.8% of parents are periodically interested in online activities and share photos with their children, while on average 30% of parents are not interested in their children's virtual lives; 8% of high school students avoid communicating with their parents on social media by creating fake accounts or rejecting parents' «requests for friendship»;

73.9% stated that they help the older generation to master the technical capabilities of the Internet;

The fact that 52.3% present their account under their own name and with a real photo 69.3% seems indicative, while as many as 85.2% have open access to the page.

6. Analysis and Discussion

The analysis of the diagnostic results of the Ukrainian high school students' dependence on virtual social networks allowed to understand that this problem has not been realized in the country and respectfully no preventive work has been carried out to solve it, which is presented in the first paragraph. The second paragraph represents the preventive work approaches analysis results of this problem in developed countries.

6.1 Analysis of the results of diagnostics of the attitude of high school students from virtual social networks in Ukraine.

More than 50% of Ukrainian high school students simultaneously have accounts and actively use four popular virtual social networks (Instagram, TikTok, Facebook, Vkontakte)), which indicates a reduction in their social development in the real environment. The same users are online more than 7 hours a day. More than 70% of high school students use social networks not for social development, but for entertainment. Both parents and at school should pay special attention to those high school students (8%) who prefer virtual communication and avoid the real one. Thus, even a pilot survey of socially active young people shows that half of children are vulnerable to possible aggression against them in cyberspace, especially since almost half of parents (44%) do not pay enough attention to the "life" of their children in virtual social networks.

Thus, prevention of high school students' dependence on virtual social networks is also relevant for Ukraine, because:

- 1) unawareness of high school students about threats from social networks for their health, life and development of their sociality. Like their foreign peers, high school students violate school discipline because they enter virtual social networks secretly, even during lessons for their own entertainment. Awareness of high school students of the problem of dependence on virtual social networks and the need for self-prevention of this condition.

- 2) the vast majority of parents (86.8%) are not aware of the threat posed by virtual social networks for the social development of their children; do not pass on the experience of safe communication on social networks culture to their own children; usually do not care about preventing children's dependence on social networks
- 3) systematic work on prevention of dependence on virtual social networks with high school students in schools of Ukraine has not been carried out (monitoring of 230 sites of general secondary education institutions).

6.2 Approaches to the prevention of youth dependence on virtual social networks in the leading countries of the world

It is clear that the richest experience in preventing the youth dependence on social networks have the countries that first joined the information society: Japan, Taiwan, the United States, the countries of Northern Europe, because they were the first to realize the new social threat. These countries have a nationwide preventive and educational approach, using a variety of approaches. Since there are different approaches for understanding the essence of the term "prevention", we consider it is necessary to underline our socio-pedagogical approach to this concept - as prevention, not allowing, prevention of negative deviations is at the first position. From such positions we will analyze the published world experience of youth dependence on social networks prevention. In our opinion, from the aspect of social education it is expedient to unite in the following directions of preventive activity:

- 1) *Outreach activities* (ICTs themselves are actively used to inform about virtual threats and increase the level of media literacy of the population (Angel eyes, website, n.d.); distributed books (e.g. "Caught in the Net", "Tangled in the Web" etc.) of Dr. Young (2007);
- 2) Enlightenment public attention to the dependence of modern youth on gadgets and social networks, in which they spend too much time without noticing anything around, by *the art of urban installation* (e.g. The Netherlands "Amsterdam light festival" 2018);
- 3) *Specialized centers for comprehensive solutions to the problem of prevention through professional information, counseling of social institutions and institutions* that are forced to join the warning (e.g. Young founded the "Center for On-Line Addiction");
- 4) *Preparation for family prevention* (maintaining good relations with friends and relatives, changing the daily routine; for personal self-affirmation and gaining a sense of security and stability, belonging; the need to create strict conditions for monitoring time and activity, joint activities with parents, in particular, in cyberspace (content creation and search on information sites), time distribution (setting restrictions on the Internet and computer activities not related to educational activities), the method of encouragement and punishment; open conversations about the possible negative consequences of network abuse; parents should help their children build real relationships and strengthen communication skills, clarify life goals and plan learning time (Angel eyes, website, n.d.; Chin-Chung & Lin, 2001);
- 5) *Preparation for school teachers prevention* (comprehensive program of psychological and pedagogical education of teachers, aimed at helping students to develop skills to apply modern techniques and technologies (Shchelina and Maslova, 2014));
- 6) Focus on *direct preventive work with high school students* (work focused on the development of human personality (Emel'yanenko & Ameshina, 2014); focus on intellectual development in preventive work with high school students; the fascination with computer action video games can be used to develop cognitive abilities and improve the productivity of boys and girls in solving spatial problems (Feng, Ian & Pratt, 2007);
- 7) *Organization of leisure* (ensuring leisure diversity, switching to other activities and employment; a variety of programs for sports (daily exercise and physical activity) and outdoor activities (e.g. Netherlands' private paid youth clinic "Yes We Can" (2020); social - participation in public life (Yurieva, 2014) etc.

7. Recommendations

Based on the above in substantiating the theoretical foundations of socio-pedagogical prevention of high school students' dependence on social networks abroad, in our opinion, we should proceed from the following general approaches management (organization, technology, methods, forms, etc.) of this prevention in Ukraine:

- *a multilevel approach* to the prevention of addiction: global, regional, public, educational, family, personal levels form a single system of prevention. *The global level* will allow most earthlings to realize the urgency of a problem that humanity has never solved, so there is no technology to solve it. This requires the combined efforts of "everyone" to prevent the decline of humanity of the new generation, to preserve its intellectual and creative potential for the flourishing of the mankind global culture. *The regional (for example, European) level* will allow to take into account, when developing prevention programs, the socio-cultural features of different countries in the region, their readiness for this prevention, and, consequently, to provide mutual support, mutual assistance and exchange of experience to improve youth addiction in the region, coordinating this prevention with other regions of the world. *The social and state level* is traditional for solving the social and educational problems of the new generation, but in the information age it has lost the features of the higher level. Therefore, specialists, when developing public-state prevention programs for young people from virtual dependence, should take into account the requirements of prevention programs of higher levels - global and regional. Social-state prevention remains responsible for its quality in the country, for its accessibility to every high school student, for uniting the efforts of all social institutions, institutions, the public and young men and women to solve the problem, for using the latest methods, forms, innovative prevention tools. Attitudes towards young people must change, not only as the future of their own country, but also as the future of the region and global humanity, otherwise the social mobility of the information society may leave the state without this future. *The educational level* provides coverage of prevention for each high school student, implementing social-state prevention programs, taking into account local socio-cultural, political-economic, information-technological, etc. features of the country's region and the contingent of students. At the educational level, preventive activities are coordinated not only for internal school structural components, but also for external school components, in particular with the family. *The family level* allows the use of prevention, as they say, "with mother's milk", ie subconsciously. Obviously, this may happen to the children of today's high school students, provided that modern prevention is successful. Thus, the quality of the family level depends on the socio-state and educational levels of prevention, on the conscious attitude to the problem of parents themselves, who gaining experience of such prevention at all previous levels for their own children, enable personal level of prevention. *The personal level* involves direct preventive work with the high school student, taking into account its features (can be carried out at all previous levels), and self-prevention of high school students of their own dependence on virtual social networks. It is clear that according to the socio-educational paradigm, preventive work at all previous levels is aimed at ensuring self-prevention of young people studying at high school;
- *uniting the efforts of specialists of the social environment of the school and preparing educators, parents, the public to prevent the dependence of high school students on virtual social networks.* This reveals the specifics of the socio-pedagogical approach to prevention - the creation of a favorable social environment for prevention, which indirectly increases the effectiveness of prevention. Combining different specialists and educators, parents, and the public trained in prevention makes it possible to create a coordination group and multifaceted prevention;
- *spiritual and creative development, improvement of information culture of senior students as the leading directions of the dependence of young people on virtual social networks prevention content.* Based on the thesis of modern scientists that the virtual world is derived from the

real, we understand that the direction of modern cyber culture (in the formation of which high school students take an active part) depends on the value orientations of its creators. Thus, global and regional sociality, creativity in forming specific cultures of new types of societies, will help high school students to overcome selfishness, civic, ethnic, family, personal (while maintaining and improving family, national and civic values, expanding and deepening the identification of their own), which will significantly reduce the risk of manipulating the minds of young people in cyberspace. And the improvement of information culture and critical thinking will be a protective shield against the cyber enslavement of young boys and girls. The content of prevention is built in such a way as to ensure the harmonization of "I-real" and "I-virtual" through the development of virtual sociality of high school, while saturating the latter with the values of mankind global culture;

- *stimulating the subjectivity of high school students in preventing their dependence on virtual social networks.* Given the psychological needs of young people in self-actualization and self-realization, socio-pedagogical prevention should ensure the activity of boys and girls in improving prevention programs, in creating a preventive environment both in school and out of school, in finding innovative forms, methods and means of preventing addiction to virtual social networks, in the implementation of the gained experience of prevention among adolescents and the elderly (axiom of Ya.A. Komenskiy "you want to learn something, teach it to others" no one has canceled), etc.;
- *active use of virtual tools for socio-pedagogical prevention of high school students' dependence on virtual social networks.* Virtual space is native to modern youth, who cannot imagine their lives without it, so its tools can be most effective in preventing addiction. The organizers of prevention will significantly increase its effectiveness if they promote the creativity of young people in the development of new virtual forms, the diversification of virtual means of preventing cyber addiction. The problem here is to overcome the fear and insecurity of adults when using virtual means of prevention, which destroys their authority as professionals in the eyes of young people;
- *diversification of interesting activities for high school students in reality.* The information society makes it possible to expand the identification of activities inherent in high school students from public activities to protect their rights, international tourism to foreign social assistance, etc.

Thus, socio-pedagogical prevention of high school students' dependence on virtual social networks, built taking into account these leading approaches, will reduce the impact of natural factors of cyber reality (spam, manipulative methods of influence, garbage information, questionable groups, illusion "human" dissemination of fake news, cyberbullying, illegal use of personal data, phishing, cyberbullying, etc.) faced by high school students every day while in virtual social networks, and strengthen positive opportunities (distance learning, access to the best galleries and libraries in the world, promotion of Ukrainian culture, intercultural interaction with representatives of other countries, manifestations of social activity aimed at mastering the future profession and additional communication skills, etc.), which they provide, in order to develop virtual sociality of young people, which would further contribute to the flourishing of real social which, in turn, reflects the process of harmonization of human social development in modern social pedagogy.

Further study of this problem is the development and experimental testing of the high school students' dependence on virtual social networks socio-pedagogical prevention program in general secondary education institutions.

8. Conclusion

The formation of information civilization is characterized, among other matters, by processes such as globalization, digitalization and cyber socialization, which can threaten the survival of Homo Sapiens if innovative technologies of social education that would harmonize its "I-real" and "I-virtual" are not

developed in time and the development of new types of social personality (other social subjects) - global, regional and virtual. This is especially true for high school students, who will soon be responsible for the global culture. However, it is high school students (being mainly under the influence of spontaneous cyber socialization) who experience various Internet addictions, in particular from virtual social networks, realizing the mental needs of self-affirmation, self-actualization, social activity, etc. An empirical study conducted on the Internet on Ukrainian high school students confirmed the urgency of the problem that worries the scientific community in the world. Analysis of foreign experience of prevention, provided grounds to identify such areas as: preparation of the social environment for preventive work (national preventive and educational approach; creation of specialized centers for comprehensive solutions to prevention through providing professional information, counseling social institutions and institutions that are forced to participate in prevention; preparation to implement prevention measures to the family, which is perceived as capable of overcoming or, accordingly, to prevent Internet addiction in all its manifestations; preparation for the prevention of school teachers); direct preventive activities with high school students (spiritual, intellectual development of personality, psychological education for self-regulation of high school students, diversification of their leisure time). Approaches to socio-pedagogical prevention of high school students' dependence on virtual social networks are justified: multilevel approach: global, regional, public, educational, family, personal levels form a single system of prevention; combining the efforts of school social professionals and preparing educators, parents, and the public to prevent high school students from becoming addicted to virtual social networks; spiritual and creative development, improvement of information culture of high school students as the leading directions of the content of youth dependence on virtual social networks; stimulating the subjectivity of high school students in preventing their dependence on virtual social networks; active use of virtual tools for socio-pedagogical prevention of high school students' dependence on virtual social networks; diversification of interesting activities for high school students in reality.

References

- Angels Eyes Children's Internet Dependence 『子ども ネット 依存』 [Online] Available: <https://angels-eyes.com/>
- Azza Abdel-Azim Mohamed (2010). Online Privacy Concerns Among Social Networks' Users. *The Canadian Cross-cultural communication*, 6(4), 74-89.
- Bedlinskyi, O.I. (2011). The adolescence periodization problem in modern society. *Practical psychology and social work*, 2, 49-54.
- Chin-Chung & Tsai Sunny Lin (2001). Internet addiction of adolescents in Taiwan: An interview study. *CyberPsychology & Behavior*, 4, 649-652.
- Emel'yanenko, V, & Ameshina, N. (2014). Internet addiction: spiritual and value grounds. *Almanac of modern science and education*, 11(89), 51-54.
- Erikson, E. (1996). The Identity: youth and crisis. [A translation of the Tolstyih, A.V.]. Moscow: Progress.
- Facebook. Investor Relations. [Online] Available: <https://investor.fb.com/investor-news/default.aspx>
- Feng, J., Ian S., & Pratt, J. (2007). Playing an Action Video Game Reduces Gender Differences in Spatial Cognition. *Association for Psychological Science*, 18(10), 850-855. <https://doi.org/10.1111/j.1467-9280.2007.01990.x>
- Fukuyama, F. (1996). Trust: The Social Virtue and the Creation of Prosperity Paperback. Free Press.
- Giddens, A. (2000). Runaway World: How Globalization is Reshaping Our Lives. Routledge.
- Goldberg, I. (1997). The New Yorker, January 13, 28.
- Harari, Y.N. (2014). Sapiens: a brief history of humankind. London: Vintage Books.
- Hashmi, Saba. (2013). Adolescence: an age of storm and stress. *Review of Arts and Humanities*, 2(1), 19-33.
- Kirchev, C. (1997). A Cyberpunk Manifesto. [Online] Available: <http://old.guelman.ru/slava/manifest/istochniki/kiberpank.htm>
- Kuss, D.J., & Lopez-Fernandez, O. (2019). The STOA project: Harmful internet use. Manuscript Brussels, European Union. doi:10.3390/ijerph17113797
- Kuss, D.J., Rooij, G.W., Shorter, A., & Griffiths, M.D. (2013). Internet addiction in adolescents: Prevalence and risk factors. *Computers in Human Behavior*, 29(5), 1987-1996. <https://doi.org/10.1016/j.chb.2013.04.002>

- Lanier, J. (2010) You are not a Gadget: A Manifesto. N.Y. [Adobe Digital Editions version]. [Online] Available: <https://cmapspublic3.ihmc.us/rid=1MHHS4T68-C8ZML1-6DRW/YouAreNotAGadget-Jaron%20Lanier.pdf>.
- Lee, C.K., & Conroy, D.M. (2003). The internet: a consumer socialization agent for teenagers. *Proceedings Adelaide 1-3, University of Auckland ANZMAC, 1708-1715*.
- McLuhan, M. (1964). *Understanding Media: The extensions of man*. (1st ed.). New York: McGraw-Hill.
- Peccei, A. (2013). *The Human Quality (Club of Rome Publications)*. Elsevier, 227.
- Potomkina, N. (2019). Adolescents' Internet Addiction as Socio-Pedagogic Prevention Object. *Herald of the T. Shevchenko LNU, 1 (324), 64-74*.
- Ryan, T.A. (2015). Facebook Addiction: an exploratory study using mixed methods. RMIT University.
- Ryzhanova, A.O. (2019). Transformation of social pedagogy and social work in the culture of the information society: a collective monograph. Kharkiv: KhDAK, 208.
- Shchelina, T, & Maslova, V. (December 2014). The Phenomenon of Internet addiction as a cause of deviant behavior of teenagers. *Young Scientist, 21.1 (80.1), 143-145*.
- Toffler A., & Toffler H. (2006). Revolutionary Wealth. [Online] Available: https://www.researchgate.net/publication/229792622_Revolutionary_Wealth
- Valkenburg, P.M., & Cantor, J. (2001). The development of a child into a consumer. *Applied Developmental Psychology, 22, 61-72*.
- Vyigotskiy, L.S. (2005). *Psychology of human development*. Moscow: Smyisl, Eksmo.
- Yes We Can (youth clinics). [Online] Available: <https://www.yeswecanclinics.com/>
- Young, K. (2007). Treatment Outcomes with Internet Addicts. *CyberPsychology & Behavior, 10(5), 671-679*.
- Yurieva, L.N. (2014). Computer addiction is the addiction of a knowledge-based society. *Tyumen Medical Journal: Suicidology and addictology. 16(1)*. [Online] Available: <http://cyberpsy.ru/articles/k-society-addiction/>.