

ACCESSIBILITY OF VIRTUAL SOCIAL ENVIRONMENTS FOR THE VISUALLY IMPAIRED AS A MEANS FOR LEVELING OUT SOCIAL INEQUALITY IN RUSSIA

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Abstract: The paper considers questions associated with accessibility of virtual social environments for the visually impaired in Russia. The current law of the Russian Federation on social protection of the disabled, special requirements for the visually impaired, and ensuring of accessibility to virtual social environments for the visually impaired are analyzed. Practical steps of the government for leveling out the social inequality of this category of citizens concerning the access to information and performing the information communications are discussed. Examples are given of using the current standards for organizing the virtual social environments for the visually impaired in Russia. The materials of the paper are of practical importance for specialists dealing with problems of social stratification of today's society and social inequality arising in interaction of various social groups of the civic society and the state.

Keywords: Quality of life, social inequality, visually impaired people, virtual social environments, protection of the disabled.

INTRODUCTION

In today's Russian society, the issue of social inequality is extremely crucial (Sushko et. al., 2016b). Social inequality leads to stratification of the society into various levels of quality of life (Moser & Robin, 2006; Sushko et. al., 2016a). One of the most important kinds of inequality is currently that of access to the information (Monakhov & Pronchev, 2015; Khodakova, 2009). It is not only the welfare of man but also his physical survival that depend on the opportunity of access to the relevant information (Goncharova & Pronchev, 2016; Pronchev et. al., 2013).

It touches on people with health limitations especially pressingly (Goncharova & Pronchev, 2015). The current limited condition of social opportunities of the disabled persons urges finding the new ways for socially adapting the disabled

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into life of the civic society which by default is the “society of the healthy”. The authors believe the problem will keep its relevance also in case the disabled persons make up the majority of the society or even if it all consists only of the disabled (Muravjov et. al., 2013).

Virtual social environments created on the basis of multimedia Internet technologies can become a quite efficient means for leveling out the information inequality (Pronchev et. al., 2016; Pronchev & Goncharova, 2016). Using the Internet services currently available, various social groups can if not overcome the inequality of access to the relevant information completely but anyway advance in this direction considerably (Pronchev et. al., 2016; Khodakova, 2013).

The numerosity of the visually impaired – and this amounts to 285 millions, including 39 millions of the blind in the world according to WHO estimate – calls for a special attention to this category of people (WHO, 2014). For people having total or partial loss of sight, the impairment means the impossibility to perceive information via the visual channel. Thus, the “conventional” virtual social environments based on the Internet technologies are unacceptable for this category of citizens and special environments have to be developed.

The currently available in the Russian Federation regulatory support of accessibility for the visually impaired to virtual social environments, on balance, allows solving the tasks the society faces (Goncharova et. al., 2016).

In an earlier work by the authors (Goncharova & Pronchev, 2015), a review of virtual social environments used for the visually impaired was given. It should be pointed out that the existing social environments are not numerous and are poorly standardized. The use of them requires special training for this category of citizens.

The existing in the Russian Federation regulatory support of accessibility for the visually impaired to virtual social environments is aimed at leveling out the social inequality of this category of citizens in accessing the information and performing the information communications. Examples are given of the use of the current standards for organizing the virtual social environments for the visually impaired in Russia.

LITERATURE REVIEW

Russian Traditions of Support of the Visually Impaired

Since the point the All-Russian Society for the Blind was founded in 1925 and for the entire Soviet period up to the collapse of the USSR, solid traditions had been formed for supporting the people having visual impairments in social, political, legal and economic spheres (VOS, 2017).

Social security and the size of disability allowance depended on the historical stages of development. In particular, one of the earliest decrees of November, 1917,

was the resolution on the increased amount of disability pension. The constitution of 1936 consolidated the right of citizens for social benefits due to disability. During the Great Patriotic War, the urban and district commissions, departments of social security and mutual aid funds in the rural areas were active in taking care of the disabled persons. After the war, the functions of the Ministry of social security of the RSFSR were expanded considerably: alongside with its principal task of distributing the pension benefits, it was vested with the general management of the activity of the All-Russian Society for the Blind. Further drawing up of sizes of the social disability allowance was regulated by the USSR Law on state pensions (Goncharova & Pronchev, 2016).

The legal framework of supporting the low-sighted disabled persons relied on the international acts on protection of rights of the disabled, in particular: the Universal declaration of human rights of the disabled (1948), Declaration of social progress and development (1969), the International bill of human rights (1975), the Declaration on the rights of disabled persons (1975).

In the economic sphere, the main task of the state was employment of people having visual impairments. The All-Russian Society for the Blind conducted an active policy of constructing and organizing profitable enterprises in which specially equipped work places for the blind were organized, and in the 1970s, it achieved this objective.

It became possible for the low-sighted children to obtain the secondary education owing to organizing the specialized boarding schools.

The right of obtaining a higher education was consolidated by legislation owing to the efforts of the Society for the Blind in cooperation with the People's Commissariat of Education of the RSFSR back in the 1930s.

An achievement of the Soviet medical service system is the creation of medical and social assessment boards and the development of preventive measures promoting the rehabilitation of the low-sighted.

In the cultural and educational sphere, the work went along two directions, one of them being the explanatory policy by the mass media about the problems and actual side of life of the low-sighted persons among the country's population, and, consequently, forming a friendly attitude of the society to the visually impaired which promotes further integration of the latter into the civic society. On the other hand, specialized printed goods based on Braille font was published for people with visual impairments ("Life of the Blind", "Soviet Schoolchild", "Aid for the Cultural and Educational Worker", "Physical Culture and Sport", "Literature Reading", "In the World of Music", "Work of the Blind" and so on) (Goncharova & Pronchev, 2016).

The Contemporary Russian Legislation of Support of the Visually Impaired

The UN Convention on the Rights of Persons with Disabilities (2006) provides the following definition: “disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others”. Thus, disability ceases to be considered as a defect of an individual but transforms into a serious issue of the society (WHO, 2014).

In the Russian Federation, the main legal instrument on protection of rights of the disabled persons is the Federal law “On social protection of the disabled in the Russian Federation” (Federal law, 1995). The law regulates the state principles of protection of the disabled persons in the social sphere and is a regulator of ensuring equal rights for the disabled in all spheres of life activity: political, economic and others, up to the Constitution of the Russian Federation and the principles and standards of the international law. According to this federal law, “a disabled person is a person having a deterioration of health accompanied by a persistent disorder of functions of the organism and conditioned by illnesses, consequences of injuries or defects which leads to limitation of the life activity and causes the necessity of social protection of the person” (Federal law, 1995).

The Russian Federation ratifying the Convention on the Rights of Persons with Disabilities in 2012 means recognizing the dramatic importance of persons with health limitations’ entering the civic society as full-fledged members. It also implies reconsidering the notion “disability” as a result of the joint activity of a disabled person and the society as a whole (United Nations, 2006).

A healthy person obtains up to 80% of information via the visual channel, so for people having full or partial loss of sight, disability implies failure to be able to perceive information via the visual channel. Article 14 of the Federal law “On social protection of the disabled in the Russian Federation” stipulates the measures for ensuring the unhindered access of the visually impaired persons to the information: publishing the fine literature, scientific, educational and methodological, reference and information literature by the raised dots Braille font, acquiring the said literature for educational institutions and libraries (Federal law, 1995).

The crucially new typhlotechnic computer communication means open up vast opportunities for overcoming the information barrier and for social integration and adaptation of people having visual impairments: Braille font based keyboard, screen access software, speech synthesizers, typhloprinters etc. (Goncharova & Pronchev, 2015). One can learn to operate the PC of this kind both independently and in various training centers of the country, although they are not numerous today. For example, the most successful ones are the “Rehacomp” Institute of Rehabilitation of the All-Russian Society for the Blind (Rehacomp, 2017), and “Camerata” Center for Rehabilitation of the visually impaired (Camerata, 2017).

New multimedia technologies for interaction of visually impaired people and the PC emerging as well as the growing quantity of users from this category of citizens have yielded a change in the regulatory framework of Russia.

So, according to Federal law of the Russian Federation of December 1, 2014 No. 419-FZ “On making amendments to individual legislative acts of the Russian Federation on questions of social protection of the disabled due to ratification of the Convention on the Rights of Persons with Disabilities” (Federal law, 2014), Article 10 of Federal law of February 9, 2009 No. 8-FZ “On ensuring the access to the information about the activity of state agencies and local self-government authorities” (Federal law, 2009) was amended by part 6: “The procedure of ensuring the conditions of accessibility for the visually impaired persons of the official websites of the federal state agencies of the Russian Federation subjects and the local self-government authorities in the Internet network shall be established by the federal executive power agency authorized by the Government of the Russian Federation”. The law became effective on January 1, 2016.

In Federal law of 24.11.1995 No. 181-FZ (as amd. on 29.12.2015) “On social protection of the disabled in the Russian Federation” (November 24, 1995), amendments on unacceptability of discrimination according to the attribute of disability (Article 3.1) and on ensuring an unhindered access of the disabled persons to the information were introduced (Article 14) (Federal law, 1995).

The letter of the Federal education and science supervision agency of March 25, 2015 No. 07-675 (Obrnadzor, 2015) instructs that “educational organizations shall ensure the availability of an alternative accessibility version of the educational organization official website in the Internet network for the low-sighted persons”.

Accessibility versions located in the websites are prescribed by the legislatively consolidated right of access to the information for the visually impaired persons. Requirements for the accessibility version are detailed in the relevant standard GOST R 52872-2012 “The Internet resources. Requirements for accessibility to the visually impaired persons” (GOST, 2012). The main provisions of GOST stipulate the perceptibility, clearness, reliability and controllability of the Internet resources visited by the visually impaired people.

METHODOLOGICAL FRAMEWORK

The objective of the research is to study the accessibility of virtual social environments for people with health limitations as a factor of their integration into the civic society in Russia.

The main tasks of the research are as follows:

1. Analyzing the regulatory framework of the RF which ensures the legislative consolidation of rights and liberties of the visually impaired within the RF; detailing the notion of disability within the legal terrain;

2. Studying the traditions of support of the visually impaired in the Soviet period which promoted leading a full-fledged way of life – medical service, social security, labor guarantees, education etc.;
3. Studying the technologies of transferring the digital visual and sonic information to the low-sighted people using the tactile technologies system; studying the computer typhlotechnologies which ensure a full-fledged work of the low-sighted with the PC – access programs, Braille line keyboard, speech synthesizers;
4. Analyzing the today's condition of virtual social environments for the availability of a community of the low-sighted and for the quantity of users registered;
5. Analyzing the community for overlap of the Soviet solid traditions of supporting the visually impaired and of questions reflected in the said communities and being priority ones for the low-sighted;
6. Analyzing the digital platforms of the state authorities and educational resources for their accessibility to people having visual impairments.

For solving the tasks associated with analyzing the legal framework of the Russian Federation, the following methods of studying the law sources were used: the comparative legal one, the systemic and structural one, and logical and semantic analysis.

The comparative legal methods was used for finding out the similarities and distinctions between the law sources within the RF legal system and the international law one according to the attribute “disability” and “health limitations”.

The use of systemic and structural method has allowed revealing and analyzing in a completer way the mutual influence of the law sources as well as making a conclusion about the efficiency of functioning of the system on the whole.

The logical and semantic analysis was used for the search of the correct definition.

RESULTS AND DISCUSSION

The vast majority of the Internet resources of the state executive power structures at the federal level are equipped with the accessibility versions for the visually impaired that are up to the requirements of GOST R 52872-2012. For the visually impaired, the accessibility features of the Internet resources include the opportunities to increase the font size, to convert all colored graphic objects into black and white format, the option of turning off the graphic objects, with all of them being backed up by a verbal description. Alongside with this, the low-sighted can choose the page color, from white font on the black background up to the black font on the white background.

As a positive example, the following official websites can be quoted: that of the RF President (<http://special.kremlin.ru/events/president/news>, date of address: 11.03.2017), of the Government of the Russian Federation (<http://special.government.ru>), state services portal of the Ministry of communication and media (<http://www.gosuslugi.ru/special>, date of address: 11.03.2017), website of the Ministry of health of the Russian Federation (<http://www.rosminzdrav.ru/special>, date of address: 11.03.2017), of the Federal agency for tourism (<http://www.russiatourism.ru>, date of address: 11.03.2017), of the Ministry of justice of the Russian Federation (<http://minjust.ru/ru/visuallimpaired>, date of address: 11.03.2017), and of the Federal drug control service of the Russian Federation (http://fskn.gov.ru/special_fskn.shtml, date of address: 11.03.2017).

Nevertheless, the Federal agency for tourism (Rostourism) (<http://www.russiatourism.ru>, date of address: 11.03.2017) does not support an accessibility version for the visually impaired.

As for the legislative power at the federal level, the state structures also have the low-vision accessibility versions on their official websites. As an example, the Federal Assembly of the Russian Federation can be quoted: website of the State Duma (<http://spec.duma.gov.ru>, date of address: 11.03.2017), that of the Federation Council (<http://special.council.gov.ru>, date of address: 11.03.2017).

The Internet portal of Moscow Region дума (<http://moduma.ru>, date of address: 11.03.2017) allows the low-sighted people to get all the required information. It has the features of changing the font size, contrast increase or change, and graphic object to text conversion.

However, not all official websites of the legislative power state structures at the regional level have got accessibility versions for the low-sighted. For instance, the official website of Kursk Region дума (<http://kurskduma.ru/index.php>, date of address: 11.03.2017) has got no such function.

The General Prosecutor's Office has an accessibility version for the visually impaired persons on its Internet resource (www.genproc.gov.ru/special, date of address: 11.03.2017), with options of color scheme change and font size adjustment.

The most popular information search services are already in line with the developed standards of the Internet information presentation for the low-sighted people.

So, in May 2015, the main page of Yandex search engine became accessible both to the blind and to the low-sighted Internet users who work via the screen access software – JAWS, NVDA and VoiceOver. The main task of the portal is singling out the most critical information because a screen access software reads everything that is input. The blind users can also use the Mail and Yandex. Browser for Windows OS. Launching of the services was timed to coincide with the

Global Accessibility Awareness Day dedicated to popularization in the IT-branch of accessibility ideas – i.e. of the interfaces accessibility to people with health limitations (Blog Yandex, 2014).

At the end of May, 2014, Google search engine launched a new free Google speech synthesizer (Google Text-to-speech, 2014) that voices over the text in the device screen. This allows using the function “Read aloud” in Google Play Books, listening to the pronunciation of words in Google Translator, using TalkBack and other accessibility features (while all actions are voiced over). The following languages are supported: English (Great Britain, India, the USA), Indonesian, Spanish (Spain, the USA), Italian, Cantonese, Korean, Mandarin, German, Dutch, Polish, Portuguese (Brasil), Russian, Thai, Turkish, French, Hindi and Japanese.

However, not all official websites of socially important organizations currently support visual accessibility versions. According to the sociological survey conducted by FinPotrebSouz and the National Agency for Financial Studies (NAFI) on the verge of August and September 2015, “no website of 60 largest RF banks has got a “visual accessibility version” function which could have eliminated most of adaptive and psychological problems for people with reduced eyesight. A font that is twice as large than the main one used in the website is considered to be large, with one that is similar to the one used in the website (or slightly larger) being medium. So, 27 banks out of 60 have the medium font – while 13 remaining ones use the small one (smaller than the main font of the website text). Only 29 banks of the 60 have websites with a high contrast font which helps the partially sighted to read the information (FinPotrebSouz, 2015).

CONCLUSION

In conclusion, it can be stated that ratification of the Convention on the Rights of Persons with disabilities in the Russian Federation has allowed, first, reconsidering the notion of disability as a social problem, and second, has resulted in legislative consolidation of the relevant provisions in the RF regulatory framework. The subsequent development of information typhlotechnologies grants the visually impaired an opportunity to be full-fledged participants of the virtual social environments in a number of cases. Similarly, it allows partially leveling out the social inequality existing between them and the healthy people. Nevertheless, in Russia, not all socially important organizations currently ensure the access to the information in their Internet resources for the people with visual impairments.

Acknowledgements

This research was supported by the Russian Foundation for Humanities (grant No. 15-03-00435-a) and Russian Foundation for Basic Research (grant No. 16-01-00306-a).

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