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**Research article**

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## **Using the Internet User's Self-report Diagnostic Tool to Study Specific Characteristics of Internet-based Socialization Among Adolescents and Young Adults with Intellectual Disabilities**

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### **Abstract**

**Introduction.** The study of specific characteristics of online socialization among adolescents and young adults with disabilities, especially intellectual disabilities, is a new and promising direction in special education that requires the development of methodological approaches and foundations for conducting research of this kind.

**Methods.** The study of specific characteristics of online socialization in individuals with intellectual disabilities is associated with a description of their socialization and online-based formation, in comparison with typically developing peers. Researchers should understand online interaction as a form of alternative communication, a way of adaptation and a potential source of online risks individuals face. The Internet User's Self-report diagnostic tool was tested using the samples of typically developing adolescents and young adults (n = 181) and respondents of the same age with intellectual disabilities (n = 119).

**Results.** Testing the Internet User's Self-report using samples of adolescents and young adults with mental retardation and their typically developing adolescents showed that this diagnostic tool is easily understood by respondents from both groups and can identify qualitative and quantitative differences between the samples. The respondents with mental retardation show less online activity related to search for information and a low awareness of online phenomena and the phenomena of online interaction; they use the Internet as an additional field for realizing the need for communication and more aggressively protect their online interaction space from parental control.

**Discussion.** The presented data open up promising directions of research in the field of online socialization of students with developmental disabilities, including (a) primary screening within the framework of the primary disease in comparison with typically developing peers, (b) in-depth study of age ranges within nosologies and identification of age differences within nosological groups, and (c) differentiated study comparing different nosological categories and identifying intergroup differences.

## Keywords

mental retardation, online socialization, Internet, personality, adolescents, young adults, Internet users, online risks, communication, online interaction

## Highlights

- ▶ The development of tools for studying online socialization is associated with understanding online interaction as an alternative communication, a way of adaptation, and a potential source of online risks individuals face.
- ▶ Adolescents and young adults with mental retardation and typical development have common characteristics of online socialization, including high motivation to use the Internet for individual purposes (for example, viewing photos and videos, searching for various information, online games, communication, and entertainment using interesting multimodal content).
- ▶ Adolescents and young adults with mental retardation have an insufficiently realized need for communication in an online context and a tendency towards online hypersociality.

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## Introduction

For individuals with disabilities, in particular students with intellectual disabilities, social realization on the Internet may be characterized as an alternative form of social adaptation, expanding the habilitation prerequisites for the integration of such individuals into society and activating the compensation potential in adolescents or young adults with special needs. The online adaptation may require a teacher and psychologist to assess the necessity of creating additional special conditions for the successful online socialization of students with developmental disabilities. The qualitative uniqueness and potential possibilities of online socialization among individuals with disabilities, in particular intellectual disabilities, still remain understudied.

This study *aims* to develop and test the Internet user's Self-report diagnostic tool in the context of studying certain aspects of online socialization of adolescents and young adults with disabilities, in particular mental retardation, in comparison with their typically developing peers. A number of preliminary considerations provided a conceptual framework for the approach to studying specific characteristics of online socialization of adolescents and young adults with intellectual disabilities and methodological tools developed in this study.

We believe that in this case online socialization should be understood not only as a process of personality development and assimilation of online experience, but also as a polycontextual

integrative modus of personal realization, demonstrating an individual's ability to his/her own formation in the existing diverse and changing online conditions.

The Internet, which becomes the most important socialization institution for individuals, has a decisive influence in the context of new technologies of informatization and globalization in today's society (Arnoux et al., 2017; Danilov, 2012). The Internet transmits such characteristics of space that describe it as something filled with social meaning and content, bearing both potentials and risks, as the emergence of virtual social reality is both a cause and a result of online interactions (Beck, 1992; Golbeck, Robles, & Turner, 2011; Danilov, 2012). The Internet, in turn, becomes an alternative field which offers young individuals expanded possibilities for finding themselves and realizing their interests (Yartsev, 1999; Karpukhin, 2000).

The modern educational and communication environment is increasingly 'digitalized'. Networked interaction becomes the main media mechanism of socialization, initiating large-scale changes in the content and forms of relationships between individuals of various ages in the online space (Boyd & Pennebaker, 2017; Celli, Bruni, & Lepri, 2014; McLuhan, 2007).

Online communication appears to be a specific environment for social interactions (Farnadi et al., 2016). It has the following characteristics: (a) presence of an audience of online resources with common value orientations; (b) social importance of online information for the emergence and development of interpersonal interactions; (c) technical environment that ensures the process of online interaction; (d) heterogeneity of the social environment/audience of online resources; (e) illusory nature of freedom of behavior and action; (f) anonymity that enables individuals to overcome communication barriers; (g) reduction of non-verbal communication, which is partially replaced by the use of smiles, emoji, and audio messages; (h) need to 'complete' the image of a online interlocutor unknown in real life using social stereotypes; (i) decrease in the pace of communication; and (g) intensification and concentration of information in verbal/written communication (Dibble & Levine, 2013; Kalimeri, Beiró, Delfino, Raleigh, & Cattuto, 2019; Kolokol'tseva & Lutovinova, 2012; Chuiko, 2012; Danilov, 2012).

Individuals' participation in online communities is one of the socio-integrative forms of individual realization in online interaction, which has the following attributes: (a) all the participants in communication interaction can build relationships with everyone; online openness to each other is considered as an alternative to real manifestations of social space, where social interaction is determined by a number of factors, including territory, time, and functional potential of the participants; (b) anonymity as a factor of an unlimited personal resource for transforming individual image, constructing models of behavior, ways of implementing individual actions, acting both in a constructive and destructive way; (c) freedom of entry/exit as the main value of online Internet communities, which determines actions of subjects in this space; and (d) concrete character of interests, leading to the emergence of various virtual integrations, communication groups, and communities (Danilov, 2012).

Individuals can realize the possibilities of online socialization in the following directions: (a) when they interiorize online norms, values, and behavior models and becomes a member of Internet communities, acquiring online literacy and networking skills; (b) when they are socialized in the real world using the resources of the virtual dimension; and (c) when they construct their online images with their presentation potential, because the success of social inclusion and individual online security depend on the quality of the presentation of personal information.

Maintaining netiquette, distinguishing between ethical and unethical online behavior, and adopting moral and ethical standards of cyberspace contribute to ensuring the online security of individuals (Maner, 1980; Moor, 2017; Kovaleva & Serdyukova, 2015). Personal online security is directly related to the problems of cybersecurity, prevention of extremism and terrorism, violence and aggression, fraud and crimes against the person in the online field (Voiskunskii, 2000, 2010; Gorshenin & Dubenskii, 2018), compliance with ethical standards of control over information flows during data transmission (Ovchinnikov & Grishin, 2012; Danilenkov, 2014; Kuchin, 2010).

There is also a relationship between the level of moral development of individuals and their perception of online content. For example, there is a complex relationship between various parameters of the moral development of adolescents and the productivity of cognitive methods of processing social information on the Internet. For adolescents with a low level of moral development, the central task is to understand the moral content of social information and the identification of moral conflict; for adolescents with a high level of moral development, the main task is the choice of the optimal solution to the moral dilemma based on ideas about moral norms of regulation of social relations (Molchanov, Voiskunskii, Markina, & Borodina, 2019).

The analysis of individual online images that subjects create may help determine the specific characteristics of their communication skills, value orientations, and potential opportunities and weaknesses of personal development (Ferwerda & Tkalcic, 2018; Celli et al., 2014; Guntuku, Qiu, Roy, Lin, & Jakhetiya, 2015; Guntuku, Lin, et al., 2017). Information on an individual online profile demonstrates: (a) the Big Five personality traits – extraversion, openness to experience, conscientiousness, neuroticism, and agreeableness (Azucar, Marengo, & Settanni, 2018); (b) a variety of emotional states (joy, sadness, loss, etc.); (c) interests, hobbies, and values; (d) features of behavior in online contacts; and (e) disabilities, physical and mental problems (e.g., physical and mental disabilities, depressive disorders, mania, etc.) (Benton, Mitchell, & Hovy, 2017; Bijl, Ravelli, & van Zessen, 1998; Reece et al., 2017; Guntuku, Yaden, Kern, Ungar, & Eichstaedt, 2017).

The phenomenology of individual abnormal states can be found both in the verbal content produced by the Internet users and in the specific characteristic of their online contacts, social circle, photo and video material that they represent. For example, the profile photographs of an individual with depressive disorders do not show pronounced emotional manifestations, such as laughing or crying, overt joy or sadness, smiling or tears. Such images are emotionally neutral, individualized, and minimally expressive, which is associated with the weakening of polar opposite emotions emotional experiences in depression and subdepression (Andalibi, Ozturk, & Forte, 2015; De Choudhury, Counts, & Horvitz, 2013; Reece et al., 2017; Guntuku, Yaden et al., 2017).

Thus, online interaction is not only a form of alternative communication and a way of adaptation in the context of habilitation prospects but also a potential source of personal online risks for an Internet user. This idea represents an important prerequisite for studying the possibilities of online socialization of individuals with disabilities, in particular intellectual disabilities, in comparison with their typically developing peers. However, within this research area, there is a methodological and methodological vacuum, which overcoming is associated, first of all, with the development and testing of new approaches which may help conduct comparative studies on the online aspects of socialization of persons with disabilities and with typical development. Individuals with developmental deficits (e.g., impaired vision or hearing) may be examined using diagnostic tools developed for persons with typical development, taking into account the modification of presentation. However, it is difficult and uninformative to examine individuals

with intellectual disability with the use of verbal diagnostic tools developed for those with typical development, because of their specific perception and processing of cognitive information in combination with systemic speech underdevelopment that is not overcome with age. Difficulties in understanding the instructions, specific perception and comprehension of the verbal content of questionnaires and inventories used for individuals with typical development, leads to an unconscious, random choice of answers by individuals with intellectual disabilities, which significantly complicates the diagnostics. Therefore, a diagnostic tool should be a kind of unified version of self-report, available for independent implementation by individuals with intellectual disabilities, requiring minimal organizing assistance from the experimenter and assuming its minimal impact on the diagnostic results.

## Methods

To study specific characteristics of online socialization among adolescents and young adults with disabilities, including those with mental retardation, and their typically developing peers, the original Internet User's Self-report diagnostic tool was developed, which considers the fundamental principles of special education – the principle of qualitative analysis, the principle of complexity, and the principles of determinism and structural dynamic study. This diagnostic tool is based on a unified version of thematic standardized self-reports, implemented in relation to the areas of online socialization, which is important for adolescents and young adults with typical and impaired intellectual development. Within these areas self-reports of respondents provide a variety of information about the possibilities of their online socialization: (a) the information block – information on gender and age characteristics; (b) the organizational block – data on how respondents arrange their time and activities on the Web, how they observe online rules of behavior, and what online resources they prefer; (c) the 'e-mail and browser' block – formal data on the availability of e-mail, the frequency of its use, the methods and purposes of using mail and search engines; (d) the 'social networks and trading platforms' block (information about the preferred use of social networks and awareness of online trading platforms); (e) the 'friends on the Internet' block (information related to specific characteristics with respondents' relationships with online contacts); (f) the linguistic block (information about the specific characteristics of respondents' verbal communication on the Web); (g) the 'parental control' block (information about the attitude of parents towards respondents' online activity and ways of its control).

The Internet User's Self-report contains 34 items formulated as simple extended sentence. The Internet User's Self-report items involve mainly standardized answer options (the wording is understandable for individuals with intellectual disabilities, since they were previously obtained using the method of content analysis from interviews with Internet users of different ages and different nosological groups, including those with mental retardation). The respondents also may choose the non-standardized answer ('Another') in case of difficulties in choosing from the proposed options or if they wish to expand the range of answers and provide important information. The linguistic material of the Internet User's Self-report is maximally simplified to minimize misunderstanding and misinterpretation of its semantic variability by the respondents and to realize their ability to independently fill in this diagnostic tool. The Internet User's Self-report indirectly contains markers of potential encountering online risks (high and average levels).

To test the Internet User's Self-report diagnostic tool, we conducted a study involving adolescents and young adults with typical development ( $n = 181$ ) and with mental retardation (MR,  $n = 119$ ),

males and females. For this study, we used a wide age range, because already in early adolescence (in some cases even earlier), the Internet space becomes widely available for students. They have their own gadgets (phone, tablet, computer) and, accordingly, gain the advantages of online interaction, and face various internet-related risks as well. In addition to age and nosological compliance, the main selection criteria for the experimental groups, were the presence of their own gadgets (for example, a phone) and/or (access to a stationary home computer with Internet access (both under the control of parents and without it), which in our understanding, a priori meant a respondent's exposure to online risks. This research did not aim to identify dynamic intragroup age and gender differences. Therefore, the participants of different ages and genders were combined into two experimental groups – (a) a group of adolescents and young adults with mental retardation and (b) a group of adolescents and young adults with typical development (Table 1). Comparison of the characteristics of the samples was carried out using the  $\phi$ -test, Fisher's angular transformation (Fisher's criterion).

<u>Nosology</u>	<u>Early adolescents</u> (11–12 years)	<u>Late adolescents</u> (13–15 years)	<u>Young adults</u> (16–18 years)	<u>Males</u>	<u>Females</u>	<u>Total</u>
Typical development	57	102	22	123	58	181
Mental retardation	18	50	51	74	45	119

## Results

Testing the Internet User's Self-report provided the following empirical results.

**The organizational block.** Compared to their typically developing peers, adolescents and young adults with MR are less active in using the Internet for their own purposes. Some of them spend more than five hours on the Internet (16.4 %); the number of those who spend less than an hour on the Internet (31.9 %) is higher. The respondents of both groups have different experiences as Internet users – from 'less than a year' to 'more than three years', which does not always correspond to their age (for example, younger adolescents from both study groups indicate the user experience of 'more than three years').

The online vocabulary of adolescents and young adults with MR is much more modest than that of their typically developing peers. Despite the fact that of 22 online terms proposed for recognition, they marked all of them as familiar, most of these words were in the passive vocabulary of adolescents and young adults with MR and were available only for recognition without subsequent reproduction in spontaneous speech. Recognition of popular web terms showed the advantage of respondents

with typical development. The most popular terms were as follows: 'site', 'password', 'account', 'chat', 'login', 'browser', and 'link'. Similarly to typically developing peers (65.1 %), the respondents with MR have an idea of online rules (60.5 %), but they often neglect reading user agreements (38.5 %) and cannot verbalize the rules they are familiar with. Respondents with intellectual disabilities, as a rule, do not face the facts of account blocking due to violation of the rules (68.1 %). However, they note that at least once they were blocked for violation of the rules (15.1 %) or warned about impending blocking (7.1 %). Only several adolescents and young adults with mental retardation noted regular blocking of their accounts (8 %).

Representatives of both groups use the Internet for viewing photos and videos, communicating with others, reading news, playing online games, doing online shopping, searching for information, studying, and gambling. The most visited sites are those with games, sites for self-development, internet libraries, hobby sites, dating sites, and sites for adults (Fig. 1).

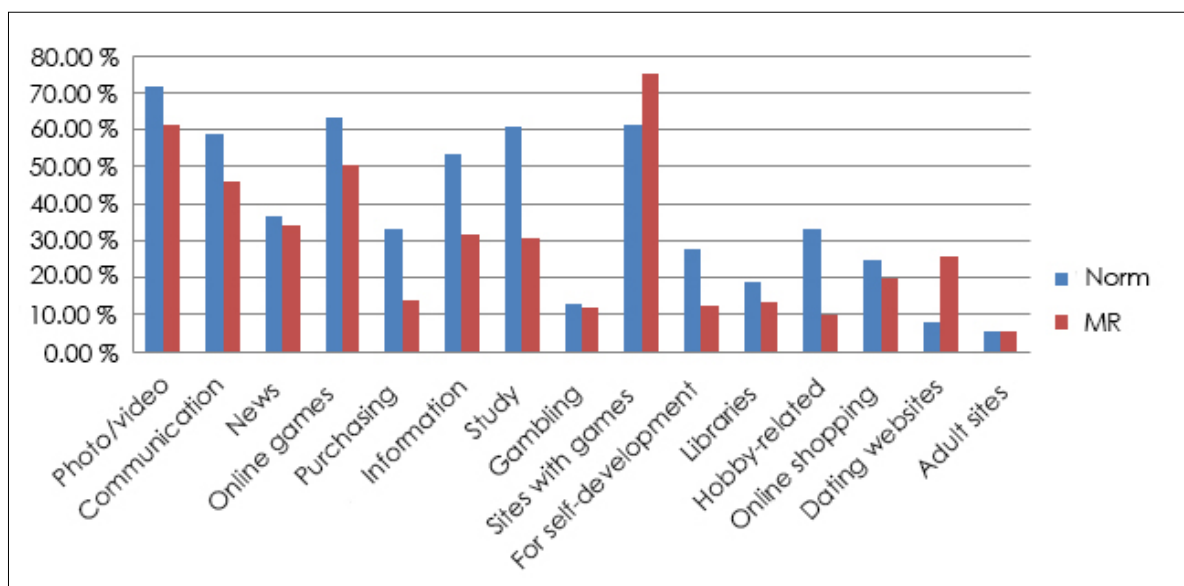


Figure 1. Purposes of the respondents' visits to the Internet space

**The 'e-mail and browser' block.** The percentage of those who use personal e-mail was 70 % among those with typical development and 49.1 % among the respondents with MR. Respondents with MR actively used e-mails of their friends and acquaintances (16.4 %), while typically developing respondents did it less often (6.7 %). The percentage of those who did not have e-mail is higher among adolescents and boys with MR (34.5 %). The respondents with typical development more often used e-mail for study (43.8 %) and for sharing information (40.2 %); the respondents with MR more often used e-mail for communication (46.9 %). The respondents from both groups used e-mail to make online orders at online stores. All the respondents were well informed about browsers. Google, Yandex, Yahoo!, and Rambler were the most famous. Compared to typically developing peers (61.5 %), respondents with MR less often used them to search for educational information (37.5 %); they preferred to search for entertainment (60.7 %), news (33.9 %), and goods in online stores (19.6 %).

**The block of social networks and trading platforms.** The respondents of both groups are focused on communication in social networks and create their accounts. The Vkontakte is the leader in terms of use. The respondents with typical development (71.9 %) and with mental retardation (71 %) are most often registered on this platform. In the social network, respondents, having an interest in the very content of online communication and knowing that many of their acquaintances have accounts there, use them to find interesting people. Among the attractive characteristics of social networks the respondents of both groups noted the following ones: to buy and sell things, to make money, to have an opportunity to find a couple, to communicate with a large number of individuals, to be 'in touch', to express an opinion, to block an unwanted interlocutor, to get acquainted online, to argue and quarrel, and to be rude to someone without consequences for themselves. The identification of online trading sites was not difficult for the respondents. However, in both groups, some respondents indicated the Gosuslugi site among the traditional online trading sites such as Avito and Yula. Also, 6.5 % of respondents with typical development mentioned the Hydra online trading platform for drug-containing products (website banned in Russia), while among respondents with mental retardation, only one person indicated this resource (Fig. 2).

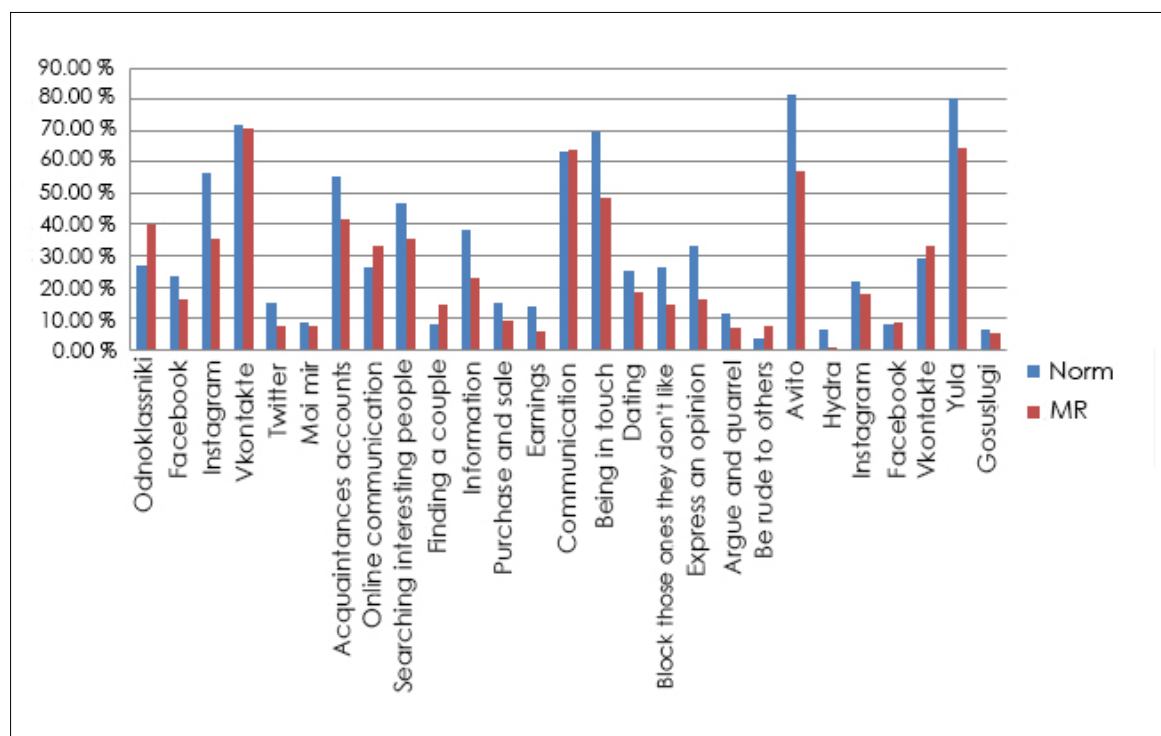


Figure 2. Distribution of responses from the block of social networks and trading platforms

**The linguistic block.** The respondents of both groups used emojis and emoticons in online interaction. In writing, they tried not to make mistakes, but sometimes they used obscene vocabulary to describe their emotional state (Fig. 3).



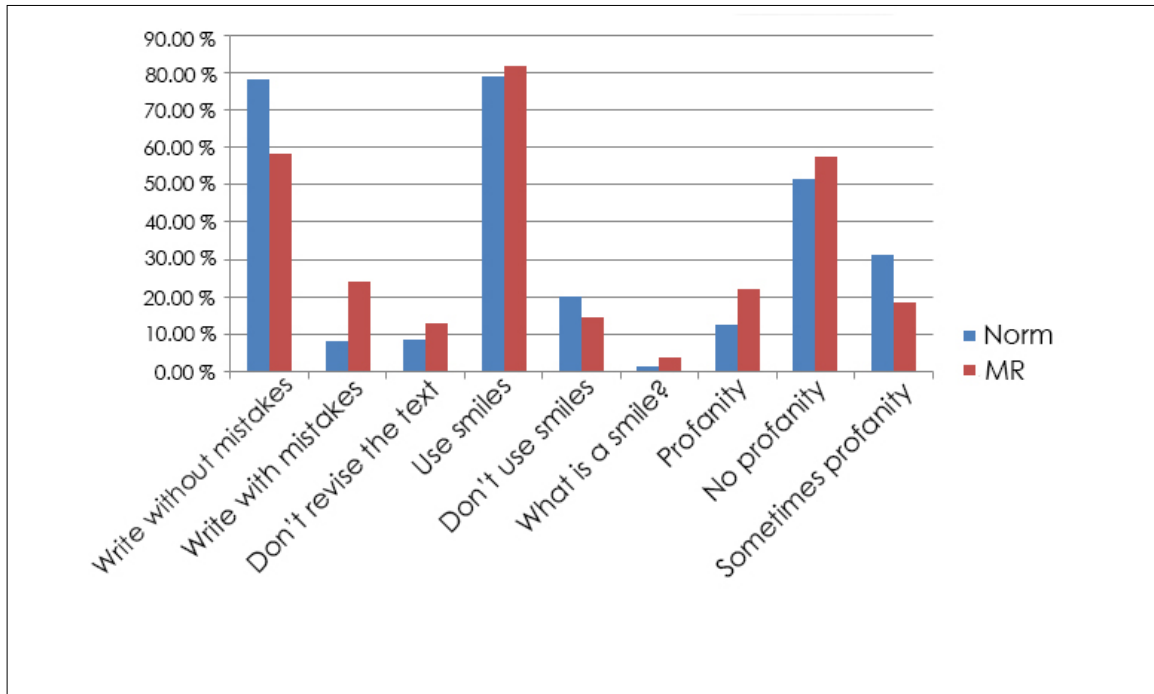


Figure 3. Distribution of responses from the linguistic block

**The block of parental control.** According to self-report, compared to parents of typically developing respondents, those of their peers with MR were more interested in the content and had more control over the time they spent on the Internet. Meanwhile, the respondents with MR argue that their parents had no idea about the content they used or produced. However, in both groups, respondents pointed to the presence of parents who were aware of specific sites they visited and their online movements. Parents could limit their time online, but some of them allowed their children to be there for as long as they wanted. Some respondents from both groups were ready to agree with parental restrictions; others actively resisted their influence. The respondents with MR demonstrated willingness to aggressively protect their online space from parental interference and were willing to prevent the blocking of the content that was valuable to them. Parental control of the time spent on the Internet was also variable – from less than 1 hour a day to more than 5 hours a day (Fig. 4).

Statistically confirmed data on specific characteristics of the process of online socialization of adolescents and young adults with mental retardation, in comparison with their typically developing peers, may be significant differences indicating that the following parameters are more pronounced in the group of adolescents and young adults with MR: visits to sites with games (GS) and dating sites (DS), use of others' e-mails for their own purposes (OE), respondents do not have e-mail (NE), use of e-mail for communication (EO), use of the Odnoklassniki online (O), presence of more than 100 friends on the internet (FI), aggressive defense of their online interaction space from parental control (A), lack of effort to write without mistakes when communicating in the online (CO) (Table 2).

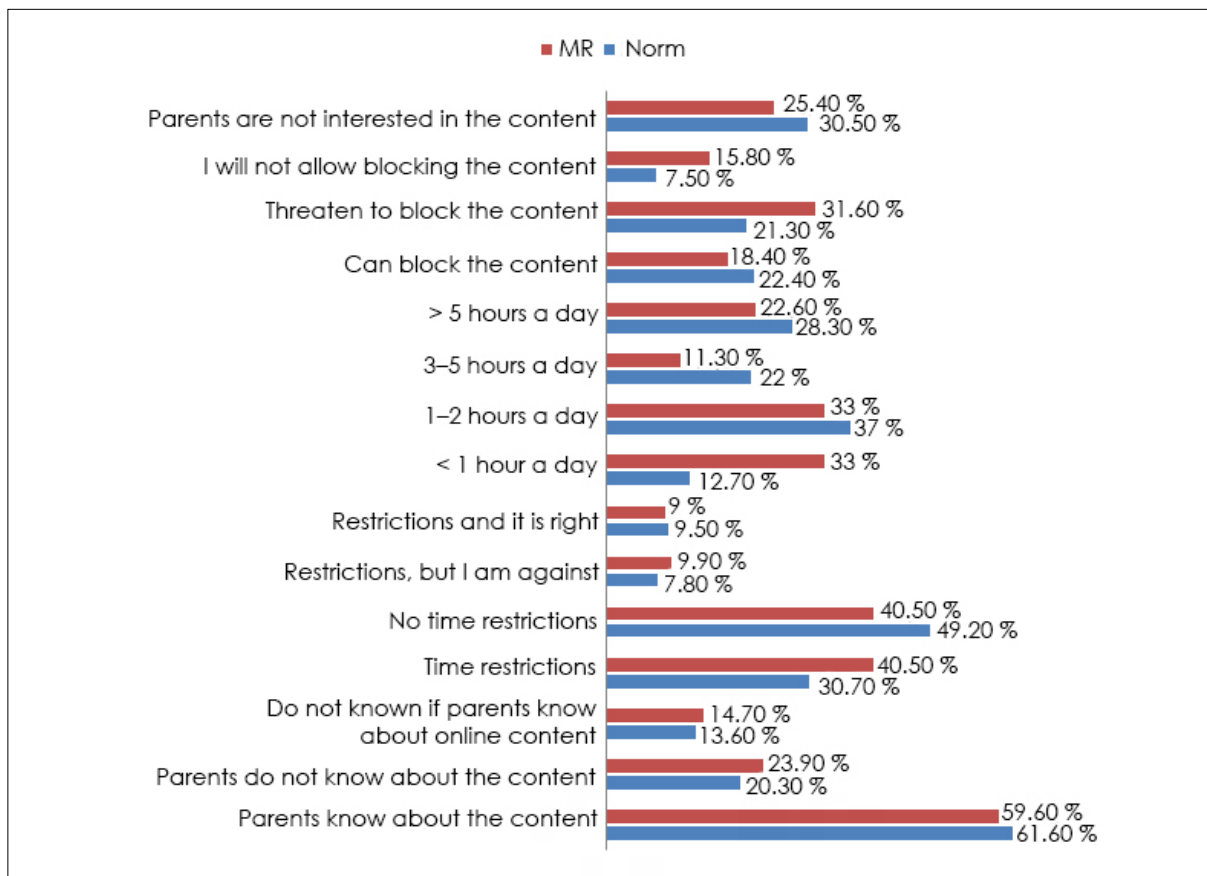


Figure 4. Performance characteristics of the block of parental control

	<u>GS</u>	<u>DS</u>	<u>OE</u>	<u>NE</u>	<u>EO</u>	<u>O</u>	<u>FI</u>	<u>A</u>	<u>CO</u>
P	0.05	0.01	0.01	0.01	0.05	0.05	0.05	0.05	0.01
$\varphi^*_{emp}$	1.94	3.991*	2.567*	3.127*	2.212	2.067	1.737	2.161	3.474*

Note: \* values with high statistical significance.

**Online risk markers.** Respondents with MR demonstrated less frequent encounters with both high and medium levels of online risk, in comparison with typically developing peers. This may be determined by reduced cognitive activity of adolescents and young adults with MR on the Internet, which in online interaction is normally expressed in an intensive online search for content, sites, specific communities, as well as their lower awareness of the characteristics of online realization. For the sample of normatively developing adolescents and young adults, the total percentage of the possibility of encountering online risks of an average level is 23.6 %; for the sample of adolescents and young adults with MR it is 16.9 %. For high-level online risks it is 18.2 % in the norm and 12.8 % for those with intellectual disabilities.

In the context of studying markers of potential encounter with online risks of a high degree of danger, we identified the following diagnostic positions: the respondent is familiar with the Tor Browser concept (1); the respondent is familiar with the 'darknet' concept (2); the respondent is familiar with the Hydra online trading platform (website banned in Russia) (3); the respondent plays online gambling (4); the respondent visits websites for adults (5); on the Internet the respondent communicates with much older individuals (the same age as his/her parents) (6); for the respondent, communication on the Internet is attractive as an opportunity to be rude to others without consequences (7); parents do not limit the time spent by the respondent on the Internet (8); parents are not interested in the respondent's online activity (9); the respondent receives requests to "move money" from online acquaintances (10); the respondent mentions the possibility of aggressively protecting their online space from parental control, using phrases such as "my parents want to restrict my online presence, but I will not let them!" (11) (Fig. 5).

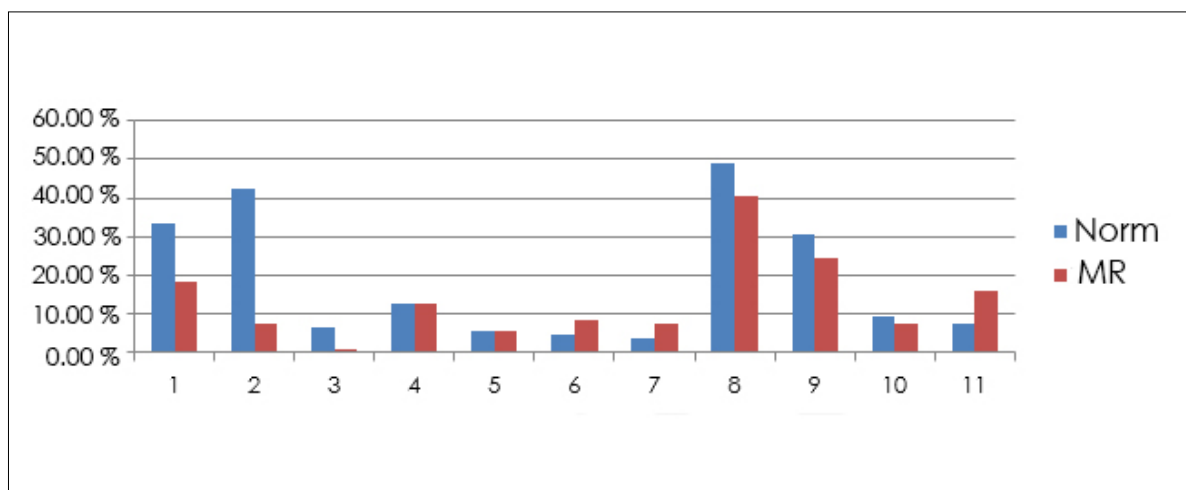


Figure 5. Distribution of responses in relation to markers of high-level online risks

The markers of a potential encounter with medium-level online risks represent the following diagnostic positions: the respondent is familiar with the concept of 'cryptocurrency' (1); the respondent considers online interaction as a way of earning money (2); for the respondent, online communication is attractive because of the opportunity to argue and quarrel without problems (3); on the Internet the respondent communicates with much older individuals (4);

the respondent receives requests for help, and he/she responds to them (5); the respondent receives requests to convey something to someone (6); the respondent receives requests to help deceive or play a prank on someone (7); the respondent has more than 100 online friends (8); the respondent knows nothing about the activities of his online friends (9); parents do not know which sites the respondent visits (10); and the respondent spends on the Internet more than 5 hours a day (11) (Fig. 6).

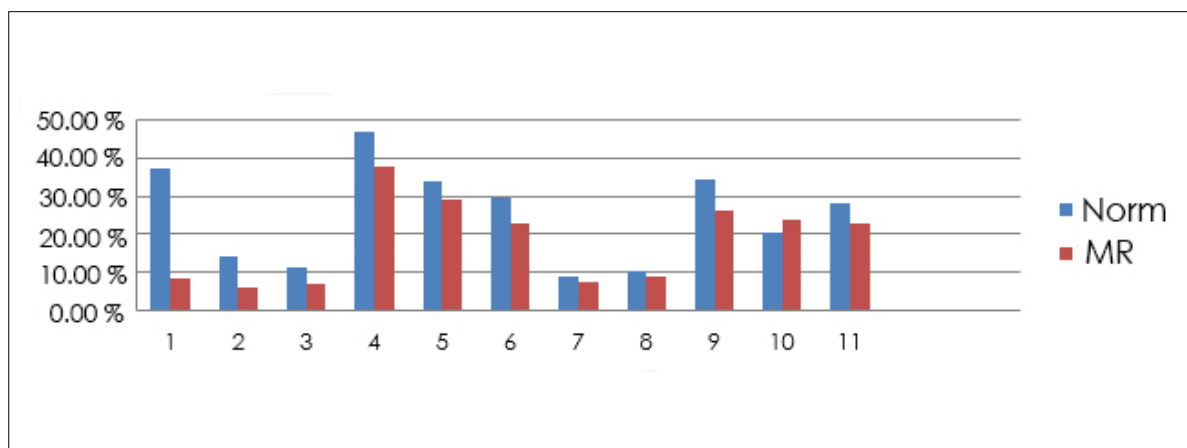


Figure 6. Distribution of responses in relation to markers of average-level online risks

By itself, the presence of online risk markers in respondents' answers does not directly indicate that they have faced a real online risk. This, first of all, indicates the broad online awareness of the respondents. However, it needs in-depth verification and study in confidential communication to minimize online risks.

The awareness of adolescents and young adults in areas that under certain conditions can produce online risks indicates that teenagers or young adults (a) observed potentially harmful factors occurring with others, (b) communicate with those who are already exposed to these risk factors, (c) themselves create such risks to other participants in online interaction, (d) were directly exposed to an online risk (consciousness/unconsciousness), (e) got into a risky online situation and stay in this situation, and (f) are aware of the dark sides of online interaction and this help them to avoid risks.

Online risk markers in adolescents or young adults should be studied individually and comprehensively. Close attention should be paid to both the facts of facing with a potential online threat, and the facts when respondents do not know what factors of online interaction are potentially dangerous. Low intensity of online interaction, limited experience of online contacts, low awareness of online 'dark' phenomena may be a risk factor for the occurrence of potentially dangerous online behavior in the future. And then a teenager or young man with MR or normative development may be uncritical about the incoming online information or the negative online intentions of others due to the lack of elementary knowledge in this area.

## Discussion

The data obtained in the testing study indicate that the Internet User's Self-report is available for understanding and independent implementation by respondents with mental retardation.

It has potential for use in comparative studies among respondents from different nosological groups. This diagnostic helped identify general manifestations of the online interaction among adolescents and young adults with typical development and impaired intelligence. These include the widespread use of the potential of the Internet; high motivation to use the Web for their own purposes; relatively successful attempts to implement such use for viewing photos and videos, searching for various information (e.g., educational) online games, entertainment with the use of interesting multimodal content. The presence of a wide range of online terms in the passive vocabulary; partial acquaintance with netiquette was also noted. In most cases, the experience of using the Internet is from one to three years by adolescence, and over three years by young adulthood.

The respondents of both groups are characterized by attempts to establish online communication with individuals of different ages, the desire to express themselves and their emotions using a variety of verbal and visual-emotive means, including using emojis, smiles, profanity, the desire to get acquainted with the dark side of online life, visiting dating sites and adult sites. Some respondents are ready to engage in polemics on the Internet. Some respondents are ready to quarrel and swear with online interlocutor, but preferably without consequences for themselves.

The data obtained in this study partly correspond to the results of a study (Sobkin & Fedotova, 2019) involving school students from grades 5 to 11, which considers the Online as a socialization space for modern adolescents and indicates the hierarchy of the importance of the Online functions in their understanding such as enabling communication with friends and relatives, finding new acquaintances, expanding the circle of friends, having fun and finding the information you need, usefulness of using social networks in learning, for self-education, and self-development, searching for romantic acquaintances or professional contacts.

Testing the Internet User's Self-report diagnostic tool helped establish, that compared to their normatively developing peers, adolescents and young adults with MR had the following specific characteristics of the Internet socialization: lower online awareness (including the dark side of the Internet); lower online mobility and switchability; preferable use of the Internet for communication, games, dating and searching for a couple, rather than for studying, making money, buying and selling, and self-development. Respondents with MR more often visit dating sites, have a high, but often insufficiently realized need for communication in an online context. The phenomenon of 'online hypersocialization' is noted, when the quality of interpersonal online interaction decreases due to attempts to communicate with as many individuals as possible (for example, a subject may have more than 100 online friends). The respondents with MR have a lower intensity of verbal online communication, the difficulty of perceiving the interlocutor. This may be explained by the fact that the process of communication on the Internet mainly involves verbal means, which use is difficult when the intellect is impaired (due to systemic speech underdevelopment). Also, in online communication it is difficult/impossible to perceive facial expressions and direct emotional manifestations of the interlocutor (which is partly compensated by the use of emojis and smiles in correspondence or with the help of audio messages and video communication). Compared to peers with a developmental norm, the respondents of this group more often mention the possibility to aggressively protect their online space from parental control.

Thus, the Internet User's Self-report can be used to analyze respondents' online interactions, collect data within a single class, one parallel, one nosological group of respondents, and as a screening for respondents' encounter with potential online risks. In addition to its informative component, the approach to studying specific characteristics of the online interaction among adolescents and young adults with normative and impaired development with the help of the Internet user's Self-report encourages respondents to self-analysis, activates the reflexive mechanism of self-consciousness, which is in its sensitive phase in adolescence and young adulthood, and open up areas of psychological and pedagogical support.

It is necessary to expand this direction of research not only for the primary disease, but also for the age ranges within the same nosological category, and also create samples that include various categories of students with disabilities in the framework of comparative studies, examine the levels of online socialization, and etc.

Future work should involve (a) the development of methods for a more in-depth study of respondents' adherence to online risks based on comparing their declared facts of online interaction with their real behavior on the Internet and analyzing their digital footprints and (b) the elaboration of educational materials to increase the digital awareness among students with typical and impaired development, their parents and teachers, as well as to create methods of psychological and pedagogical support for the online socialization of adolescents and young adults with special educational needs.

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Kuzmina

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