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ANALYSIS OF DIGITAL SOCIALIZATION CONCEPTS: INDICATORS AND CRITERIA OF DIGITAL SOCIALIZATION

In the era of the development of global digital platforms for social communication, it is important to scientifically substantiate the concept and structure of the process of digital socialization of an individual. Digital socialization of the younger generation is considered as a process aimed at developing social skills for effective interaction in the digital environment, relationships and identity through digital technologies. The purpose of the study was to conduct a comparative analysis of the leading modern concepts of digital socialization and to highlight the indicators and criteria of digital socialization of an individual. Based on the results of the analysis of the concept of digital socialization, the author's questionnaire "Diagnostics of the level of digital socialization of adolescents in the educational environment" was developed. As part of this study, a survey was conducted among students of secondary comprehensive schools in Uralsk and district schools in the West Kazakhstan region. The study identified the need for comprehensive psychological work to develop a skill in the creative use of digital technology, ability to think critically with media sources, and instill skills of emotional self-control and regulation in online communication. The results of this study complement knowledge in the field of social psychology, psychological diagnostics of personality. The identified indicators and criteria of digital socialization can be used as a basis for developing new methods of psychological diagnostics of the level of successful digital socialization of children and adolescents.

Key words: digital socialization; digital technologies; digital culture; digital environment; online space; successful digital socialization.

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Цифрлық әлеуметтену тұжырымдамаларын талдау: цифрлық әлеуметтенудің көрсеткіштері мен критерийлері

Әлеуметтік коммуникацияның жаһандық цифрлық платформаларының даму дәуірінде жеке тұлғаның цифрлық әлеуметтену процесінің тұжырымдамасы мен құрылымын ғылыми негіздеу маңызды. Өскелең ұрпақты цифрлық әлеуметтендіру цифрлық технологиялар арқылы цифрлық ортада тиімді өзара әрекеттесу, қарым-қатынас пен сәйкестілік үшін әлеуметтік дағдыларды дамытуға бағытталған процесс ретінде қарастырылады. Зерттеудің мақсаты цифрлық әлеуметтендірудің жетекші заманауи тұжырымдамаларына салыстырмалы талдау жүргізу және жеке тұлғаның цифрлық әлеуметтенуінің көрсеткіштері мен критерийлерін бөліп көрсету болды. Цифрлық әлеуметтендіру тұжырымдамасын талдау нәтижелері бойынша «Білім беру ортасындағы жасөспірімдердің цифрлық әлеуметтену деңгейінің диагностикасы» авторлық сауалнамасы әзірленді. Осы зерттеу аясында Орал қаласындағы жалпы білім беретін мектептер мен Батыс Қазақстан облысындағы аудан мектептерінің оқушылары арасында сауалнама жүргізілді. Зерттеу цифрлық технологияны шығармашылықпен қолдану дағдысын, БАҚ көздерімен сыни тұрғыдан ойлау қабілетін дамыту, желідегі қарым-қатынаста эмоционалды өзін-өзі бақылау және реттеу дағдыларын қалыптастыру үшін кешенді психологиялық жұмыстың қажеттілігін анықтады. Бұл зерттеудің нәтижелері әлеуметтік психология, тұлғаның психологиялық диагностикасы саласындағы білімді толықтырады. Сандық әлеуметтендірудің анықталған көрсеткіштері мен критерийлері балалар мен жасөспірімдердің табысты цифрлық әлеуметтену деңгейін психологиялық диагностикалаудың жаңа әдістерін әзірлеу үшін негіз ретінде пайдаланылуы мүмкін.

Түйін сөздер: цифрлық әлеуметтену; цифрлық технологиялар; цифрлық мәдениет; цифрлық орта; онлайн кеңістік; нәтижелі цифрлық әлеуметтену.

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Анализ концепций цифровой социализации: показатели и критерии цифровой социализированности

В эпоху развития глобальных цифровых платформ социальной коммуникации важно научно обосновать концепцию и структуру процесса цифровой социализации личности. Цифровая социализация молодого поколения рассматривается как процесс, ориентированный на развитие социальных навыков эффективного взаимодействия в цифровой среде, отношений и идентичность посредством цифровых технологий. Цель исследования заключалась в проведении сравнительного анализа ведущих современных концепций цифровой социализации и выделении показателей и критериев цифровой социализированности личности. Методология исследования основана на анализе ведущих зарубежных концепциях цифровой социализации личности. По итогам анализа концепции цифровой социализации разработана авторская анкета «Диагностика уровня цифровой социализированности подростков в образовательной среде». В рамках данного исследования проведено анкетирование учащихся средних общеобразовательных школ г. Уральска и районных школ Западно-Казахстанской области. В рамках проведенного исследования определена необходимость комплексной психологической работы по развитию культуры поведения в цифровом пространстве, развитию навыков креативного использования цифровых технологии, развитию способности к критическому мышлению в работе с медиаисточниками, привитию навыков эмоционального самоконтроля и саморегуляции в онлайн-общении. Результаты данного исследования дополняют знания в области социальной психологии, психологической диагностики личности. Выделенные показатели и критерии цифровой социализированности могут быть применены как основа для разработки новых методик психологической диагностики уровня успешной цифровой социализированности детей и подростков.

Ключевые слова: цифровая социализация; цифровые технологии; цифровая культура; цифровая среда; онлайн-пространство; успешная цифровая социализация.

Introduction

The problem of digital socialization is becoming more and more urgent in today's globalized world, where the boundaries of interaction and communication between people using digital technologies (social networks, messaging applications, video conferencing platforms and etc.) are being erased. Digital socialization has become a process that allows more actively differentiating and maintaining a personally significant system of social relations and interacting with reality online. Digital socialization in present realities has a significant impact on people's well-being, mental health and social integration. In the modern world many people spend their main time in the online space respectively and digital platforms actively influence their social communications. This leads to the manifestation of a number of psychological problems, such as cyberbullying, social isolation and dependence on social networks. Another important aspect of the digital socialization problems covers the problem of digitalization of all levels of education. The listed aspect of the problem actualized the need for scientific analysis of problem of the younger generation's successful digital socialization. The problem of studying the digital socialization process remains open, which in turn

actualizes the need to develop a methodology and content of psychodiagnostics tools to determining the level of digital socialization of children and adolescents (definition criteria and indicators of digital socialization).

In the scientific field, digital socialization is considered as a process of integration and adaptation of an individual to the digital space through the differentiation of a digital culture of communication. The digital socialization process for the modern generation is an experience of communication in online games, etc. This social experience is a set of social skills for effective interaction in a digital environment. These are skills and abilities to find and use the necessary information, respond adequately to messages and comments, comply with ethical and personal cybersecurity standards.

The object of this research the level of digital socialization of adolescents in urban and rural schools aged 13-15 years.

The subject of the research was the scientific substantiation of indicators and criteria of digital socialization of adolescents.

The purpose of the research is a comparative scientific analysis of modern psychological concepts and highlight of criteria and indicators of digital socialization of adolescents.

Research objectives:

- to conduct a comparative analysis of approaches to understanding the digital socialization process in foreign and national psychology;
- to analyze results of international research on psychological aspects of younger generation's digital socialization;
- describe advantages and disadvantages of digital socialization;
- identify indicators and criteria for assessing the digital socialization level;
- to draw up a questionnaire on the diagnosis of the digital socialization level of adolescents and carry out research.

Among the present scientific and psychological approaches to analyzing the digital socialization problem of adolescents, we used:

- the impact of digital technologies on mental health, well-being and social relationships (Orben et al., 2022; Gazzaley et al., 2016);
- Internet security, digital literacy and the impact of digital technologies on social relationships (Livingstone, 2008):
- psychological aspects of the impact of digital technologies on identity formation, social support and privacy issues (Amichai-Hamburger, 2017).

In foreign psychology and the psychology of the CIS countries, the concept of digital socialization is defined in different ways.

In foreign psychology, digital socialization is described as a process in which a person acquires social skills, rules of behavior and experience of interaction in a digital environment. In the psychology of the CIS countries, the concept of digital socialization has not yet become standard and is rarely used. However, within the framework of research in the field of digital psychology, digital socialization can be considered as a process of personal adaptation to digital culture and the formation of digital identity. Also, in this context, digital socialization may include the construction of social skills and abilities necessary interaction in online communities and social networks.

There are many present scientists researching the problem of digital socialization and formulating scientific concepts to understand this phenomenon. Among foreign scientists, studies by Livingstone, Turkle, Boyd, Twenge, etc., should be noted.

S. Livingstone (2002) represented the concept of digital education. This concept is addressed to parents who must ensure the safe use of digital technologies to preserve their psychological and mental health. To do this, children need to till digital com-

petencies to prevent online risks. S. Livingstone (2008) considers digital socialization as a learning process to acquire knowledge, skills and attitudes for the effective use of digital media resources. This allows children to overcome the problems of cyberbullying, exposure to negative content and violation of privacy boundaries (2011).

S. Livingstone defines digital socialization as a complex, continuous process that is influenced by many individual, social and cultural factors. In her opinion, it is important to take these factors into account in the application of digital media for the maturation of positive digital citizenship. S. Livingstone's research provides insight into the process of adaptation of the younger generation to the changing digital landscape and the differentiation of responsible use of digital media.

S. Turkle (2012) in his research examines the impact of digital technologies on human self-identification. He is the author of a concept (Turkle, 2005) describing the till of a sense of self-isolation in online communication. According to S. Turkle, digital socialization has both a positive and negative impact on the social development of an individual. Among the negative consequences of digital socialization are S. Turkle (2015) notes the opportunity to avoid personal contacts, which negatively affects the till of a sense of empathy and understanding of others. He also notes (Turkle, 2015) the emerging desire to present oneself in the online environment only from the best side, to form a false digital image of oneself without flaws.

In his research, D. Boyd (2007) considers digital socialization as a process of assimilation of social norms and rules of online communication with other people. At the same time, he notes the profound transformation of the structure and content of communication and worldview of young people. D. Boyd (2014) draws attention to the importance of social and cultural contexts that influence the content of digital socialization of a particular person. He notes the importance of a critical understanding of the role of digital media in shaping the lifestyle of the modern young generation.

D. Tweng (2017) investigated the problem of the impact of social media surveys on the mental health and moral well-being of young people. An interesting characteristic given by D. Tweng for the generation he called "iGen". This is a generation with an increased level of anxiety, prone to constant emotional experiences and depression, and having problems with self-identification. According to D. Tweng (2017), a decrease in the amount of time

devoted to personal communication leads to the maturation of a sense of social isolation and social loneliness.

Considering the digital socialization problem research in the CIS countries, it is necessary to note the research of G.U. Soldatova (2013). She considers digital socialization as a process of formation of stable personal and professional qualities necessary for a person to function effectively in an information and communication environment. In the course of digital socialization, in her opinion, digital identity, social communication skills in social networks, the foundations of morality and ethics of the digital environment, and digital skills are formed. According to G.U. Soldatova (2017) for successful digital socialization, it is necessary to learn not only technical skills, but also social skills for effective search and application of the necessary information, productive interaction in online communities, skills to ensure of personal information and the differentiation of digital literacy.

Literature review

As part of the scientific analysis, research by a group of foreign scientists (Danby et al., 2018) is interesting. S.J. Danby, M. Fleer, K. Davidson, M. Hatzigianni investigated the peculiarities of the influence of digital technologies on the daily experience of children in school, at home and other communities. The study revealed a significant impact on the content of children's social experience of the content of online games, social networks and various mobile technologies. The need for the differentiation of digital literacy and parental support in the use of digital media was noted.

The research by G. Johnson, K. Puplampu (2008) examines the impact of the Internet on children forward movement. The Internet is a multi-factorial, global socio-ecological system that has a complex impact on the forward movement of the modern generation of children. The authors have originated the structure of the ecological technosystem of the Internet, which has a multi-level impact on the socio-cultural maturation of an individual, family, peer group and various communities. They emphasize the importance of socially active position of parents, teachers in differentiation a culture of safe and responsible Internet use among children.

G. Johnson (2015) in his research "Internet use and child development: Validation of the ecological techno-subsystem" introduced the structure of the ecological technosystem. The research included

a survey of parents of children aged 8 to 18 years in Canada, during which the relationship between the use of the Internet and the differentiation of the child was studied. The results of the research confirmed that individual, family and cultural factors are decisive in this process. The research also showed that the amount of time children spend online is negatively related to academic performance, but positively related to social skills and self-esteem. In this research recommends the adoption of measure to maturation trust in the family and mediation of parents in the use of the Internet, the differentiation of digital literacy and critical thinking skills.

In the experiment of J. Smith, B. Hewitt and Z. Skrbis (2015), the dynamics of changes in the value orientation and behavior of young people under the influence of the Internet in the transition to youth age were studied. The research is based on a survey of young people aged 16-25 in Australia. The authors use the concept of "digital socialization" to describe the process of forming a value attitude to the Internet based on social interaction and experience. The study noted the dynamics of changes in value orientations when using the Internet from adolescence to adolescence. Thus, J. Smith, B. Hewitt, Z. Skrbis identified the evolution of value orientations in three directions: instrumental (the Internet as a tool for achieving specific goals), social (the Internet as a means of social communication and co-creation), expressive (the Internet as a means of self-expression and identity differentiation).

A. Stornaiuolo (2017) investigated the features of digital socialization through social networking sites (SNSs). According to the author, SNSs provides teenagers with an important space for differentiation digital literacy, forming self-identity, discussing and sharing social experiences, sharing content, and managing their own circle of online communication with peers.

In research by G.U. Soldatova (2013), the level of digital competence of adolescents and their parents was studied. The research was organized throughout Russia among adolescents aged 12-17 years and their parents and included research of the level of knowledge in the field of computer technology, online skills, use of mobile devices, knowledge in the field of information security, knowledge of programming languages, etc. This research showed that teenagers spend more time online than their parents and have a higher level of digital competence. However, both teenagers and their parents have a limited understanding of information security. This can lead to various problems related to identity leakage and Internet fraud.

Psychologists E.P. Belinskaya and T.D. Marcinkovskaya (2018), having analyzed the results of an empirical research of a sample of 100 young (17-27 years old) respondents, came to the conclusion that in some cases the virtual environment contributes to strengthening personal identity. This trend is typical for young people with an informational style of personal identity. It is typical for them to make decisions based on the analysis of all available information, and the online and offline context complement each other and create a single communication space. Users with a normative (diffuse) identity style are more susceptible to the negative consequences of online communication: it is difficult for them to identify themselves in the online space because the virtual world does not provide such clear and unambiguous social instructions; in online contexts they face the same problem that does not allow them to successfully adapt.

G.U. Soldatova's work "Digital socialization in the cultural and historical paradigm: a changing child in a changing world" (Soldatova, 2018) presents the result of a research of the effects of digital technology on the socialization of children in the modern world. The concept is based on the cultural and historical theory of L.S. Vygotsky, where human social development takes place in the context of the social and cultural environment of life. The analysis of trends in the differentiation of modern children's culture through digital technologies, the positive and negative impact of a large flow of information and content on the socialization of personality is presented, the importance of the role of parents and teachers in the organization of the digital environment for the successful socialization of children in the modern digital world is determined.

The research by a group of scientists (Soldatova et al., 2022) presents approaches to the use of digital technologies for the cognitive and socio-emotional differentiation of children and adolescents, as well as aspects related to parental practices in the use of these technologies in a family context:

- the cognitive sphere of children and adolescents with various indicators of digital socialization;
- the impact of digital technologies on children's neurocognitive indices;
- cognitive characteristics of children and adolescents with different intensity of Internet use (optimal "digital" time);
- the relationship between cognitive maturation of children and adolescents and psychological well-being online and offline.

In another research, T.A. Poskakalova, M.G. Sorokova (2022), analyzing the main aspects and

trends in digital communication (progress of social networks, increased use of mobile devices, increased online communication time, etc.), note that digital communication of young people is characterized by brevity and emotionality of text messages, as increase in the use of emoticons and emojis, the use of multimedia formats. The research showed that online communication has almost no effect on the value of personal communication. Social networks attract boys and girls with the possibility of free expression, the ease of using various messengers, thanks to which young people usually communicate with their friends. In most cases, the circle of such communication is small and amounts to up to 5 people per day. Surrounding yourself with a real circle of acquaintances helps young people avoid aggressive messages and bullying on social networks, as most of them have such experiences from the past. Social media also helps to combat feelings of loneliness and receive emotional support.

Materials and methods

The research methodology is based on the analysis of leading foreign concepts of digital socialization of the individual using methods of analysis of literary sources (axiomatic method, apperception method, descriptive method, aspect analysis), theoretical methods (analysis and synthesis, generalization and systematization, comparison and comparison, induction and deduction), empirical methods (psychodiagnostics testing method, methods of statistical and mathematical processing). The ideas of Orben, Przybylski, Blakemore, Gazzaley, Rosen, Livingstone, Amichai-Hamburger are analyzed as the main concepts of digital socialization. Based on the analysis of leading foreign concepts (Livingstone, Turkle, Boyd, Twenge, Danby, Flier, Davidson, Hatzigianni, Johnson, Puplampu, Smith, Hewitt, Skrbis, Stornaiuolo, Soldatova, etc.), the advantages and disadvantages of the digital socialization process are determined, the results of the study of the dynamics of the development of the digital socialization process of the younger generation are analyzed, the indicators and criteria of digital socialization, the content of the criteria for diagnosing the level of digital socialization of children and adolescents are identified.

The identified indicators and criteria of digital socialization were used to develop a methodology for psychological diagnostics of the level of successful digital socialization of children and adolescents. The author's questionnaire "Diagnostics of

the level of digital socialization of adolescents in the educational environment (13-15 years old) (author-compiler A.S. Irgaliyev)” was used as a psychodiagnosics technique. The questionnaire includes 30 questions on 7 scales: 1. communication in digital social networks and instant messengers; 2. use of digital technologies in educational activities; 3. knowledge of the culture of behavior in the digital space; 4. development of creative skills; 5. ability to critical thinking; 6. experience in using various digital technologies; 7. ability to self-control and self-regulation in online communication. Interpretation of the questionnaire results made it possible to determine the level of digital socialization of the subjects. As part of this study, a survey was conducted among students of secondary comprehensive schools in Uralsk and district schools in the West Kazakhstan region. A total of 328 adolescents aged 13-15 years participated in the research.

Results and discussion

The analysis of modern concepts made it possible to highlight both the advantages and disadvantages of digital socialization.

Among the advantages of digital socialization:

- opportunities for the formation of social ties and communication: modern digital technologies present a wide range of opportunities for communication without geographical restrictions with representatives of various societies, states, regardless of the language of communication;

- differentiation of communication skills: during daily online interaction, young people have the opportunity to improve their writing and speaking skills;

- access to various information: the online space can be a resource for analyzing information and maturation children’s interests and abilities on this;

- a sense of communication: belonging to a certain online community gives a child a sense of confidence and social support, avoiding feelings of loneliness;

- forward movement of creativity and self-expression: digital technologies and platforms provide an opportunity for creative self-expression and creativity through the creation of various content (video, music, images, etc.);

- acquaintance with new cultures: the opportunity to communicate with representatives of different cultures, mentalities to expand knowledge of the world, maturation tolerance and empathy.

However, in addition to the advantages of digital socialization can also be noted:

- the risk of cyberbullying and obscene behavior: in the online environment among teenagers, the problem of psychological bullying is often manifested, which is difficult for adults to control. Cyberbullying has a negative impact on emotional well-being and lowers self-esteem;

- negative impact on mental health: uncontrolled use of digital technologies leads to the upgrowth of Internet addiction, anxiety, depression, social maladjustment, emotional instability;

- accessibility of negative content: through digital technologies, children can access content with science of violence, pornography, extremist propaganda, etc.;

- the risk of developmental growth dependent behavior: excessive use of digital technologies can form dependent, addictive behavior that has a negative impact on both the physical and somatic and psychoemotional maturation of children and adolescents;

- social isolation: the predominance of online communication can lead to social phobia, self-isolation from a group of peers, and degradation of personal communication skill.

It is important for parents and teachers to control the digital socialization process, monitor online activity in visiting various digital content, and minimize cyber risk. To guide young people and support the maturation of digital skills of cognition of the world around them for educational purposes. Parental control can be expressed in setting time limits for using smartphones, online games, encouraging an open dialogue on the risks and benefits of digital technologies, and differentiation trust in sharing free time and leisure.

To assess the quality of digital socialization of children and adolescents, psychological diagnostics is important, which allows determining the degree of success in the digital space and, more importantly, the degree of differentiation of social communications skills.

We have identified the main criteria for assessing a child’s socialization in a digital environment (including educational):

1. The level of accessibility to high-quality digital resources: the child’s access to modern computer programs, Internet resources, educational platforms, media resources, interactive virtual environments, etc.;

2. Digital technology application skills and competencies: the child’s knowledge and competencies in the application of various digital technologies in learning and self-maturation;

3. Digital literacy: the child's skills in working with information of various formats, skills of safe and ethical behavior in an online environment, critical thinking skills;

4. Social activity in the digital space: active participation in social networks, digital communities based on the differentiation of communication skills with various groups of people, a wide range of friends;

5. Social skills: the ability to build productive communication in the digital space, to build trusting and rational relationships in an online environment;

6. Psychological stability: stress resistance, skills of overcoming problematic situations, skills of emotional self-regulation and self-control, successful overcoming of attempts at Internet bullying, adequate self-esteem in an online environment.

Difference methods can be used to conduct psychological diagnostics of the level of digital socialization. These can be survey and questionnaire methods to collect information about the child's knowledge and skills of using digital technologies, adaptability and willingness to work successfully in a digital environment. In this case, it is possible to apply the method of expert checkup of the child's behavior in the online space, analyze digital traces and the quality of his digital communication. When choosing methods of psychological diagnosis, it is important to take into account the age, individual and personal characteristics of the child, to adapt them as much as possible to the needs of parents and teachers.

As part of our scientific research, an author's questionnaire was originated "Diagnostics of the level of digital socialization of adolescents (13-15 years old) in an educational environment" (author-compiler A.S. Irgaliyev). The questionnaire includes 30 questions on 7 scales. The questionnaire is personalized, with 5 ranked answer options depending on the scale. Each answer is rated from 1 to 5 point according to the key.

The questionnaire "Diagnostics of the level of digital socialization of adolescents (13-15 years old) in an educational environment" includes the following 7 scales:

- scale 1 "Communication in digital social networks and messengers" consists questions on the assessment of the amount of the time spent by teenagers on social networks, the number of friends on social networks, the level of activity in groups and communities, the ability to maintain remote communication (4 questions);

- scale 2 "The use of digital technologies in educational activities": computer proficiency, office software skills, ability and willingness to use electronic educational resources, ability and desire to share experience and knowledge in an online environment (4 questions);

- scale 3 "Knowledge of the culture of behavior in the digital space": knowledge and compliance with safety rules when using digital technologies, the ability to adhere to ethical standards during digital communication, compliance with norms and rules of behavior in the online environment, conflict prevention skills in the online environment (4 questions);

- scale 4 "Differentiation of creative skills": the ability to use digital technologies to create new project, games, multimedia presentations and other materials, showing interest and creativity in digital technologies (5 questions);

- scale 5 "Critical thinking ability": the ability to analyze information obtained from digital sources, distinguish between facts and opinions, evaluate the reliability and usefulness of information, form your own opinions by analyzing different media sources (4 questions);

- scale 6 "Experience in using various digital technologies": the level of experience and skills in working with mobile devices, personal computers, game consoles, smart TVs and other devices, the ability to quickly adapt to new technologies (5 questions);

- scale 7 "The ability to self-control and self-regulation in online communication": the ability to control the time of using digital technologies, find a balance between online and offline activities, the ability to manage your emotional state when using digital technologies, the ability to self-regulate online behavior (4 questions).

The interpretation of the questionnaire results is carried out in accordance with the answer key. The total amount of points allows to determine the level of socialization of a teenager: high – 120-150 points; average – 75-119 points; low – 30-74 points.

As part of this research, in the 2023-2024 academic year (using the above-mentioned author's questionnaire), pupils of secondary comprehensive schools in Uralsk and district schools in the West Kazakhstan region were surveyed. A total of 328 adolescents aged 13-15 years participated in the study. The final results of the research are presented in table 1 and figure 1.

Table 1 – Results of psychological diagnostics using the questionnaire “Diagnostics of the level of digital socialization of adolescent (13-15 years old) in an educational” (author-compiler A.S. Irgaliyev) of teenagers of urban and rural school of the West Kazakhstan region

No	Name of the scale	Max and min scale values	The average value	
			adolescents of the urban school	adolescents of the rural school
1	Communication in digital social networks and messengers	4-1	3,98	3,61
2	The use of digital technologies in educational activities	4-1	3,72	3,18
3	Knowledge of the culture of behavior in the digital space	4-1	2,98	2,87
4	Differentiation creative skills	5-1	3,15	3,28
5	The ability to think critically	4-1	2,86	2,78
6	Experience in using various digital technologies	5-1	4,59	3,56
7	The ability to self-control and self-regulation in online communication	4-1	3,1	3,54

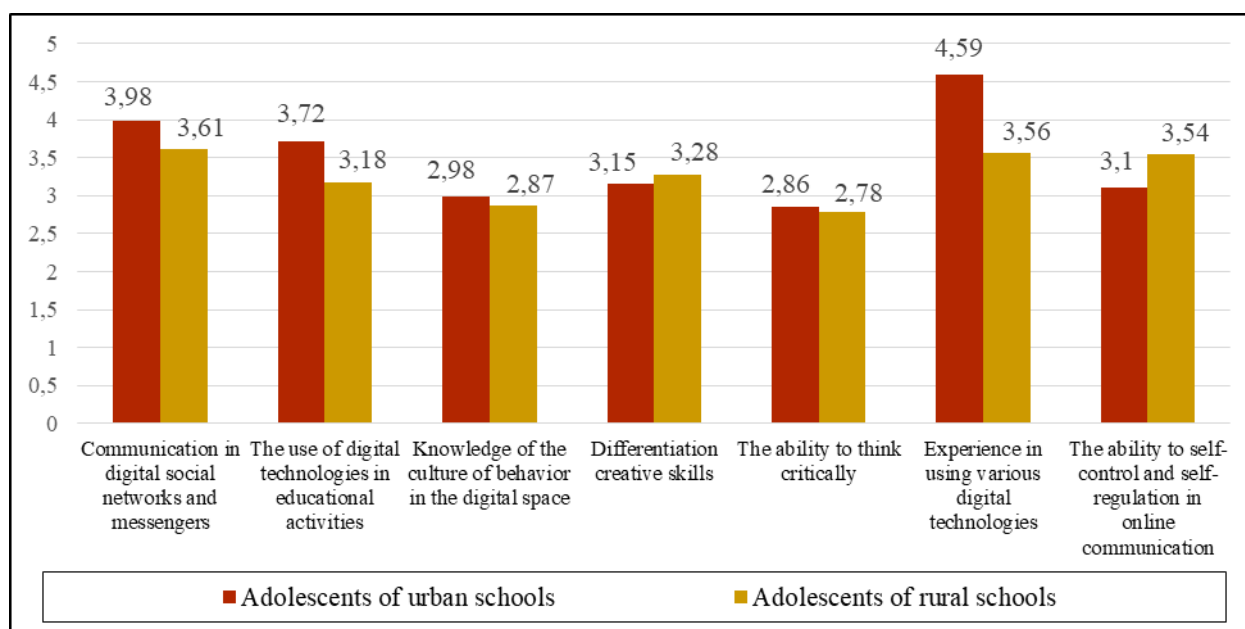


Figure 1 – Results of psychological diagnostics using the questionnaire “Diagnostics of the level of digital socialization of adolescent (13-15 years old) in an educational” (author-compiler A.S. Irgaliyev) of teenagers of urban and rural school of the West Kazakhstan region

The analysis of the results of psychological diagnostics using the questionnaire “Diagnostics of the level of digital socialization of adolescent (13-15 years old) in an educational” (author-compiler A.S. Irgaliyev) of teenagers of urban and rural school of the West Kazakhstan region (table 1, figure 1) showed:

- on a scale of 1 “Communication in digital social networks and messengers”, the average value for teenagers studying in urban schools (3,98) is slightly higher than for teenagers in rural schools (3,61).

Both values on this scale correspond to a high level of digital socialization and are interpreted as the fact that adolescents of the sample spend significantly more time on social networks, have a wide range of real and virtual friends on social networks, show a high level of activity in online groups and communities, and strive to maximize online communication with all significant peer groups and adults.

- according to the scale 2 “The use of digital technologies in educational activities”, the average value among adolescents studying in urban schools

(3,72) is slightly higher than among adolescents in rural schools (3,18). The value on this scale among teenagers in urban schools refers to a high level of digital socialization. At the same time, for teenagers in rural schools, the value refers to the average level of digital socialization, which can be interpreted as the presence of problems that prevent the full use of digital technologies in the educational process of rural schools (poor quality of connection, the need for further equipment with multimedia educational tools, etc.). Nevertheless Internet, in the sample of adolescents, the level of computer proficiency, skills in working with office programs, the ability and willingness to use electronic educational resources, the ability and desire to share experience and knowledge in an online environment is quite high.

- according to the scale 3 “Knowledge of the culture of behavior in the digital space”, the average value for adolescents studying in urban schools (2,98) and for adolescents in rural schools (2,87) has almost the same value. Both values on this scale correspond to the average level of digital socialization. This is interpreted as the fact that adolescents in the sample as a whole have a general understanding of compliance with safety rules when using digital technologies, adhere to the norms of rules and ethics during digital communication in the educational process, comply with the norms and rules of behavior in the online environment. Nevertheless, in an “uncontrolled” online environment, teenagers are not always able to distinguish between dangerous, negative content and prevent conflicts in the online environment.

- on a scale of 4 “Differentiation of creative skills”, the average value of adolescents studying in urban schools (3,15) is slightly lower than that of adolescents in rural schools (3,28). Both values on this scale correspond to the average level of digital socialization. These indicators are interpreted as the ability of adolescents in the sample to use digital technologies to create template projects, games, multimedia presentations and other materials, showing sufficient interest and creativity in digital technologies within the framework of educational tasks.

- on a scale of 5 “Critical thinking ability”, the average value of adolescents enrolled in urban schools (2,86) is slightly higher than that of adolescents in rural schools (2,78). Both values on this scale correspond to the average level of digital socialization. This value is interpreted as the ability to compare information obtained from digital sources, but difficulties in distinguishing reliable facts, opinions and evaluating the usefulness of information, difficulties

in formulating one’s own opinion based on a comparative analysis of different media sources.

- on a scale of 6 “Experience in using various digital technologies”, the average value of adolescents studying in urban schools (4,59) is significantly higher than that of adolescents in rural schools (3,56). The value on this scale in urban school adolescents refers to a high level of digital socialization, and in rural school adolescents to an average. As you can see, teenagers in urban schools have more experience and skills working with modern mobile devices, personal computers, game consoles, smart TVs and other devices, and are able to adapt to new technologies faster than students in rural schools.

- on a scale of 7 “The ability to self-control and self-regulation in online communication”, the average value for adolescents studying in urban schools (3,1) is slightly lower than for adolescents in rural schools (3,54). Both values on this scale correspond to the average level of digital socialization. According to the survey, teenagers in rural schools show more patience and emotional self-control when using digital technologies compared to students in urban schools. Teenagers of urban schools do not always rationally use the time allocated to digital technologies, while teenagers of rural schools are more successful in maintaining a balance between online and offline activities, the ability to manage their emotional state, and are capable of self-regulation of online behavior.

Conclusion

Based on the results of our research, the scientific experience of studying the problem of digital socialization was analyzed. An analysis of foreign and domestic concepts of digital socialization has shown that this problem requires further scientific research. The problem of psychological diagnosis of the level digital socialization also remains one of the little-studied and poorly understudied.

The indicators and criteria of digital socialization that we have identified can be applied in the creating of form, questionnaire, tests, expert check-up for the psychological diagnosis of the level of digital socialization of adolescents. With further application, these criteria and indicators of digital socialization should be adapted to different categories of adolescents (gifted, at-risk children, deviant children, children with developmental delays, etc.) and taking into account age and individual characteristics. So, for junior pupils, the diagnostic technique can be more simplified, including an assessment of

the ability to control time spent in the digital space, distinguish between safe and dangerous online activity, knowledge of the basics of cybersecurity, etc. For teenagers and senior pupils, the methodology of psychological diagnostics should include an assessment of the competence to manage their emotional state when using digital educational platforms, social networks, online games, self-regulation skills of online behavior, and the ability to analyze cyber risks. It is also important that the methodology is understandable for teachers and parents, who will be able to use the diagnostic results for their own purposes to improve the quality of education and upbringing.

Thus, according to the results of the conducted research using the questionnaire “Diagnostics of the digital socialization level of adolescent (13-15 years old) in an educational” (author-compiler A.S. Irgaliyev) among teenagers of urban and rural school of the West Kazakhstan region, we see that the average level of digital socialization prevails in the sample. These indicators determine the need for comprehensive psychological work to differentiation a culture of behavior in the digital space, skills for the creative use of digital technology, the ability to think critically when working with media sources, instill of emotional self-control and self-regulation on on-line communication.

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