



Information society and its impact on personality development

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Abstract

The purpose of the study is to develop and test the original model which illustrates the development of personality in the information society. The study involved two Russian universities, higher educational institutions of the Arab Emirates and Kazakhstan. A total of 400 students participated in the research. The experiment consisted of three stages: introductory, experimental, and final. At the introductory stage of the study, the influences of the information society on the development of human personal qualities were analyzed. At the experimental stage, the original model which illustrates the development of personality in the information society was developed and implemented. At the final stage, the students were surveyed in accordance with the original methodology for the use of the capabilities and resources of the information society for personality development. After the implementation of the model, the number of students using the capabilities of the information society for personal development, the development of professional skills, and maintaining and strengthening health increased by 18.5%, 18.7%, and 10%, respectively. The practical value of the scientific research results relates to the possibility of using the questionnaires and models of personality development in the context of the information society in the higher education system of Russia, the Arab Emirates, Kazakhstan, and other countries. The model described in the study is relevant in the context of the transfer of the educational process in higher education to a distance format and the growing social isolation of an individual caused by the coronavirus pandemic.

Keywords Information society · Personality development · Distance learning · Social isolation · Education · Higher education · Virtual digital era · Information technology

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1 Introduction

Today people live in the digital era characterized by dramatic virtual and digital transformations as more and more human activities require the use of information technologies. The twenty-first century society is an information society that poses new challenges to an individual. On the one hand, the information society opens up new opportunities for learning, development, communication, and on the other hand, it makes each member of the society experience the lack of real live communication, entails degrading personality changes caused by the uncontrolled introduction of information technologies into all spheres of social life. The most important present-day task of the society is to create conditions to provide every person with the opportunity to choose a format of work, study, or activity that would allow them to make the most of the positive aspects of the information society in order to develop their personality and mitigate negative trends inherent in the new society.

1.1 Literature review

It is recognized by scientists that the future of the society, human activity, learning and development is dependent on a digital component. Modern education aims to teach a person to use information resources, to develop appropriate competencies and the ability to live in a new information space (Moiseev et al., 2020). According to researchers, the major characteristic of the information society is a high level of education, the value of knowledge, and information culture of a person as a key factor in professional activity (Nepsha et al., 2020).

Researchers are engaged in the search for and the determination of those skills and patterns that a person needs to live and work in the information society (Allan & Chisholm, 2008; Castells, 2010). Today, the informatization of education is considered as the key aspect of its development (Fedorenko et al., 2019), and education is the most important aspect of human development (Paul et al., 2017). One of the modern models of education is the so-called media-based learning, which is considered as a process of personal development with the help of a media resource (Iogolevich et al., 2019; Tyurina, 2019). There are various approaches and models based on which personality development in the information society is considered. Thus, in some studies, the modern information society is considered from the perspective of the information ecology approach. The approach aims to determine the place of a person in the system of person-society-ecosystem relationship and to study the prospects of a humanistic approach to the subject-object relationship in the communication space of the information society (Ivlev et al., 2016).

According to scientists, digital literacy is the most important skill of a modern information society member (Sparks et al., 2016); researchers are studying the influence of the information society on the intellectual capital of a nation (Voronkova & Kyvliuk, 2017) and highlight the need for self-development regardless of age in the context of informatization and globalization of education (Kassymova et al., 2018; Mosco, 2017).

Modern scientists are engaged in the development of effective strategies for the development of education in an information society (Boguslavskii & Lelchitskii, 2016), introduce new concepts, such as “noospheric thinking”, which is determined by the sphere of reason, morality and justice (Voronkova, 2016). Based on empirical research, scientists have found that education is a factor affecting the formation and development of a creative personality. Thus, the new person-society-education system relationship should be taken into account as society should have the necessary and sufficient resources to unlock the creative potential of a person (Nikitenko, 2018).

When analyzing the major trends in the modern information society development, scientists focus on the positive and negative aspects of the influence of the information society on an individual; this is due to the fact that the key negative aspects of the information society are the loss of individuality, a decrease in the general level of culture, dehumanization due to the long-term social isolation (Asmolov & Asmolov, 2019), changes in human evolution (Lukov, 2018), psychological disorders (cyber-addiction, Internet addiction, hacking) (Kravchenko, 2019).

At the same time, it should be noted that a person is able to adapt to the digital environment, which allows reducing the negative influences by creating an education system that meets the requirements of the time (Pushkareva, 2016) as the educational environment directly affects personality development (Terekhova, 2017). Researchers agree that the problems associated with the crisis of humanism should be solved through a tolerant dialogue (Selin et al., 2016), and favorable conditions for the successful development of personality on an ethnic, national, international and civilizational scale should be created (Pirozhkova, 2018).

A member of the twenty-first-century society often encounters everyday life woes; the key to the solution of these problems is studying the characteristics of the society, which allows a person to use the complexity of the information society for their own development purposes (Kostina, 2018).

Most studies consider the impact of information technologies on personality development (Yakovin & Myltasova, 2017), in particular on the spiritual and moral development of an individual (Pashkov, 2016). Scientists establish a fact of the transformation of human value priorities in the information society, the renewal of a number of contradictions caused by the immaturity of the new society and the inability of people to adapt to new information realities (Naumova & Garanina, 2019); they point to the consequences of global informatization and computerization of society (Soldatova & Rasskazova, 2017), consider the need to improve the efficiency of education as a means of self-expression and self-realization to achieve compliance of a particular specialist with the requirements of the new information society (Feoktistova & Krasovskaya, 2016). This can be achieved by the use of virtual and augmented reality technologies, which will allow training in virtual environments that cannot be visualized in the physical classroom, such as access to virtual laboratories, visualization of machines, industrial installations. The vast capabilities of available virtual technologies will break the boundaries of formal education (Martín-Gutiérrez et al., 2017).

Within the development of the information society in the United Arab Emirates, the integration of technologies in education is being discussed (Almekhlafi

& Almeqdadi, 2010); the effect of information and communication technologies and education on strengthening technology readiness is being studied (Alfaki & Ahmed, 2013); e-government technologies (Al-Khoury, 2012) and the leadership in efficient IT projects are being successfully implemented (Randeree & Ninan, 2011).

The common features of the studies discussed above are the recognition of the fact of the introduction of information technologies into all spheres of public life, the transformation of the relationship between the person and society, the availability of great opportunities for learning and personality development in an information society, as well as leveling of personality traits, dehumanization, and a decrease in the moral and spiritual personality development. Taking this into account, the task of education in the information society is the development and implementation of the models that will allow the person to make the most of the benefits of informatization to develop and mitigate the negative trends related to the virtualization of public relations.

1.2 Problem statement

The analysis of the scientific sources creates the need to study the problem of the influence of the information society on personality development.

The purpose of the research is to develop and test an original model, which illustrates the development of personality in the information society.

The hypothesis of the research relates to the fact that a well-developed model of personality development in the information society allows the person to make the most of the benefits of informatization to promote their personality development and mitigate the negative trends related to the virtualization of public relations. It is necessary to trace the relationship between the information society and its influence on the development of its members.

The research tasks are as follows:

- to analyze the problem of the development of the information society and its impact on the individual;
- to develop and test an original model, which illustrates the development of personality in the information society.
- to compare the data obtained with the foreign experience and determine the common and distinctive features;
- to draw conclusions about the effectiveness and further feasibility of the original model, which illustrates the development of personality in the information society.

The scientific novelty of the research is the development of the original model, which illustrates the development of personality in the information society, as well as the original questionnaire to determine the influence of the information society on personality development.

2 Methods and materials

2.1 Research design

The study involved two Russian universities (Moscow State Technical University of Civil Aviation, Orenburg State University), higher educational institutions of the United Arab Emirates and Kazakhstan (Aldar University College, M. Dulati Taraz State University).

This is an empirical psychometric study that uses a quantitative approach and a specialized questionnaire; sample data are evaluated using descriptive statistics.

The approach for the formation of the questionnaire and statistics assessment is based on a holistic view of mental activity. The components of personal development in a digital environment identified by the authors are to one degree or another involved in the daily activity of all participants. Research shows that in any set of psychological traits or among the components of the psyche, there are always dominant traits (DeVellis, 2016). The questionnaire was formed on the basis of participants' assessment of their daily activities; the component with the most points was considered dominant. The four scales presented below were formed in accordance with the studies on personal development (DeVellis, 2016; Dweck, 2017).

The experiment consisted of three stages: introductory, experimental, and final.

At the introductory stage of the study, the influences of the information society on personality development were analyzed based on the developed questionnaire. The survey was conducted among students. The questionnaire that aims to determine the use of information society resources by students consists of questions that can be grouped into four scales: the development of personal qualities; the development of professional skills; the development of interpersonal relations and the arrangement of routine activities; health maintenance. These are the components of personality development in the information society.

The questionnaire consists of 20 questions. Each question implies a single choice of the answer.

The number of points is calculated by each scale. The highest score is 18. The results are interpreted as follows:

- on the scale of the development of personal qualities 1 point is given when 1c, 2d, 3c, 4c, 5c, 6a, 7c, 8b, 9b, 10a, b; 11c, 13d, 14a, d; 15b, 16a, 18c;
- on the scale of the development of professional skills 1 point is added if the answers are as follows: 1a, d; 2a, 3d, 4b, 5a, 6b, 7a, b; 8a, 9a, 11b, 13a, 15a, 16b, 17d, 19c, d.
- on the scale of the development of interpersonal relationships and the arrangement of routine activities 1 point is scored when 1b, 2c, 3a, 4a, 5b, 6c, 7d, 8c, d; 9c, 10c, d; 11a, 13c, 14c, 15c, 16c, 18a;
- on the scale of health maintenance 1 point is added if the answers are as follows: 2b, 3b, 4d, 5d, 9d, 12a, b; 15d, 16d, 17a, b, c; 18b, d; 19a, b; 20a, c.

The scale on which the respondent scored the highest number of points is considered the development means used by the respondent in the information environment. This can be the development of personal qualities, the development of professional skills, the development of interpersonal relations and the arrangement of routine activities, health maintenance.

To determine the reliability of the questionnaire, the Cronbach Alpha method was applied, in the course of which the series of answers for each participant were compared separately in the general aggregate of all the answers to the questions during the first and repeated questioning. As a result, the value $\alpha=0.873$ was obtained. The internal consistency and reliability of the questionnaire can be considered sufficient for practical research. The validity of the research instrument can be confirmed by the similarity of values distribution obtained in this study on each of the four scales corresponding to personal development factors with the results obtained in other studies using the same scaling methods (Dweck, 2017; Hill & Pargament, 2017; Moiseev et al., 2020) (construct validity). Additionally, respondents' answers were assessed regarding their correspondence to the study problem. The assessment was carried out 2 weeks after the completion of the final stage of the study for each question, for individual scales and for the entire survey as a whole. The assessment was carried out on a 5-point Likert scale ("1"—completely inconsistent with the object under study; "5"—completely consistent with the object under study). Average scores were obtained on the scales: the development of personal qualities—4.44; the development of professional skills—4.52; the development of interpersonal relations and the arrangement of routine activities—4.32; health maintenance—4.28; for the test as a whole, the average score is 4.31.

At the experimental stage, the original model which illustrates the development of personality in the information society was developed and implemented. The model was introduced in the period of the coronavirus pandemic, when distance education, teleworking, and social isolation became very common.

At the final stage, the students were surveyed in accordance with the original methodology for the use of the capabilities and resources of the information society for personality development.

The questionnaire is closely related to the proposed model and fully reflects its content. Accordingly, the data on the reliability and validity of the questionnaire are fully consistent with those for the model (Fig. 1).

2.2 Sample study

The research involved Moscow State Technical University of Civil Aviation, Orenburg State University (Russia), Aldar University College (the Arab Emirates), M. Dulati Taraz State University (Kazakhstan). The experiment lasted for six months (September 2019—March 2020). The survey took place remotely. With a confidence level $p=0.5$ adopted for the study, the statistical reliability of the sample for each of the universities where the study was conducted is at least 2.16. Thus, the sample can be considered representative. The study participants were selected by random sampling. The indicated age limits were not a pre-formulated rule for the sample. The



Fig. 1 The developed model of the personality development in the information society

age of the participants in the already randomly formed sample was in the range of 18–22 years. For research purposes, gender, age, social factors, etc. were not significant. The selection of participants was carried out using open lists of students studying at these universities; all participants received an invitation in advance; all those invited gave their consent to participate in the study.

2.3 Intervention

The study provided for a certain level of interference in the educational process of the university. The educators gave us time to do the research.

2.4 Ethical issues

All study participants were informed about the objectives of the study. They took the study positively and had no objection. The anonymity of participation was guaranteed by the use of specially generated random e-mail addresses, with the help of which the completed questionnaires were sent and received. No personal data were collected, processed or stored during the preparation of the study.

2.5 Statistical analysis

The study involved 400 students (200 students from Russian universities), 97 students from the Arab Emirates, and 103 students from Kazakhstan universities. Google forms were used to survey the participants. The results of the questionnaire were processed in MS Excel. The results of the survey are given in the table.

2.6 Research limitations

The age of the respondents is 18–22 years old. The research was carried out as part of the educational process and scheduled. The limitations are associated with the lack of analysis of individual significant factors that can affect personal development in the modern digital environment. Besides, for the study, the methods of descriptive statistics were used as the basis for further correlation and factor studies of this topic. Since the identification of individual factors of personality development in the environment of modern technologies is still a problematic issue, this is also a limitation of the study.

3 Results

At the experimental stage, the original model which illustrates the development of personality in the information society was developed and implemented. It was developed in accordance with each personality development component identified based on the questionnaire that determines the use of the information society resources by students. The students are offered activities aimed at personality development in the context of distance learning and social isolation as the conditions of living in the information society.

After the implementation of the model, the students were surveyed in accordance with the original methodology to determine the use of the information society resources by students. The comparative analysis of the data of the introductory and final stages of the experiment is shown in Table 1.

Table 1 shows that before the introduction of our model, first-year students in Russia used the capabilities of the information society for the development of personal qualities (6.25%), the development of professional skills (8.3%), the development of interpersonal relations and the arrangement of routine activities (75%), health maintenance (10.45%). The second-year students from Russian universities preferred to use the information resource for the development of personal qualities (2%), the development of professional skills (4%), the development of interpersonal relations and the arrangement of routine activities (76%), health maintenance (18%). The third-year respondents from Russian universities demonstrated the following result: the development of personal qualities (7.7%), the development of professional skills (25%), the development of interpersonal relations and the arrangement of routine activities (40.4%), health maintenance (9%). Graduate students of Russian

Table 1 Comparative analysis of the results of the questionnaire aimed at determining the use of the information society resources by students

Research stage	The components of personality development in the information society				Health maintenance	Total number of respondents
	The development of personal qualities	The development of professional skills	The development of interpersonal relations and the arrangement of routine activities			
Russia						
Moscow State Technical University of Civil Aviation						
Course year 1						
Introductory stage	3	4	18	1	26	
Final stage	6	8	10	2	26	
Course year 2						
Introductory stage	0	0	18	5	23	
Final stage	6	6	6	5	23	
Course year 3						
Introductory stage	1	3	19	5	28	
Final stage	7	7	7	7	28	
Course year 4						
Introductory stage	1	3	19	2	25	
Final stage	4	9	5	7	25	
Orenburg State University						
Course year 1						
Introductory stage	0	0	18	4	22	
Final stage	3	5	7	7	22	
Course year 2						
Introductory stage	1	2	20	4	27	
Final stage	7	9	6	5	27	

Table 1 (continued)

Research stage	The components of personality development in the information society					Total number of respondents
	Number of respondents	The development of personal qualities	The development of professional skills	The development of interpersonal relations and the arrangement of routine activities	Health maintenance	
Course year 3						
Introductory stage	3	7	7	7	7	24
Final stage	9	11	4	4	0	24
Course year 4						
Introductory stage	2	3	20	20	0	25
Final stage	8	8	6	6	3	25
The United Arab Emirates Aldar University College						
Course year 1						
Introductory stage	0	0	22	22	3	25
Final stage	4	6	12	12	3	25
Course year 2						
Introductory stage	0	2	19	19	3	24
Final stage	5	7	8	8	4	24
Course year 3						
Introductory stage	3	6	17	17	0	26
Final stage	9	12	5	5	0	26
Course year 4						
Introductory stage	3	6	11	11	2	22
Final stage	8	10	1	1	3	22

Table 1 (continued)

Research stage	The components of personality development in the information society					Total number of respondents
	Number of respondents	The development of personal qualities	The development of professional skills	The development of interpersonal relations and the arrangement of routine activities	Health maintenance	
Kazakhstan						
M. Dulati Taraz State University						
Course year 1						
Introductory stage	1	2	25	0	28	
Final stage	6	7	18	5	28	
Course year 2						
Introductory stage	2	4	19	1	26	
Final stage	8	9	4	5	26	
Course year 3						
Introductory stage	3	3	12	3	24	
Final stage	9	6	4	5	24	
Course year 4						
Introductory stage	2	1	20	2	25	
Final stage	9	5	6	5	25	

universities that participated in the experiment use the resources and capabilities of the information society to develop personal qualities (24%) and professional skills (12%), to establish interpersonal relations and arrange routine activities (60%), as well as to maintain health (4%).

After the implementation of the model developed in the study (Fig. 1), the number of first-year students from Russian universities using the capabilities of the information society for personal development amounted to 18.6%, for the development of professional skills—27%, the development of interpersonal relations and the arrangement of routine activities—35.8%, health maintenance—18.6%. The second-year students from the Russian universities involved in the experiment use the information society resources for personal development (26%), the development of professional skills (30%), the development of interpersonal relations and the arrangement of routine activities (24%), health maintenance (20%).

At the final stage of the study, it was found that the third-year students rely on the capabilities of the information society for personal development (30.8%), the development of professional skills (34.6%), the development of interpersonal relations and the arrangement of routine activities (34.6%), health maintenance (0). Russian graduates demonstrated the following results at the final stage of the experiment: the development of personal qualities—24%, the development of professional skills—34%, the development of interpersonal relations and the arrangement of routine activities—22%, health maintenance—20%.

In general, after the experiment, the number of Russian students using the resources of the information society for the development of personal qualities increased by 15%, for the development of professional skills—by 19%. At the same time, the number of students who use the possibilities of the digital era to develop interpersonal relations and arrange their routine decreased by 34%. This is due to the fact that the implementation of the model (Fig. 1), as well as distance learning and social isolation in connection with the pandemic, allowed students to test and confirm the broad capabilities of the information society, which are not reduced to interpersonal contacts and everyday life but become a global value. The number of students using the resources of the digital age of to maintain health has hardly changed.

At the introductory stage of the research, it was found that the first-year students from the University of the United Arab Emirates never used the capabilities of the information society for the development of personal qualities and professional skills. Only 88% of the respondents used the information society resources for the development of interpersonal relations and the arrangement of routine activities, and 12% of the students—for health maintenance. The second-year students also did not use information resources to develop personal qualities. They preferred to use the resources of the information society for the development of professional skills (8.3%), the development of interpersonal relations and the arrangement of routine activities (79.2%), health maintenance (12.5%).

The third-year students from the University of the United Arab Emirates demonstrated the following results: the development of personal qualities—11.5%, the development of professional skills -23%, the development of interpersonal relations and the arrangement of routine activities—65.5%. None of the students considered it feasible to use the resources and capabilities of the information society in order to

maintain health. Graduate students used the resources and capabilities of the information society to develop personal qualities (13.6%) and professional skills (27.2%), to establish interpersonal relations and arrange routine activities (50.2%), as well as to maintain health (9%).

After the implementation of the model developed in the study (Fig. 1), the number of first-year students from the Arab Emirates using the capabilities of the information society for personal development amounted to 16%, for the development of professional skills—24%, the development of interpersonal relations and the arrangement of routine activities—48%, health maintenance—12%. The survey showed that the second-year students from the United Arab Emirates use the information society resources for personal development (21%), the development of professional skills (29%), the development of interpersonal relations and the arrangement of routine activities (33%), health maintenance (17%). At the final stage of the study, it was found that the third-year students rely on the capabilities of the information society for personal development (34.6%), the development of professional skills (46%), the development of interpersonal relations and the arrangement of routine activities (19.4%). None of the students considered it feasible to use the resources and capabilities of the information society in order to maintain health. At the final stage of the experiment, the graduates from the University of the United Arab Emirates demonstrated the following results: the development of personal qualities—36.4%, the development of professional skills—45.5%, the development of interpersonal relations and the arrangement of routine activities—4.5%, health maintenance—13.6%. On average, at the final stage of the study, the number of Arab students using the resources of the information society for the development of personal qualities increased by 20.7%, for the development of professional skills—by 22.3%. In addition, the number of respondents using the advantages of the information society exclusively for interpersonal communication and solving everyday problems has significantly decreased—by 44.5%. However, the number of students using the resources of the digital age in order to maintain health increased by 2.3%.

Before the introduction of our model, first-year students from Kazakh universities used the capabilities of the information society for the development of personal qualities (3.6%), the development of professional skills (7.1%), the development of interpersonal relations and the arrangement of routine activities (89), health maintenance (0%). The second-year students from Kazakhstan preferred to use the information resource for the development of personal qualities (7.7%), the development of professional skills (15.4%), the development of interpersonal relations and the arrangement of routine activities (73.1%), health maintenance (3.8%). The third-year students from the University of Kazakhstan demonstrated the following results: the development of personal qualities—11.5%, the development of professional skills—11.5%, the development of interpersonal relations and the arrangement of routine activities—65.5%, health maintenance—11.5%. Graduate students used the resources and capabilities of the information society to develop personal qualities (8%) and professional skills (4%), to establish interpersonal relations and arrange routine activities (80%), as well as to maintain health (8%).

After the implementation of the model developed in the study (Fig. 1), the number of first-year students from Kazakhstan using the capabilities of the information

society for personal development amounted to 21.4%, for the development of professional skills—25%, the development of interpersonal relations and the arrangement of routine activities—35.6%, health maintenance—18%. The survey showed that the second-year students from Kazakhstan use the information society resources for personal development (30.7%), the development of professional skills (34.6%), the development of interpersonal relations and the arrangement of routine activities (15.5%), health maintenance (19.2%).

At the final stage of the study, it was found that the third-year students rely on the capabilities of the information society for personal development (37.5%), the development of professional skills (25%), the development of interpersonal relations and the arrangement of routine activities (16.7%), health maintenance (20.8%). At the final stage of the experiment, Kazakh graduates demonstrated the following results: the development of personal qualities—36%, the development of professional skills—20%, the development of interpersonal relations and the arrangement of routine activities—24%, health maintenance—20%.

In general, after the experiment, the number of Kazakh students using the resources of the information society for the development of personal qualities increased by 23.7%, for the development of professional skills—by 19.8%. At the same time, the number of students who use the possibilities of the digital era to develop interpersonal relations and arrange their routine decreased by 54%. The number of students using the resources of the information society in order to maintain health increased by 11%.

In general, the educational institutions that we analyzed are characterized by an increase in the number of students using the resources of the information society for personal development (by 18.5%), the development of professional skills (by 18.7%), health maintenance (by 10%). There is a significant decrease in the number of respondents using the tools and advantages of the information society for the development of interpersonal relations and the arrangement of routine activities (by 41%).

4 Discussion

The studies similar to ours address the use of the information society capabilities for educational purposes. The authors of one of these studies have successfully and effectively implemented the integration of new knowledge, the availability of information technology and computer equipment, the professionalization and computerization of education. The study aimed to develop the structure and content of the information educational environment at the university based on geoinformation technologies. The assessment system of the effectiveness of the information educational environment was also adapted and an empirical study of the quality of the information educational environment at the university was carried out (Levina et al., 2017). However, the model of the use of information technologies described in this study is aimed exclusively at the educational activities of a technical nature. We propose a model that involves the integration of various components of personality development in addition to learning.

Another study is focused on the significance of the penetration of the Internet and social networks in the life of a modern person in the context of the information revolution of the twenty-first century. This study confirms that the Internet makes people's lives dynamic, active and innovative. The research is practice-oriented as it demonstrates how the resources of the information age can be used for a practical purpose—the development of self-control. During the experiment, social networks made it possible to create a city brand, to determine its attractiveness when choosing a city to study, work and live (Cherkasov et al., 2019; Ermakova & Sukhovskaya, 2020), that is, the information society has become a means of marketing. The experiment aimed to develop creativity and implement interpersonal contacts; however, the other components of personality development, proposed in the described model, were omitted here.

There was an interesting experiment related to the use of media-based learning in the context of personality development with the help of a media resource. This is an ambitious experiment aimed at the development and implementation of the communicative potential development model based on media resources. But this scientific intelligence relies on the communicative aspect of an information resource. A positive aspect of the experiment is the development and implementation of electronic textbooks based on media texts for learning foreign languages (Tyurina, 2019). The model also has a communicative component that is considered separately from other components of personality development. Development of interpersonal relations and the arrangement of routine activities, as the research results show, are among the most significant determinants of personal development in the digital environment.

The extensive use of the information society resources is noted in the study aimed at determining the communicative activity of students on the basis of media-based learning approaches. The respondents confirmed the use of Internet resources to deal with their personal space and noted the convenience of information technologies; they managed to use these technologies for self-development, in particular, to create their own image. The authors of the study summarize that information technology helps to remove barriers to interpersonal communication. Moreover, students note the convenience of the Internet for self-development and self-presentation through cognition and creation of new images (Iogolevich et al., 2019). Compared to our research, the focus of this study is narrow—the emphasis is placed on communication and self-presentation. The study offers a number of other components of personality development, including the development of personal qualities, professional development, and physical activity as attributes of the twenty-first century person. A development model is presented that takes into account the development of a personality, its external (professional) activity, and concern for one's health.

An empirical study aimed at tracing the influence of the information society on social and professional illusions being formed in the modern information society is quite justified. The study found that social and professional illusions arise as a result of the manipulation of human consciousness in the information society. Scientists point out that social and professional illusions allow the expansion of individual consciousness and successful interaction with the information society (Ignatiev, 2017). The similarity of this study with the present one is its correlation with the

components of the proposed model: professional development and interpersonal communication.

The scientific research, which confirms that different countries and continents are characterized by different approaches to the development of the information society and personality, is of practical value. For example, in African countries, even the most digitalized societies are affected by demographic, socio-economic, and cultural factors, such as ethnicity, income, education, and gender. These trends highlight the need to develop strategies for bridging the digital divide and integrating South Africa in the information society (Bornman, 2016).

We propose the use of the information society resources for teaching students; however, in the United Arab Emirates, this practice has been introduced to train teachers. In the United Arab Emirates, an alternative model of teacher training was developed and implemented based on the information society capabilities. Thus, the teachers were trained to use information and communication technologies. The experiment involved 2,500 teachers. The results of the study confirmed significant changes in the professional development of teachers (Makrakis, 2005).

To study the global patterns of the Internet use and the complex interactions between technology, culture and identity, a study that analyzes online communication and attitudes towards the Internet as a means of social interaction between university students in the United Arab Emirates has been conducted. The research results have revealed that the Internet can significantly counteract social isolation and gender segregation, and, at the same time, serve as a mechanism to reinforce the pre-existing norms in the new virtual communities (Sokol & Sisler, 2010). One of the aspects of considering the capabilities of the information society in our experiment is the development of interpersonal relations and the arrangement of routine activities, which correlates with the experience described above.

The present paper expands the concept of the possibilities of personality development in the information society, the use of the capabilities and resources of the digital era for personal, professional, communicative, and physical development of the student.

5 Conclusions

The study describes the original questionnaire that aims to determine the use of the information society resources by students and the original model of personality development in the information society.

After the implementation of the model, the number of students using the capabilities of the information society for personal development, the development of professional skills, and maintaining and strengthening health increased by 18.5%, 18.7%, and 10%, respectively. There is a significant decrease in the number of respondents using the tools and advantages of the information society for the development of interpersonal relations and the arrangement of routine activities (by 41%). This is due to the fact that the implementation of the model, as well as distance learning and social isolation in connection with the pandemic, allowed students to test and

confirm the broad capabilities of the information society, which are not reduced to interpersonal contacts and everyday life but become a global value.

The practical value of the scientific research results relates to the possibility of using the questionnaires and models of personality development in the context of the information society in the higher education system of Russia, the Arab Emirates, Kazakhstan, and other countries. The model described in the study is relevant in the context of the transfer of the educational process in higher education to a distance format and the growing social isolation of an individual caused by the coronavirus pandemic.

The scientific value of the study is due to the fact that it lays the groundwork for numerous scientific discussions about the possibilities, ways, problems, and prospects of personality development in the digital era in the context of the total introduction of distance learning and the promotion of social distancing as a necessary measure for maintaining health.

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