The Role of Smartphones in the Life of Modern Russian Pupils and Students

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ABSTRACT

The article is devoted to the study of the needs of modern schoolchildren and students in the daily use of smartphones. Today, considering the emergence of people's dependence on telephones is an important topic in international discourse and generates a lot of controversy and controversy. The aim of the study was to study the importance of mobile phones for modern young people, in particular students of schools, secondary specialized and higher educational institutions, as the most connected and progressive representatives of society in the field of gadgets.

Keywords: smartphone, social network, addiction, internet, time, use.

1. Introduction

Today the inhabitants of the planet are direct observers of the confirmation of the law of acceleration of history. In ten years in the twenty-first century, several times more events take place than in ten years, for example, in the fifteenth. Progress is moving inexorably forward, forcing the entire population of the Earth to adapt to it. At the same time, those who refuse to accept the new norms run the risk of being outcasts in modern society. Failure to adopt modern technology contributes to the emergence of difficulties even in the most mundane areas of our lives. Therefore, the ability to accept and understand constantly updated technologies is a modern criterion for adaptation.

Today, humanity does not have the problem of survival in a constantly changing environment. People are trying not only to survive, but to provide the most comfortable living conditions around them. It cannot be denied that many strive to study the phenomena that surround us, which are still not understandable to the scientific community, to spiritual development, to prevent global environmental catastrophes, to save others, to cognize oneself and the world or gain experience. But still, the acquisition of comfort - psychological, material, spiritual, today is the goal of human life.

One of the main means of providing comfort is a smartphone, a mobile communication device with the ability to perform various tasks. With its appearance, people began to be in constant contact with each other, not directly, but its ability makes people's lives more peaceful. We can always call or write a person to find out about his health or whereabouts. This is a definite advantage, especially for parents. And with the advent of the mobile Internet, the phone has also become an endless database that stores absolutely any information from scientific literature to culinary recipes.
Today, there are more than 4.3 billion smartphone users in the world, which is 59% of the total population of the planet. At the same time, the availability of phones is becoming more and more every year - relatively inexpensive companies appear, offering customers the same range of opportunities as expensive ones. Therefore, the average age of smartphone users is decreasing every year. Even children aged 5-7 today have a mobile phone, which is primarily due to the desire of parents to be always in touch with the child. The smartphone is indeed a kind of controlling tool, but is its action limited to this function only?

For children, the desire to have their own mobile phone is due to the impossibility of contacting loved ones at any time, but the ability to use a smartphone as a means of entertainment. At the same time, entertainment in mobile phones means not only games as such, but also watching movies, TV series, videos on social networks. The entire online entertainment industry today is aimed at children and adolescents, a huge amount of content is created that is aimed specifically at an audience from 6 to 20 years old. It is the abundance of content that makes people want to constantly be on the phone, since you can first watch a movie, then play or sit on social networks. The ability to change the field of activity, without straining and having fun, leads to the emergence of serious addiction, which not only children, but also adults are exposed to.

Dependent behavior several decades ago was a narrowly pharmacological term, which implied the use of a drug to ensure human homeostasis. Today, addiction is a spectrum of diseases related to areas such as psychology, psychiatry, and addiction. Alcoholism, smoking and drug addiction are considered one of the most severe types of addiction in human society, since they are the most harmful to the human body. But in the twenty-first century, a completely new type of addiction has emerged - gadget addiction. Gadget addiction implies dependence on the use of modern electronic means of both communication and entertainment. But the greatest danger is associated with smartphone addiction - excessive psychosocial dysfunctional smartphone use, reminiscent of addictive behavior (Cho, W et al., 2013). This type of addiction has similar features with dependence on psychoactive substances, but at the same time it is distinguished into a separate group (Kuss D., Pontes H., & Griffiths M., 2018). At the same time, in recent years, another concept has been added to dependence on a smartphone - nomophobia. Nomophobia characterizes a person's fear of being left without a telephone for a long time. A particular manifestation is anxiety, which consists in the fear of being left without a mobile phone, losing it, missing a message or notification. Nomophobia gradually penetrates into other spheres of a person's life, is transformed and reinforced by other phobias. Smartphone addiction together with nomophobia form a disease that requires professional help from specialists.

More and more studies are devoted to the consequences of overuse of mobile phones every year. For children, using a smartphone for more than 1 hour without interruption contributes to a decrease in visual acuity, while daily abuse increases the risk of myopia (Wahyuningrum T. & Prameswari V. 2018). Until the age of five, it is worth completely protecting children from using gadgets. For students who are already formed in terms of physique, the use of smartphones mainly affects their mental health, since in the period from 16 to 24 a person has to face many difficult decisions, which can lead to depression (Twenge, J., 2017). But in the past few years, scientists have been talking about the development of the most dangerous, which are the result of the unrestricted use of gadgets, such as insanity, digital dementia, hyperactivity (Khmelevskoy, V., Ivanchenko, Kudashkina S., Shchedrin V.).

The smartphone is an accompaniment to modern schoolchildren and students not only during their holidays, but also in the educational process. Increasingly, you can see primary school students going to or from school and playing on the phone. From the outside, the picture seems terrifying - the child is completely immersed in virtual reality, even when he must acquire new knowledge and skills. For teenagers and students, the telephone is a way to quickly and comfortably change between lessons or couples. Students stop communicating with each other in their free time, it is much more interesting to spend time on social networks. At the same time, scientists have found that the lack of live communication practice leads to the loss of socialization skills (King, A. et al, 2013).

To date, there are no strict restrictions on the use of the phone, which should be adhered to in order to prevent dependence on the smartphone, but there are recommendations: Children under 5 years old should not be allowed to use gadgets, from 5 to 7 years - no more than 15 minutes a day, from 7 to 12 years no more than 20 minutes a day, from 12 to 16 - no more than 30 minutes a day, from 16 to 18 no more than one and a half hours, for adults - no more than 2 hours a day. Also, ophthalmologists recommend doing gymnastics for the eyes every 30 minutes of continuous work. These recommendations are not strictly approved, but if they are significantly exceeded, there is a risk of developing dependence.

According to statistics from studies conducted in 2016, more than 66% of Americans admitted to being dependent on a smartphone. In Europe, this figure was slightly lower and amounted to about 50%. Schoolchildren and college students are the most prone to addiction. Therefore, we decided to conduct a study to determine the time spent during the day on a smartphone by schoolchildren and students of Surgut, in order to draw up an actual picture of dependence on a smartphone by people of different ages. The purpose of our study was to compare the indicators obtained during the study with the recommended ones. We also looked at the most used services in which the subjects spend the most time.
2. Methodology

To conduct the research, we created an online survey in the Google Forms format. The main analysis criteria were gender, age, stage of education, time spent on the phone during the day and the demand for various services (Table 1).

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer options</th>
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</thead>
<tbody>
<tr>
<td>2. How old are you?</td>
<td>1. 7-10 2. 11-15 3. 16-18 4. 18-25 5. Other</td>
</tr>
<tr>
<td>4. If you are in school, what grade?</td>
<td>1. 1-4 2. 5-9 3. 9-11</td>
</tr>
<tr>
<td>5. If you are an open source student, what course are you on?</td>
<td>1. First 2. Second 3. Third 4. Fourth</td>
</tr>
<tr>
<td>6. If you are in a higher education program, which course are you on?</td>
<td>1. First 2. Second 3. Third 4. Fourth</td>
</tr>
<tr>
<td>8. Is your phone an important part of your life?</td>
<td>1. Yes 2. No</td>
</tr>
<tr>
<td>9. Do you need to use your phone every day?</td>
<td>1. Yes 2. No</td>
</tr>
<tr>
<td>13. For what purpose did you do this?</td>
<td>1. Preparation for the exam (important event) 2. To prevent dependence on the phone 3. Just to test yourself 4. Other</td>
</tr>
<tr>
<td>14. Please look in the settings of your phone, how much time on average over the last 7 days you spent on the phone (if this function is not available, write your guess).</td>
<td>1. 1-2 hours 2. 2-3 hours 3. 3-4 hours 4. 4-5 hours 5. 5-6 hours 6. 6-8 hours 7. more than 8 hours 8. Other</td>
</tr>
<tr>
<td>16. How long have you spent on YouTube?</td>
<td>1. I do not use this social network 2. 1-2 hours 3. 2-3 hours 4. 3-4 hours 5. 4-5 hours 6. 5-6 hours 7. 6-8 hours 8. more than 8 hours 9. Other</td>
</tr>
<tr>
<td>17. How long have you spent on TikTok?</td>
<td>1. I do not use this social network 2. 1-2 hours 3. 2-3 hours 4. 3-4 hours 5. 4-5 hours 6. 5-6 hours 7. 6-8 hours 8. more than 8 hours 9. Other</td>
</tr>
<tr>
<td>18. How much time did you spend at Likee?</td>
<td>1. I do not use this social network 2. 1-2 hours 3. 2-3 hours 4. 3-4 hours 5. 4-5 hours 6. 5-6 hours 7. 6-8 hours 8. more than 8 hours 9. Other</td>
</tr>
<tr>
<td>19. How much time have you spent on Instagram?</td>
<td>1. I do not use this social network 2. 1-2 hours 3. 2-3 hours 4. 3-4 hours 5. 4-5 hours 6. 5-6 hours 7. 6-8 hours 8. more than 8 hours 9. Other</td>
</tr>
<tr>
<td>20. How much time did you spend on Twitter?</td>
<td>1. I do not use this social network</td>
</tr>
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</table>
The survey took place over 7 days. The respondents took the survey in their free time and were not limited by the time frame. The survey contained 26 questions, 18 of which were single-choice, but the respondents had the opportunity to offer their own answer in all questions. Participation in the survey was anonymous and voluntary, so the respondents did not press additional written or oral consent.

192 people took part in the poll, of which 144 were men, 44 were women, two chose the “other” option. The respondents were students of the Salakhov Laboratory Gymnasium, students of secondary vocational and higher education departments of the branch of Tyumen Industrial University in the city of Surgut. In total, 16 schoolchildren, 60 students of the higher education department, 115 students of the secondary vocational school took part in the survey. Of the 16 students, seven are students in grades 5-9, eight are in grades 9-11. Of the 115 receiving secondary specialized education, 16 are freshmen, 17 are sophomores, 44 are third-year students, 38 are fourth-year students. Respondents enrolled in the tertiary education program were 22 freshmen, 34 sophomore, 2 third year and 2 fourth year. The average age of the respondents was 18-25 years old. All students are technical learners. Participation in the survey was anonymous and voluntary, so the respondents did not press additional written or oral consent.

The survey was aimed at identifying people who are potentially addicted to the smartphone, as well as the reasons for using a smartphone in daily life. It was important to know the opinion of the respondents themselves about their relationship with the telephone. Therefore, according to the results of the survey, we received both temporal characteristics and psychological ones. You used purpose, duration of use, ability to quit, and age of the respondent to assess smartphone addiction. Based on the survey results, we determined the average duration of daily use of the phone, the motivation for use, the most popular social networks and services, the willingness of respondents to completely abandon their smartphone.

3. Results
To study the use of smartphones by residents of different countries, world companies conduct various surveys every year. In 2017, Counterpoint Research’s Global Consumer Insights conducted a survey of more than 3,500 respondents from countries such as Mexico, Thailand, India, Germany, South Africa, Malaysia, Australia, China and
Japan. According to its results, approximately 24% of smartphone users spend less than 3 hours a day on mobile devices, while approximately 26% spend more than 7 hours a day. More than 62% of users use their smartphone as a means of entertainment, not for work or self-education. The time spent on a smartphone, according to researchers, depends on the age of users and the socio-economic state of the region.

In the spring of 2020, researchers from the UK calculated that the average person will spend about 34 years looking at a screen in their life, with all gadgets under the screen. Of 34 years, about a third will be using smartphones. 17% of 2,000 respondents admitted that they begin to feel anxiety if they do not use the phone for too long. These results are especially alarming given that the annual trend is only growing.

Based on the results of our research, 4 diagrams and 2 histograms were drawn up.

**Fig. 1. Diagram № 1 "Digital detox"**

**Fig. 2. Diagram № 2 "Duration of digital detox"**
**Fig. 3.** Bar chart № 1 “Average amount of time spent on a smartphone per day”

**Fig. 4.** Histogram № 2 “Time spent on various social networks”
- Speeding up communication
- The ability to get the necessary data at any time
- Place of work
- A means of obtaining new knowledge and skills
- Diverse entertainment in one place

*Fig. 5. Diagram № 3 "The value of the telephone for respondents"

- She is not

- I spend time on my phone consciously and don't see a problem with it

*Fig. 6. Diagram № 4 "Self-analysis of respondents for addiction"

According to the survey results, it follows that the majority of respondents at least once tried to give up using a smartphone (Figure 1). More than 50% did it for a fairly long period (Figure 2). This indicator reflects the awareness of the respondents. But according to histogram # 1, we can observe that about 70% of respondents spend more than 4 hours a day on their smartphones, with the majority of respondents spending more than 8 hours (Fig. 3). Spending this amount of time is an indicator of addiction. At the same time, there is no significant difference between the ages in spending time on a smartphone - both schoolchildren of grades 5-9 who passed the survey and students can spend more than 5-6 hours, but at the same time there are those who do 1-2 hours. The only difference is in the preference for this or that content.

Most of the time, respondents spend on the social network Vkontakte (Figure 4). This can be explained by the fact that this social network performs several functions at the same time: communication with classmates or...
classmates, listening to music and viewing records of various communities, which are the most popular types of communication for people in the Russian Internet space. Also a significant service for the respondents is YouTube - a platform that provides access to viewing and posting videos on various topics. Today, the Russian segment of YouTube is one of the few sites where there is relatively complete freedom of speech. Today on the service you can find political news, educational content, a variety of entertaining shows for both adults and children.

Despite the fact that the majority of respondents spend about a quarter of a day on the phone, they believe that they have no smartphone addiction and only 5% admit to it (Figure 6). In our time, modern schoolchildren and students still need to reconsider the time frame for using the phone, since many of them risk spending most of their lives looking at the screen.

4. Conclusions

This research method is convenient for carrying out, does not require money and contributes to obtaining a fairly reliable picture. This research can be conducted in any region and for any audience regardless of gender, age and social factors.

The topic of the study will remain relevant, since there is already an alarming tendency of an increase in the time spent on a smartphone. Also, further research on this topic will be relevant in the context of considering the growth and decline trends in the time spent over life for different age groups.

If today teenagers already spend more than 8 hours a day, then whether they can then stop, whether they can cope with the desire to constantly be in the online version of life, remains a question.

References