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### Psychology of Personality: Real and Virtual Context

# INTERNET COMMUNICATION: ACHIEVEMENTS AND THREATS

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### *Abstract*

The main trends in the development of Internet communication in the modern information space are considered. The growing role of the Internet and the network space on the positioning of people in society and communication is shown. The information received from the network makes it possible to be in a constantly changing information flow and contributes to adequate socialization. The importance of personal, age and professional characteristics in the formation of an individual style of information socialization and the filling of the content of personal pages in various social networks is shown. Both positive and negative components of Internet communication are considered. The data of the study on possible threats and protections in a situation of active Internet use are presented. The study used semi-structured interviews and focus groups. The respondents were both specialists in the field of IT technologies, and non-professionals who are active users of the Internet. The main fears, the reasons for my own vulnerability, as well as the specification of what or whom I am afraid of and who can help to avoid the danger, were studied. The results showed the similarities and differences of typical fears, depending on the degree of professional awareness of Internet threats. The level of professionalism shifts the sphere of threats from the personal to the financial field. At the same time, the danger of losing personal data as one of the main threats is considered by all users as one of the main.

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## 1. Introduction

### 1.1. Internet communication and information socialization

The problem of information technologies and their impact on all aspects of people's lives and activities is currently one of the leading for many scientific disciplines - from biology and physics, to cultural studies and sociology. This problem also occupies a great place in psychological research, with the leading role being given to electronic media, mainly the Internet. Internet communications and virtual interaction are especially significant in a modern transitive society. Communication can occur between people who are not only in different parts of the globe, but also in different time spaces.

The relevance of the study of information socialization is also associated with the fact that in the modern world the role of information and information impact on the motivation and behavior of people of all ages is constantly increasing. It was this fact that allowed scientists to talk about the emergence of the "information society" and the "information culture". In the context of the problem of the information society, the influence of the socialization impact (both positive and negative) of information, the characteristics of this effect on people of different ages living in different social spaces is currently being studied.

Since the data obtained in recent decades are extremely contradictory and ambiguous, the study of the specifics of Internet communication remains at the center of attention of researchers in different countries. Toffler's (1980) once arguably well-known thesis that not only and not so much information, but specific communication will become the semantic core of a new, informational era, today no longer needs proof. There is no doubt that the information received by people is related to their social perceptions, since attitudes affect, as a kind of "selective attention", the choice of both the source and content of the information. At the same time, the perceived information itself influences the existing system of concepts, changing and / or partially modifying it.

Of particular interest in this regard are the electronic media, both in terms of the method of presenting the material, and in terms of a deeper impact on the personality of the recipients (Bernd et al., 2006; Van Dellen & Hoyle, 2008). Today, issues related to the study of age and territorial characteristics of Internet communication and Internet preferences are being updated. In studies conducted in recent years, much attention is also paid to the analysis of the information space in terms of its impact on the social stratification of various, mainly youth, groups. This important factor of information socialization has not yet been sufficiently studied, although even a superficial analysis of TV users and such network communities as Facebook and VKontakte shows the presence of both age and social and regional differences.

In the works of Voiskunsky et al. (2014), Belinskaya (2013), Golubeva (2018) it is shown that over the past fifteen years, there has been a constant decrease in the age of "computer initiation" throughout the world. As noted by Voiskunsky et al. (2014) and Belinskaya (2013), this trend is also typical for Russian teenagers, and more and more teenagers are becoming active Internet users, not only in big cities, but also in regions and in small settlements.

Speaking about the process of information socialization, it is necessary to emphasize the importance of information resocialization that is, finding new ways and means of obtaining and working with information by mature and elderly people. This issue is of great importance from the point of view of their

vision of the world, their general socialization, as well as from the point of view of communication, interaction and conflicts of people of different age cohorts, who use and relate differently to print and electronic media.

## **1.2. Media and the Internet as a new development space**

Recent studies have convincingly proved that the media are becoming one of the leading institutions of socialization (Belinskaya, 2013; Golubeva, 2018; Marsinkovskaya, 2015). At the same time, over the past three years, the degree of criticality of adolescents and youth in relation to information obtained from TV has significantly increased. This criticality applies to all types of information - advertising, entertainment, news. At the same time, confidence in information received from the Internet has not diminished.

Another point that we need to pay attention to is that for a large group of teenagers and young people, the Internet is not only the entertainment, but also a way of obtaining information and even learning. This phenomenon has already touched even preschoolers who are actively starting to use lap-tops in the learning process. Scientists, parents and teachers note that preschoolers easily master sophisticated electronic technology; navigate the gaming computer space in educational and developmental programs. This proves the need for a close study of the influence of all types of information, as well as virtual methods of communication, on the mental development of modern people.

It Golubeva's (2018) research was showed that the choice of media and the information world of adolescents of the same age differ significantly among adolescents living in different countries. Personal communication for adolescents who have moved to a small town in Germany is one of the dominant values, unlike Russian children, for whom it is significant, but not the leading motivation and can be carried out in virtual space.

Numerous data also showed that a small settlement, regardless of the country, lags significantly behind big cities in the overall development of the information space. It is manifested in a smaller variety of choices and less access to the proposed information fields compared to megacities and affects information preferences and, accordingly, the content of information socialization of adolescents.

Of great importance for understanding the psychological characteristics of Internet communication and the psychological characteristics of Internet users are the works of Belinskaya (2013), in which, in particular, emphasizes that empirical data on the personality characteristics of active Internet users are extremely contradictory. Extremely significant is the fact that there is a lack of consistency between empirical data and estimates of the users themselves on the relationship between business, cognitive-informational and communicative motives for using the Internet. If researchers give the first place to information, then users prefer communications.

One of the most serious problems today is the study of the role of information and social spaces in the development of the personality of children and adolescents (Bernd et al., 2006; Martsinkovskaya, 2019). Territorial identity and the ratio of social and personal spaces have a great influence on all aspects of mental development, although the nature of this influence has changed somewhat in recent years. Particularly pronounced differences between the youth of megacities (primarily Moscow) and small cities are manifested in the content of needs, identity and attitude towards the media. The hierarchy of needs of

young people from the big city is dominated by career, self-realization, respect of others, while their peers from the small city are dominated by conformity, respect for traditions, happiness. There are differences in the content of identity among adolescents and youths living in small cities and big towns. For young people from a small city, social roles, group affiliation, reflexivity are priority, while for teenagers and young men from a big city, individual and personal qualities, their own independence and autonomy are important.

Extremely significant are the results showing that even compared to students, school-children are much more committed to the individualistic standard of life than to collectivism. At the same time, a small difference in the responses of older and middle-aged teenagers shows, firstly, the general tendency of the formation of an individual (individualistic) lifestyle, and secondly, the correspondence of this style to development goals, especially in older adolescents.

The materials available today allow us to conclude that the relevance of further research on the problem of information socialization is associated with the great potential of institutions and groups located in this field of socialization impact. No less important is the fact that many types of information can influence not only the lifestyle choices of children, adolescents and youth, but also their ideas about themselves and the world. That's why the emergence of fears associated with the expanding role of Internet communication in their lives must become one of the prominent investigations.

## **2. Problem Statement**

The question of the risks of active Internet use is considered today, as a rule, in the context of the problem of information security. It is easy to see that among this rather diverse and multilevel field of problems, issues related to the psychological safety of active users occupy a rather modest place. It should be also noted that empirical psychological studies of information security problems are of a pronounced age-related nature: they mainly relate to the problems of ensuring the physical and psychological safety of children and adolescents by teaching them the rules of safe behavior on the Web, preventing Internet addiction and preventing the risks of involvement in illegal activities (see, for example: Soldatova et al., 2017). The final result of such prevention is the formation of the so-called digital competence, which includes not only relevant knowledge, skills, but also the motivation and responsibility of use. Interestingly, that the researchers noted a certain mismatch of real and perceived threats of Internet use, as well as the presence of often unexpected intergenerational differences. Thus, the parent generation, unlike teenagers, is less responsible for Internet use, and adolescents are much less likely than their parents want to expand their knowledge and use skills.

From the point of view of perceived threats, the parent generation overestimates the threats of a technical and content nature, while adolescents note that they are more often faced with threats of a communicative type. It should also be noted that today the Russian Internet Development Fund has accumulated a large amount of data regarding information security problems, but all of them were obtained through quantitative research. The phenomenology of a person's experience of Internet threats and the description of their own actions in response to these threats, as a rule, remain outside the scope of such studies, especially when it comes to adult users. Of particular interest is the study of the differences between experiences of fears associated with everyday use among those who, due to their professional affiliation,

have sufficiently formed knowledge about real Internet threats, and those who, not being professionally connected with this area, are poorly informed about them. Obviously, attribute processes will also be different.

### **3. Research Questions**

This problem includes the following blocks of questions: 1. the objective security of information and its supporting infrastructures from accidental or deliberate influences; 2. protection of the rights of the owner and consumer of information; 3. a sense of personal security and safety of the subjects of receipt and dissemination of information.

### **4. Purpose of the Study**

- describe the similarities and differences of typical fears that arise in the current situation of Internet use, depending on the degree of professional awareness of Internet threats;
- find out the features of causal attributions of the feeling of one's own vulnerability / security during Internet use from IT professionals and active users;
- find out the nature of the attributions of the subjects of threat and protection from IT professionals and active users.

### **5. Research Methods**

- individual semi-structured interviews (each 1 – 1,5 hours long; all interviews were conducted face-to-face; all participants gave informed consent);
- focus groups, the guide of which was built on the same semantic blocks as the interview questions (the duration of each focus group was 1,5 - 2 hours).

The semantic blocks of interview questions and a focus group guide included: 1. questions aimed at clarifying the image of an active user from the point of view of respondents; 2. issues aimed at identifying basic fears and a general sense of vulnerability of respondents associated with active use; 3. questions clarifying the perceptions of respondents about the subjects of threats and subjects of protection in a situation of active use.

- 15 respondents participated in the interview, of which 7 were specialists in the field of IT technologies (programmers, back-end developers, graphic designers, 3D-modelers) with experience in the profession from 3 to 15 years, and 8 people represented areas of work that are not related to IT (psychologists, linguists, biologists), but who consider themselves to be active and competent users; the median age of respondents is 29, 7 years.

- 6 focus groups were held with a total number of 53 people; the participants of the 1-st focus group were specialists in the field of IT technologies (developers of mobile applications); 2 focus groups - future specialists in the field of IT technologies (senior students in programming); the participants of the remaining three focus groups were not related to the IT sector and were senior students and young specialists.

Interview and focus group texts were processed using the thematic analysis method.

## **6. Findings**

### **6.1. The image of the active user**

Common features in the image of an active user for professionals and non-professionals in the field of IT technologies are related to solving problems arising during the use: they attribute the ability to solve them quickly, independently and efficiently, regardless of the degree of their novelty. The difference is that non-professionals attribute to the active user the lack of fear of any difficulties and problems associated with use and the presence of some “intuitive” knowledge, while professionals believe that the high efficiency of the active user is based on his technical competence. Perhaps, age-related differences which characterize the image of an advanced user are also associated with this. Non-professionals see active user as primarily a young (up to 30 years) person, while professionals, noting the high speed of mastering technical skills in a younger generations, rather than themselves, nevertheless believe that activity in the development of Internet use does not depend on age, but rather is the result of certain personal qualities (perseverance and self-discipline). Interestingly, the respondents of both subgroups do not note the gender specificity of this image, which seems to reflect a really equal ratio of men and women in active use.

### **6.2. The main fears**

Both groups of respondents have a fear of intentionally stealing personal information, but if for IT professionals this is mainly financial information that cybercriminals can use for personal enrichment, then non-professionals connect fears with their personal correspondence, photos, contacts, suspecting such violation of the confidentiality with "anyone who might need it." At the same time, professionals, using self-defense measures, admit their possible insufficiency and recognize their vulnerability, unlike non-professionals. It is interesting that both subgroups of respondents consider their fears to be “optimal”, attributing the younger generation (than themselves) of the users more carelessness and the absence of any fears, and the older one - excessive caution and the presence of more negative emotional experiences, including “the life experience”. The second most frequent fear of respondents - the possibility of delayed use of “Internet tracks” left by them by subjects of various levels: from government to small blackmailers. The differences between the groups are that non-professionals are largely characterized by the fear of the global disappearance of the possibility of Internet use - due, for example, to technological disasters.

### **6.3. Attribution of the reasons for their own vulnerability**

The main difference between the subgroups is the nature of the causal attribution of their own vulnerability in an active use situation. For IT professionals, it has a pronounced internal character: regardless of the specifics of the fears (from fears to suffer from financial scammers to fears that their careless statements will be used by the authorities and special services of the country against them), they tend to attribute the reasons for their vulnerability to themselves. At the same time, the internal inconsistency of this position is interesting: objectively mastering various technological methods for protecting personal information, actively using them in everyday life and differentially perceiving various risks of active use, they nevertheless consider themselves ultimately defenseless, claiming that “if you have something to hide, it’s easier not to approach the computer”, “in order to defend oneself one must always be rational, but a person will always remain a weak link”. In contrast, non-professionals have an external

nature of attribution of the causes of their own vulnerability, believing that the main reasons for their insecurity are related to the malicious behavior of other people. It is interesting that, given the attribution of the causes of vulnerability to other age cohorts, the noted trends are amplified: IT professionals consider the younger and older generations vulnerable due to their correspondingly lower reasonableness and non-professionals because of their greater attractiveness to various scammers.

#### **6.4. Subjects of threats and subjects of protection**

It should be noted that when answering this block of questions, the respondents of both subgroups were almost unanimous. The most frequent answers about possible subjects of threats were indications of financial fraudsters and representatives of state authorities; other options (for example, companies with marketing tasks) were much less common. The answers to the question about possible subjects of protection in general reflected the willingness of respondents of both subgroups to attribute responsibility to themselves, provided that in the case of non-professionals the desire “to seek help from specialists”, which, however, was not specified in any way. Another difference was the high willingness of IT professionals to take responsibility for protecting the older generation of active users.

### **7. Conclusion**

The main trends in the spread of Internet communication is the expansion of the age range (both towards decreasing the age limit and increasing the number of users). Thus, it can be stated that both younger and older people become active users.

The geographical and professional range of active Internet users is expanding, while this group includes an increasing number of non-professional users for whom online communication is becoming one of the main ways of interacting with others.

A high professional level of Internet communication increases the internal locus of control both in Internet communication and in attributing its vulnerability. This phenomenon is associated mainly with professional and not age-related characteristics of users.

The level of professionalism shifts the sphere of threats from personal to financial. At the same time, the danger of losing personal data as one of the main threats of Internet activity is considered by all users as one of the main

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