Communication via the Internet as a modern social phenomenon

Eva Žiaková, Vladimír Lichner

Pavol Jozef Šafárik University in Košice

Abstract. The authors of this paper focus on communication via the Internet and define it as a modern social issue. Its aim is to provide a basic theoretical overview of the issues in question. They also bring their authors' research conducted on this topic in adolescents using the method of an electronically published questionnaire. The paper describes different perceptions of the characteristics of both personal and electronic communication among respondents according to the time spent on the Internet and according to whether they manipulate with their identity at the Internet. The authors also point to some of the characteristics of the Internet use and the possible pathological tendencies in adolescent respondents who are one of the most vulnerable groups in consequence of the daily use of the Internet.

Key words: communication via the Internet, Internet, social network

Komunikacja przez Internet jako współczesne zjawisko społeczne

Abstrakt. Autorzy niniejszego artykułu skupiają swoją uwagę na komunikacji internetowej, która jest przez nich rozpatrywana jako współczesne zjawisko społeczne. Artykuł omawia w ogólnych zarysach podstawowe teoretyczne aspekty poruszanych zagadnień. Prezentuje on również wyniki badań autorów, dotyczących występowania zjawiska komunikacji przez Internet wśród młodzieży, przeprowadzonych w oparciu o kwestionariusz opublikowany w wersji elektronicznej. Artykuł omawia, w jaki sposób respondenci postrzegają różnorodne aspekty komunikacji osobistej i elektronicznej w zależności od ilości czasu spędzonego w Internecie oraz tego, czy manipulują oni w Internecie swoją tożsamością czy też nie. Autorzy omawiają także wybrane aspekty użytkowania Internetu oraz patologiczne tendencje występujące wśród nastoletnich respondentów, którzy stanowią jedną z grup w największym stopniu podatnych na skutki codziennego korzystania z Internetu.

Słowa kluczowe: komunikacja przez Internet, Internet, serwis społecznościowy

Introduction

The Internet has been getting into the awareness of every human being in recent years. Out of the simple connection of computers serving to transmit short messages, it has become a global network interlinking many billions of devices within a few decades of development. The purposes of its use have also changed, and today its use is irreplaceable in every area of human enterprise. In connection with its use, recent years have witnessed a dramatic change of communication among people.

The presented paper may be described as a theoretical study which is to provide an overview of basic knowledge about the Internet, communicating via the Internet, but also its significant impact on users. Under this topic, we can recognize a deficit of information, which is why we have decided to summarize the findings of several authors to be introduced in this paper. These are complemented by the partial results of the authors' research, which we have implemented in this topic and which we offer in the second part of this paper.

Basic theoretical background

Social and psychological aspects of the Internet environment

According to the definition by Vybíral (2001)¹, the Internet "may be understood as an interactive social medium enabling the transfer of information through space in real time".

Today's young people are still the only generation that the Internet has accompanied basically throughout their life so far. The ever increasing number of people spend their time on the Internet, the number of connections to electronic social networks has also been on the rise. This is why the modern society could be called an on-line generation, and the Internet environment could be named a digital world where people connect, make friendships, make hobbies, receive, sort and distribute information, and share their thoughts².

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¹ In M. Dušková, M. Vaculík: *Psychologické aspekty on-line komunikácie prostřednictvím internetu na tzv. chatech*, "Československá psychologie" 2002, nr 46(1), p. 55.

² N. Vrabec: On-line generácia. Informácie, komunikácia a digitálna participácia mládeže v informačnej spoločnosti, Bratislava: IUVENTA, 2010.

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The Internet is a virtual space bringing independence and freedom, the loss of social constraints, it represents another dimension of communication among people and may be compared to life amidst words³.

Šmahel⁴ provides a comprehensive characterization of the virtual (online) environment based on the summarization of approaches of several authors, supplemented by the results of research conducted by him among adolescents. The virtual environment may thus be described by several characteristics.

Disinhibition ("environment without barriers") is based on the assumptions that inhibition is lost in the virtual space, anxiety in social situations is absent, the opinion of others is becoming less important, masks are put off, users are more open, more explicit. The author substantiated his theory of disinhibition by additional features which include *overcoming the anxiety* (less tension, disappearance of complexes. fading of fear), absence of sanctions, lack of self as a physical object and the possibility of terminating the contact. Another supporting fact is deindividuation that arises on the Internet (suppressing the individual characteristics of each of the members, leaving unknown properties, behaviour is unpredictable). The last component is anonymity, because users assume that in a virtual world they are completely anonymous. The author defines in this respect the objective anonymity and subjective anonymity. It is expected that subjective anonymity is at a much greater level than the real, objective one. Anonymity of the Internet is also supported by the research carried out by the Dutch and the German authors Utz and Krämer⁵, which shows that young people today publish a lot of information online, even that which is considered absolutely private by other people (especially by the previous generation). This defines the so-called privacy paradox (although users are aware of the dangers of the use of the Internet, they fear of being disclosed of their privacy, but they are also often willing to publish detailed information about themselves).

³ M. Dušková, M. Vaculík, op. cit., pp. 55–56.

In D. Šmahel: Psychologie a internet. Děti dospělými, dospělí dětmi, Praha: TRITON, 2003, pp. 13-36.

⁵ In S. Utz, N.C. Krämer: The privacy paradox on social network sites revisited. The role of individual characteristics and group norms, "Cyberpsychology. Journal of Psychosocial Research on Cyberspace" 2009, nr 3(2).

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Transference and projection in online environments – the Internet users project their feelings, fantasies, as well as their concerns in the persons with whom they spend their time on the Internet. The transference also affects filtering of the information that is received through the Internet, because one internally tends to information or friends who suit him/her, inconvenient information is suppressed. The problem with the virtual environment can be a transfer and projection into inanimate, virtual machines, or into the unknown and often dangerous persons whose conduct may be highly pathological.⁶

The Internet environment is currently linked to another interesting social phenomenon called "reverse socialization", where children often teach their parents how to use the Internet and the related facilities. Thus, parents may take over from their children certain patterns associated with the use of the Internet, even the vocabulary related to virtual communication.⁷

According to Suler (2005), one may generally talk about a few basic features of the online space affecting the psychological aspects of the users' personalities, among whom there exists a constant interaction. These include: reduction and changes in perception, a strictly written form, flexible identities, elimination of social differences and crossing the spatial boundaries.

In online communication, social roles are greatly weakened, which results in the reduction of the impact of social norms (attention is shifted from a person to the issue, the traditional social hierarchy is fading). Various media through which we communicate provide us with different levels of the so-called social proximity. Proximity is at its highest level in traditional personal communication and is necessarily weakened in the Internet environment, its degree is reflected by the quality of the communication medium, which expresses the relation between social proximity and attention (the lower the social proximity, the lower the attention of participants, while increasing the rate of impersonality of the entire communication). In the Internet environment, we may differentiate the communication among the users into two components of the perception

⁶ D. Šmahel: Psychologie a internet..., op. cit., pp. 20–22.

⁷ K. Subrahmanyam: Adolescent Online Communication: Old Issues, New Intensities, "Cyberpsychology, Journal of Psychosocial Research on Cyberspace" 2007, nr 1(1).

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of oneself, which are: 1) the sense of oneself and 2) the sense of the world around. The electronic communication is dominated by just the sense of oneself compared to the surrounding environment.

Another interesting theory about electronic communications is the so-called *SIDE model.*⁸ Despite the fact that virtual communication is, as it appears, to minimize the barriers, it may strengthen them sometimes, this by way of deprivation due to deindividuation. Although relations are liberalized, but barriers can overcome, and even be strengthened.

According to Reidová⁹, the environment of anonymity and physical security on the Internet may produce aggression and rudeness of users. It emphasizes customary punishments of public ridicule and public degradation, which is a danger which all of the users wish to avoid. Therefore, they often become compliant with even radical views of some of the groups of administrators.

However, the online communication has a psychological impact that is reflected in the restructuring of social borders, the nonverbal side is fading, focus passes to frequently used words, although people communicate face to face, but the face takes on a different, intangible and virtual dimension. With the development of online communication, new virtual communities are created in the virtual space.¹⁰

Vybíral¹¹ also writes about the impact of communication in cyberspace. These, according to him, may be summarized into two categories: positive and negative. The positive one mainly includes availability, interactivity and speed of messaging. As major negative qualities he defines a reduced quality of thought and speech, expansion of English words and computer terms, and possible impacts on the lifestyle and health (development of pathologies, etc.). He further also analyzes deeper psychological aspects and divides them into the following categories:

- indiscriminate responses,
- a common language adopted by the virtual community,
- uncultivated vocabulary,
- the use of language as a gesture to express protest against conformist users.

⁸ In D. Šmahel: Psychologie a internet..., op. cit., pp. 14–17.

⁹ In Idem: *Specifika elektronické komunikace*, "Československá psychologie" 2001, nr 45(3), p. 253.

¹⁰ M. Dušková, M. Vaculík, op. cit., p. 56.

¹¹ In Z. Vybíral: Psychologie lidské komunikace. Praha: Portál, 2000. pp. 151-154.

In the online space, unique groups are formed that are just exceptional by overcoming all barriers that would not have to arise in real life. They, however, arise intermittently, develop rapidly, and reflect the current needs of the users. So the groups may develop beneficial to its participants (self-help groups, etc.), groups serving solely for communication purposes, but also groups based on pathological grounds (e.g. groups of various deviants).¹²

Synonymous with online group may be the term of virtual community. This is characterized by Dušková and Vaculík¹³ as an inevitable result of the online or virtual communication. This is a type of community that arises on a discussion channel. However, this does not emerge in the network, but through it, on the basis of the psychic connection among the users who are geographically distant. Because of these interconnections, participants in communication converge through common interests and hobbies, form friendships or relationships, share experiences and information.

Social and psychological consequences of the Internet use

The Internet is a specific type of social environment, changing the nature of interpersonal interaction, as well as customary communication patterns. It is indisputable that the Internet and its use have an impact on its users.

Social impacts on individuals are generally distinguished into *normative* (prescriptive, they relate to current social norms), and *information* (on the basis of the information acquired). The information ones are further subdivided into those *that result from creating group norms* (these are not enforceable, but if an individual wants to continue to communicate, these must be adapted) and those *which are based on interpersonal influence*. Tom Postmes¹⁵ indicates this to be a traditional perspective in relation to the social impact of the Internet and highlights the importance

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¹² J. Suler: *The psychology of cyberspace*, New Jersey: Rider University, 2005.

¹³ In M. Dušková, M. Vaculík, op. cit., pp. 56-57.

¹⁴ K. Sassenberg, K.J. Jonas: Attitude change and social influence on the net, [in:] The Oxford Handbook of Internet Psychology, eds. A. Joinson et al., New York: Oxford University Press, 2009, pp. 272–288.

¹⁵ In T. Postmes: The psychological dimensions of collective action, [in:] The Oxford Handbook..., op. cit., pp. 167–168.

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of the so-called relative anonymity in the context of the wide influence of the Internet (minimization of remorse, lack of social responsibility for what the users publish, unlimited space to present oneself).

Šmahel¹⁶ addresses the interactions that arise and are maintained on the Internet. Despite the irrationality of that environment, the author emphasizes that we face frequent arguments and hated manifestations, but also with the development of friendships and love. There also exist some gender differences in the formation of friendly relations – women seek friends faster and more intensely.

Several authors¹⁷ agree on the fact that due to the specifics of the Internet, changes of personality and identity of the individual may also occur in online groups. The concept of the so-called virtual identity is created that may coincide with the identity that an individual has in the real world, but often this virtual character is in fact quite different. Postmes¹⁸ sees behind these changes perception and feeling of belonging to a group on the Internet (which that person is a member of, or which they would like to belong to). The individual I in such an environment is dependent on the compliance with other group members and can quickly adapt. Sometimes virtual representation of an individual has a tendency to act autonomously (independent of the awareness and will) despite the fact that the individual creates it on their own and realizes it. In the context of the above, the author delimits the very notion of **virtual identity** as identity which the individual attributes to the above virtual representation.

In the context of the information presented in this paper and of the study of available sources, we may conclude that the benefits of the environment of anonymity and disinhibition may by careless use easily go wrong in pathology. The most serious pathological consequences include aggression in the online environment and its transfer into real life and dependence on the Internet. Šmahel¹⁹ characterizes such aggression by frustration theory, which is based on the premise of increased

¹⁶ In D. Šmahel: *Psychologie a internet...*, op. cit., pp. 73–100.

¹⁷ Y. Amichai-Hamburger: Personality, individual differences and Internet use, [in:] The Oxford Handbook..., op. cit., pp. 187–204; T. Postmes, op. cit., pp. 165–186; R. Spears, M. Lea, T. Postmes: Computer mediated communication and social indentity, [in:] The Oxford Handbook..., op. cit., pp. 253–272; D. Šmahel: Psychologie a internet..., op. cit.

¹⁸ In T. Postmes: op. cit., p. 167.

¹⁹ In D. Šmahel: Psychologie a internet..., op. cit., pp. 78-82.

aggression of those individuals who feel frustrated. This may be due to the technology and technique of communication, or as a result of sudden disconnection of the person with whom the individual communicates. Aggression may be provoked by unexpected reactions of the other party and may also be triggered by the anonymous environment of the Internet, which the author describes as a supportive environment for hostility.

The concept of Internet addiction, according to Vondráčková and Vacek²⁰, is at present a new term, but one which has different markings. Generally, it may be defined as the use, which results in social, psychological, or work problems. Dependence here may have several forms (one on sexuality on the Internet, on virtual relationships, on virtual compulsions, on the basis of information overload, dependence on the computer) and can have a negative impact on several areas (career and school, social relationships and mental health, physical health, loss of financial funds). With regard to the emergence of dependence, what is at stake is the internal consistency of the assumptions of individuals with such Internet features as protection of anonymity, social influence. The desire to belong somewhere is one of the basic characteristics of the individuals, who often have a tendency to resort to an environment where they feel free, anonymous and where they do not show what they do not want to.²¹

Characterization of research and definition of problem

The next part of this paper focuses on the description of research based on the above theoretical results. It focuses on the issue of the use of the Internet and online communication, specifically on the experiences and opinions of the respondents. We also focus on the potential development of social pathologies and even addiction and look for possible thresholds above which the perception of the individual parts of a personal online communication between different groups is different.

²⁰ P. Vondráčková, J. Vacek: Závislostné správanie na internet, "Sociálna prevencia" 2009, nr 2, pp. 4–7.

²¹ Ibidem, p. 6.

The basic problem of the research is to identify differences in the perception of personal and electronic communication between groups of respondents as compiled by various characteristics. It tries to figure out how to identify these differences and when they emerge as important variables when considering the dangerous social consequences associated with the use of the Internet and communicating through it.

Research objectives

The objectives of the research conducted may be divided into the primary and the secondary level. The primary objective of the research is the detection of differences in the perception of subjective characteristics of both personal and electronic communications according to various criteria. Another interpretation of these differences will greatly assist in defining the effects of communication in the virtual environment on the development of individuals who grow up with the Internet and the possible changes of established social patterns, and the development of potential pathologies associated with online communication.

The secondary objective of the implementation is finding details about the Internet use among respondents. We mainly focus on the characteristics of its use (when respondents began to use the Internet, for what purpose, the time on the Internet during the day, the type of information published, but also subjective symptoms related to its use). These findings offer an image of the level of use of the Internet and communication through it, but also help to break down the sample according to several criteria important for further evaluation.

Characterization of techniques and methodologies

We have chosen a questionnaire for the implementation of the present research. To ensure validity, we have developed a preliminary questionnaire, distributed electronically over the Internet to the selected target group in the month of April 2011. We distributed the actual questionnaire to the respondents in the months of December 2011 to March 2012. Distribution took place via the Internet, we distributed the link to the questionnaire to the respondents through available Slovak social networks. We characterize selection of the research sample as intentional, we randomly contacted users of social networking sites according to pre-selected criteria of age distribution. Gavora writes about low return of electronic

questionnaires²². This has affected the data collection in our study. The return of the questionnaire did not exceed 4%, to obtain research samples of 157 respondents, we had to send out a questionnaire in this way more than 4,400 times. To increase the validity, we used the setting in which the same respondent on the same computer could not complete the questionnaire again.

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The questionnaire consisted of three parts. The first one is devoted to the characteristics of personal communication and electronic communication. It consists of 32 statements to which respondents could answer on a 1–5 scale. Based on these arguments, we divide in the next section the characteristics of both personal and electronic communication into the positive and negative ones through the subjective perception of the respondents. The second part of the questionnaire aims to identify the scope and method of the use of the Internet and online social networks. On the basis of these criteria, we compare the approaches of the respondents to both personal and electronic communication in the interpretation section. The third part of the questionnaire determines the basic demographic characteristics of the selected sample. We interpret the research implemented by employing the methods of quantitative statistics through the SPSS statistical software, and also by detecting the frequency of responses of the respondents.

We assume that in the standard, non-pathological, work and leisure use of the Internet and social networking, the individuals subjectively perceive the negatives and positives of both types of communication in a balanced way. This fact was confirmed by the preliminary research conducted. Therefore, differences in the perception of one of the characteristics of both personal and electronic communication may be considered as a deviation, and this is the approach that we have employed in interpretation as well.

Characteristics of the research sample

The research sample consisted of 157 respondents of the selected target group. Pre-research was attended by 38 respondents. The sex ratio is rela-

²² In P. Gavora et al.: Elektronická učebnica pedagogického výskumu, Bratislava: Univerzita Komenského, 2010.

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tively well balanced, this being in the number of 76 male respondents and 81 female respondents.

Within the age distribution of the sample, we focus on the adolescents. The age distribution of the survey sample is as to frequency shown in Table 1.

Table 1. Distribution of the survey sample by age

Age	F	%
12	3	1.9
13	2	1.3
14	29	18.5
15	38	24.2
16	22	14.0
17	31	19.7
18	25	15.9
19 and over	7	4.5
Σ	157	100

Source: the authors

When selecting the research sample, we followed the assumption that in this case this is still the first generation which is almost in daily contact with the virtual environment and the use of social networks. Communication patterns and habits change as a result of the characteristics of the environment. But in the pubescent age, it is also a period of life which is full of contradictions in experiencing social relations, of defiance. Individuals experience strong internal disorder, and this often leads to extremes in behaviour or over-emphasis of their own abilities and unevenness in the development of the components of their personality. ²³ By virtues of the fact that contemporary teenagers spend a lot of time in the irrational space of virtual reality, the danger of a different perception of reality is increasing, alongside with the possible development of pathological personality tendencies.

²³ L. Končeková: *Psychológia puberty a adolescencie*, Prešov: Pedagogická fakulta Univerzity P.J. Šafárika, 1996.

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The next part of this paper focuses on the description and interpretation of the results of the research. We focus on some of the characteristics of the Internet use in the research sample. We present the characteristics of the survey sample in terms of how much time they spend online, what information about themselves and their surroundings they publish. Next, we focus on pointing out the possible hazardous consequences of sociopathological issues by focusing on subjective symptoms among respondents and the handling of their own identity. We will also test the statistical significance of the differences in the perception of the characteristics of the Internet communication according to certain characteristics.

Characteristics of the Internet use

In the questionnaire, we find the sum total of the daily time spent by the respondents on the Internet. Based on their responses, we categorize the research sample into two sections according to the selected choice (according to 6 options of the choice: less than an hour, 1-2 hours, 2-3 hours, 4-5 hours, 5-6 hours, and longer than 6 hours a day, which we in divide into a group of up to 3 hours and a group of over 3 hours). In this case, a group of up to three hours is considered a normal business use of the Internet, when using the Internet for over 3 hours a day, we may think about work and leisure, at the higher rate of even its pathological use. In this division, we have progressed by employing the model of R.M. Hechanová and J. Czincz²⁴, who in their research note that the definition of the exact time when we could consider the Internet use as pathological would be very misleading. By summarizing a number of studies that tell us about a time when we may talk about the dangers of pathology, the authors note that this time is different according to these studies and ranges from around 8.5 (according to Schumacher and Morahan, 2000) to 21.2 hours a week (by Yang and Tung, 2007). This fact is taken into account even when we presented the distribution of the research sample, when the connection for three hours a day means 21 hours a week. The characteristic of the use according to the time of the day is shown in Table 2.

²⁴ R.M. Hechanova, J. Czincz: *Internet Addiction in Asia: Reality or Myth?*, Ottawa: International Development Research Centre, 2009.

Table 2. Characteristics of the research sample according to the connection in the time of the day

Daily time of connection	F	%
Up to 3 hours	71	45.2
Over 3 hours	86	54.8
Σ	157	100

Source: the authors

As apparent from the above, as many as 86 respondents use the Internet for more than 3 hours per day, which according to studies contains elements of risk taking. Conversely, in 71 respondents we could state the use of a minimum of risk. Under this criterion, we started testing also statistically significant differences in the perception of both electronic and personal communication by the t-test. The results are contained in the following table.

Table 3. T-test: distribution according to connection within the time of the day

	Connection time of the day	N	х	S	t	p (α)	CI (95%)	
Positive perception PC	within 3 hours	71	17.592	5.315	-1.256	0.214	-2.934	0.646
	over 3 hours	86	18.651	5.217	-1.230			
Negative perception PC	within 3 hours	71	16.197	5.626	-1.597	0.112	-2.382	1.855
	over 3 hours	86	17.779	6.598	-1.597			
Positive perception EC	within 3 hours	71	18.268	6.275	0.724 0.474	2 11 /	1.926	
	over 3 hours	86	18.965	5.627	-0.734	0.464	-2.114	1.920
Negative perception EC	within 3 hours	71	14.099	4.914	0.0/2 0.044+	0.075	10/4	
	over 3 hours	86	15.698	4.768	-2.063	0.041*	-2.265	1.064

PC – personal communication, EC – electronic communication

Source: the authors

The presented t-test shows a significant difference between the variables according to the number of hours spent on the Internet in the subjective negative perception of electronic communication at 0.05% significance level. A closer insight into the individual items falling under negative

^{*5%} level of significance - significant difference

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and positive perception, we state that the respondents who spend less time on the Internet daily perceive negative sides of the environment at a significantly greater rate.

Table 4. Characteristics of the research sample according to the type of information published

Information published		F	%
NP-1	yes	97	61.8
Nickname	no	60	31.2
First name	yes	123	78.3
First name	no	34	21.7
	yes	110	70.1
Surname	no	47	29.9
City of any analysis	yes	44	28.0
City of my residence	no	113	72.0
Fire standards	yes	9	5.7
Exact address	no	148	94.3
Talanhanana	yes	11	7.0
Telephone no.	no	146	93.0
e-mail address	yes	82	52.2
e-man address	no	75	47.8
My awa abatagraph	yes	120	76.4
My own photograph	no	37	23.6
References to my web, blog, photo gallery	yes	21	13.4
References to my web, blog, photo gallery	no	136	86.6
Photographs	yes	110	70.1
Photographs	no	47	29.9
Videos	yes	46	29.3
videos	no	111	70.7
Photographs of my friends, relatives	yes	55	35.0
Friotographs of my menus, relatives	no	102	65.0
Information about myself and my partner	yes	37	23.6
Innormation about mysen and my partner	no	120	76.4
Information about what I am just doing	yes	36	22.9
Information about what I am just doing	no	121	77.1
Information about where I am currently staying,	yes	17	10.8
where I am going to	no	140	89.2

Source: the authors

The information on what the respondents publish in their profiles on the Internet appears interesting from the perspective of the present study of the Internet communication as a social phenomenon. Even the very type of the information published may offer a characteristic of the respondents and highlight any pathological tendencies in this regard. In general we may say that social work in its form of prevention should focus on individuals who themselves publish large amounts of sensitive information that could easily be abused and manipulated by other Internet users. The Table 4 offers frequency representation of the information published.

This is the way the above information gets into the public domain of the Internet and it is impossible to check who gets access to this information. Even though the options shown in the second half of the above table do not reach an absolute majority, it is in our view necessary to address them exactly, because we consider them the most serious invasion of privacy and they may be a severe manifestation of social pathology in the context of the virtual environment

Subjective manifestations

In the next two characteristics, we focused on the subjective manifestations of the respondents who are interesting for us in terms of the use of the Internet.

One of the characteristics is the subjective experiencing of nervousness in cases where the respondents could not connect to the Internet and use social networks. This characteristic may tell us about the early stages of socio-pathological manifestations due to communication via the Internet. Distribution of the survey sample according to the criterion presented is contained in Table 5.

Table 5. Distribution of the research sample by experiencing nervousness in the failure to connect

Feeling nervous	F	%
yes	88	56.1
no	62	39.5
missing	7	4.5
Σ	157	100

Source: the authors

As can be seen from the above, most members of the research sample have already met with the feeling of nervousness when, for any reason, being unable to connect to the social network. In this layout, there certainly exist plenty of reasons why not being able to connect to the Internet manifested subjective feelings of nervousness among the respondents. One of the possibilities is the one that tells us about the dangers of "being lured" in the virtual environment and a possible indication of the development of social pathology in the need to communicate and connect to the online environment.

Finally, the characteristic brings about interesting results of the respondents according to whether they are already on the Internet pretending to be someone else. We understand that if the answer is "yes", it will not necessarily be a sign of social pathology, but it can be a guide for identifying individuals whose behaviour may be at risk in the future. Frequency of the respondents' answers to the above questions is presented in Table 6.

Table 6. Distribution of the respondents according to whether they manipulate with their identity

Have you pretended to be someone else on the Internet	F	%	
yes	42	26.8	
no	111	70.7	
missing	4	2.5	
Σ	157	100	

Source: the authors

Based on the above distribution, we note that nearly 27% of the respondents pretended to be someone else on the Internet, compared to nearly 71% of the respondents. With this research sample divided as it is, we will now address testing the significance of differences (Table 7).

Testing the significance of the differences have brought interesting results in the category of subjectively negative characteristics of personal communication, and in the one of subjectively positive characteristics of electronic communication, in both instances at 0.05% level of significance.

Looking at the individual items related to negative perceptions of personal communication we note that the respondents who have already pre-

tended to be someone else on the Internet perceived personal communication by the possible negative characteristics to a greater extent than those who do not cover their identity. This could indicate a tendency to prefer electronic communication to personal. Most important, according to our arguments, are those assertions when those who already have pretended to be someone else incline to believe that personal communication is difficult and hurtful. This leads us to reflect on negative experiences in personal communication, and perhaps this is why these respondents preferred more the online communication.

Table 7. T-test: breakdown by manipulating with the identity

	Have you ever pretended to be someone else?	n	Х	S	t	p (α)	CI (95%)	
Positive	yes	42	18.024	5.048	-0.283	0.778	-2.183	1.636
perception PC	no	111	18.297	5.437				
Negative perception PC	yes	42	15.238	5.499	-2.168	0.032*	-4.555	-0.212
	no	111	17.622	6.267				
Positive	yes	42	16.762	5.235	-2.444	0.016*	-4.634	-0.491
perception EC	no	111	19.324	5.979				
Negative perception EC	yes	42	14.762	5.387	-0.298 0.766	2.022	1 401	
	no	111	15.027	4.716		0.766	-2.022	1.491

PC - personal communication, EC - electronic communication

Source: the authors

In the case of differences in the item of positive perception of electronic communication, a similar difference is obvious. The respondents who have already changed their identity on the Internet and pretended to be someone else, perceive the Internet through its characteristics in a more positive way than those who have not changed their identity in that environment. We could also explain this difference by the above alluded preference of the Internet communication to personal communication. If we consider the fact of the change of identity as an expression of immersion in the online environment and the preference for online communication, we may explain it as a preference for the benefits of electronic

^{*5%} level of significance - significant difference

What is also interesting is the distribution of sample according to whom they entrust in case of a problem. In the distribution of the research sample depending on whether they have already changed their identity, 20% of those who responded "yes" connect to the social network and look for someone who would be there to entrust. In those who have not changed their identity, it was only 4%. In searching for social support on the Internet, there exists a great risk of who will form the social network thus created, because the Internet friendships are based on intangible foundations.

Conclusion

The present study aims at providing communication via the Internet as a modern social phenomenon. It explains the basic terminological characteristics of this, in our environment still new issue. Finally, it represents a portion of the authors' research on the perception of communication via the Internet. The primary purpose of the implementation of the study was to map the characteristics of the use of the Internet with the research sample. However, we also focused on detecting the differences in the perception of characteristic signs of both personal and electronic communication between groups of respondents. The assumption was a balanced perception of both positives and negatives in the standard, non-pathological use of the Internet. We have achieved the presented objective through interpretation, and we found significant differences between groups of respondents according to several criteria. In demonstrating the differences in interpretation, we were looking for possible connection with the methods and other features of the use of the Internet. Here we point out some interesting connections that might indicate the elements of a risk-taking behaviour of the users. This may be dangerous and may ultimately lead to the development of socio-pathological phenomena. The development of information systems is currently based on the characteristics of the society and reflects the societal demand. Therefore, there is no sense in proposing solutions which would be based on forced limiting of the use of the Internet, because it gets into every area

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of human life, and many areas cannot function properly without using it. However, it is important to minimize those consequences that are associated with risky behaviour by the development of socio-pathological phenomena, and which may be associated with differences in the perception of subjective characteristics of communication.

In the area of practice, we therefore suggest focusing on the existing and functioning programmes dealing with the prevention of drug addiction by a sophisticated complement in the prevention of addictions associated with the risky use of the Internet. We have in mind the particular programmes implemented in form of experience, which we think suitable for this purpose. It is appropriate to extend the existing peer programmes in this area, since peer relationships are highly welcome for such prevention. These programmes could also be extended in peer groups in the Internet space, which would spread the awareness, would function as prevention and would create a network of the social capital in this space, so that we would no longer have to consider it risky. In this context it is appropriate to extend the programmes of psychological and social counselling in the guidance through synchronous virtual communication. In this way, the social work profession may create awareness especially among young users. Social workers may specifically in this way search the virtual environment for those who show signs of pathological behaviour, which may get them involved in effective prevention or intervention of such phenomena.

By taking the above measures, one may, in our view, achieve complex prevention before the emergence of socio-pathological phenomena, as we consider prevention more effective and economically less demanding than the possible later intervention. The presented characteristics of electronic communication need not cause any hazards, but can become a great asset to the society significantly influenced by the development of the Internet and information technologies.

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