

E-BUSINESS

# PRIVACY, PROPERTY AND ETHICS REGARDING THE USE OF COMPUTERS AMONG THE YOUNG

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#### Abstract:

The problem of privacy on the Internet, threat to property and other implications of violation of ethics have gained importance as a consequence of social networks and various Internet sites. Intensive influence of virtual reality into lives of young people brings controversial circumstances and unpredictable outcomes. The paper presents research of education influence on ethical upbringing of students in the process of acquiring digital competencies. The research included high school students from first to fourth grade, who are living in school lodging.

#### Key words:

threat to privacy, property, computer ethics, adolescents.

# 1. THE INTERNET AND THE YOUNG

The Internet is characterized by a huge technical and social complexity, as such it stands for gigantic but almost invisible universe which encompasses thousands of nets, millions of computers and billions of users round the world" (Greenfield & Yan, 2006, p.391). There is a growing impact of the Internet on various aspects of people's lives and development. This is the case with the role of Internet and computers in the process of socialization, education, entertainment, various kinds of purchase and access to information. Present generation of the young have greater access and greater consumption of information than the previous. Today, the young may get online through various media including cell phones, TV and radio. The number of users is getting bigger every day, including children and adults. As a complex medium of communication, the Internet enables users quick and easy access to information, not only from big cities but also from small and distant settlements. The teenagers from New York, Berlin and those from the remotest settlements in Africa or Asia may be online at the same moment.

Worldwide research has shown that the Internet enables numerous users from impoverished and deprived regions to get necessary information and medical knowledge such as characteristics and symptoms of various diseases, ways of cure and many other information and medical help that could not be obtained before (Cassell *et al*, 2006).

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Information on many socially sensitive topics, on marginalized groups, human relations, and political activities is accessible through the Internet (Suzuki and Calzo, 2004).

In the process of growing up every child goes through several phases of maturing which end by a stage of abstract thinking in the period of adolescence. At that time, the capabilities of understanding emotional experience of others as well as the skills of empathy are developed (Trnavac and Djordjevic, 2002). Today, the young spend more and more time on the Internet, exposing their brain to digital technology which influences the normal growth of the frontal cortex. This part of the brain is responsible for the process of thinking, so the growth of traditional communication skills is inflicted and success in school and social life as a whole are also influenced (Long & Chen, 2007).

We may say that presently the young are living in two worlds. One of these worlds is a real world with real, face to face interaction. In that world, real action and success are ways of competing for the social position, and there are rules and principles one has to adopt and follow for common good and mutual respect. Another world, the online world is a place with no sanctions for disrespect of moral principles, where immediate needs are not being postponed, where the young may create their identity just following their own, where they may be what they would like to be in the real life but without any conditions to fulfill or self-confirmation to carry out.

According to one research, the knowledge about ethical principles is poor among the individuals aged between 14-18. The answers show that most of the students in some way agree with the statements proposing some kind of neglect of ethical principles (Nikcevic, Markovic, 2015).

#### 2. RESEARCH

Aside from many benefits of the Internet use, because of the lack of knowledge and experience necessary for bringing right decisions, the young often find themselves in risky situations, when facing ethical issues. Taking into consideration the amount of time spent on the Internet, it is necessary for the young to be aware of its influence on their behaviour and their growing-up process. Aside form its positive effect on modern society, easy access to the Internet constitutes greater risk and danger for the young and causes, through various virtual communities, different social problems, such as intrusion of privacy, security and ownership and also cyber crimes, pornography, *etc.* The young are free to visit any Internet site and to communicate with anybody. That kind of free

access and the exposure to all kind of information may have negative effect on growing-up for the young that haven't reached full maturity. It may negatively affect their real social interactions and make problems in their emotional development (Johnson, 2006).

On the basis of the above mentioned problems, the object of our research is the invasion of privacy and ownership and disregard for ethical norms on the Internet.

#### 3. OBJECTIVE AND HYPOTHESES

On the basis of the above mentioned problems and subject of research, the objective is to examine the extent of respect for privacy, ownership and for ethical code that the young have on the Internet. The main hypothesis is that the young are inexperienced and do not have adequate respect neither for their own nor other people's privacy. On the Internet, they also lack respect for ownership and ethical principles. There are differences regarding privacy, ownership and ethical principles depending on the school students attendance and their success. The main hypothesis is followed by special ones:

- On the Internet the young do not have adequate respect neither for their own nor for other people's privacy.
- On the Internet the young do not have adequate respect neither for their own nor for other people's ownership.
- 3. There are differences regarding privacy, ownership and ethical principles between students depending on their success.
- There are differences regarding privacy, ownership and ethical principles between students of different schools.
- 5. There are differences regarding privacy, ownership and ethical principles between boys and girls.

# 4. RESEARCH METHODS AND TECHNIQUES

Descriptive, so called "survey" method has been chosen as a research method. It is the attitude according to which researcher does survey, measures, compares, makes statements, analyses and presents (in our case), certain attitudes and social processes but without any change in practice.

The technique used in research is of making scales. Comparison of arithmetic means between different groups of respondents has been performed by the use of T-test and ANOVA. For the purposes of research, an instrument was designed in the form of a scale of Likert type, on four levels, through which the participants expressed their



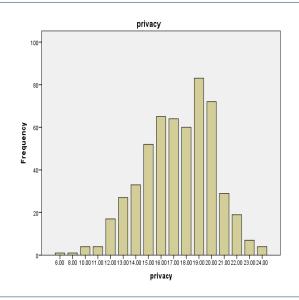
views, namely the degree of agreement or disagreement with the proposed statement. Independent variables were gender, success and different school a student attends. The test consists of 21 statements supporting the examined dimensions. Cronbach-alpha test was used in order to examine the reliability of the scale. We got total inner consistency  $\alpha$ =0, 74 confirming reliability of the whole test (Cortina, 1993).

## 5. PATTERN

The research sample consists of high school students of all grades and educational profile of tenants of high school dormitory in Belgrade. It included 542 male and female students, which indicates representativeness of the sample. On the basis of that, it is possible to conduct some detailed research and draw some generalizations.

# 6. RESULTS AND DISCUSSIONS

The first hypothesis is that the young do not respect enough their own privacy and privacy of others on the Internet. Based on the stated positions that the students presented, which are related to the dimension of policy we received frequencies that are presented in Graph 1.

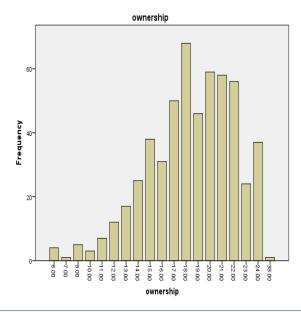


Graph 1. Respect of privacy on the Internet for adolescents

On the basis of the frequency response, we can conclude that our hypothesis is confirmed and that students do not sufficiently respect the privacy on the Internet or do not recognize it indicating lack of experience and lack of understanding of certain institutions (Greenfield &

Yan, 2006). Understanding and comprehension privacy among the young is one of the debatable topics. They "share and like" almost everything on social networks, publish their and their friends photos their feelings, thoughts, *etc.*, without thinking about the consequences (Long & Chen, 2007). The research of professor Sarah Jayne at the University College in London suggests that today's obsession with the Internet for many teenagers interferes the proper development of the frontal lobe and thus aggravates their social skills and damages the ability of reasoning (Smol and Vogan, 2011).

The second hypothesis is that the young do not respect sufficiently their ownership on the Internet, and the ownership of others. The frequencies of answers to questions relating to the ownership dimension are presented in Graph 2.



Graph 2. Respect of ownership on the Internet for adolescents

In Graph 2 we can see that the answers are concentrated in the bottom of the graph, which indicates low esteem of ownership. Researches show that excessive use of the Internet among the young leads to improper development of abstract thinking and understanding of the impact of their decisions for the benefit of another person (Smol and Vogan, 2011). Our hypothesis is confirmed by this.

The third hypothesis is that there are differences among students with different success in terms of privacy, ownership and ethical standards. Method ANOVA which determines differences among multiple categories has been used for examining this hypothesis. In order to determine differences among groups, Post hoc was done.



Dependent variable	(I)Success	(J)Success	SumM (I-J)	p
success	excellent	very good	0,62	0,015*
		good	0,60	0,33

<sup>1</sup>Differences are significant on the level 0,05

Table I. Differences among the students in the examined expression size regarding to the success of students (Post hoc)

Table 1 shows the results of comparing the arithmetic means at examined dimensions of privacy because there was statistically significant difference. There are differences both in terms of ownership and respect of ethical norms but there is not a statistically significant difference. It was found that students with excellent grades have a more positive attitude toward privacy in relation to students with very good success. This hypothesis is partially confirmed.

The fourth hypothesis is that there are differences between students from different schools in terms of privacy, ownership and ethical norms. To test the difference of arithmetic means, factor analysis of variance Post hoc was used to determine differences among groups.

Dependent variable	(I)School	(J)School	SumM (I-J)	p
school		grammar	0,57	0,37
	medical	musical	-0,80	0,63
		legal and economics	1,11	0,11
		tourism	0,53	0,79
		civil engineering and technical	0,18	0,014

<sup>2</sup>Differences are significant on the level 0,05

Table II. Differences among students in expressions of examined dimensions regarding the school they attend (Post hoc)

Dependent variable	Sex	N	M	SD	t	df	p
	Boy	260	17,00	2,99	-0,67	516,19	0,027
privacy	Girl	282	17,17	2,61			
	Boy	260	17,67	3,70	-5,09	529,67	0,210
ownership	Boy	282	19,24	3,49			
ethical	Girl	260	15,51	2,57			
standards	Boy	282	16,13	2,54	-2,82	535,39	0,931

<sup>&</sup>lt;sup>3</sup> Differences are significant on the level 0,05

Table III. Differences among students in expression of examined dimensions regarding the sex

Table 3 shows the differences of arithmetic means between students of different sexes. It can be seen that significant differences exist between students of different sex only regarding the privacy, by which our hypothesis has partially been confirmed. Female examinees have more positive attitude toward privacy than male examinees.

# 7. CONCLUSION

The paper presents the results of research which aim was to examine how much the young respect the privacy and the ownership on the Internet and how much they are willing to follow the ethical code of behaviour. This study is the third in the series of studies on the behavior of adolescents on the Internet. (Nikcevic and Markovic, 2014, Nikcevic and Markovic, 2015).

The study is based on the assumption that the young do not have enough experience and do not sufficiently respect their own privacy and privacy of others, as well as ownership and ethical standards on the Internet.

The first and the second hypotheses were related to respect of privacy and ownership. The answers of our examinees show the low level of respect of the examined dimensions, indicating the need to involve parents and professionals to transform the existing strategy and forming new to influence the behavior of the young on the Internet.

The third hypothesis is related to the connection between success and privacy, ownership and ethical codes of behavior on the Internet. Statistically significant differences were found only in the connection between success and privacy, which can be explained by the conditions they live in. In fact, life in the dormitory means constant monitoring and control of students and their free time by the teachers. Coexistence with their peers involves joint decision-making in a variety of situations and respect of personal assets and assets of the institution they live in.

The fourth hypothesis examines the connection of schools of different modules with privacy, ownership and ethical code of behaviour. Statistically significant differences are, as in the previous hypothesis, found only in terms of privacy, which can also be described by the conditions they live in.

The fifth hypothesis examined the connection of the examined dimensions with the students' sex. The differences are, as in the previous two, found only in terms of privacy. The girls showed greater respect of privacy in relation to boys, as was confirmed by the previous research (Nikcevic and Markovic, 2014).



Simple and continuous access to the Internet provides tremendous opportunities for adolescents and their socialization, enabling them to connect with their peers all over the world. It is clear that the Internet transforms the social world of adolescents, and it is necessary to point out the potential benefits and risks and to ensure safe strategy of communication and interaction.

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