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## Selected aspects in searching for health information on the Internet among generation Y

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**Abstract** Good health conditions are very important for quality of life not only for an individual but for the whole society. Many people try to do their best in order to be fit, others do not care. Currently, people also try to use the Internet to find the information about health they need. In fact, the information about health is the third most searched information on the Internet after goods and services and travelling information. The purpose of this study is to analyze selected aspects of the search for health information on the Internet and verify dependence between sex, health condition and family relationships with respect to healthcare in the search of health information on the Internet. The methods used in this study include an online survey in form of a questionnaire. The target research group are people aged 20-35 who are the so-called digitally literate generation. The survey was conducted from 29 November 2015 till 29 February 2016 and involved 120 respondents in the selected age group. The findings confirm that the dependence between the search for health information on the Internet and sex, the existence of chronic disease, and the psychic disorder and preference of the Internet advice was proved.

**Keywords:** generation Y, information, Internet, search, benefits, limitations

## 1 Introduction

Modern technologies penetrate in many areas of human activities and health is not an exception.[[1]-[2]]People also try to use the Internet to find the information about health they need. In fact, the use of the Internet in the European Union (EU) countries reaches 78% among people aged 16-74 years.[3]The use of the Internet for different purposes differs among its users in many aspects. The majority of researchers state that the gender gap in Internet use has considerably narrowed with the university age group [4], as well as with the general population.[5]Nevertheless, some gender differences have been discovered with respect to technology, intensity of the Internet use, online applications and experience in cyberspace. In addition, research shows that technologies are not used in similar ways by men and women.[16] Furthermore, Zhang [7]presents that female university students have more positive attitudes towards its use than male students. Trifonova et al. [6]add that men seem to like to try out new things in comparison with women. Gender differences can be also seen in the use of web applications. Fox[8]shows that one in four internet users who suffers from a chronic disease

such as high blood pressure, diabetes, heart conditions, lung conditions, cancer, or some other chronic ailment (23%) has accessed the Internet to find others with a similar health problem. On the contrary, 15% of the Internet users who report no chronic conditions have sought such help online.

The information described above shows that there are several dependences which can be researched. Thus, the purpose of this study is to analyze selected aspects of the search for health information on the Internet and verify dependence between sex, health condition and family relationships with respect to healthcare in the search of health information on the Internet.

## 2 Used Methods and Tools

The sample of the respondents include people aged 20-35 years since this group of people should have an influence on future development of different fields. It is also considered to be generation Y in dependence on the year when they were born, usually around the year of 1980. In addition, these are people who are digital natives and are used to exploiting the Internet information on a daily basis. Altogether 200 respondents participated in the questionnaire survey. Nevertheless, the selected group of the Y generation respondents comprised only 120 people. The questionnaire survey consisted of 22 questions that were divided into three main areas: demographic data of the whole sample (i.e. age, sex, employment and education); respondents' state of health; and the use of the Internet, especially for health purposes. However, only the most important results are presented in this study due to its limited scope. The questionnaire was distributed via click4survey in the course of three months, from 29 November 2015 till 29 February 2016. 51% of the respondents completed the secondary school education with school leaving exam (51%) and 41% of the respondents had a university education degree. Most of them were already employed (57%). Just a small percentage of people (3%) either studied medical field or worked in it, which did not really have any significant impact on the survey.

## 3 Health Information on the Internet among Generation Y

The results of this study show that the search for the health information on the Internet comes fourth because young generation like to search for fun as well (Fig. 1).

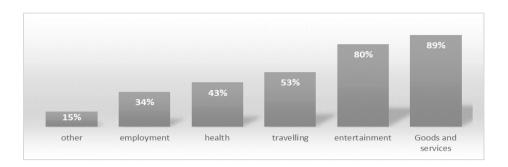


Fig. 1. An overview of the search for the information on the Internet

As Fig. 2 below illustrates, people are quite interested in searching for the information about alternative medicine, which is most likely connected with following the right lifestyle and trying out something new. People also search for the information about different types of allergies, and psychic problems.

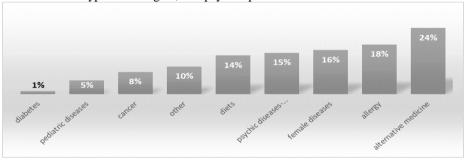


Fig. 2. Patients and their search for the information about a specific health problem

Most often the respondents search for the information about health via Google search engine. The findings also show that 43% of the respondents are willing to spend between 18-36 EUR per month on drugs or medical devices recommended to them on the Internet. Students usually are ready to spend about 7EUR. As far as the time spent on the Internet is concerned, the respondents (71%) usually spend one hour per day on searching for the health information on the Internet. 11% of the respondents spend between 2 and 5 hours. In most cases these are the people who suffer from some chronic disease. The findings of this study also indicate that people are a bit suspicious of the information found on the Internet, which is, on the other hand, a quite positive observation since currently one cannot believe everything that is published on the Internet pages. Only 10% of the respondents do not see any negatives when searching for the health information. These are mainly men who often buy products on the Internet, however, they do not search for the health information, they do not suffer from any chronic disease and they trust their doctor. The specific negative aspects mainly include the distortion of information (56%) and a lack of relevant information (23%). In addition,

more respondents (63%) think that doctor's advice cannot be compared with the Internet information, particularly the university students and women. 38% of the respondents who think that the Internet advice is as good as doctor's advice are the patients who are not satisfied with their doctor, which results in searching for the information on the Internet and they consider this information trustworthy. Nevertheless, the findings show that people generally prefer doctor's advice as 83% of the respondents confirmed. And in majority cases (90%) people do not have a negative experience with the advice provided on the Internet pages.

## 3.1 Analysis of other dependences

Within the generation Y, hypotheses about the relationship of sex, psychic diseases, chronic diseases, or the presence of a family member in healthcare and the amount of searched information were tested. (Table 1)

Indicator	Test statistic	P-value	Conclude H1 at
	value		5% Significance?
Hypothesis H0: P1=P2 versus H1: P1<>P2*			
searching for the health information (men X women)	0.075	0.433	No
searching for the health infor- mation (family members work/do not work in healthcare)	0.351	0.43	No
Patients suffering from a psychic disorder trust their doctor less and they prefer advice provided on the Internet	0.117	0.15	No
People who do not suffer from any chronic disease are less inter- ested in in searching for the infor- mation about alternative medicine	0.842	0.23	No

Table 1. Results of the statistical testing

The results in Table 1 show that within the generation Y, the search for this information is not connected with the aspects stated above. These results need further investigation, especially the difference in the approach of the generation Y and other respondents, which will be a subject of further research after the expansion of the sample outside the generation Y.

## 4 Discussion

The fact that men search for the health information less frequently than women have bee also confirmed by the findings of foreign research studies. A German study [22] states that this is particularly true for the women with the university degree and higher income. The findings of this study about the female prevalence in searching for the health information on the Internet, or the fact that people who do not suffer from a chronic disease are less interested in searching for the health information on the Internet, also correspond to the results of the study performed by Fox [20] or Economides and Grousopoulou [19] in which these issues were also discussed.

In addition, the empirical findings of this study confirm that although many respondents do not understand the medical reports, they do not search for further information. Furthermore, health application, which could help in the prevention and treatment are not fully exploited either. People prefer to use general search engines to discover the needed health information. If people use specific web pages, they are usually influenced by their design. The findings also indicate that each user of the Internet should evaluate the reliability of the health web pages for the following aspects to make sure that s/he receives a trustworthy piece of information: author's credibility; author's expertise; topicality of the page; possibility of the verification of the provided information.

As Murray et al. [9]claim, the quality of information on the Internet is paramount because inaccurate information can cause a lot of harm both to the doctor and his/her patients in terms of doctor-patient relationship, quality of care, health outcomes, and time efficiency. Murray et al. [9]also emphasize the need to develop doctor's skills in the area of reacting to patients' enquiries about the health information they find on the Internet.

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## 5 Conclusion

Overall, the Y generation aged 20-35 years is a digitally literate generation, members of which rely on their own opinions and they are more independent. Almost all the respondents use the Internet and 82% have mobile access to the Internet.[11]The findings analyzed among this generation demonstrate that more respondents do not suffer from any chronic disease and they are satisfied with their doctor. Altogether 43 % of the respondents search for the health information on the Internet and 35% of people use mobile health applications such as pressure measurement or pedometer. Despite this fact, only a few use applications aimed at the check-ups or prevention of their health. A vast majority of people compares the results of their search for the health information with other web pages by using general search engines such as Google or Seznam. Furthermore, 90 % of the respondents see the negative aspects when searching on the Internet and they rather trust their doctor than to the Internet information. This is a positive sign since the respondents seem to be cautious and careful when they use the Internet while comparing the results of their search.

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#### References

- [1]. Maresova P, Kacetl J. Innovations in ICT in the Czech Republic with Focus on a Chosen Region. Procedia Social and Behavioral Sciences. 109(2014): 679–683
- [2]. Marešová P. Knowledge Management in Czech Companies. E&M Economics and Management. 2010, (1), s. 131-143
- [3]. CSO (Czech Statistical Office). Využívání informačních a komunikačních technologií v domácnostech a mezi jednotlivci [The use of information and communication technologies in households and among individuals]. (2015). Available at: https://www.czso.cz/documents/10180/20568879/062004-15a.pdf/c5df6b-e412-48ed-8129-082d8cad914d?version =1.0 (accessed 17 April 2016)
- [4]. Goodson, P., McCormick, D., and Evans, A. Searching for sexually explicit materials on the Internet: An exploratory study of college students. Archive of Sexual Behavior. 2001; 30(2): 101-118.
- [5]. Brenner, V. Psychology of computer use: XLVII Parameters of Internet use, abuse and addiction: The first 90 days of the Internet usage survey', Psychological Reports. 1997;80(3): 879-882.
- [6]. Trifonova A, Ronchetti M. Hoarding content for mobile learning, International Journal of Mobile Communications. 2006; 4(4): 459-476.
- [7]. Zhang, Y. X. Comparison of Internet attitudes between industrial employees and college students, Cyberpsychology and Behavior. 2002;5(2): 143-149.
- [8]. Fox S. Peer-to-peer Health Care. 2011.Pew Reserch Center. Available at: http://www.pewinternet.org/2011/02/28/peer-to-peer-health-care-2/ (accessed 17 April 2016)
- [9]. Murray E, Lo B, Pollack L, Donelan K, Catawa J, Lee K, Zapet K, Turnes R. The Impact of health care and the physician-patient relationship: national U.S. survey among 1,050 U.S. physicians. JMIR. 2003; 5(3): PMC1550564.
- [10]. Lapacek J. Zdraví na internetu.[Health on the Internet] Praha:Computer Press a.s. 2002.
- [11]. IBM. Myths, exaggerations and uncomfortable truths-The real story blind Millennials in the workplace. 2015. Available at: http://www-01.ibm.com/common/ssi/cgi-bin/ssi-alias?sub
  - type=WH&infotype=SA&appname=GBSE\_GB\_TI\_USEN&attAchment=GBLO03032US EN.PDF (accessed 17 April 2016)