Is Their Craze on the Internet?

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Abstract

For a long time researchers have been considered the question of the use of Internet for its users. In this study we do not want to execute a collection over companies or an entire state, but to limit us to a user group, the students of the Graz University of Technology. From the total extent of the students with a valid e-mail address a representative sample survey has been carried out. To those students a message, which refers to the questionnaire, was sent by means of e-mail. The questionnaire is available electronically at the WWW. The results of this study give us a view, how strong electronic services determined and as which medium it is used.

Keywords: Internet, Study, Internet Craze, Model

Introduction

As the number of people online grows, so do the ranks of those hooked on electronic chats and games. Unlike stamp collecting or reading, computers are a psycho-stimulant, and a certain segment of the population can develop addictive behaviour in response to that stimulant.

Addiction results from indulging in a substance or an activity that produces a shift in mental state and triggers an alternate reality.

For most online subscribers, said long-time users, being lost in cyberspace are a passing phase. Initially, being online insulates people from their intimate setting while expanding their horizons electronically.

The screen is suddenly a window into a new world and people do not know you are a dog. The honeymoon period is intense. But that should not be confused with some new form of antisocial behaviour or supreme narcissism for those who wish to indulge.

Some Internet users may develop an emotional attachment to on-line friends and activities they create on their computer screens. Internet users may enjoy aspects of the internet that allow them to meet, socialize and exchange ideas through the use of chat rooms or "virtual communities". These communities allow the person the means to escape from reality and seek out means to fulfill unmet emotional and psychological needs, which are more intimate and less threatening than real life relationships.

Some Internet addicts may also create on-line personas where they are able to alter their identities and pretend to be someone other than himself or herself. The highest risk for creation of a secret life are those who suffer from low self esteem, feelings of inadequacy, and fear of disapproval from others. Such negative self-concepts lead to clinical problems of depression and anxiety.

For a long time researchers have been considered the questions of the use of the Internet for its users. In this study execute a representative collection over the user group of students of Graz University of Technology (Austria).

What is Internet Addiction?

We are interesting in the term addiction. We define addiction as a behaviour pattern of compulsive drug use characterised by overwhelming involvement with the use of a drug and the securing of the supply, as well as a tendency to relapse after completion of withdrawal.

According to Orzack computers and the Net present a problem as real alcoholism, with all the attendant symptoms of addiction—withdrawal, loss of control, and compulsive behaviour, see (Spring, 1999).

Dealing with Internet Addiction is no different than dealing with any other type of addiction. Whether you are addicted to heroin, gambling, cigarettes, sexual deviancy or eating Milky Way bars, all addictions have certain basic elements in common.

Since Internet Addiction is often compared to compulsive gambling the criteria of compulsive gambling similar with other addictions are listen to:

Compulsive gambling (Freeman, 1992:212—224))

1. preoccupation with the abusing behaviour,
2. abusing larger amounts over longer periods of time than intended,
3. the need to increase the behaviour to achieve the desired effect,
4. repeated efforts to cut down or stop the behaviour,
5. social or occupational activity given up for the behaviour, and
6. continuation of the behaviour despite social, occupational or legal problems.

A far more worrying prospect is that people who have never used the Internet before might be scared off from discovering its benefits if they read about forms of Internet Addiction.

Problems caused by Internet Addiction

Like other addictions, it affects other people—family, friends, and co-workers. The problem is not isolated to the sufferer but affects everyone who is in contact with the addicted person.

While all addictions can ultimately be cured, this is not always an easy or painless process. A high degree of commitment to breaking established habits is required, as are persistence, dedication, honesty, and self-compassion.

All people who are addicted have some degree of denial. Without denial, most addictions would not have become established in the first place. Denial can take many forms. At the milder extremes, a person may believe "I can handle this problem whenever I decide to do so." The fact that one has a problem is at least acknowledged. At the other extreme, denial often takes the form of: "What problem? I do not have a problem. You have got the problem".

Denial can sometimes be so strong that a person's whole life begins to deteriorate before the person ultimately recognizes there is a problem to be solved.

Signs of Internet Addiction include the following:

- Preoccupation with the Internet. (Thoughts about previous on-line activity or anticipation of the next on-line session.)
- Use of the Internet in increasing amounts of time in order to achieve satisfaction.
- Repeated, unsuccessful efforts to control, cut back, or stop Internet use.
- Feelings of restlessness, moodiness, depression or irritability when attempting to cut down use of the Internet.
- On-line longer than originally intended.
- Jeopardized or risked loss of significant relationships, job, educational or career opportunities because of Internet use.
- Lies to family members, therapist, or others to conceal the extent of involvement with the Internet.
- Use of the Internet as a way to escape from problems or to relieve a dysphonic mood. (e.g., feelings of hopelessness, guilt, anxiety, depression)

Internet Addiction results in personal, family, academic, financial and occupational problems that are characteristic of other addictions.

Online addiction is no joke, although most CEOs and human resource professionals may doubt its existence. When a company provides Internet access to its employees, the people in charge must acknowledge this phenomenon and allow for the occasional employee who "overdoes it" on cyberspace.

Ultimately, goals for companies facing this problem include incorporating Internet usage guidelines into their employee handbook, identifying legal protection in cases of termination involving Internet abuse among employees, and educating human resource managers on warning signs of Internet addiction among employees.

In addition, companies should formulate effective ways to improve productivity without eliminating the use of the Internet among employees, for more details see (Frentzen, 1996).

Investigation Design

From the total extent of the students with a valid e-mail address on Graz University of Technology a representative sample survey has been carried out. To those students a message, which refers to the questionnaire, was sent by means of e-mail. This questionnaire is available electronically at the WWW.

We did a pre-test, which had a scope of 30, of the students, who has an own homepage. The list of all students with homepages, at present around 2400, is supplied to us by the computer science service of the Graz University of Technology.

On Friday, 9 October 1998 at 16:45 an e-mail was coincidentally sent to 1000 students in which they were asked to click and fill out the questionnaire on the network. At the Graz University of Technology there are at the moment 8,482 students having an e-mail account.

The date Friday, 9 October 1998 (16:45) was selected because of the following reasons:

- The study began on Thursday, 1 October 1998, and therefore all most all students were already on the Technical University;
- The accessibility should be examined on the weekend;

The e-mail, which was sent, was directly addressed in each case (no mass transmission). The sending was however already terminated on the same day, around 19 o'clock.

The questionnaire, which was on the Web address

http://www.cis.tu-graz.ac.at/iwb/ufo/internetgebrauch.html

consists 27 questions about the internet and also 5 demographic questions.

From 1000 e-mails that were sent, we received 25 acknowledgements with delivery failure notification or failure notice. Therefore the sample size reduced to 975. We received 22 acknowledgements with improvement suggestions concerning the questionnaire and constructional criticism. 9 acknowledgements were settled on a deeper level.

Our response rate was already 25% only four days after the emails were sent out, which increased to about 33% after the end of the empirical survey, that means 75% of all responses replies after four days.

For more details about Direct Mailing we refer to Benesch (1999). In comparison, the study of Swoboda, Mühlberger, Weitkunat and Schneeweiß (1997) got a response rate of 19 per cent by sending 8.859 e-mails in which 90 per cent of all answered within the first four days. This clarifies the trend of the more frequent e-mail usage.

Our survey limited itself to answers up to midnight Sunday October 11th 1998 since we were mainly interested in the frequent users. Within this time span, there was a response from 118 people. We also limited ourselves to technical students, resulting in a figure of 109 responses, since 9 were already active in the job market.

Our 109 responses, distribute on the individual days as shown in Table 1.

Day	Responses	Percentage
Friday	34	31%
Saturday	48	44%
Sunday	27	25
Sum	109	100%

Table 1: Distribution of the 109 Responses

Results

Our spot-check was made up of 96 males, 7 females and 6 undeclared. This gender structure corresponds to the general gender structure at Technical Universities in Austria. The age distribution among men was between 19 and 33 years, with an arithmetic mean of 24.17 years and a standard deviation of 2.7 years. Among the women, the age distribution was between 20 and 27 years, with an arithmetic mean of 22.86 years and a standard deviation of 2.97 years.

In response to the question "How many hours do you spend working on the Internet every week?" we received the breakdown among the different genders as shown in Table 2.

From this, one can conclude that independent of gender, the average Internet usage is in the range of 6 to 10 hours per week, that is, an average of about 1 hour every day. If we calculate the Median we get for male 9,5 hours and for

	Gender	
Hours	Male	Female
1 – 5	21	2
6 – 10	33	3
11 – 20	27	1
21 – 30	10	1
31 – 50	8	
More	3	

Table 2: Distribution of hours spend working on the Internet

female 7,5 hours. From this again it follows, that the Internet is used about 1 hour every day.

Which services are most frequently utilised during these hours?

It turned out that after the WWW (World Wide Web), which is used 100 percent of the time, the most frequently utilised services were File Transfer (92 percent), Newsgroups (70 percent), Video and Audio broadcasts and transfers (64 percent), Java, Java Scripts (53 percent) and Chat (44 percent). Other services such as video-conferencing, Internet telephone and fax, digital signatures (Verisign, RSA), 3D worlds, virtual reality (VRML) and Push technologies/channels (Pointcast, Backweb) were used for only about 10 percent of the time.

This indicates that the relatively older services enjoy a higher acceptance than the newer ones.

The central hypotheses are:

- Whether Internet makes addicted, like the television;
- Whether Internet substitute the print media.

The statement that "The Internet is replacing the need/use for Television" was confirmed by only 9 percent of the respondents. 4 percent withheld or had no opinion about the topic. This leads to the conclusion that the Internet and television are two separate media, and that TV-addiction is not comparable to Internet-mania.

A popular approach to the study of leisure time activities is to treat this as a budget allocation process (see the references listed at the bottom of this page). Thus, everybody has a total of 24 hours to allocate each day, and no one has more or less than that amount. Within this time budget, people can allocate according to their needs and utilities, which will vary from person to person.

A fact of contemporary life is that people allocate significant amounts of time in their daily lives to watching television, whether for information or entertainment.

At the point, the important question is: what (if any) is the impact of the Internet on television viewing? According to the Los Medios y Mercados de Latinoamérica 1998 study, among those who used the Internet at home within the last 3 months, the average time spent on television viewing is 5.0 hours per day. This is in fact higher than the average for the general population (4.5 hours per day). Indeed, this is a seemingly unexpected answer.

Should we conclude that the Internet would have no impact on television viewing? Well, we believe that this question needs to be formulated more precisely. The measure that we have used here is the quantitative volume of television viewing time. This measure is the one that is adopted by the television industry, and is at the foundation of television ratings measurement. But there has always been some degree of uneasiness since there is some doubt as to what attention, if any, are people paying to what is going on the television screen and what is coming through the audio channel.

The crux of the matter is that Internet usage and television viewing is not mutually exclusive activities.

Another possible outcome is that the Internet and traditional television may converge into a single medium. There are no compelling reasons, either technological or economical, for keeping them apart. The prospects for convergence are in fact good. Whereas television is a narrowly specified standard (for example, NTSC or PAL format delivered by a few officially licensed stations on the UHF / VHF band), the Internet is multi-plat formed, continuously evolving and not inhibited by centralized planning and directing. For these reasons, the Internet that we use today looks and feels different from what we were using five years ago. Whereas the ascent of television was driven by governments and large commercial interests, the Internet is propelled by a much larger population base, empowered by a technology that extends beyond national

boundaries. People who meet new needs and demands from this base will be rewarded.

The statement that "The Internet is replacing the print media" was confirmed by 29 percent of the respondents. 2 percent did not respond. We can therefore conclude that there is a process of replacement of print media through online newspapers and magazines, although this process is definitely not complete. The situation today, and the substitution of the print media by the Internet is not a given fact, (as the hypothesis, that the fraction of internet users for whom the internet replaces the print media is greater than 50 percent is rejected by a p-Value of 8 E-06).

Finally, we present a model, showing from which factors the Internet Craze, measured by time of use of the Internet per week, can be explained.

Therefore, we use the general log linear analysis (LOGIT-Model) and obtain the following model:

Internet Craze = a constant + non-addict + addict*success + addict*awareness + non-addiction*people

The following abbreviations were used:

Addict: I consider myself an Internet addict

Success: I have already tried to reduce my occupation with the Internet, without success.

Awareness: I have met interesting people through the Internet.

People: I like to converse with people via/through the Internet, because one gets a wider spectrum of opinions on the Internet.

Therefore Internet Craze is independent of the following characteristics:

- Do you check your mailbox several times a day, even without receiving important mail?
- Are you a member of a mailing list?
- The Internet offers a good opportunity to receive information from the whole world in a simple way and form.

- It happens to me often, that I end up surfing longer than I had intended to on the Internet.
- My friends often react negatively to my Internet surfing.
- When I am on the Internet, I can forget my daily worries.
- When I do not surf the Internet for one or two days, an excitement builds up in me, which leads me to surfing again.
- The Internet is a playground with thousands of possibilities, which are waiting to be exploited.
- Do you surf then on the Internet too, when you have other more important things to attend to?
- I use the Internet mainly for scientific purposes.

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Biography

Thomas Benesch is a member of the FH Joanneum, Information Management, where he teaches Information Management and General Management courses. Thomas Benesch has authored around 30 papers on the subject General Management / Information Management and Applied Statistics.