

David Smahel

Petr Lupac

**Masaryk University
Faculty of Social Studies**

Czech Republic

**Charles University
Faculty of Philosophy**

**Hungary WIP Meeteing,
July 2008**



Digital Divide and Internet Addictive Behavior in the Czech Republic

**The presented research was supported by the Czech Ministry of Education, Youth and Sports
(MSM0021622406).**

Structure of the presentation



- I. What is digital divide?
- II. Czech Republic digital divide deepening evidence
- III. Is it a social problem? → problems of digital divide research
- IV. What is Internet addictive behavior?
- V. Internet addictive behavior in the Czech Republic
- VI. Why international comparison - discussion

World Internet Project in the Czech Rep.

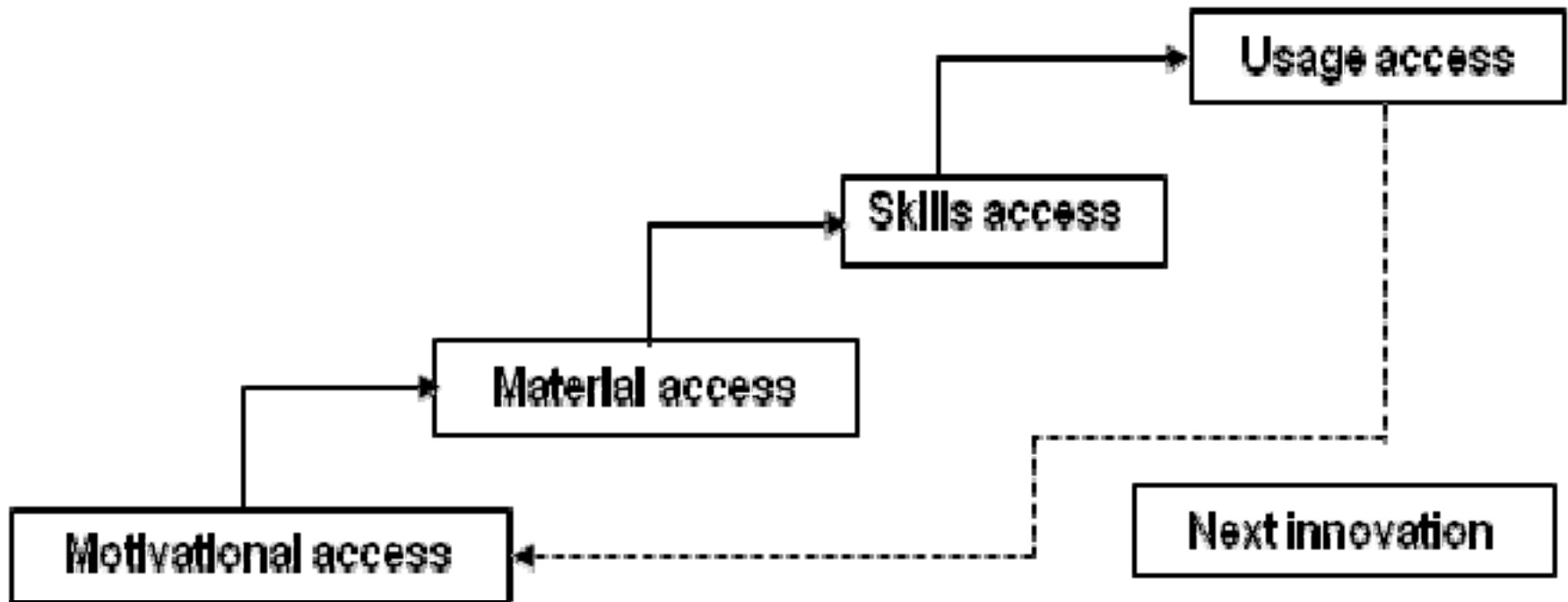


Czech Republic: 77,276 sq km, population: 10 milions,
Religion: Roman Catholic 27%, Protestant 2%,
unaffiliated 59%

WIP research 2004 – 2008, face to face interviews

This presentation: 2007 data (collected in September):
1586 respondents aged 12 years and older
-> 862 Internet users

A Model of Four Successive Kinds of Access

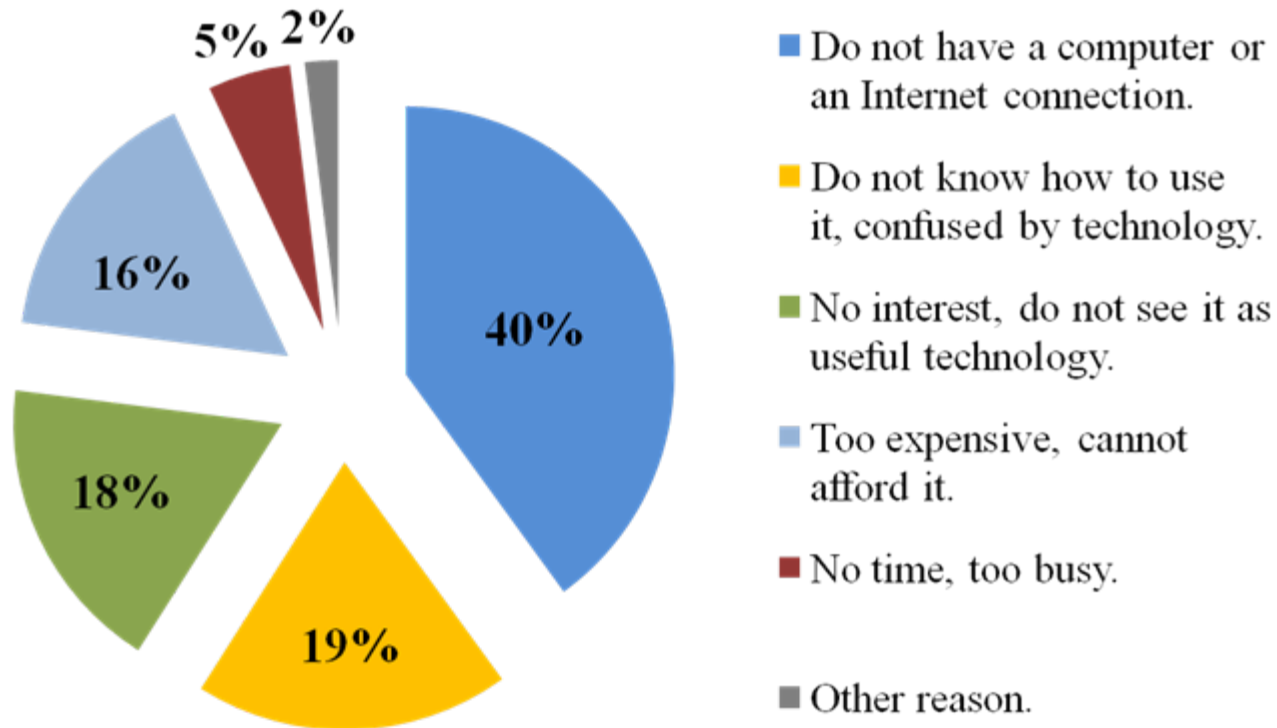


Source: Van Dijk, J. A. G. M. (2005) *Deepening digital divide: Inequality in the information society*. Thousand Oaks, CA: Sage., str. 22; simplified for purposes of presentation

I. Motivational access



P21. What is the main reason you DO NOT use the Internet?



Source: WIP CZ, 2007, N=713 (nonusers)

II.A. Material access



P1. Do you personally use the Internet, i.e., the World Wide Web, e-mail, or any other part of the Internet from home or from any other place?

Chosen groups of population	Year		Change
	2005	2007	
12-18 years old	87	93	+6%
27-33 years old	61	74	+13%
48-54 years old	39	46	+7%
62+ years old	11	12	+1%
Businesspersons and self-employed	78	87	+9%
Employed	56	62	+6%
Unemployed	31	37	+6%
Primary (without students)	11	16	+5%
Secondary with "Maturita" (without students)	60	66	+6%
Monthly net household income up to 14,999 CZK	24	24	0%
Monthly net household income 35,000 CZK and more	75	79	+4%

Source: VHL CZ, 2005, 2007. Own respondents.

II.B. Material access



Internet Penetration by Type of Households

**Households equipped with Internet access in the 2nd quarter 2007
(% of total number of households in given sociodemographic group)**

Type of household

One adult without dependent child(ren)	12.0%
Two adults without dependent child(ren)	20.4%
Three or more adults without dependent child(ren)	34.8%
Single adult with dependent child(ren)	40.0%
Two adults with dependent child(ren)	57.1%
Three or more adults with dependent child(ren)	55.9%

Source: CZSO, 2007

III. Skills access



Chosen groups of users	Level of internet skills		
	Low	Medium	High
Males	36,4	31,1	30,9
Females	48,6	35,6	14,4
16–24 years old	25,8	36,7	35,8
35–44 years old	47,6	32,3	18,6
55–64 years old	56,0	29,6	12,4
Secondary education without GCE	60,3	26,9	10,2
Secondary education with GCE	42,0	34,1	22,9
Tertiary education	32,2	36,0	31,0

Source: CZSO, 2007

IV. Usage access

- No publicly accessible data about usage practices and about exact time spent on using the Internet
- Experienced user vs. newcomer
 - a longer time spent online
 - a bigger diversity of applications and functions used
 - a preference for a higher-speed connection
 - different online activities preferred

Online activities by years of experience

**Share of users who usually perform given activity at least once in a month
(% of Internet users in given group performing given activity).**

	Newcomers (up to 2 years)	(2 to 6 years)	Experienced users (6 and more years)
Reading news online	76	85	92
Looking for a job	42	44	54
Buying things online	35	50	68

Problems of digital divide research



- Problems of measuring “relational” variables – e.g., position in and the type of respondent’s social network (delegation of Internet use)
- Problem of the Internet as the only device granting participation in the information society (self-fulfilling prophecy of the digital divide concept)
- Strategic skills research is almost absent (the same apply for educational programs)

Introduction: Addiction



- Criteria for the Internet addiction (Goldberg, 1995) – imitation of DSM IV
- Grohol (2005) – „Internet addiction“ is hoax
- Griffiths (2000a, 2000b) – same characteristics as other addictions
- Carlton a Danforth (2004): differentiating „high engagement“ and „addiction“
- The addiction is not caused by the Internet but by the applications (Meerkerk et al., 2006)
- Terms: Internet Addiction, Addictive Behavior, High Engagement, Excessive Use

Introduction: Addiction in Questionnaires



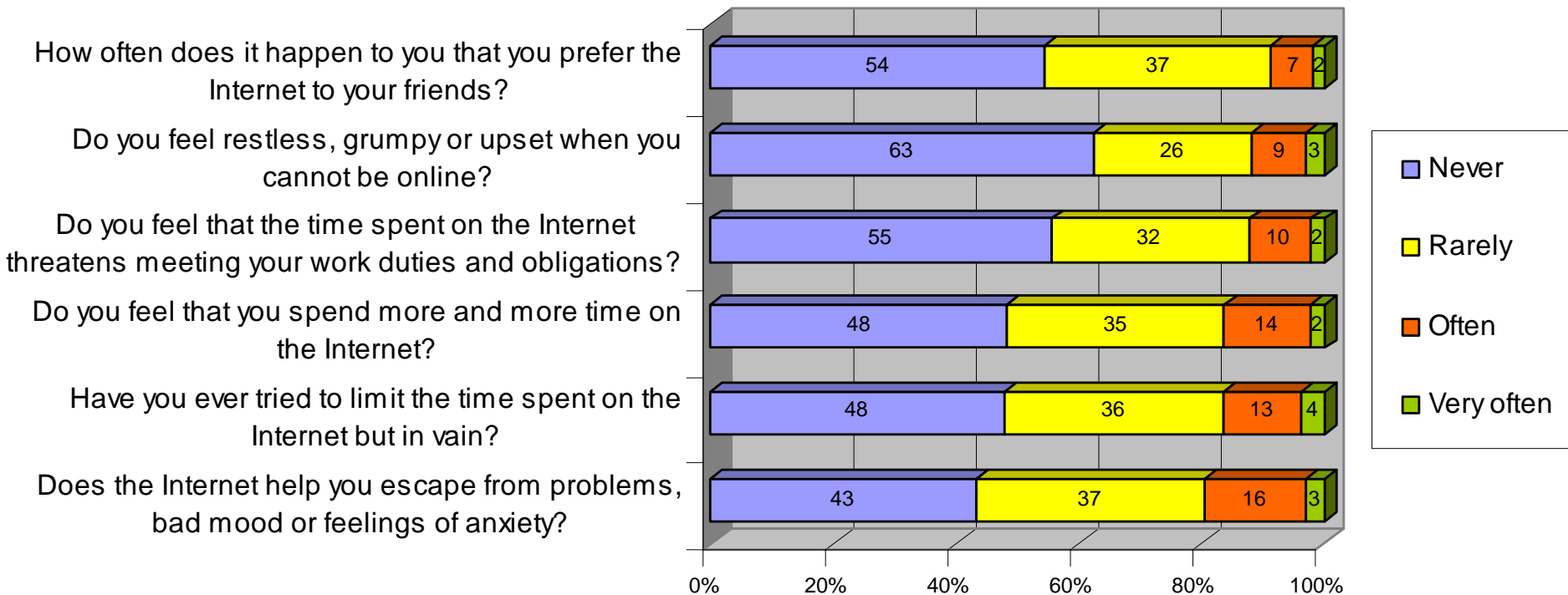
Factors of the Internet addiction (Griffiths, 2000):

- Salience – becomes most important for an individual's life
- Mood change (euphoria) – subjective experiences influenced by pursued activity
- Tolerance – requires larger and larger activity
- Withdrawal symptoms – negative feelings and emotions
- Conflict – interpersonal or intrapersonal
- Relapse – a tendency to returning

Results: Descriptives



We used 14 questions, addiction score was created ($\text{Alpha} = 0.92$)



Results: Gender and Applications

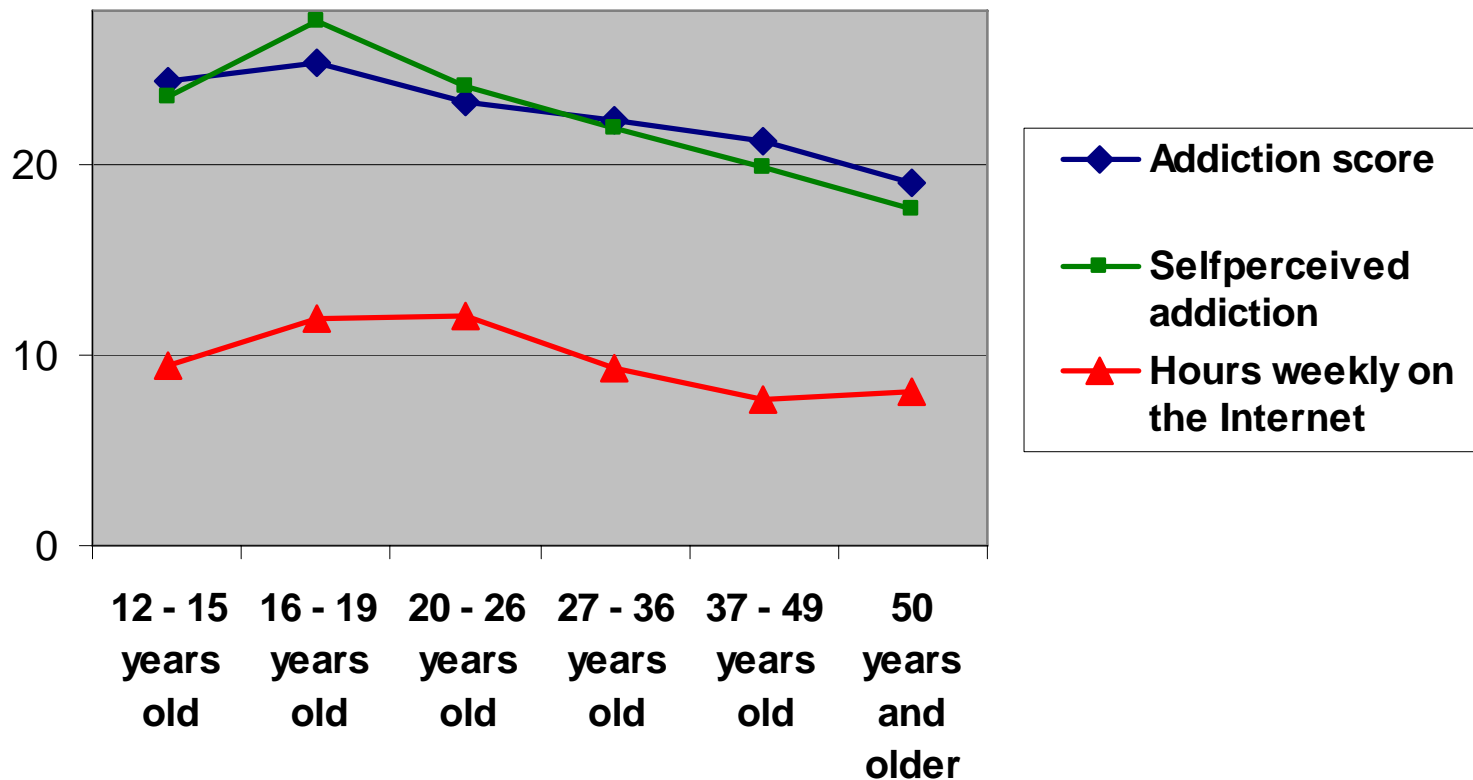


- Men have higher addiction score than women, but men spent in the Czech Rep. more time on the Internet as women. There are no differences between men and women who use the Internet more than 5 hours weekly.
- Applications which show highest correlations with the addiction score: downloading video and music, Internet chatting and forums, sending online messages (MSN/ICQ), online gaming, looking at sexual content

Results: Age Comparison



Age comparison: addiction score, selfperceived addiction and hours weekly on the Internet



Results: Other Context

- Connections with the disinhibited behavior in virtual communities ($r = 0.42$)
- Connections with the score of virtual communication preference ($r = 0.43$)
- Connections with self-esteem (Rosenberg, $r = 0.30$)
- Connections with dissociated online friendship ($r = 0.21$)
- Connections with number of friends online
- Connections with hours on the Internet ($r = 0.28$)

Discussion and Conclusions



- About 3-5% of the Czech Internet users seem to be endangered by the Internet addictive behavior
- Age category of younger adolescents (12-15) seems to behave in some different way – more research is needed
- Broader context and deeper analyses is needed
- These results are important for the future policy and decision making
- Technology can change everything but the research should not be behindhand

International comparison



What questions could answer the international comparison?

- Is the Internet addictive behavior higher in the countries with the high penetration?
- -> do the changes in the online behavior change the level of potential to the Internet addiction?
- How are different age groups endangered in the different countries?
- What applications are most danger in different countries?
- Interdisciplinarity

You can (soon) download this presentation from the following link:

<http://www.terapie.cz/smahelen>

E-mail: smahel@fss.muni.cz

Thank you for your attention.

