



# Internet Surveys - Potentials For Use in Scientific Research

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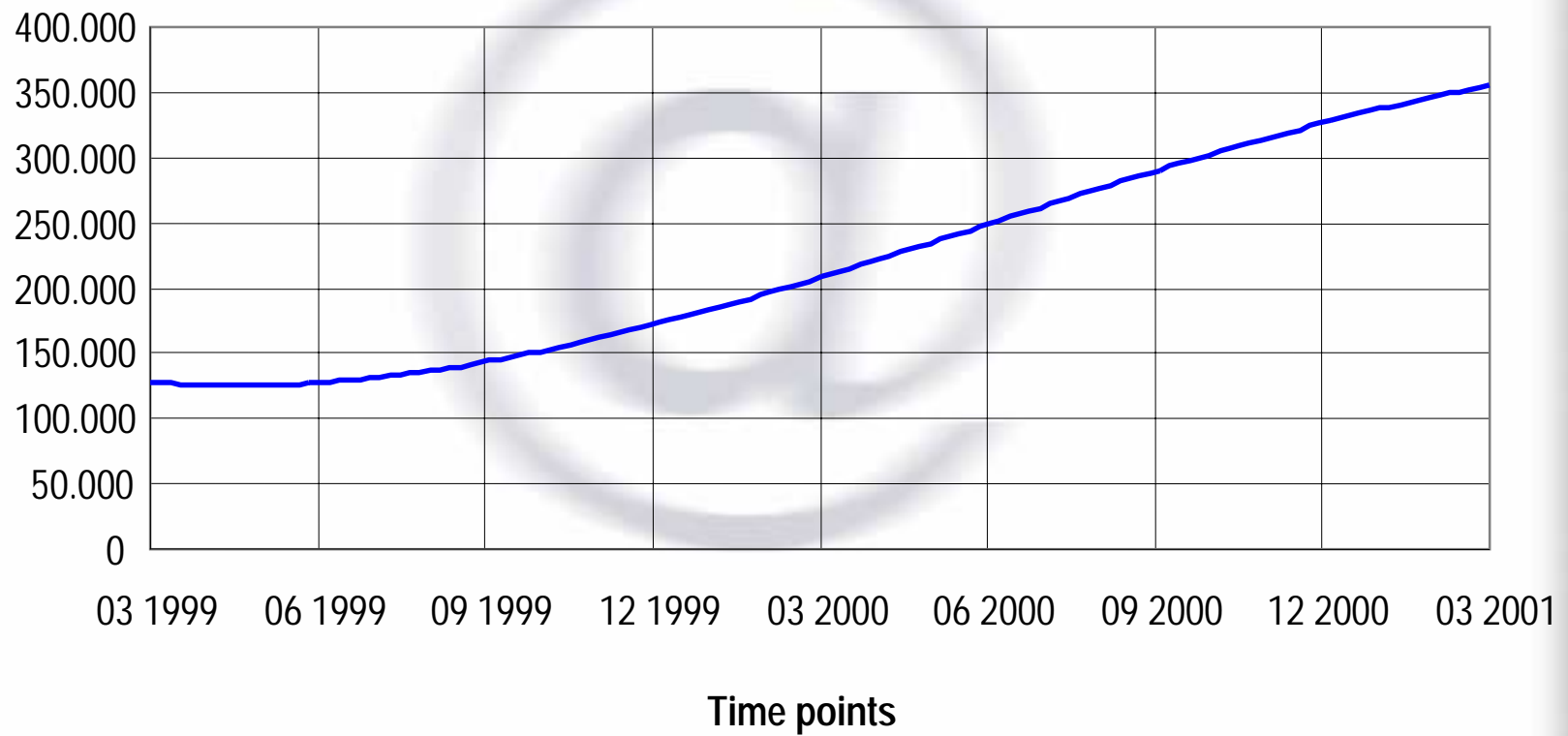
## Internet in the world

- Access: 420 million people or 7% of world population
- Active users: 236 million people

by Nielsen, 2001

# Internet in Croatia

## Internet users



by Proof, 2001

# Internet research in social sciences

Most advanced in the fields of:

- Consumer behavior
- Social psychology and sociology
- Work and organisational psychology
- Experimental psychology
- Computer mediated communication studies

## Internet Research: **Basic Methods**

- On-line surveys
  - Mail
  - Web
- On-line experiments
  - Web based, interactive applications
- On-line individual and group interviews
  - Real-time: chat, virtual worlds
  - Delayed: forums, e-mail discussion lists

## Internet Research: **Basic Advantages**

- Fast and low-cost data collection
- Larger samples: greater statistical power
- Greater diversity of respondents than in traditional studies
- Easy access to geographically dispersed groups
- Easier access to certain social groups

## Internet Research: Drawbacks

- Limited projectability of results
- Autoselection of respondents
- Concerns about respondents' identity



## Internet Research: Drawbacks? But:

- Limited projectability of results
  - Only when projecting on total population
  - Diminishes with greater Internet penetration
- Autoselection of respondents
  - Present also in all other research methods
  - On the Internet, it is measurable
- Questionable respondents' identity
  - Eliminated with the use of on-line panels



## Internet research: **Other advantages**

- More convenient and comfortable for the respondents
- Enhanced discussion of socially sensitive issues
- No human intermediaries between researcher and respondent
- Easy manipulation/adjustment of questions
- Possibility of presenting various audio-visual material



# On-line Research in Practice

## On-line Research in Practice

- On-line research agency, Zagreb, Croatia
- Surveys on its own on-line panel:
  - Database of Cro. Internet users, volunteers for participating in research studies
  - Built by advertising on main web pages and via (solicited) newsletters
  - March 2001: 4500 members

## On-line Research in Practice: **Topics**

- Since summer 2000 studies on:
  - Internet users' profile: demographics, attitudes, behaviors
  - Use of the Internet: ways, intensity, places
  - Interest in on-line services: ISPs, Internet banking, WAP, e-commerce
  - Use of various products: mobile phones, cars
  - On-line promotion effectiveness
  - On-line relationships

## On-line Research in Practice: **Methodology**

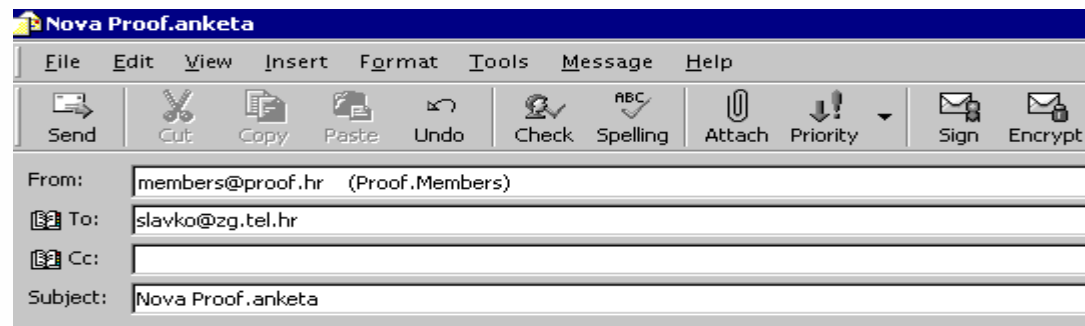
- Surveys available only to members of the panel, invited via e-mail
- Unique URLs guide respondents to the survey
- Interactive modification of survey questions depending on previous answers
- Possibility of building specially designed - targeted samples

## On-line Research in Practice: Panel Structure

|           |        | Croatian population | Croatian Internet users | Online panel N=4500 |
|-----------|--------|---------------------|-------------------------|---------------------|
| Age       | 15-25  | 15 %                | 47 %                    | 44 %                |
|           | 26-35  | 15 %                | 27 %                    | 33 %                |
|           | 36-55  | 26 %                | 24 %                    | 22 %                |
|           | 56-65  | 12 %                | 2 %                     | 1 %                 |
| Gender    | Male   | 49 %                | 65 %                    | 70 %                |
| Education | Higher | 20 %                | 42 %                    | 42 %                |

March 2001

## On-line Research in Practice: E-mail Invitation



⋮ [ kliknite na anketu ] ⋮

<http://www.proof.hr/a/o/oswb1.php?id=5dce7beedbc0324769b8500aa3147832>

⋮ [ kliknite na anketu ] ⋮

:) Pozdrav Slavko!

Pokrenuli smo novu Internet anketu. Anketa je kratka i nagradna!  
Trajati ce izmedju 05.11.2000 i 10.11.2000.

Pozivamo vas da ispunite svoju prvu anketu!  
Proof je u ovoj anketi po prvi puta upotrijebio usavršeni sistem anketiranja. Proof zajednica sada broji 4.300 clanova. Nas je cilj prikazati stanje na Internetu u Hrvatskoj!

Trenutno u Hrvatskoj Internet koristi 300.000 korisnika, tako da danas Hrvatska ima jednak broj korisnika Interneta kao i susjedna Slovenija.



# On-line Research in Practice: Survey

Internet Explorer

Tools Help

Stop Refresh Home Search Favorites History Mail Print Edit Discuss Messenger

ajlo/oswb2.php

**proof.anketa** ispunili ste 18 % ankete

Molimo da na sljedeća pitanja odgovorite za računalo koje najčešće koristite za spajanje na Internet

**5. Vrsta procesora :**  
-- izaberite --

**6. Veličina monitora :**  
-- izaberite --

**7. Rezolucija monitora :**  
-- izaberite --

**8. Operativni sustav :**  
-- izaberite --

**9. Koja je brzina veze kojom se najčešće spajate na Internet?**  
-- izaberite --

**daljee...**

# Internet Research Laboratory

- Department of Psychology, University of Zagreb
- Comparisons of classic and on-line methods
  - examining differences in projectability of results, quality of answers, data structure
  - validating classic instruments for on-line use
  - developing proper weighting procedures for projecting the results to broader populations

# Internet Research Laboratory

## Research on work-life balance in Croatia:

### - Comparison of Field and On-line Survey

- Samples equivalent in age, sex and education structure
- Different methods of examination:
  - Field: face-to-face interviews conducted by students; N= 81
  - On-line: sample selected from online panel; N=81

# Internet Research Laboratory

## Comparison of main results (arithmetic means)

|                             |   | Field sample | On-line sample |
|-----------------------------|---|--------------|----------------|
| Life Balance & Satisfaction | M | 2.8          | 2.8            |
| Job Involvement             | M | 3.2          | 3.1            |
| Family Involvement          | M | 3.4          | 3.3            |
| Family-to-Work Conflict     | M | 1.5          | 1.5            |
| Work-to-Family Conflict     | M | 1.9          | 1.9            |

+ Richer answers on open questions in on-line survey



**Other Applications  
of Internet for Research  
in Social Sciences**

## Experiments Over the Internet

- Computer aided experiments in social sciences started in 1970s
- First web experiments in 1995
- Topics: from music recognition to female attractiveness
- Flourishing - enabled by new software solutions (Macromedia Authorware) and enhanced bandwidth
- Demonstration:  
<http://mrav.ffzg.hr/CUC01/MR.htm>

## Experiments Over the Internet: **Basic Advantages**

- Greater diversity of respondents
- Larger samples - higher statistical power
- Faster (24 hours / day)
- Cost savings of premises, research personnel, research material, administration and analysis



## Surveys on Hard-to-reach Social Groups

- Internet enables research on social groups once hard to reach:
  - Persons who suffer from certain diseases: AIDS, tumors,..
  - Persons with specific physical or psychological problems: overweight, panic attacks, depression,..

## Surveys on Hard-to-reach Social Groups: **Examples**

- Persons who engage in socially unacceptable or illegal behaviors: pedophiles, hackers, drug-dealers,...
- Persons who share specific attitudes: political, gender-related, nationalistic,...
- Various other specific groups: homosexuals,..., experts in certain scientific/business fields,... unemployed,...

## Surveys on Hard-to-reach Social Groups: Access possibilities

### News groups

- Examples:
  - tumors - sci.med.diseases.cancer, hr.alt.med
  - overweighted - soc.support.fat-acceptance
  - "hackers" - alt.hackers, hr.alt.hackers
  - drugs - alt.drugs.cocaine, hr.alt.drugs
  - homosexuals - alt.homosexual, hr.alt.romance
  - NN experts - comp.ai.neural-nets

## Surveys on Hard-to-reach Social Groups: Access possibilities

### Specific web pages

(regularly visited by members of certain groups)

- Examples:

- AIDS - [www.thebody.com](http://www.thebody.com)
- panic attacks - [www.panicattacks.com.au](http://www.panicattacks.com.au)
- depressive - [www.depression.org](http://www.depression.org)
- ultra-nationalists - [www.americannaziparty.com](http://www.americannaziparty.com),  
[www.ustasa.net](http://www.ustasa.net), [www.chetnik.com](http://www.chetnik.com)
- unemployed - [www.moj-posao.net](http://www.moj-posao.net)

## Surveys on Hard-to-reach Social Groups: Access possibilities

- And then?
  - Posting a survey on the news group
  - Implementing a survey on the web site, or
  - Advertising a separate survey site via the news group / web page

Important: Netiquette!

# Thank You!

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