# Lecture 19 Consumer Health Website Usability Survey

Something we've done together

#### **Domain Motivation**

- The Internet (more specifically, the Web) is influencing the healthcare process
  - People use the Web both before (or instead of) consulting a physician, as well as afterward
    - Are they getting accurate information?
    - Are they interpreting it correctly?
  - Doctors use the Web a lot, too
    - And they sometimes recommend Web resources to patients
  - Potential to make a positive contribution to 'activated patients' in a support self-management scenario
    - Self-management is vital for conditions such as diabetes, and can be useful in all sort of chronic/complex illness, esp. with an ageing and often obese population

# Pedagogic Motivation

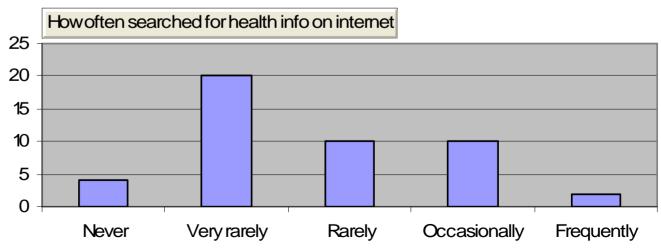
- You folks will be on the 'supplier side'
  - Many (most?) of you will design web pages during your career
  - Some of you will design things used by the general public
  - Some of you may organize usability studies
- So good if you introspect on the 'consumer side' and the use and challenges of such evaluation
  - So you had the chance to be a guinea pig and to be made to reflect on your consumer experience
  - Now let's talk about the experience, and I'll show you what it looks like from the evaluator end

#### Results

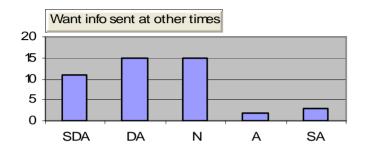
- Responses
  - 46 surveys returned (2 indicated not for research purposes)
  - About 30% response rate
    - Which is not great in terms of understanding the population - too much room for bias in terms of who chose to participate
    - But probably OK in terms of getting feedback on the websites

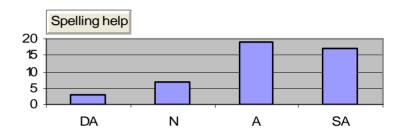
# Respondents

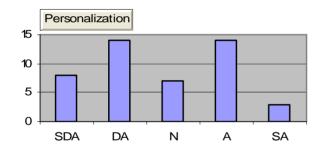
- >90% had searched for health information on the Internet before
  - But remember, only 30% response rate, so class could be just
     27% who have looked before
- Unsurprisingly, young (mostly 22 and under), only two 31-40 year olds (none older) and very experienced with Internet

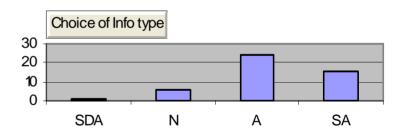


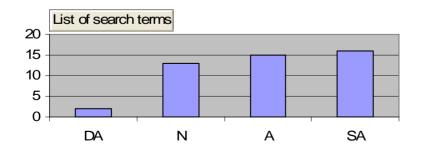
## Features You Want

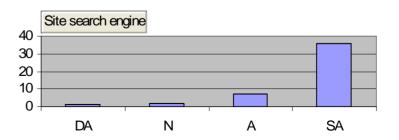












# The Design

- Partially within-subject design you each did one 'local' and one 'foreign' web site
  - Well there was only one .nz worth choosing www.everybody.co.nz
    - You either got that or healthsite.gov.au
  - 'Foreign' sites were medlineplus (US National Library of Medicine, hon (Health on Net Foundation, Geneva) or mayoclinic (US not-for-profit)
- Controlled ordering effect by balancing whether 'local' or 'foreign' went first in the survey pack
  - And otherwise balanced 50/50 and 33/33/33 with the site options
  - Then physically shuffled and passed them out

#### ...and did it work?

TEST FOR ORDERING EFFECT								
Would you use th	nis website agair	1?						
G1.c for first site			G1.c for secon	G1.c for second site				
G1c	Count of G1c	%	G1c	Count of G1c	%			
No	16	34.78%	No	20	44.44%			
Yes	30	65.22%	Yes	25	55.56%			
Grand Total	46	100.00%	Grand Total	45	100.00%			
Count of Site1			Count of Site2	2				
Site1	Total		Site2	Total				
everybody	12		everybody	11				
healthinsite	11		healthinsite	12				
hon	8		hon	6				
mayoclinic	5		mayoclinic	6				
medlineplus	10		medlineplus	11				
Grand Total	46		Grand Total	Grand Total 46				

- Randomization of ordering went well and seemed marginally important to do (actually, the 65.22% would've had to be >75.2% for 5% significance in difference of proportion test – according to answers.com (which wasn't very systematic in convincing me they knew what they were talking about)
- Random variation got medlineplus a little over-represented (and mayoclinic a little under)

#### Research Ethics

- Several requirements from the research ethics committee
  - The Project Information Sheet
    - With contact info of my supervisor and the ethics committee
  - Didn't need explicit Informed Consent form because it was an anonymous questionnaire
  - Need to achieve good separation of myself from the study, to not compel you as your lecturer
    - Option to not use results in research even if you did want to do it for class
    - Not directly require participation for a mark
    - Lecturer not 'looking' to see that you do it!
  - Also needed to provide convincing argument of appropriate and minimal risk AND ability to deal appropriately with harm if it occurs (e.g., refer to counseling if you find disturbing info)

### Bottom Line – Your Verdict

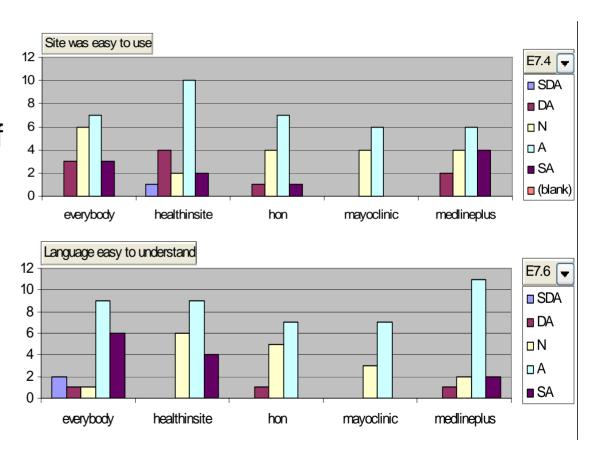
 HON is a little ahead, but differences are not significant

Would you use this website again?							
Site	No	Yes	Total	% Yes			
everybody	9	14	23	60.9%			
healthinsite	10	12	22	54.5%			
hon	4	10	14	71.4%			
mayoclinic	5	6	11	54.5%			
medlineplus	8	13	21	61.9%			
Grand Total	36	55	91				

Methods note: made a lot of use of Excel pivot tables. Probably should go with SPSS if you want to do a lot of similar charts.

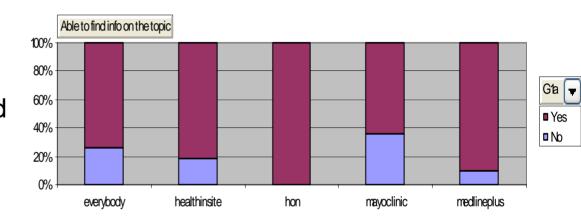
# Usability per se

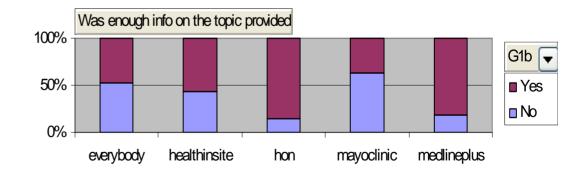
- No terribly clear story on easy of use and understandability of language
  - Mayo Clinic is unoffensive
  - Language of MedlinePlus looks pretty good

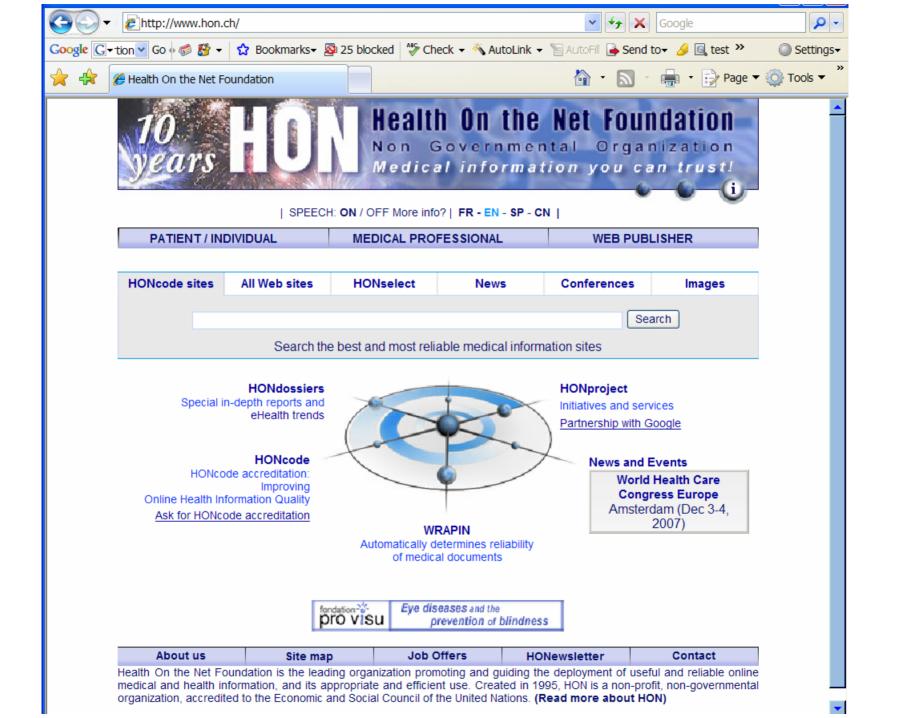


#### More Results

- HON is best information provider
  - Very closely followed by MedlinePlus
- Probably not all the same in terms of enough info
  - Need to consult a statistician
  - Possibly use as a hypothesis for a further study







# So what did you think?

- Confidentiality reminder...
  - I don't recommend sharing your health business (and NOT anyone else's!) to the class)
- You liked HON even though it's a bit weird looking
- Noted poor menu layout in everybody



- A little put off (and slightly confused) by healthinsite being just a hub; also medlineplus being relentlessly US
- A lot of fans for just using Google changed your mind at all?
- Other observations???

## And how 'bout the methods?

- Only a few people missed the back side of the surveys
  - Possibly OK with a little clearer labelling
  - Also few people confused by the layout of the initial questions, and a bit redundant on quizzing about problems, but not so much that response was unreadable
- Was it a good survey?
- Was it a good task?
- Should it have been for a mark?
  - Or how else to bring up response rate??