A Study on the Adoption of a Web Page Content Assessment Tool: SPAT

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Background

Access to Information
is a
Privilege

Background

"...the literary appetite of the young is often feeble, and often capricious or perverted. While their stomachs generally reject unwholesome food, their minds often feed on garbage and even poison" William Mathews

United States Bureau of Education. (1876). *Public libraries in the United States of America; their history, condition, and management. Special report, Department of the Interior, Bureau of Education. Part I* **(No. LCCN: 01-9828). Washington: Govt. Print. Off.**

1960

Open stack debate

1964

Open the stacks!

Physical effort

1990

Open health information

2007…

SPAT Development

- Analyzed methods used to review paper resources

**Compared
&
Linked**

- Analyzed methods used to review web sites or web pages

SPAT Development

- Informally questioned six professional academic librarians

- Profiled the population to use the tool

SPAT Development

Requirements

- Memorable

- Easy to use

- Require no additional time when browsing

- An acronym

- A word association

SPAT

S = site

P = publisher

A = audience

T = timeliness

Research Questions

- At what level do Pittsburgh metropolitan area Certified Diabetes Educators (CDEs) use information from the Web or Internet in their professional practice?

- What kind of assessment do Pittsburgh metropolitan area CDEs perform on web based diabetes information before recommending the information to patients?

- If CDEs perform an assessment of web based diabetes information before recommending the information to patients, what do they do?

- At what level does the use of the SPAT assessment tool for web based information make a difference in the information CDEs provide to patients?

Study Design

- Case study
  - 38 Certified Diabetes Educators
    - Recruitment
      - Web page directories
      - Snowball sampling process
  - Pre and post web page evaluation questionnaire upon introduction of SPAT
    - Total number of web pages: 4
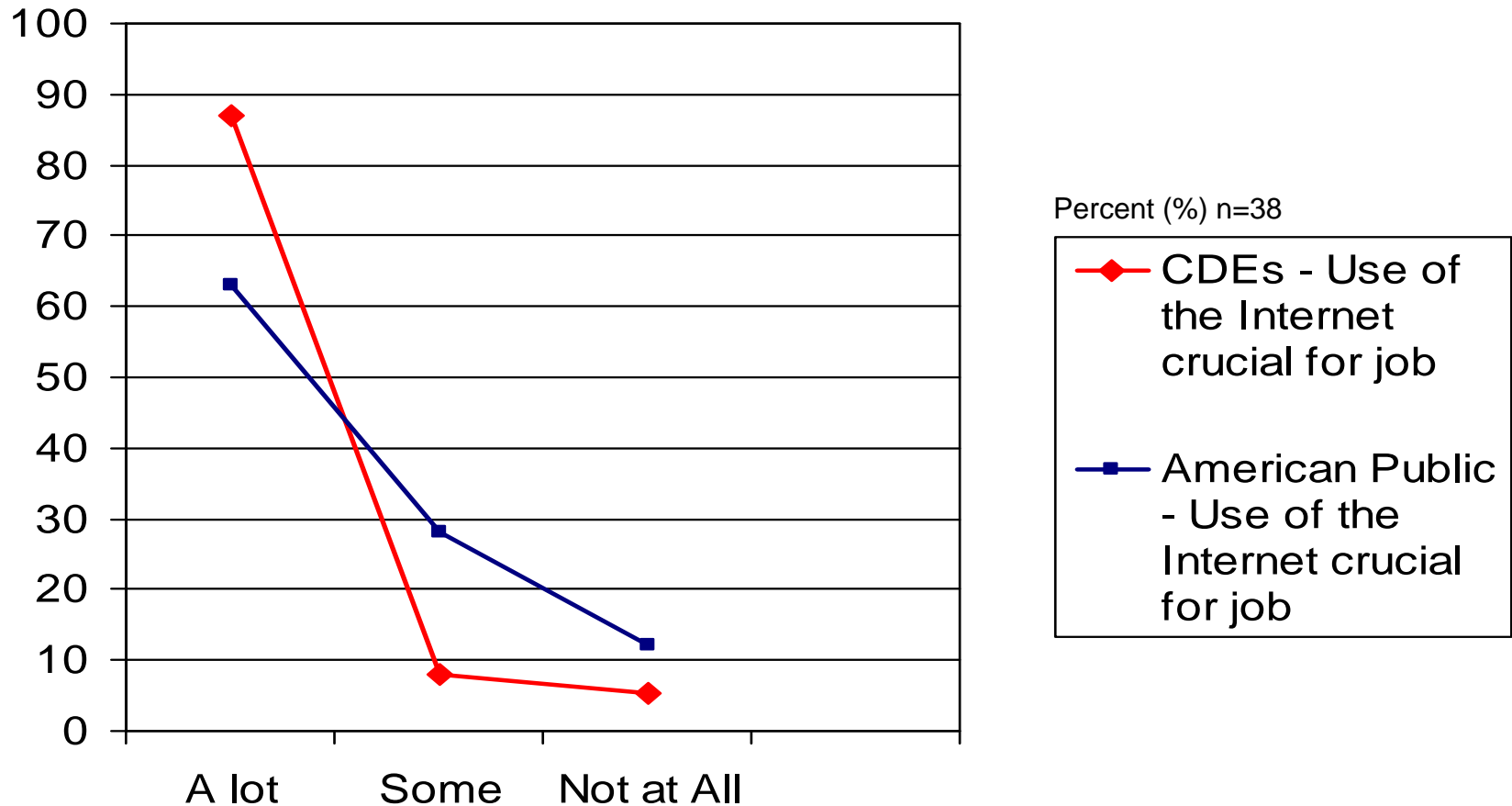 - Three week post SPAT questionnaire

Results

Use of information tool for professional purposes

Percent (%) n=38

Internet Services	Never	Rarely	Sometimes	Often	Very often
E-mail	0	5.3	7.9	18.4	68.4
The World Wide Web	7.9	0	7.9	31.6	52.6
Blogs	84.2	14.8	0	0	0
USENET newsgroups	75.7	13.2	5.4	5.4	0
Forums/Listservs™	28.9	28.9	18.4	13.2	10.5
Google	5.3	7.9	26.3	18.4	42.1
Yahoo	23.7	21.1	31.6	15.8	7.9

Results

Use of Web or Internet in professional practice

Percent (%) n=38

Legend:
- CDEs - Use of the Internet crucial for job
- American Public - Use of the Internet crucial for job

X-axis: A lot, Some, Not at All

Source: Madden, M. (April 2006). *Internet penetration and impact.* Pew Internet & American Life Project. Retrieved May 7, 2007 from http://www.pewinternet.org/pdfs/PIP_Internet_Impact.pdf
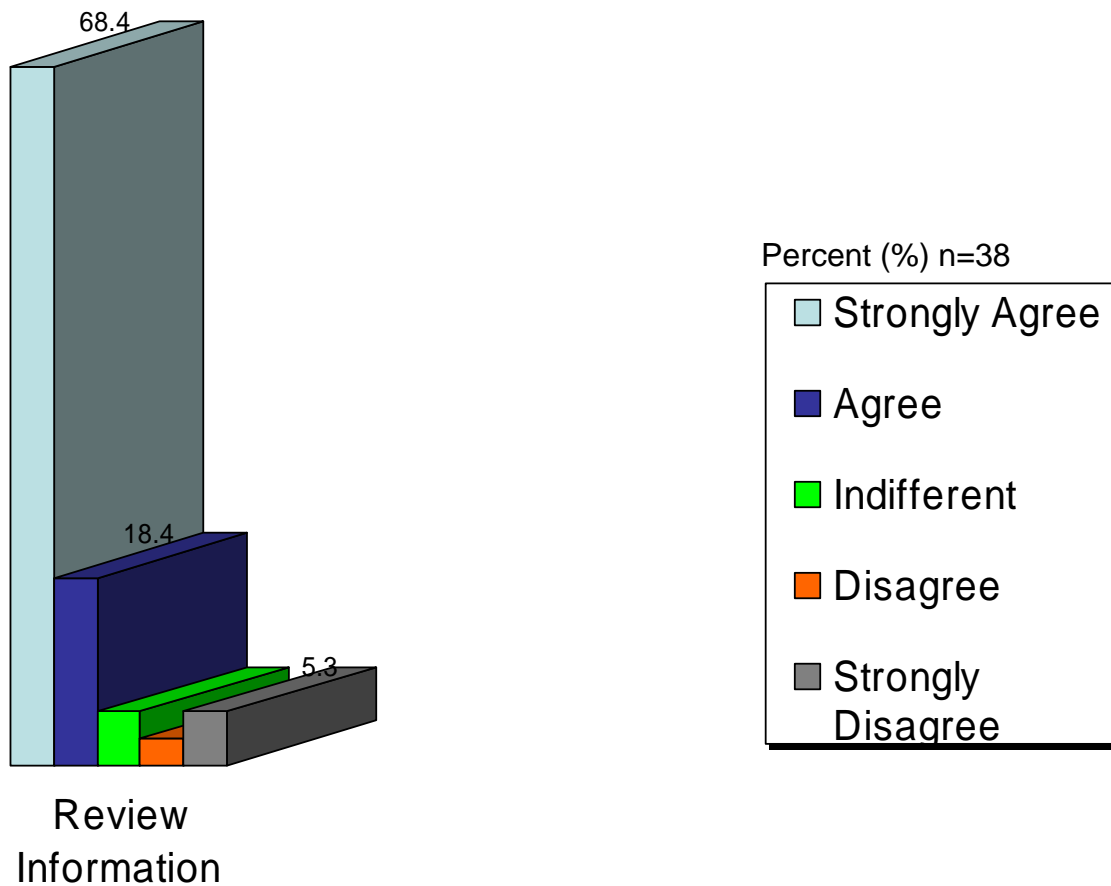
Results

A large number of my patients currently use the Internet

Percent (%) n=38

Legend:
- US Population
- U.S. Internet Use
- Pew Report
- CDEs
- CDEs - no

X-axis categories: U.S. Population[1], U.S. Internet Use[2], Internet Health Seekers
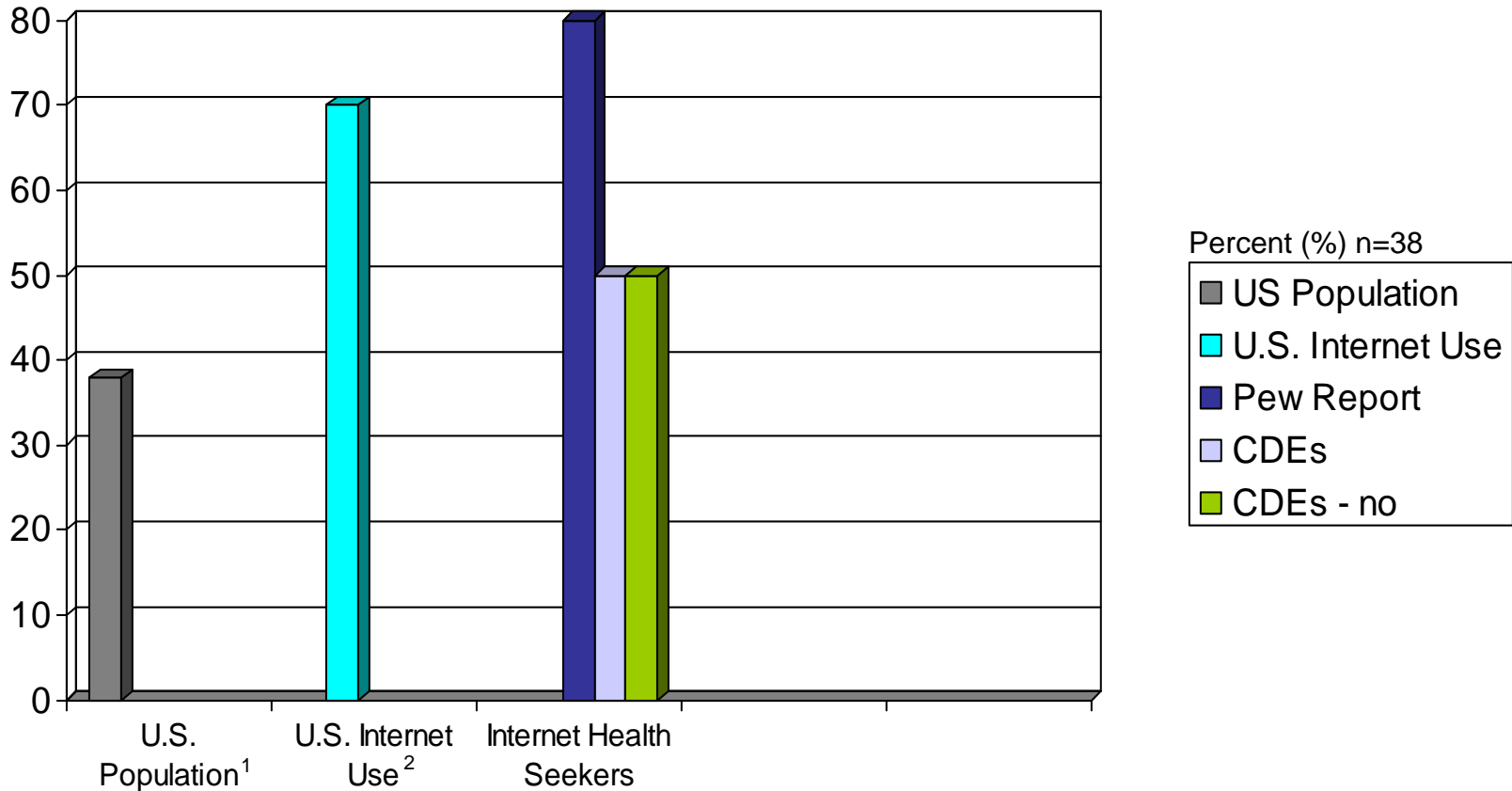
Sources: 1. Miniwatts International. I. (2007, March 19). Internet world stats: Usage and population statistics. Retrieved May 8, 2006, from http://www.internetworldstats.com
2. Fox, S. (Octoberl 2006). *Online Health Search 2006.* Pew Internet & American Life Project. Retrieved May 8, 2007 from
http://www.pewinternet.org/pdfs/PIP_Online_Health_2006.pdf

Results

It is important to review web page information

68.4

18.4

5.3

Review
Information

Percent (%) n=38

☐ Strongly Agree

■ Agree

■ Indifferent

■ Disagree

■ Strongly
Disagree

Results

Location of Internet access

Percent (%) n=38

Internet Location	Never	Rarely	Sometimes	Often	Very often
In your office	0 0	10.5	31.6	21.1	36.8
In your home	7.9	13.2	26.3	21.1	31.6
In an Internet café or coffee shop	84.2	10.5	5.3	0	0
In a library	57.9	36.8	2.6	2.6	0

Results

Web page evaluation
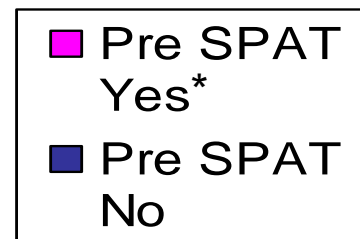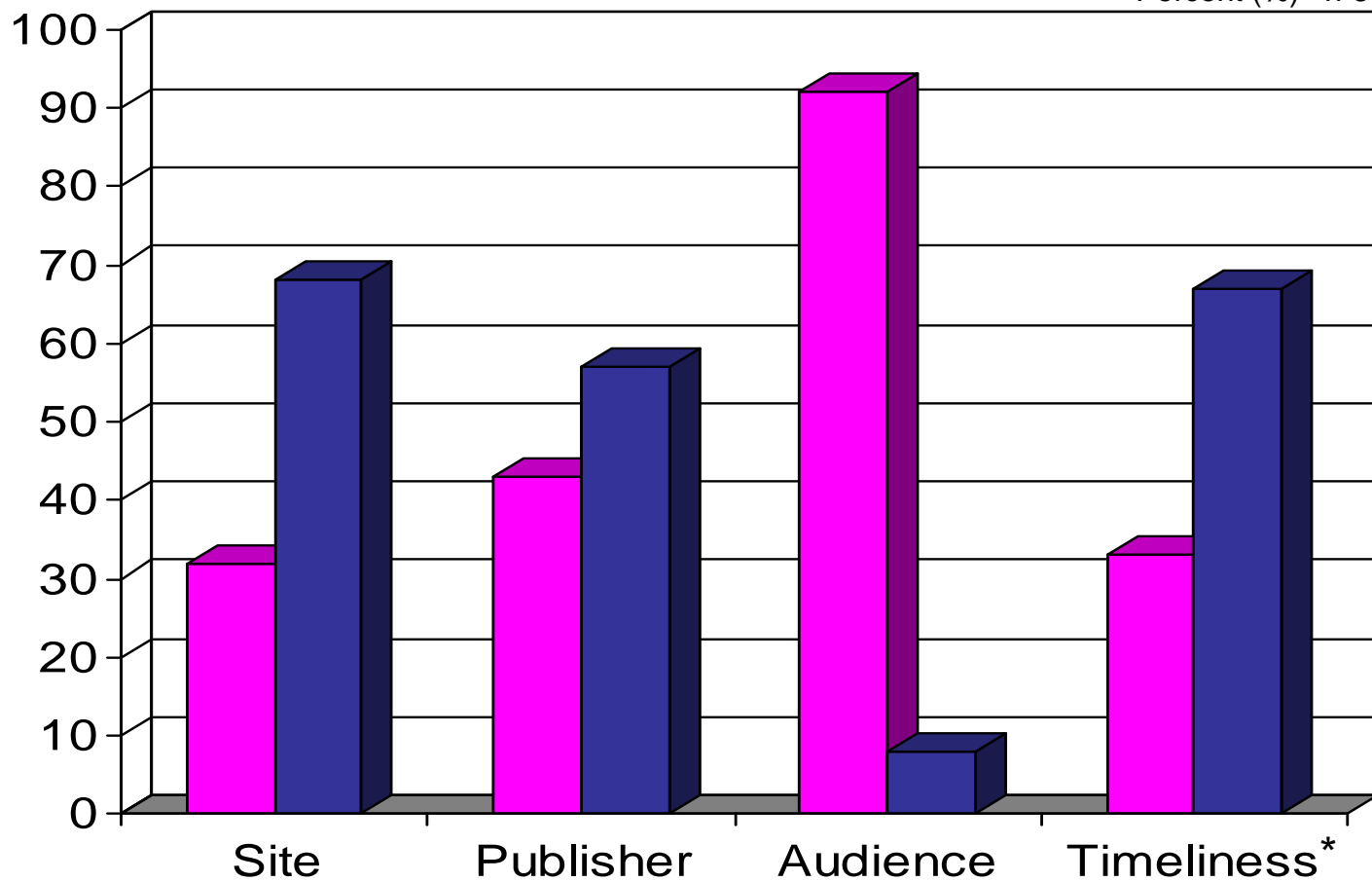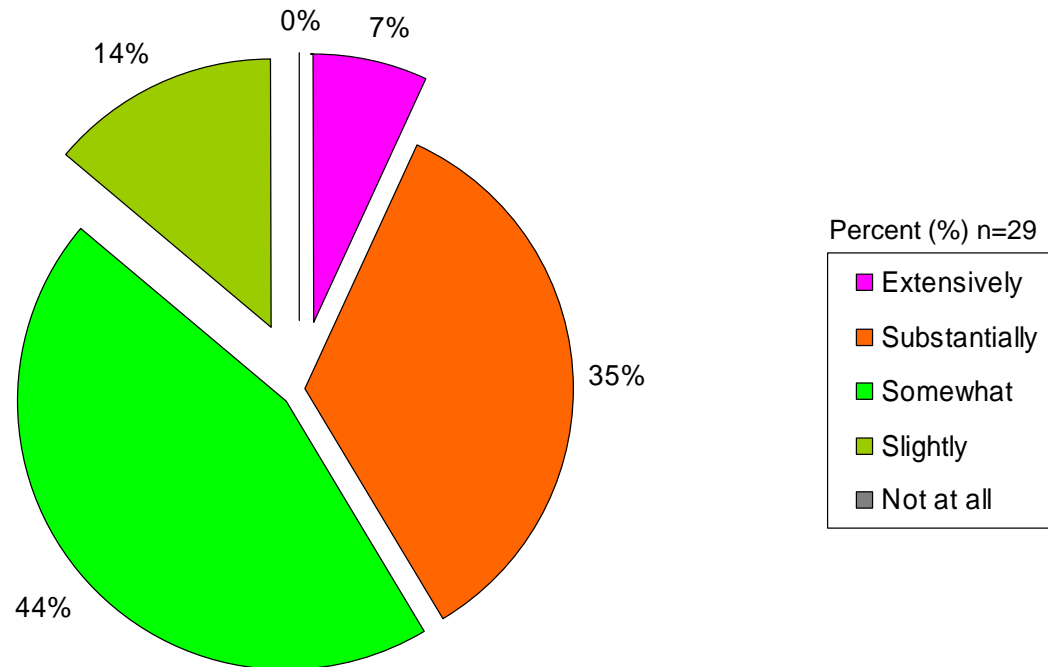
Results

Web page evaluation
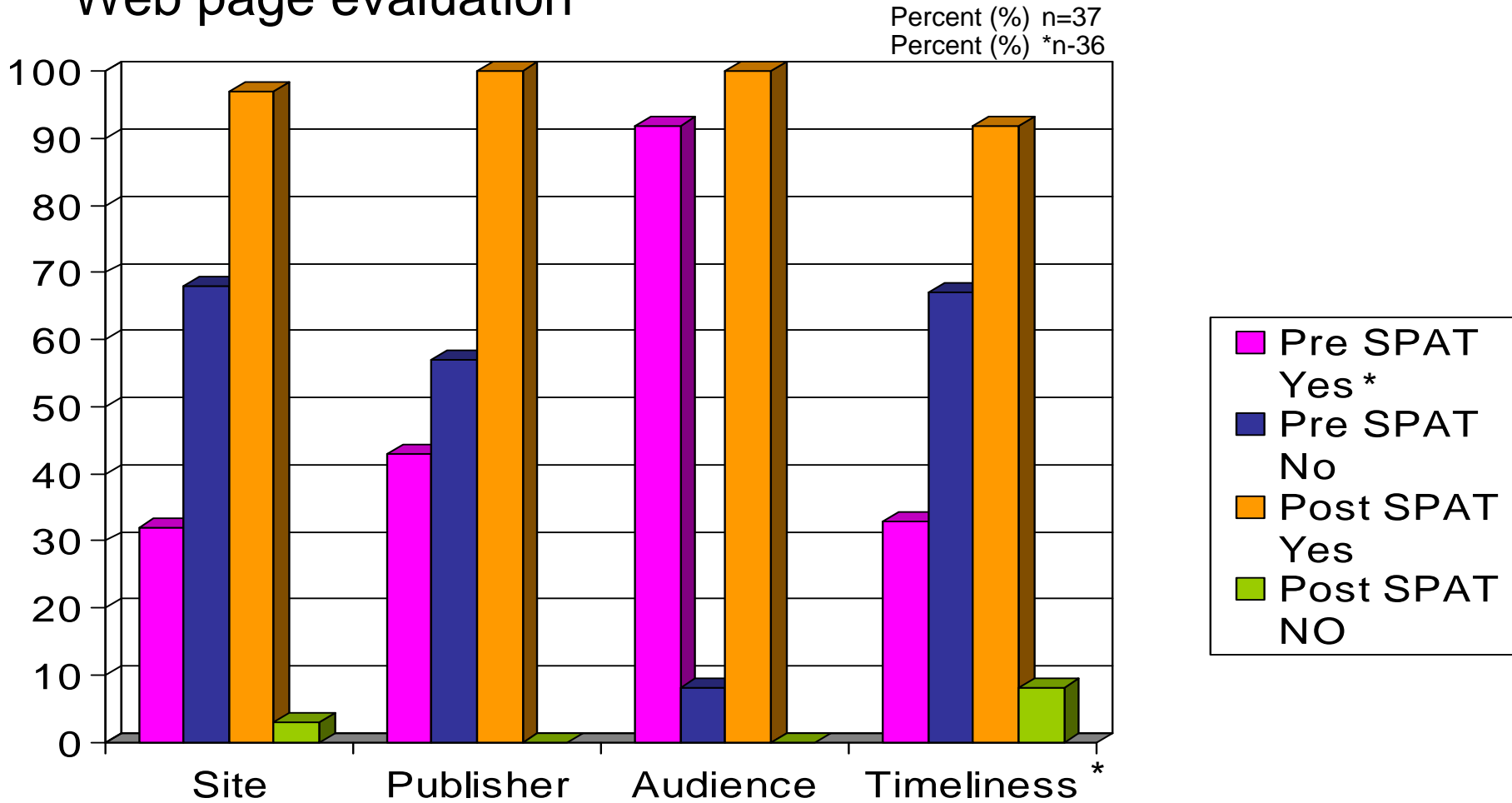
Results

Follow-up questionnaire

SPAT changed the way you review web pages

Results

Follow-up questionnaire

Introduced SPAT to others

Percent (%) n=29

- ■ Extensively
- ■ Substantially
- ■ Somewhat
- ■ Slightly
- ■ Not at all
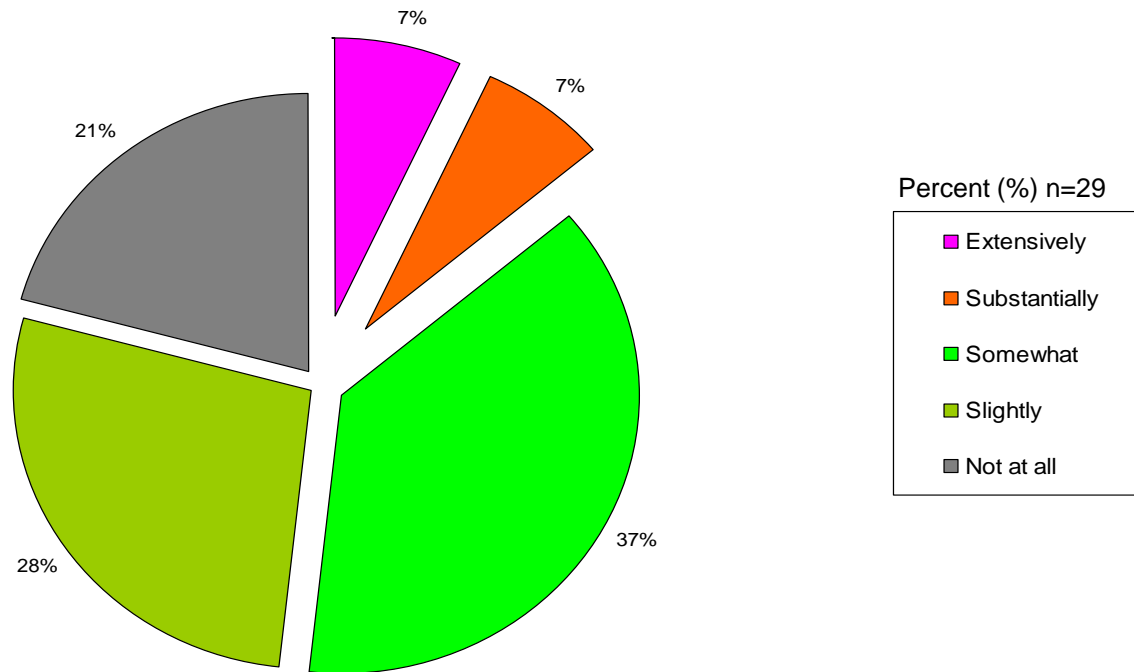
Results

Follow-up questionnaire

Comments on SPAT from the CDEs

- "I shared the info with my class I teach at Seton Hill University"

- "Would also be helpful for consumers/patients. I plan to teach these guidelines to patients who use the Internet for health info -- a handout or brochure on this would be helpful for patients."

- "Good Tool. I will include it in my presentation at the ADA expo on Saturday."

- "I shared the SPAT with my co workers and with my family members. My nephews are students at local colleges and universities and my 2 brothers and sister are all professionals and were very impressed. I think they shared with their coworkers."

Conclusions

- Communication tool : Email

- CDEs don't necessarily utilize blogs

- CDEs utilize the Internet more than the general public

- CDEs feel it is important to evaluate information from the web

- CDEs are not sure if their patients seek information from the World Wide Web

- Internet access point : Office
  - Sometimes : Library

Conclusions
Before SPAT

- CDEs did some sort of web page evaluation
  - Mostly on usability aspects
    - The organization of information
    - The font size
    - If the back arrow worked
    - How quickly links opened
    - If links worked
    - The organization of information

Conclusions
After SPAT

- CDEs evaluated web pages
  - Site
  - Publisher
  - Audience
  - Timeliness

    - Color
    - Animated Objects
    - Number of advertisements
    - Pictures
- CDEs continued to use SPAT after its introduction
- CDEs exhibited belief in SPAT by sharing it with others

Future Directions

- – A cross-sectional study on web page evaluation behaviors and techniques, as well as the adoption of SPAT, by age group and gender of people not employed within healthcare.

- – A cohort study of web page evaluation behaviors and techniques by patients and their care giver's, as well as the adoption of SPAT.

- – Development of a web page to introduce the world to the tool, SPAT.
  - Once developed, the page may be analyzed for its utilization.