

**Quality Evaluation of Health
Answers in Yahoo! Answers:
A Comparison Between Experts and
Users**

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Problem Statement

- The popularity of sharing health information in social contexts
- Importance of the quality of health information shared
- Little is known about people's perceptions of quality criteria for evaluation

Purpose and Significance

- To compare quality evaluation between three different groups

Yahoo!
Answers
questioners

Health
reference
librarians

Nurses

Research Questions

- How do health reference librarians, nurses, and questioners in Yahoo! Answers evaluate the quality of health answers provided in Social Q&A?
- How are their ratings on health answers different from one another?

Roles and Tasks

Adam

Research Collaboration

Assist in reviewing
literature

Recruit, conduct
online surveys with
librarians

Collect and analyze
librarian data

Yong

Research Assistant

Recruit, conduct
online surveys with
questioners

Collect and analyze
questioner data

Both

Help with human
subjects (IRB)
approval

Code for question /
answer
appropriateness

Help design and
implement survey

Recruitment

Questioners (40)

- Population: Those who asked health-related questions in Yahoo!
Answers during May 2011
- Sorted, sampled randomly
- Invited via message feature
- E-mailed Yong or Adam to express interest
- \$10 compensation

Librarians (40)

- Mailing lists
 - Medical Library Association
 - Florida Ask-a-Librarians
 - jESSE
- Collected contacts for health science librarians in FL, GA, other states
- \$30 compensation

Coding Questions and Answers

Random
sample

- 500 questions and their “best answers”

Coding

- Remove
 - No meaning
 - Excessive cursing / explicit content
 - Pure survey / opinion

Re-random
sample

- 400 questions and answers

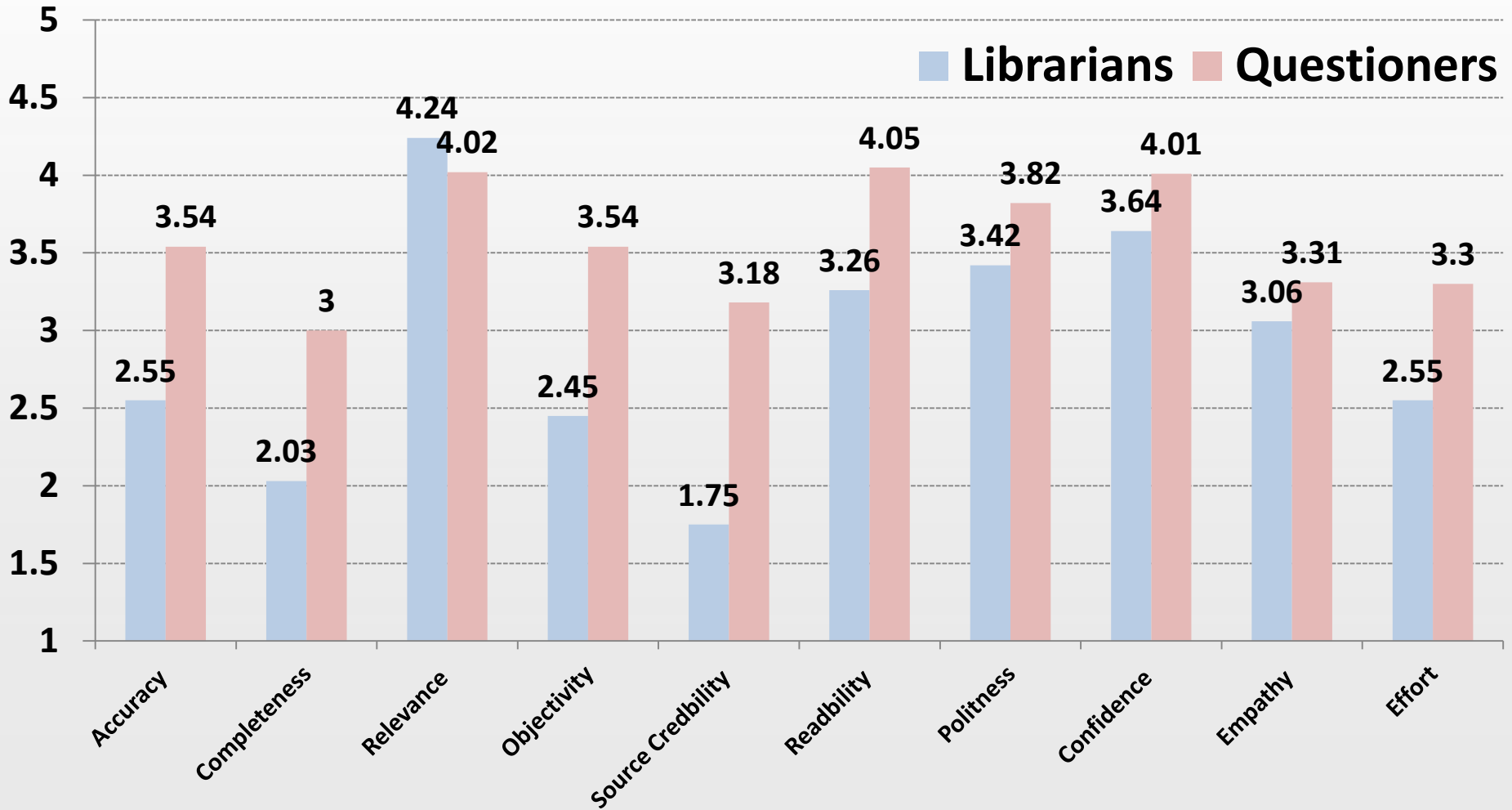
Method

- Online surveys
- 10 questions and answers each
- Evaluation criteria (1 to 5, or N/A)
 - Accuracy
 - Completeness
 - Relevance
 - Objectivity
 - Source credibility
 - Readability
 - Politeness
 - Confidence
 - Knowledge
 - Efforts
- Demographic and other questions

Problems Encountered

- Extraction of data
 - SQL database hosted by Virginia Tech
 - Encoding, selection, export to Excel
- Recruitment
 - Fewer responses than expected from questioners
 - Reminders necessary
- Survey software
 - Quirks and issues
 - Extraction and analysis of results

Findings



Findings (continued)

- The average ratings
 - librarians (M=2.85) < questioners (M=3.63).
- Additional criteria from librarians
 - helpfulness
 - authority of answerers
 - safety

Ongoing Work

- Surveys with nurses
- Comparing the results of quality evaluation by nurses with laypeople (*Yahoo!* Questioners) and reference librarians
- Analysis of qualitative comments
 - Per question: resources used, additional comments
 - Overall: impression, suggestions, other comments

Implications

- For research and practice
 - Suggestions for users and patients: be critical in using online health information
 - Education and instruction for laypeople: how to judge the quality of health information given by non-experts in social contexts
- For us
 - What we personally got out of it
 - How it relates to our own research

Thank you!

Questions?