

**Teen Health Information Behavior and Social Q & A:
A Study to Investigate Teens' Assessments of the
Accuracy, Credibility, and Reliability of Health
Information about Eating Disorders**

**Leanne Bowler
Jung Sun Oh
Daqing He**

**School of Information Sciences
University of Pittsburgh**

A light green circular logo with a drop shadow, containing the text "Teen Health Information Project" in a dark green, sans-serif font.

Teen Health
Information
Project

Teen Health Information Project OCLC-ALISE Research Grant

Study to investigate teens' heuristics for determining the credibility, reliability, and accuracy of health information.

Goals of this research project

- Understand how teens interpret the credibility, reliability, and accuracy of health information in Social Q&A.
- Work toward a model of adolescent health information behavior in the context of Social Q&A;
- A set of design recommendations for information systems and services that support the health information needs of young people.

We asked teens what *they* think about the content on eating disorders in *Yahoo! Answers*

How do they rank it?

What meaning does it have for them?

Does it inform them?

How do they determine it's
credibility, reliability, and accuracy?

Background

Teen health information in Social Q & A

Where do teens find answers to their health questions?

- **90 % of online teens** in the United States look for health information on the Web! (Rideout, 2001);
- Teens often use the Internet as the **primary source of information on sensitive or embarrassing health topics**, among them weight-related issues (Eysenbach, 2008, p. 127).

Eating disorders and teens: A serious health problem

- **Many teens suffer** from eating disorders (Neumark-Sztainer and Hannon , 2000).
- There can be **serious complications** from eating disorders (Katzman et al., 2010).
- Eating disorders can have **lifetime effects** (Rome et al. ,2003, p. 107).

A source for health information...Social Q&A sites

- **Yahoo! Answers** is:
 - The **fifth most visited social media web site in the United States**, preceded only by the social media power houses of *Facebook*, *YouTube*, *Twitter*, and *Pinterest* (Dayton Business Journal, 2012).
 - Part of the **health information ecology of teens**.
- We decided to look at *Yahoo! Answers*, as one source where teens might seek answers to their questions about eating disorders;

Yahoo! Answers

Example of a “best answer” chosen by asker



?

How eating disorders have changed over the years?

Hi, I am writing a paper on the effect of advertising on eating disorders. I need some concrete statistics on how the prevalence of eating disorders has grown over the past decades. Does anybody have some/know where I could find some? Thanks :)

8 months ago

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My Two
Cents

Best Answer - Chosen by Asker

I dont know the statistics. But i believe that eating disorder have increased because back in the day (80s and back) models had a more healthy bigger body type now a days models are so stick skinny its just not realistic or healthy for the average girl to be that skinny.

8 months ago

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Asker's Rating: *****
thanks :)

Yahoo! Answers

Example of a “best answer” chosen by user community



Resolved Question [Show me another »](#)

What are the consequences of eating disorders?

I understand morally why eating disorders like anorexia and bulimia are bad, but I've never been taught what bad effects they actually have on health.

5 years ago [Report Abuse](#)



Best Answer - Chosen by Voters

Well, you need a certain amount of body fat in order to menstruate--body fat produces estrogen, and without the body fat, there's not enough estrogen to have a monthly cycle. In and of itself, this is quite dangerous--if you don't have enough estrogen to menstruate, then you don't have enough estrogen to support your bones. Until women are about 30 or 35, their bones are supposed to be increasing in density and strength. Then after that time, they can either maintain, or lose density and strength. If you don't menstruate, then you are automatically losing strength and density of bone, meaning you WILL get osteoporosis at a young age--you can NEVER make up what you lost or failed to build--and that's DANGEROUS. Everyone worries about cancer getting them, but osteoporosis is more deadly. Breaking your hip can leave you bedridden for the rest of your life, too. It's been shown that there are a lot of risks to the brain due to low estrogen, but there have not been studies of those who were anorexic in their youth. But hypothetically, you might be at greater risk of Alzheimer's or Parkinson's disease. These are the dangers merely of not having your period. There is also, of course, major organ damage that can occur because of starvation--your organs shrink in size, as your body uses them to feed you. These are cells that might never be restored to these organs, even if you gain weight, so your organs are permanently weakened.

5 years ago [Report Abuse](#)

Methods

Teen health information in Social Q & A

Methods

- Web-based survey:
 - N=18
 - Ages 14-17
 - Five question/answer sets from *Yahoo! Answers*.
 - Participants asked to select the “best” answer.
 - Combination of numeric ranking and written responses.
- Focus group:
 - N=7
 - Ages: 15-16
 - 4 females, 2 males.
 - Re-visited five question/answer sets from web survey. Clarified meaning and explored dominant themes.
 - Sketching exercise.

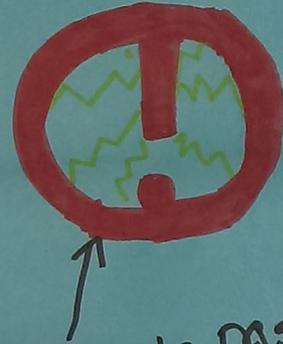
Yahooooooo Answers

Verification Quiz

* Ask Questions about
Various health subjects

* Political questions verify.
* Make it so users can't
leave page
* Make a poll of
1900 questions
but only
give 20

(If participants pass
they will receive
this badge showing
that they are a
professional.



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Preliminary Results

Teen health information in Social Q & A

When presented with a selection of question and answer sets about eating disorders from *Yahoo! Answers*, **how do teens rate the accuracy, credibility and reliability of the answers?**

Satisfaction with health information on
Yahoo! Answers.

Helpfulness is as important to teens as credibility, reliability, and accuracy.

Participants' Rankings of the Value of "Best Answers" in *Yahoo! Answers*

Table 1: Scores for Accuracy, Credibility, and Reliability

All Questions (n=5)	Accuracy	Credibility	Reliability
High	32	44	40
Medium	43	36	33
Low	9	9	14
Not at all	3	1	1
I don't know	3	0	2

Table 2: Scores for Helpfulness

All Questions (n=5)	Helpful
Very helpful	46
Somewhat helpful	37
Not helpful at all	7

Credibility

Scores for Credibility	
All Questions (n=5)	Credibility
High	44
Medium	36
Low	9
Not at all	1
I don't know	0

80/90
= 81.3%
High and medium
credibility
combined.

44/90
= 48.8% of
participants'
scores
suggest they
rated the
credibility of
the "best"
answer as
"high".

Scores for Helpfulness

All Questions (n=5)	Helpful
Very helpful	{ 46 }
Somewhat helpful	{ 37 }
Not helpful at all	7

83/90

= 92.2%

High and medium
helpfulness
combined.

46/90

= 51.1% of
participants'
scores
suggest they
thought the
"best"
answer was
"very helpful"

Helpfulness

When presented with a selection of question and answer sets about eating disorders from *Yahoo! Answers*, **on what basis do teens choose the best answers?**

Qualitative analysis of written responses on questionnaire

- **Open coding:** 122 codes along two axes:
 - 77 “best”; 45 “helpful”
- **Categories:** 18 (combined “best” and helpful”)
- **Cross-cutting themes:** 7 (plus a bucket called “miscellaneous”)

Themes

- **Communication style:** Grammar, spelling, tone, rhetorical style, complexity.
- **Emotional Support:** Empathy, compassion, gives hope, kindness, offers support.
- **Information Quality:** Sources and citations, accuracy, reliability, facts rather than opinion, comprehensive.
- **Guidance:** “tell me what to do”, “next steps”, directs to experts, warns.
- **Opinion:** Not grounded factual evidence.
- **Personal Experience:** evidence to support the answer is drawn from personal experience and reflects the realities of a teen world view (“my approach”), answer comes from another teen.
- **Professional Expertise:** Answerer status, someone with professional expertise.

Best versus Helpful

Answers	Same answer; Opposing views on “Best” and “Helpful”	
	Best	Helpful
Answer 1	“It gives a lot of good information ” (S13)	“It gives people good advice about the subject” (S13)
Answer 2	“Answer 1 uses facts and believable evidence to support their claim” (S09)	“This answer explains the problem . The answer encourages these people to seek help” (S09)
Answer 3	“this is from an educated adult ” (S17)	“This may give comfort to teens who are suffering” (S17)

Best versus Helpful

Compromise choices:

Here the participant chooses the helpful answer, not the “best” answer. The participant chooses the answer that, in their estimation, a teen would actually use.

Best

“I chose the answer that suggested a seemingly safe website for the girl. **Teens are stubborn** and will probably need more convincing...to actually go talk to a doctor, so this answer at least **provides a more reliable website**” (S07)

Helpful

“The **answer that suggested talking to a doctor or counselor is obviously the better decision**, but I think that teens who are looking for health information about eating disorders will find the answer I chose helpful for them because **it gives them a reliable website** they can use” (S07)



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Final Thoughts and Next Steps



Insights on Credibility and Teens

- “Best” is not always “helpful”; Calls into question the values that health/information professionals apply to health information.
- Teens *are* aware of credibility issues and threats to safety. And yet...answers that drew upon the personal experience of answerers were valued. A different form of credibility that is important for teens.
- Teens are highly attuned to the rhetorical structure of text and in *Yahoo! Answers*. It signals credibility;
- Quantity (still) matters (Fidel et al, 1999. A visit to the information mall). More content = more credibility.
- Tone matters, not just credibility. Kindness counts. No bullying teens! The socio-emotional piece is strong!
- Teens said they need help identifying the credentials of answerers. In-app tools like badges?

Next steps

- Further development of models and concepts:
- Collect new data: Same instruments but with health professionals, health educators, and information professionals
- Explore trust issues:
 - One direction future researchers could take is to develop a badging system for people who provide health information in social Q & A. Show health credentials (i.e. is this a real doctor?).

Acknowledgements

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Acknowledgements

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Thank you!

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