Eating Disorder Questions in Yahoo! Answers: Information, Conversation, or Reflection?

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ABSTRACT
This study investigated a particular form of social Q&A – Yahoo! Answers – and the nature of the questions posed by teens on the topic of eating disorders. The goals of this study were to identify the information needs of questioners in Yahoo! Answers vis-à-vis the topic of eating disorders, to create a taxonomy of question types in Yahoo! Answers on the topic of eating disorders, and finally, to contribute to broader models of question-asking in social Q&A. We achieved these goals through a content analysis of 2230 questions posed in Yahoo! Answers between December 2005 and April 2011. This resulted in a classification scheme with five overarching themes - Seeking Information, Seeking Emotional Support, Seeking Communication, Seeking Self-Expression, and Seeking Help to Complete a Task, and the sub-categories of factual, diagnosis, treatment or intervention, validation, seeking comfort, conversation starters, deep talk, confession, reflection, homework help, and manuscript ideas. Through the investigation of the socio-emotional aspects of social Q&A, this study enriches our understanding of the affective dimension of health information behavior.

Keywords: Social Q&A, Yahoo! Answers, Eating Disorders, Health Information Behavior, Teens.

INTRODUCTION
Despite attempts to quantify the prevalence of eating disorders in young people, it is important to acknowledge that a complete understanding of the incidence in adolescents is extremely challenging to obtain. Medical professionals have identified a reluctance among adolescents who suffer from eating disorders to seek treatment, to perceive their behavior as problematic, or to honestly disclose to a medical professional the extent of their symptoms (Katzman et al., 2010). If teens are reluctant to speak directly to a medical professional, then where do they find information about eating disorders?

This paper identifies one potential source of information for teens seeking information about eating disorders – Yahoo! Answers, a popular question and answer portal. Our starting point in this study are the questions that are posed on this topic (future work will explore the quality and content of the answers). The goals for this paper are threefold: 1) to identify the information needs of questioners in Yahoo! Answers vis-à-vis the topic of eating disorders; 2) to create a taxonomy of question types in Yahoo! Answers on the topic of eating disorders, and; 3) to contribute to broader models of question-asking in social Q&A. We achieved these goals through a content analysis of 2,230 questions posed in Yahoo! Answers between December 2005 and April 2011.

Many of the people who pose questions about eating disorders in Yahoo! Answers self-identify as teens. However, since the questioners are anonymous, it is not possible to state with one hundred percent confidence that they actually are teens. However, eating disorders like anorexia nervosa are, as research indicates, a common teen health issue so it makes sense to assume that many of the questions do come from teens. Furthermore, may be a large, silent audience of teens who use these questions and the answers that result to help guide their own decisions and behavior. We also emphasize here that we are not diagnosing the people who post questions in Yahoo! Answers as sufferers of eating disorders. In this paper we have identified the questions about eating disorders in Yahoo! Answers and from those questions have extrapolated information about the nature of the questions, and more specifically, the needs that may lie beneath.

LITERATURE REVIEW
Eating Disorders and Adolescents
In recent decades, the medical community has acknowledged an increased pervasiveness of eating disorders and, consequently, the research from the medical field has reflected this, with a growth in studies since the
1970s. Publications that focus on the prevention and treatment of eating disorders at a young age remain somewhat limited, a surprising gap in light of the tendency for eating disorders to begin at this stage in life (Agras, 2010).

Still, there are studies that provide some statistical insight into the fact that abnormal eating and distorted body image are very real problems in adolescence. In a 2000 article in Archives of Pediatrics & Adolescent Medicine, Neumark-Sztainer and Hannon discuss the findings of their survey of 6,728 American adolescents in fifth to twelfth grade. Of these young people, 13.4% of the female adolescents and 7.1% of the male adolescents indicated that they engaged in “disordered eating” (p. 571). According to the American Psychiatric Association, the “lifetime prevalence” of anorexia nervosa alone, which is in fact the least common of eating disorders, is .5% in adolescent and young women and .05% in adolescent and young men. According to these percentages, 1 in 200 women and 1 in 2,000 men will struggle with anorexia nervosa at some point in their lives (Keel, 2010).

While the literature suggests that there is a growing recognition of the prevalence of eating disorders in both adults and young people, there is still a tendency by some members of the medical community to view eating disorders as “mild or relatively unimportant conditions” (Agras, 2010, p. 2). This is a point of concern when considering the potential seriousness of the medical complications of eating disorders. These complications may include cardiovascular, hematological, and immune system abnormalities and, for adolescents, long-term problems with bone density, linear growth, and even cognitive function and brain structure (Katzman et al., 2010). As Rome et al. (2003) indicate, “eating disorders in adolescents can be of long duration, potentially life-threatening depending on the severity of the illness, and with likely relapse if adequate alternative coping skills are not developed” (p. 107). For individuals suffering from anorexia nervosa, the medical community reports mortality in 1 in 20 patients, with suicide and starvation as the leading causes of deaths (Keel, 2010).

Eating disorders often have their onset at a young age. Gowers (2010) explains that anorexia nervosa may surface in children as young as eight years old, “reaching a peak around [ages] 15–18” (p. 331). Bulimia nervosa is less common in children under thirteen but more prevalent than anorexia nervosa in older adolescents. In keeping with the general statistical observations surrounding eating disorders, more adolescents are affected by an eating disorder not otherwise specified, or EDNOS, than anorexia nervosa and bulimia nervosa.

Katzman, Kanbur, and Steinegger (2010) explain that adolescents who suffer from an eating disorder may not identify their behavior and negative feelings about their body as unusual and, as a consequence, may not consult with a medical professional or seek treatment. Those adolescents who do acknowledge that they are struggling with a disorder may be too embarrassed to seek the help they need. The authors write, “They may find these issues difficult to discuss with their parents, family members, friends, or clinicians... commonly minimizing or denying their symptoms” (p. 267-268). It is this fear and embarrassment that may encourage adolescents to seek answers from a faceless stranger, rather than a trusted individual in their lives, through social networking sites like Yahoo! Answers.

Health Information and the Web

Ackard and Neumark-Sztainer (2001) identify the adolescents’ hesitance to discuss sensitive health issues as contributing to their increased use of the Internet to retrieve health information. This is echoed by Eysenbach (2008), who maintains that for “sensitive or embarrassing health topics that are not perceived as ‘severe diseases,’” among them weight-related issues, adolescents often use the Internet as the primary source of information (p. 127). Although studies have indicated that adults and adolescents alike place greater value on health information that is provided to them by health professionals, both groups tend to turn first to the Internet. Eysenbach speculates that, for adolescence, circumventing trusted experts in an effort to obtain information may be characteristic of the age. He writes, “During adolescence, teenagers become more autonomous and increasingly learn to rely less on traditional authority figures and intermediaries” (p. 127). This tendency toward autonomy may contribute to the information behavior of teens, prompting them to turn to the web rather than trusted adults. In a Henry J. Kaiser Family Foundation report entitled Generation Rx.com: How Young People Use the Internet for Health Information, Victoria Rideout (2001) describes the results of a random survey of 1,209 respondents between the ages of 15-24. The survey revealed that 90% of the respondents reported going online and, of these individuals, 75% had used the Internet to access health information. 15% of these respondents reported using the Internet to access information about eating disorders.

In their 2003 article in the Journal of Medical Internet Research, Hansen et al. report the findings of their study of how adolescents use the Internet to find health-related information. They determined that the adolescents relied on Internet search engines to locate information and that the majority focused on the first nine links that the search yielded. In their study of the use of information technology by adolescents to locate health information, Skinner et al. (2003) learned that teens used a search engine to access information, rather than a trusted medical website. Skinner et al. found that the teen generally spend time reviewing the results and were unsure of how to determine the credibility of the yielded sites.

With adolescents turning to the Internet for health information, the question of the nature of health information sources emerges as an important point of consideration. As Bowler et al. (2011) indicate in their article “The Visibility of Health Web Portals for Teens,”
the findability and reliability of Internet sources are definite issues; studies have revealed that a web search will not always yield the information that adolescents need. In addition, the interactive and collaborative sites facilitated by Web 2.0 platforms provide a “matrix of dialogues, not a collection of monologues” (Maness, 2006), and allow for individuals from outside of the medical profession to provide health information. The participatory nature of this health information calls into question the reliability of the sources.

In light of the rise of Web 2.0 technologies, a reexamination of adolescents’ search behavior would serve to determine their reliance on social networking sites to locate health information. In their Pew Internet report entitled The Social Life of Information, Fox and Jones (2009) provide insight into use of user-generated online health information by American adults. Forty-one percent of these “e-patients,” as Fox and Jones refer to them, have turned to blogs and user commentary on health websites. They found that a small percentage, 6%, has posted comments and questions on group forums.

In their paper for the 2011 iConference, Bowler et al. (2011) examined pathways which adolescents navigate to web-based health information via hyperlinks. The study revealed a “weak network of inlinks from reliable health care providers,” a finding that they describe as a “lost opportunity for health care professionals to reach young people” (p. 238). As well, they discovered that bloggers, who in most cases offered no credentials as a health care professional, were offering health information and advice via personal blogs, leading Bowler et al to call for further research into the role of social media in delivering health information to teens. Social Q&A is one of the many faces of social media, allowing as it does the “creation and exchange of User-Generated Content” (Kaplan & Haenlein, 2010, 61).

Social Q&A

As Gyöngyi et al. (2008) indicate, social Q&A sites were predated and have been accompanied by other means for individuals on the Internet to ask questions and provide answers to others; email, online bulletin and discussion boards, chat rooms, and search engines are among the outlets that may be used to obtain and offer responses to a question. Recent years, of course, have seen an increase in the number of Internet users and social networking sites, among them social Q&A sites. There are three types of online Q&A services: digital reference services, “ask an expert” sites, and community question and answer sites (Harper et al, 2008; Shah et al, 2009; Gazan, 2011). “Digital reference services” refer to tools for library patrons to communicate and pose reference questions to librarians via an online system. “Ask an expert” sites are characterized by an answerer with some type of credential in a given topic area; the interaction between questioner and answerer is not one of peers. Finally, features of Web 2.0 community sites, such as Yahoo! Answers, include limited structured roles and browsing and searching capabilities.

Yahoo! Answers ranks as the fifth most visited social media web site, preceded only by the social media power houses of Facebook, YouTube, Twitter, and Pinterest (Dayton Business Journal, 2012). Adamic et al. (2008) describe Yahoo! Answers as the largest English-language “knowledge sharing” community, boasting, at the time of their writing, more than 23 million resolved questions. Gyöngyi et al. note that Yahoo! Answers differs from other web-based inquiry tools in a number of ways. Unlike email, in which a questioner must identify who will act as a potential source of information, Yahoo! Answers allows for an individual to pose a question to a large community of users. Unlike many bulletin and discussion boards, Yahoo! Answers is a general-purpose resource instead of a forum for a specific topic. Gyöngyi et al. indicate that the interface is more simple and intuitive than many online bulletin boards, and unlike many of the other outlets, it allows for search and retrieval of previously posed questions. Interestingly, while a questioner may select the best answer or have the community select the best answer, thus “resolving” the question, users may not answer their own question and answerers are limited to one post per question. This limits the amount of back-and-forth discussion among users.

Types of Questions in Social Q&A

For the purposes of developing better automated Question Answer systems, Pomerantz reviewed the literature from the fields of information retrieval, library science, and linguistics, to frame five common rhetorical structures of questions: Wh-words (classically, the five-W’s asked by journalists), subjects of questions, functions of expected answers to questions (intent), forms of expected answers to questions, and types of sources from which answers may be drawn (2005, p. 717). While not constructed to classify questions in social Q&A, Pomerantz’ analysis provides a tool for understanding how the rhetorical structure of a question can shape the answer.

Examples of taxonomies of questions specific to Yahoo! Answers are beginning to emerge in the literature. Adamic et al’s (2008) analysis of Yahoo! Answers revealed that users are seeking more than hard facts, but also advice, opinions, and thoughts on questions without one definitive answer. They grouped questions into three broad clusters: discussion forums (users “both pose and answer questions”), advice (“people both seek and provide advice and commonsense expertise”) and factual answers (“people tend to ask or reply”).

Gyöngyi et al (2008) identify three ways in which questioners use Yahoo! Answers. Motivated by a specific information need, a user may pose a “focused question,” one that may otherwise be answered by a web search. Second, a user may put forth a question in an effort to solicit opinions, thereby using Yahoo! Answers to poll the web community. Finally, Gyöngyi et al. observe that a third use of Yahoo! Answers is to create “noise,” with users simply posting thoughts rather than real questions.
Ignotava, Toprak, Bernhard, and Gurevych (2009), as cited in Gazan (2010), developed their classification of question types in Yahoo! Answers based on a sample of 755 questions about data mining, natural language processing, and e-learning, offering one of the few, if only, taxonomy that is grounded in a specific subject domain. Their question framework includes categories such as concept completion, definition, procedural, comparison, disjunctive, verification, quantification, causal, and general information need.

Harper et al (2009), in their investigation of three social Q&A sites (Yahoo! Answers, Answerbag, and Ask Metafilter), identified two broad frames for questions: informational questions and conversational questions. Informational questions are “asked with the intent of getting information that the asker hopes to learn or use via fact- or advice-oriented answers.” Conversational questions, on the other hand, are “asked with the intent of stimulating discussion. They may be aimed at getting opinions, or they may be acts of self-expression.” Harper et al. (2010) applied Aristotelian rhetorical theory to build a taxonomy that is broad enough to capture the open-ended conversational nature of questions in social Q&A. They identify three broad categories: Deliberative (future-focused), Epideictic (present-focused) and, Forensic (past-focused). Each category is then sub-divided to more accurately reflect question types.

What is clear from the existing taxonomies of questions in Yahoo! Answers is that users seek more than the basic, quick, fact-based answer when they post their queries. Social Q&A is complex, involving concepts of conversation, advice, opinions, approval, noise, and more.

METHODOLOGY

Data Collection

Through the use of Yahoo! Answers Application Programming Interface (API), we were able to collect content-rich data about teens’ use of social networking sites to locate information about eating disorders. The API allows for researchers to access data in four ways: “questionSearch,” which returns questions that contain specified search terms; “getByCategory,” which lists questions by Yahoo! Answers category; “getQuestion,” which lists the responses to a selected question; and “getByUser,” which retrieves questions using a user ID. Each of the search methods has parameter settings that allow for the researcher to, for example, limit by result number and to sort by date. These parameters are set by the researcher in URL, which has a syntax defined by the Yahoo! Answers Server.

We gathered the questions about eating disorders by conducting a query through two of the aforementioned ways: “questionSearch” and “getQuestion.” The search terms used in “questionSearch” included: teen+eating disorder, teen+anorexia, teen+anorexic, teen+bulimia, teen+binge eating, and teen+purging. XML is the default file format from Yahoo! API and data retrieved from the searches was downloaded into an XML file. An intermediary parser was used to transfer this into a MySQL database.

With 3,111 questions returned, a preliminary review of the data revealed that there was a need to refine and reduce the dataset. In addition to this issue, we observed that there were instances in which users had uploaded the same inquiry more than once in a different Yahoo! Answers category, generating a unique identification. Moreover, we were interested in looking at questions in which users provided responses. Both duplicate questions and unanswered questions were extracted from our data. This resulted in a data set of 2,230 questions.

Data Analysis

This study drew upon content analysis as a methodology, a research technique for analyzing textual communication that has been increasingly employed by both social scientists and researchers in health fields (Krippendorf, 1980; Neuendorf, 2002; Kondracki, Wellman, and Amundon, 2005). While Berelson (1952) defined content analysis as “a research technique for the objective, systematic and quantitative description of the manifest content of communication” (p. 18), content analysis is today viewed as an applicable method in both quantitative and qualitative research (Krippendorf, 1980, Kondracki et al., 2005).

Hseish and Shannon (2005) provide a useful discussion of three qualitative approaches to content analysis: conventional content analysis, directed content analysis, and summative content analysis. Hseish and Shannon characterize conventional content analysis as an inductive process in which researchers first immerse themselves in the data as a whole, making note of their initial reactions and pulling out central concepts from the text. Codes emerge directly from the text and form the coding scheme for the analysis. The second approach, directed content analysis, is more deductive in nature and is intended to build upon or support an exist body of knowledge or theory. Codes emerge from prior research and guide the analysis of the data. The final approach, summative content analysis, begins with the quantification of words or phrases in the text; frequency of content in the studied communication is of interest. As Hseish and Shannon explain, “If the analysis stopped at this point, it would be quantitative...a summative approach to qualitative content analysis goes beyond mere word counts to include latent content analysis,” or interpretation (p. 1283). Two of the qualitative approaches described by Hseish and Shannon were employed in this study: summative content analysis and conventional content analysis. This paper focuses on the latter – the results from our conventional content analysis.

Data analysis proceeded through two stages, one with a data set of 180 questions, the other with a data set of 330 questions. During the first stage we sorted questions by their length and selected the 180 longest questions from the larger set of 2,230 questions, our logic being that by
limiting our analysis to longer questions, we would be working with content-rich data that was highly descriptive, could best capture the experience of the teens and their information needs, and might yield a rich set of descriptors to use in a classification scheme. A script was written to extract these questions and a merged Excel file that contained 180 of these data rich questions was generated. Each question was then coded by two researchers in order to assure inter coder reliability. This resulted in a preliminary classification scheme roughly framed around the themes of emotional support, seeking information source, readers advisory, task-driven, communication-discourse, self-expression, ask for public opinion, comfort-sympathy, diagnosis, treatment.

In the second stage of analysis, the set of 2,230 questions was revisited and this time, to identify those with the keywords anorexia, anorexic, bulimia, bulimic, and eating disorder in the question title (regardless of their word length). This was to assure the “aboutness” of the question and capture some of the fact-based, information needs expressed in the shorter questions. Questions from self-identified adults, who stated they were asking for themselves (because they suffered from an eating disorder), were also removed. This resulted in a data set of 330 questions. A close reading of the questions in this data set helped to refine the preliminary classification scheme into five overarching themes - Seeking Information, Seeking Emotional Support, Seeking Communication, Seeking Self-Expression, and Seeking Help to Complete a Task.

RESULTS

Types of Questions About Eating Disorders in Yahoo! Answers

Our analysis of the questions related to eating disorders that were asked by teens in Yahoo! Answers resulted in a classification scheme comprised of five overarching themes - Seeking Information, Seeking Emotional Support, Seeking Communication, Seeking Self-Expression, and Seeking Help to Complete a Task. Like Harper et al.’s taxonomy (2010), each broad theme (or category) is accompanied by a set of sub-categories. The classification scheme, developed a posteriori, emerges from the data and represents a broad snapshot of the informational, social, and emotional needs expressed by teens on the topic of eating disorders. Unlike the frameworks for social Q&A developed by Gyongyi et al (2008), Ignatova et al (2009), and Harper et al (2009, 2010), our framework is not meant to be a universal categorization of all questions in Yahoo! Answers. Rather, these categories are specific to the questions asked by teens, about eating disorders.

It is important to note that most of the questions on eating disorders in Yahoo! Answers crossed categories, demonstrating that multiple needs and purposes can be bundled into one question. This is probably reflective of the fact that questions in Yahoo! Answers can be several hundred words long and allow the questioner to develop a narrative or argument and embed several queries into one question. It may also reflect the complexity of the problems associated with eating disorders. Table 1 below sets out the classification scheme. A more complete description of each category follows.

<table>
<thead>
<tr>
<th>Category</th>
<th>Subcategory</th>
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<tbody>
<tr>
<td>Seeking Information:</td>
<td>1. Factual</td>
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<td></td>
<td>2. Diagnosis</td>
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<td></td>
<td>3. Treatment or Intervention</td>
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<tr>
<td>Seeking Emotional Support</td>
<td>1. Validation</td>
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<td></td>
<td>2. Seeking Comfort</td>
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<tr>
<td>Seeking Communication</td>
<td>1. Conversation starters</td>
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<td></td>
<td>2. Deep Talk</td>
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<tr>
<td>Seeking Self-Expression</td>
<td>1. Confession</td>
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<td></td>
<td>2. Reflection</td>
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<tr>
<td>Seeking Help to Complete a Task</td>
<td>1. Homework Help</td>
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<tr>
<td></td>
<td>2. Manuscript Ideas</td>
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Table 1: Types of questions asked by teens in Yahoo! Answers

Seeking Information

The preponderance of questions from teens on eating disorders fall into the category of Seeking Information. That is, questions which seek to fill an information gap (or need). Even when the questioners sought emotional support, a desire for communication, or self-expression, there was often an informational question buried within the broader question. In the category of Seeking Information, there were three types of informational type questions: Factual, Diagnosis, and Treatment (or Intervention).

Factual

The Factual question is a “look-up” question, where the expected outcome is a quick, fact-based answer which involves little interpretation on the answerer’s part. Questioners sought health facts, names of doctors and treatment centers, web sites on eating disorders, and even book recommendations. Table 2 on the next page provides a typology of Factual questions, with sample questions.
always chew food for a long time before swallowing and feel full and bloated really quickly - I now only eat a weetabix (a brand of cereal), an apple, a little bit of chocolate and about half a bowl of pasta a day. I AM quite conscious about my image too, but I think anorexics exercise a LOT? Does this mean I am or aren't anorexic...?? Please help!! Thanks x"[sic].

**Treatment (or Intervention)**

Sometimes questioners sought information about a Treatment (or Intervention) that might help them deal with their eating disorder. A diagnosis (real or perceived) of an eating disorder is assumed and the questioner is looking for advice on how to treat it. In some cases, the questioner wants to intervene on behalf of a friend or sibling. In the question below, a self-identified 16 year-old looks for a way – an intervention - to stop “falling back into” an eating disorder.

“Lately, all I can think about is food, calories, and weight. I've had an eating disorder, mostly bulimia, for almost 4 years now, since I was 12 and I'm 16 now. I'm in recovery but I'm falling back into it, I'm afraid to talk to my doctors about it but I'm losing control again. I keep skipping meals, binging, taking laxatives, exercising because I feel guilty from eating when I'm eating less than my meal plan tells me too.” [sic]

**Seeking Emotional Support**

Many of the questions had an element of emotional need, beyond the need for factual information. We saw two types of questions related to Seeking Emotional Support: Validation and Seeking Comfort.

**Validation**

In questions where validation is sought, the questioner presents an opinion, argument, or explains a rationale for their own behavior, and seeks confirmation from the answering community. Often this is a rhetorical question, where the answer is found in the question. One questioner asked, “How is boot camp supposed to help out depressed, suicidal, or teens with an eating disorder?”, the implication being that it doesn’t.

Another questioner seeking validation of a point of view asks why some people on Yahoo! Answers support the behaviors that accompany eating disorders, saying:

“I am a teen, and I’m at a low/healthy weight, but I’m so confused as why people are supporting each other to not eat. I see questions all the time under this section about, pro ana buddies, how long until i die from starvation, how to purge easier, & etc..Then the bad thing is, people come on here, and support them not eating/purging. I don’t judge people with eating disorders as it’s a psychological disorder, but I’m pist at the kids/adults who support them in their disorder. Am I over reacting about this, or do you agree it’s way out of hand?” [sic]
Seeking Comfort

Questioners also used Yahoo! Answers as a space to find solace, support, and comfort. This type of question, which we termed Seeking Comfort, often (but not always) led to a call for more communication and so it often overlaps with another category in our classification, Seeking Communication. One questioner expressed fear about talking with a parent about an eating disorder (a common theme). The question’s title, “I’m so scared to tell my mom about my eating disorder, give me courage?” explicitly calls for moral support but in the full question, the questioner calls for both moral support and advice:

“My heart is beating so fast, but I know I have to tell her. My whole family suspects that I have an eating disorder, but I have yet to admit it. I know that she suffered form anorexia/bulimia when she was in her teens, and she is terrified of me going through that. Tell me exactly what to say. I’m lost. :(" [sic]

Seeking Communication

Questioners in the Yahoo! Answers community used their questions as a communication channel for a back and forth conversation with answerers. There seemed to be two kinds of communication desired: a Conversation Starter, where the intent is to elicit a range of ideas and Deep Talk, where the purpose seems to be to start a relationship.

Conversation Starters

This type of question was often framed around an issue, as in the case of this question that asked for opinions on teen anorexia:

“Anorexia is portrayed in many ways. Some people suffer anorexia in response to the media, others commit to it as a means of control. being a teen anorexic myself, I need to talk about it but naturally can’t tell anyone I know. What are your opinions on teen anorexia? Do you scorn anorexics or pity them or do you just accept them? This is just out of curiosity”. [sic]

Deep Talk

In Deep Talk questions, the questioner seeks to start a dialogue that will result in something deeper, perhaps a friendship. There is a call for people to contact the person who posed the question directly. One questioner who sought an “Ana Buddy” wrote, “I’m looking for a texting buddy or email buddy preferably in Nor Cal but it’s okay if you’re not from california so if you’re interested leave your email :)” [sic]

Seeking Self-Expression

Many of the questions about eating disorders in Yahoo! Answers fell into Gyongyi, Pederson, Koutrika & Garcia-Molina, 2008 category of “noise”- thoughts rather than real questions. We see this less as “noise” and more as an example of how opportunistic users can be, taking technology designed to do one thing and shaping it to do another. In this case, users have turned Yahoo! Answers into their space to express or assert the essence of their personality in the context of a question that functioned as Confession or Reflection.

Confession

Feelings of worry, anxiety, humiliation, frustration, and often anger at a lack of sympathy from parents, were vented with no apparent expectation of an answer in questions that appeared to be more of a confession to the world. The question seems to function as a cathartic release, a form of therapy. One questioner wrote a near 1000 word statement detailing eating habits and frustrations gaining and losing weight, with just one question embedded in the middle (“can anyone help me, or tell me what to do, or advice, or something?”). At the end of the question, this statement is made, suggesting that the intent of the question was really to say “out loud” to someone, anyone, what could not be said to parents:

“…i know I have to talk to my parents, but it’s hard, i don’t want to hurt them more then i did telling my mom, and then to tell her that she isn’t helping, and it’s not that I don’t want to tell my dad, it’s just that he has like a bad habit or something, to ask a question, not pay attention and ask 5 more times and this isn’t something i would like to explain 5 times…”[sic]

Reflection

As a counterpoint to the Confession, some questions function as a private Reflection, perhaps as a soliloquy, albeit a soliloquy that is exposed in the public space of Yahoo! Answers. Often a crie de coeur (a cry of the heart) and akin to keeping a journal, such questions may pose a “help me” request, but like the Confession, there is seemingly no expectation of an answer nor does an answer seem to be the point. For example, in a very long question describing depression, frustration, and eating disorders, the questioner asks this simple question - “What if there is no God?”

Seeking Help to Complete a Task

Homework Help

Overwhelmingly, the task to be completed in this category of questions was homework. Accordingly we named it Homework Help. With this type of question, the community is asked to help with a homework assignment. These tasks include proofreading an essay on eating disorders, suggesting content for a speech on eating disorders, or completing a survey for a science project on eating disorders. One questioner asked, “Why are more teens anorexic nowadays?” and then followed with, “A detailed answer would be good :).” We suspect this was for a school assignment, which leads us to ask, is this a new form of cheating or a very clever way to draw from the wisdom of the crowds?
Manuscript Ideas
A type of question that took us by surprise fell under the rubric of Manuscript Ideas, where the community in Yahoo! Answers is used a resource for developing and testing a text – either fiction or non-fiction. For example, one questioner wrote: “I am writing a book with the main character being anorexic. I am looking for personal stories.? The character is in her teens. Any stories will be appreciated!”[sic]. These authors ask the community to suggest storylines or give feedback on a manuscript. Some of the questioners in this category claimed to be authors of teen novels, although no one identified themselves by name. (We wonder if professional authors really are using Yahoo! Answers as a venue for gathering ideas and getting feedback on storylines). In any case, the identity of the “authors” is unknown and they may just as well have been teens.

DISCUSSION
Teens who ask questions on the topic of eating disorders in Yahoo! Answers are seeking to fulfill a tangled web of needs, from informational to emotional, sometimes all bundled within the same question. Informational questions run the gamut from quick, look-up, fact-based questions to more interpretive informational questions that in the “face-to-face” world would require an extended interview and examination. It was curious that many of the fact-based questions (names of web sites, good books to read, etc.) could easily have been answered by searching the Web with a search engine, which leads us to wonder why teens bothered to post their questions in Yahoo! Answers in the first place. This speaks to several issues, one of which is information credibility. Do the teen questioners think that an answer from an anonymous human is more credible than the results of a search engine? Or is there another motivation here, perhaps a subtle desire to reach out and connect?

In our analysis we saw many examples of Yahoo! Answers being used as a communication space, a characteristic we termed Seeking Communication, although strictly speaking this social Q&A environment is not meant to function as a bulletin board or chat room. While Yahoo! Answers allows for some limited communication between questioners and answerers, it was not designed with extended dialogue in mind. And yet questions were posed that were intended to achieve this very purpose, the questioners seeming to bend the design affordances to suit their own needs. Perhaps knowing that a conversation in Yahoo! Answers can only go so far, some questioners requested that people leave their email addresses or figure out a way to have a chat together in a forum.

While Yahoo! Answers may not be constructed for ongoing conversation, it does allow for long, descriptive questions (unlike other social media services like Twitter). Since we set no ceiling on the length of the questions we gathered in our data set, we encountered some very lengthy questions indeed, some with well over 1000 words. These questions typically crossed the categories of Seeking Information (particularly a diagnosis or treatment), Seeking Emotional Support, and Seeking Self-Expression – most likely because the questioner had the space to expand.

Many of the longer questions also found themselves categorized under Seeking Information, usually when diagnosis or treatment was sought. Yahoo! Answers’ allowance for long questions affords a platform for conducting what we saw as a pseudo-diagnostic interview with an imagined expert. Questioners, wanting to be diagnosed or seeking a treatment, seem to be aware that they are missing the kinds of question prompts that might come from a health professional or a close confidant. In the absence of such prompts, the questioners fill in the gaps themselves, perhaps in the assumption that they are giving the “listener” enough background information to accurately answer.

The lengthier questions also fell under the category of Seeking Self-Expression, as a form of confession or reflection. Akin to keeping a journal, for these questions it almost seemed as if it did not really matter if anyone was “listening.” Using Yahoo! Answers as a place to vent emotions or quietly reflect on life may provide a safe space for teens to work out problems without risking exposure or conflict with the people most close to them. Much like teens from a generation ago, who kept their secret thoughts in a diary, the Confession or Reflection type questions seemed to be designed to use Yahoo! Answers as a personal journal rather than a question space. Perhaps the questioners were simply venting emotion, but given that so many of these questions contained references to depression, anxiety disorders, and prescription drugs, it seems there is something more serious than “venting” and the usual teen angst going on in the questions seeking self-expression.

A good portion of the questions on eating disorders in Yahoo! Answers functioned as an entrée toward social support and communication with others – what we called Seeking Emotional Support and Seeking Communication. Safety is a big concern here. As in all communications technologies, anonymity has its uses but can also be a threat. We saw several examples of a questioner reaching out for more contact with the answering community. Is this legitimately a teen needing to “speak” with someone or is it someone operating with another agenda?

Questions that seem designed to connect with answerers were sometimes launched with friendly salutations like, “Hi guys. How are you?” suggesting a familiarity with the people on the answering end of the relationship - a paradox in an environment where users are anonymous and not necessarily benevolent. We wondered if the questioners who expose themselves to an anonymous answer community do end up finding the social support and nurturing that they need. Since many of the questions were accompanied with requests not to be rude or mean, it seems that questioners are well aware that the answers they
receive may not be supportive or sympathetic. It seems that questioners seem willing to risk the pain of insult for the possible gain of information, insight, or support.

Teens seem reluctant to talk with adults about eating disorders, as the research in this area has shown. In the absence of conversations with adults, where do teens find safe places to gather helpful information about eating disorders, to vent, let off some steam, and seek comfort in knowing there are others who share their pain? Is Yahoo! Answers the place? Or is it just a proxy for real sharing, real conversation, and real relationships? Sherry Turkle, a media scholar who has explored the relationship between humans and their machines, suggests that conversations with websites (and robots) represent a shallow substitute for the deep and rich interactions with real people and therefore;

“Confessing to a website and talking to a robot deemed “therapeutic” both emphasize getting something “out.” Each act makes the same claim: bad feelings become less toxic when released. Each takes as its premise the notion that you can deal with feelings without dealing directly with a person. In each, something that is less than conversation begins to seem like conversation. Ventiing feelings comes to feel like sharing them” (228).

As Turkle argues, social technology can “stand in” for human relationships but cannot replace them. But what if the real purpose in using Yahoo! Answers is to find a place to think and work things out before approaching a person? It may be that the questions on eating disorders in Yahoo! Answers function not so much as a substitute for face-to-face interactions, but rather, as a scaffold for teens, helping to bridge their decision space before they reach out to the people in their social world.

A fundamental question therefore that needs to be explored is whether social Q&A like Yahoo! Answers is helpful or harmful to the young people who seek help for an eating disorder from an anonymous networked public. In the next steps in this research, we intend to follow the trail of each question and see what answers it leads to. In this way, we will gain a deeper understanding of the risks and benefits associated with social Q&A in relation to a health topic, and more specifically, the relationship between the nature of a question and the kinds of answers it elicits. Notwithstanding the possibility of retrieving unreliable health information, negative feedback from answerers, and perhaps the use (and misuse) of social Q&A as a way to avoid human contact, the teens who pose questions about eating disorders must see some value in it. What is that value? So the question to ask is not so much, “what does social Q&A take away from teens” but rather, “what does it give?”

**CONCLUSION**

In this study, we investigated a particular form of social Q&A – Yahoo! Answers – and the nature of the questions posed by teens on the topic of eating disorders. We developed a classification scheme with five overarching themes - Seeking Information, Seeking Emotional Support, Seeking Communication, Seeking Self-Expression, and Seeking Help to Complete a Task, and the sub-categories of factual, diagnosis, treatment or intervention, validation, seeking comfort, conversation starters, deep talk, confession, reflection, homework help, and manuscript ideas.

More broadly, through the investigation of the socio-emotional aspects of social Q&A, this study enriches our understanding of the affective dimension of health information behavior. Many of the questions about eating disorders in Yahoo! Answers fell into Gyongyi et al’s (2008) category of “noise” - in other words, random thoughts. But to our way of thinking, at least when it comes to questions from teens about eating disorders, there is much more going on here than noise. In our close reading of the questions on eating disorders in Yahoo! Answers, we encountered teens who expressed worries about their health, their angst, a sense of alienation from the adults in their lives, and seemingly, an absence of any other way to communicate their concerns. Yahoo! Answers, it seems, is part of the health information ecology of teens and there is a rich story to be told here about how they are interacting with this and other social media tools in service to their own health and wellbeing.

**REFERENCES**


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1 Questioners frequently ended their query with the request to be civil: “Please don’t be rude about it”, “please don’t answer telling me im stupid or w.e, only if you have helpful advice”, or “Please hear me out, and only offer helpful advice. Nothing nasty or sarcastic unless you’re going to include something useful.”


