An Online Activity Diary Method for Studying Credibility Assessment on the Web

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1. Introduction
In recent years people have increasingly moved beyond information searching and reading of online content in their use of the Web, engaging in diverse activities such as sharing photographs and videos, rating and reviewing products and services, and blogging about their interests and everyday life activities. According to a recent Pew report, 23% of American adults are “heavy teach adopters” who are more likely to undertake information activities involving sharing something online, posting comments to a website, creating their own web pages, working on blogs, and taking online materials and remixing them (Horrigan, 2007). Another recent Pew Internet study reports that the number of adult Web users who have a profile on an online social network site has grown from 8% in 2005 to 35% in 2008 (Lenhart, 2009).

One of the consequences of increasing user participation on the Web is that credibility assessment is now situated in diverse online activities and contexts. A new set of credibility research questions arise – for example, what are the credibility assessment heuristics people use when deciding to contribute original content or post content they found elsewhere? Do these heuristics differ depending on whether they are creating their own online content or commenting on an online forum? The individuals who are undertaking information activities to contribute and mediate online content deserve close attention from credibility researchers because they are influencing other users to a great extent as well as making the Web more a dynamic and interactive place. There is little research examining credibility assessment heuristics across the range of online activities on the Web.

This study examines credibility assessment in the Web 2.0 context as part of a research project funded by the MacArthur Foundation. The research activities involved in this project include: (1) Web-based online information activity diary survey; (2) phone interviews with participatory Web users; and (3) experimental studies to collect behavioral data with respect to the application of credibility assessment heuristics in the processes of information seeking and content creation. This poster reports on the first research activity, the use of an online activity diary method for studying credibility assessment.

This study specifically addresses the following research questions:
1. What credibility assessment heuristics have emerged across a variety of online activities?
2. What is the relationship between use of credibility assessment heuristics and a user’s motivation for an online activity?
3. What is the relationship between use of credibility assessment heuristics and a user’s goal for an online information activity?
4. What is the relationship between use of credibility assessment heuristics and a user’s confidence in his/her credibility assessment ability?
5. What is the relationship between use of credibility assessment heuristics and a user’s satisfaction with an online information activity?

2. Methodology
The methodology employed for this study draws from two related methodologies, diary study method and experience sampling method (ESM) (Kubey, Larson, & Csikszentmihalyi, 1996). Diary studies have been previously used in credibility assessment studies (Hilligoss & Rieh, 2007). While widely used in disciplines such as psychology, communication, and HCI (Palen & Salzman, 2002), ESM is a relatively new method in information science. In ESM studies, a participant responds to a researcher’s signal, such as a phone call or beeper, that is administered several times per day at random intervals. Upon receiving the signal, the respondent completes a questionnaire, often in the form of an interview. In contrast, in diary studies the participant controls when and what to enter in the diary. The common goal in both methodologies is to capture data about the current activities and subjective states of people under naturalistic conditions.

Our study employs a Web-based information activity diary survey. Similar to ESM studies, a study participant responds to a researcher signal, in this case an email with a link to an online activity diary form. Email is sent five times a day (9:00 am, 12:30 pm, 4:00 pm, 7:00 pm, and 10:00 pm), over a period of three days (Sunday, Monday, and Tuesday) for a total of 15 email reminders. Participants are required to respond to at least three of these emails per day, resulting in a minimum of 9 (but up to 15) activity diary entries from each participant. Participants thus have some control over when they complete their information activity diary forms.

A random sample of 350 Michigan residents will be recruited by the Survey Research Operations department in the Institute for Social Research (ISR) at the University of Michigan. Data collection will take place from March through May of 2009. Participants will be compensated for their participation in the study. In order to collect data on a diverse range of online activities, participants will be screened for regular Internet use, operationalized as Internet access both at home and outside the home (e.g., work or school), and daily use of the Internet for purposes other than email. The goal is to obtain a picture of what people do when they are on the Web.

Two types of questionnaires are completed by participants, a background questionnaire completed once at the beginning of the study, and an online activity diary which is
completed multiple times during the duration of the study. The background questionnaire asks for demographic data such as gender, age, educational attainment and occupation, as well as Internet use characteristics and self-assessment of skill levels on various types of online activities. The online activity diary survey collects data on specific online activities and credibility assessment related to these activities. By asking questions regarding a specific online activity, such as the purpose of the activity or the degree of the user’s interest in the activity, as well as questions about the user’s credibility assessment processes, such as what kind of credibility assessment heuristics they employed, relationships between online activities and credibility assessment processes can be identified. The credibility-related questions identify how the three levels of credibility judgment – construct, heuristics, and interaction (Hilligoss & Rieh, 2007) – relate to each other in the process of assessing the credibility of information in the participatory Web environment.

3. Next Steps
Data analysis will be conducted during summer of 2009. Data will be analyzed to examine credibility assessment on construct, heuristics, and interaction levels across various types of online activities and across a range of participant Web users. By collecting data multiple times per day on the behavior of frequent Web users, people’s credibility assessment will be characterized across different contexts of online activity (work and everyday life) and different purposes (information seeking and content creation). One of the anticipated results is the construction of a typology of online activities and associated credibility assessment heuristics. Similarly, a typology of purposes/goals and associated credibility assessment heuristics will emerge. A typology of users based on people’s orientation towards particular credibility assessment heuristics will also result.

References