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Doing the right thing online: A survey of bloggers" ethical beliefs and practices

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Doing the Right Thing Online: A Survey of Bloggers' Ethical Beliefs and Practices

ABSTRACT

This study explored ethical beliefs and practices of two distinct groups of bloggers--personal and non-personal--through a worldwide web survey.  A stratified purposive sample of 1,224 bloggers provided information about their blogging experience, blogging habits, and demographics.  They were also asked about their beliefs and practices for four ethical principles: truth telling, attribution, accountability, and minimizing harm.  Findings reveal that the two groups differ in terms of who they are and what they do in their blogs. There were also significant differences in the extent to which they value and adhere to the four principles, and some interesting similarities.  For example, both groups believe attribution is most important and accountability least important.  Scholars have proposed blogging ethics codes, and we found bloggers themselves support a code.

Doing the Right Thing Online: A Survey of Bloggers' Ethical Beliefs and Practices

Driven by technological advances and sociological forces, blogging has become widespread in the 21$^{st}$ century.  As blogs gain readership, prominence, and influence, questions arise about bloggers' ethical responsibilities.  What responsibilities do bloggers think they bear, and to what extent do they act upon their ethical beliefs?  Answers to these questions may depend largely on the purpose they think their blogs serve.  Some blogs are mostly expressions of personal views and feelings, intended for small audiences.  Other bloggers aspire to reach wide audiences, and may have different perspectives on ethical questions.

Blogging has started to attract scholarly attention, but little work has addressed blogging ethics, and some of it has distinct limitations.  For example, Blood (2002) proposed a blogging ethics code, but it was a 'how to' guide based primarily on journalism ethics codes.  Kuhn (2005; 2007) more thoroughly grounded his proposed blogging ethics code in moral philosophy.  He used feedback from bloggers to guide its formation, but only a convenience sample of fewer than 50 participants, so the extent to which he could 'ascertain the prevailing ethic in the blogosphere' (Kuhn, 2005: 14) is questionable.  Viegas (2005) examined identification practices of bloggers and perceptions of accountability and liability, a narrow set of ethical issues.  Perlmutter and Schoen (2007) examined only 30 'politically-oriented' blogs for self-imposed ethics codes, finding few.  Given the dearth of research on blogging ethics and these studies' limitations, our study's purpose is to help fill the gap in the literature by surveying a large sample of bloggers to assess their ethical beliefs and practices, demographic differences, experiences and habits.

Literature Review

Blogging has grown tremendously in recent years, fueled by technological innovations.  Initially, bloggers had to write their own HTML code or software for their sites, until the introduction in 1999 of user-friendly blog publishing tools and services (Bausch et al., 2002).  A study estimated 31.6 million blogs were created on popular blog hosting services by early 2005 (Perseus, 2005), when this research was conducted.  In early 2008, the blog tracking site technorati.com was tracking about 113 million blogs (Technorati, 2008).  However, the total number of blogs created gives an exaggerated sense of the number of bloggers.  A survey of blogs revealed 66% had not been updated in two months, indicating they were either temporarily or permanently abandoned (Perseus, 2003).  Still, by most accounts blogging is very popular.

As blogging grows in prevalence and influence, communication scholars, news media, governments and bloggers themselves have raised questions about ethical implications (Blood, 2002; Johnson and Kaye, 2004; Mintz, 2005).  As Kuhn observed (2005: 3), 'If bloggers are going to continue breaking stories, critiquing . . . mainstream media, and being used by political parties and advertisers . . . , then a question ought to be asked regarding [their] responsibilities'.  Blogs have become news sources, raising questions about whether journalism ethics apply.  Throughout the war in Iraq, after the 2004 Asian tsunami, and during the 2006 coup in Thailand, blogging has been seen as an alternative news source offering first-hand reporting, sometimes surpassing traditional news media (Wall, 2005; Wall, 2006; Schwartz, 2004; Roasa, 2008).  Bloggers can drive the news agenda.  For example, U.S. Senator Trent Lott resigned after bloggers broke the story of what some viewed as segregationist remarks and traditional media followed up (McGookin, 2004).  People generally trust blogs; Johnson and Kaye (2004) found three-quarters of blog readers they surveyed felt blogs are moderately to very credible, and Johnson et al. (2007) found net

users who were interested in politics found blogs moderately credible, and more credible than traditional media or other online sources.  Wall (2005; 2006) found bloggers tend to regard news-oriented blogs as a better form of journalism than traditional media, in part because blogs and are fast, personal, and opinionated.  In the 2004 American elections, 21% of bloggers chose blogs as their preferred information source (Nielsen, 2004).  Singer (2007: 91) suggests there is 'considerable synergy between the norms of bloggers and journalists'.  But if bloggers have created a new genre of journalism (Wall, 2005), modified ethical standards may apply.  Questions and concerns about bloggers' ethics may be motivated both by the public interest, and—at least in the case of more journalistic blogs--by journalists' concern over defending their turf and their status as professionals uniquely qualified to fulfill their roles (Singer, 2003).

Since ethical issues may vary depending on the type of blog, a thorough examination of blogging ethics requires meaningful classification of blogs.

*Defining and Classifying Blogs*

Herring et al. (2004b: 1) define weblogs simply as 'frequently modified web pages in which dated entries are listed in reverse chronological sequence', consistent with other definitions (Bausch et al., 2002; Blood, 2002; Mortensen and Walker, 2002; Trammell and Gasser, 2004).  In other words, blogs are defined by structure--not content, which varies dramatically.

Research has explored bloggers' motivations (Nardi et al., 2004; Huang et al., 2007), and scholars have classified blogs in a number of ways.  Blood (2002) and Bausch et al. (2002) classified blogs with reference to length of entry and subject matter.  Trammell and Gasser (2004) classified blogs by function, for interpersonal communication, intrapersonal communication or one's professional reputation (Trammell and Gasser, 2004: 17).  Herring et al. (2004a) used two categories, journal-style blogs with more personal content and filter-

style blogs with more topical content (see also Herring et al., 2004b).  Similarly, Kuhn (2005: 3) divided blogs into *personal* blogs, like electronic diaries, and *journalistic* blogs, featuring news and commentary.

Following Kuhn (2005), we define a *personal blog* as a blog an individual maintains as an online diary, focusing on content such as daily events and reflections.  For our second category, we chose *non-personal blog*, which--rather than focusing solely on news and commentary--encompasses all blogs not in the personal blog category but focusing instead on areas such as politics, commerce, entertainment or technology.  The distinction is broad yet meaningful.  There may be differences between personal and non-personal bloggers and their approaches to blogging ethics, which we examine.

*Demographics, Experiences and Habits*

In their analysis of 357 blogs, Herring et al. (2004a) found journal blogs were usually created by teenage females.  To verify and extend these findings, we examined the demographic profiles of personal and non-personal bloggers, including age, gender, nationality, occupation and education level.  We also assessed blogging experiences and habits, using variables from previous surveys of bloggers (Perseus, 2003; Pew, 2004; Viegas, 2005) and a focus group discussion conducted in the preliminary stage of this research.  For example, items included main reason for blogging, type of blog content, number of readers daily, primary intended audience, frequency of updates, and experience in reading and writing blogs.  We propose these research questions:

RQ1: How do personal and non-personal bloggers differ in demographics?

RQ2: How do personal and non-personal bloggers differ in blogging experiences and habits?

Bloggers typically must accept 'terms of use' to use popular blog publishing services. Though some blog hosting services provide ethical guidelines, they tend not to enforce them

or monitor content, leaving ethical judgments to bloggers.  There are no widely accepted

rules or ethics codes for blogging, but there are general principles that are relevant.

*Ethical Principles in Blogging*

Upon reviewing ethical guidelines potentially relevant to blogging--netiquette

manuals, ethical guidelines posted online, proposed blogging ethics codes from the literature,

and various newspapers and journalism associations' ethics codes--we identified four

underlying ethical principles: truth telling, accountability, minimizing harm and attribution.

They all are important journalism ethics principles, and though literature suggests they are

important to bloggers, actual importance remains an empirical question, and different groups

of bloggers may value the principles differently.  These principles overlap with the key

principles of the Society of Professional Journalists (1996) Code of Ethics, except that we

omitted independence and added attribution.  While conflicts of interest and issues of

independence arise among bloggers, they seem more likely to occur and have serious

consequences in traditional commercial media. Furthermore, independence does not seem

widely expected of blogs, which are seen as an alternative to journalism seeking objectivity

(Wall, 2005; Wall, 2006). On the other hand, attribution seems especially important in the

blogosphere, where bloggers often comment on others' works, and digital technology makes

copying easy.

Truth telling involves honesty, fairness and completeness in reporting (Herrscher,

2002; Association for Computing Machinery [ACM], 1992).  Journalists are expected to be

fair and accurate in gathering and reporting information, in service of the public's right to

know the truth (e.g., Society of Professional Journalism [SPJ], 1996).  Non-personal bloggers

may be more attuned to journalism ethics, and thus value truth telling highly.

Accountability involves being answerable to the public, bearing consequences of

one's actions and revealing conflict of interests (ACM, 1992; Herrscher, 2002; Scheuermann

and Taylor, 1997; Shea, 1994; Strentz, 2002).  For example, journalists are expected to admit and correct mistakes promptly (SPJ, 1996).  However, bloggers' sense of accountability may be low if they feel they are more anonymous than traditional media.  Viegas (2004) found that while bloggers believe they are responsible for their blog content, they do not realize they can be sued for it.  Bloggers may misunderstand accountability in the blogosphere, or desire a different level of accountability.

The ethical principle of minimizing harm (done to others) underlies issues involving privacy, confidentiality, reputational harm, consideration of others' feelings, and respecting diversity and underprivileged groups (ACM, 1992; Herrscher, 2002; Scheuermann and Taylor, 1997; Shea, 1994; Strentz, 2002).  Journalists are expected to treat others as deserving respect (SPJ, 1996).  Minimizing harm may also be highly relevant to personal bloggers, who blog about others.

Attribution involves issues such as avoiding plagiarism, honoring intellectual property rights, and giving sources proper credit (ACM, 1992; Herrscher, 2002; Scheuermann and Taylor, 1997; Shea, 1994; Strentz, 2002).  A study found 66% of U.S. Internet users do not care if files they are sharing are copyrighted (Pew, 2004).  Journalists are expected to identify sources whenever feasible (SPJ, 1996).  In the blogosphere, attribution of content is important not only for credibility but for community building (Blood, 2002), perhaps making attribution even more important than in other media.

In this study, we aim to study bloggers' beliefs about these four ethical principles-- truth telling, accountability, minimizing harm, and attribution--and related blogging practices, leading to these research questions:

RQ3: What are the ethical beliefs personal and non-personal bloggers value?

RQ4: What are the ethical practices personal and non-personal bloggers report that they adhere to?

*Ethics Guidelines in Blogging*

Whether an ethics code is necessary, desirable or feasible for such a large, heterogeneous group as bloggers has been debated (Kuhn, 2007).   Ethics codes are usually developed for professions like medicine or law (Ang, 2001)--or journalism, whose status as a profession is disputed (Singer, 2003)--not for a usually recreational activity such as blogging.  Despite such objections, several commentators, including some bloggers, have recommended blogging ethics codes, in part because many blogs are public and are similar to journalism (Blood, 2002; Online News Association, 2003; Volokh, 2004; Mintz, 2005; Kuhn, 2005; Kuhn, 2007; O'Reilly, 2007).   No quantitative study has investigated whether bloggers themselves see a need for a code, so we ask:

RQ5: To what extent do personal and non-personal bloggers see a need for a blogging ethics code?

Method

A web survey was chosen for this study because it was deemed best to reach bloggers, who are by definition regular web users, and because of its speed, low cost, and efficiency compared to other survey methods.  It can also ensure confidentiality, which is important when asking about sensitive topics like ethics.

*Pretesting*

Prior to questionnaire construction, a focus group was conducted to explore ethical issues bloggers face and their ethical beliefs and practices.  Six bloggers aged 22 to 28, mostly undergraduate students, participated.  Participants were asked about ethical issues they had encountered or heard about, ethical values and practices in blogging they found important, and the need for an ethics code.  Findings from the discussion, together with the literature reviewed, were used to construct the pretest survey.  The pretest was administered

to 70 bloggers contacted using random blog generating services and personal contacts.

Results were examined to improve existing questions and eliminate unnecessary ones.

*Participants*

The sample consisted of bloggers from around the world.  Invitation e-mails were sent

to bloggers at e-mail addresses posted publicly on their blogs, encouraging them to complete

the survey at the web link provided.  We required that the blog was active (i.e., it had at least

three entries and had been updated at least once in the past two weeks), contained a contact e-

mail address to send the invitation e-mail, and was mainly in English (as our survey was in

English).  So that we were comparing relevantly similar blogs, we required that they have one

sole author, be text-based (rather than audio- or image-based) and not be used for purposes

other than blogging (e.g., for community announcements or advertisements).

*Sampling*

As with other surveys of bloggers, probability sampling was not possible for this

study, because there is no way to track all existing blogs.  Thus, researchers have sampled

bloggers using multiple alternative strategies (Li and Walejko, 2008).  To obtain a reasonable

representation of bloggers, purposive stratified sampling was employed in this study.  The

sample was collected in a proportionate manner, according to the respective distribution size

of blog services as indicated on the National Institute for Technology and Liberal Education

(NITLE, 2004) blog census site.  Blogs were found using blog-tracking websites such as

Blo.gs and Blogdex, which feature random blog generating functions, and bloggers' e-mail

addresses were taken from their blogs.  The Blo.gs site was selected as the primary data

source as it is able to track approximately 82% of active blogs listed on the NITLE blog

census site, including those from Antville.org, Blogger.com, Pitas.com, Weblogs.com, and

individual bloggers who blog on sites with their own domain names (Herring et al., 2004a).

Because blog-tracking websites did not provide links to blogs from some large blogging

services (e.g., Xanga and Diaryland), blogs from such services with a user base of more than 5,000 (following the NITLE (2004) blog census data) were sampled directly using the 'random' function on the service's homepage. Bloggers were also encouraged in the invitation e-mails to forward invitations to blogger acquaintances and post the link to the survey on their blogs, a snowball sampling technique employed in other blogging studies (McCullagh, 2008; Huffaker and Calvert, 2005; Johnson and Kaye, 2004; Nardi et al., 2004).

Six thousand invitation e-mails were sent, and 1,288 surveys were completed. Because respondents were recruited using multiple techniques, including snowball sampling, it is impossible to calculate response rate, because it cannot determined how many respondents learned of the survey using each technique.

*Questionnaire Design*

The first section of the survey asked about bloggers' experience in reading and writing blogs, their blogging habits, content of their blogs, and their readers. A blogger was classified as either personal or non-personal based on the answer to the question, 'Which one of the following best describes the content of your weblog?' The choices were, 'A kind of personal journal,' or 'A non-personal weblog (e.g., topical)'. The next set of questions concerned bloggers' ethical beliefs and practices. Ethical beliefs were derived from the four ethical principles that we formulated from existing ethical guidelines and codes. Ethical practices were based on examples from the focus group discussion, news reports, and pre-test results. In addition, respondents were asked whether they thought a blogging ethics code was needed. Seven-point Likert scales were used for items in this section.

Sixteen statements were used to measure bloggers' ethical beliefs (see Appendix). Of these, three statements were combined to form the truth telling belief index (Cronbach's $\alpha$ = .88), four for the accountability belief index (Cronbach's $\alpha$ = .80), four for the attribution belief index (Cronbach's $\alpha$ = .77), and five for the minimizing harm belief index (Cronbach's

$\alpha = .85$).  Participants were asked to express their level of agreement (1 = strongly disagree, 7 = strongly agree) with these statements on ethical beliefs.  For example, an ethical belief statement was, 'Honesty should be a guiding principle when people blog'.

Ethical practices were measured similarly, using 20 statements (see Appendix), of which seven statements were used to form the truth telling practices index (Cronbach's $\alpha$ = .77), five for the accountability practices index (Cronbach's $\alpha$ = .72), four for the attribution practices index (Cronbach's $\alpha$ = .68), and five for the minimizing harm practices index (Cronbach's $\alpha$ = .73).  Statements required participants to state the frequency (1 = never; 7 = always) of performing each action.  For example, an ethical practice statement was, 'I correct any misinformation in my weblog'.

The last section asked about demographic variables such as age, gender, nationality, occupation and education level.

*Procedure*

Invitation e-mails were sent to bloggers over the first three days.  Reminder e-mails were sent about ten days later.  The e-mail invitation described the study and linked to the web survey, which was constructed using Nsurvey software.  On the first page of the survey, participants were informed that confidentiality was assured.  Most surveys were completed within the first five days of the survey launch on 6 February 2005. The data collection period was limited to a little over three weeks to reduce the chance that some historical event would occur during data collection and alter responses, thereby posing a threat to the validity of the findings. The data collection concluded 1 March 2005, when a sufficiently large number of responses had been obtained and the number of surveys completed had declined to a few per day.

The final sample size for analysis was 1,224 after removing 64 surveys during data cleaning. Surveys that failed to meet our screening criteria were removed.  Remaining

surveys were examined for duplicates.  Responses to a few surveys that were completed very quickly (e.g., 5 minutes and below) and very slowly (e.g., 2 hours and beyond) were checked for logical consistency.

## Results

*Demographics, Blogging Experiences and Habits*

Of 1,224 bloggers in the sample, just over half were male (51%) and most were aged 30 years or below (65%).  One out of three was a student (33%), and most were well educated, with a mean of 13.9 years of formal education (*SD* = 5.11).  The majority were from the United States (65%), with no other country accounting for more than 8% of respondents.  The demographic profile was consistent with other studies of bloggers (Herring et al., 2004b; Pew, 2005; Lenhart and Fox, 2006).

In the sample, 892 respondents (73%) were personal bloggers and 332 (27%) were non-personal bloggers.  There were significant differences between the two groups in terms of age, education, gender, and marital status (see Table 1).  For personal bloggers, the largest categories of occupations were students (39%) and information technology industry workers (9%).  Personal bloggers' main reasons for blogging were to express their thoughts and feelings (36%) and to document their lives (22%).  The content they wrote about was mostly their life events (64%).  Usually, they did not have a primary intended audience (41%), or if they did, it was people they knew personally (39%).  When asked how well they know their readers, the majority of personal bloggers agreed that, to some extent, they know their readers very well (62%).

Table 1: Demographic differences between Personal and Non-personal Bloggers

|  | Personal bloggers (n = 892) | Non-personal bloggers (n = 332) |
|---|---|---|
| Mean Age (*SD*) | 27.0 (9.7) | 34.9(12.2) |
| Years of formal education (*SD*) | 13.4 (4.9) | 15.1 (5.4) |
| Gender (% Female) | 59.6 | 19.2 |
| Marital status – Single (%) | 73.4 | 53.9 |
| Married | 22.0 | 40.7 |

Note: All differences are statistically significant at $p < .001$

Non-personal bloggers tended to be male, older, married and better educated (see Table 1). As with personal bloggers, the largest categories of occupations were students (18%) and information technology workers (12%). Non-personal bloggers' main reasons for blogging were to make commentary (36%) or provide information (21%). The content they blogged about was diverse, with government and politics (28%) and news (10%) being most common. They tended either to blog about people they did not know (40%), or not to blog about people at all (35%). Their primary intended audiences tended to be either people they did not know personally (48%), or no particular intended audience (38%). When asked how well they know their readers, 49% expressed agreement that, to some extent, they knew their readers very well.

RQ1 asked if there are demographic differences between personal and non-personal bloggers. From Chi-square tests run on demographic variables, gender was found to be moderately associated ($\phi = -.36$) with whether one was a personal or non-personal blogger,

$\chi^2(1, N = 1224) = 157.8$, $p < .001$.  Independent-samples $t$-tests showed non-personal

bloggers were significantly older, $t(509.3) = 10.7$, $p < .001$,[1] and had more years of formal

education, $t(1222) = 5.45$, $p < .001$, than personal bloggers.

RQ2 asked about differences in blogging experiences and habits between personal

and non-personal bloggers (see Table 2).  Virtually all differences between the two types of

bloggers are significant (see Table 3 and Table 4).  Specifically, reasons for blogging and

type of blog content had strong associations with type of blogger, whereas primary intended

audience had a moderate association.  Furthermore, non-personal bloggers have more readers

daily than personal bloggers, update their blogs more frequently, spend more time writing

each entry, and check how many readers are accessing their blogs more frequently than

personal bloggers.

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[1] Degrees of freedom adjusted for unequal variances.

Table 2: Descriptive differences Personal and Non-personal Bloggers (%)

| Personal bloggers (n = 892) | | Non-personal bloggers (n = 332) | |
|---|---|---|---|
| **Main reason for blogging** | | | |
| Express thoughts and feelings | 36 | Provide commentary | 36 |
| Document one's life | 22 | Provide info | 21 |
| Provide commentary | 9 | Express thoughts and feelings | 11 |
| Entertain others | 8 | Entertain others | 8 |
| Release emotions | 7 | Influence others to take action | 8 |
| **Weblog content** | | | |
| Events in my life | 64 | Government and politics | 28 |
| No main topic | 4 | News | 10 |
| Entertainment and arts | 4 | Entertainment and arts | 10 |
| Family and home | 4 | Others | 7 |
| Religion and beliefs | 4 | Events in my life | 6 |
| **Primary audience** | | | |
| Do not have one | 41 | People not known personally | 48 |
| People known personally | 39 | Do not have one | 38 |
| People not known personally | 12 | People known personally | 11 |
| Myself | 8 | Myself | 3 |

Table 2 (cont'd): Descriptive differences Personal and Non-personal Bloggers

| | Personal bloggers (n = 892) | Non-personal bloggers (n = 332) |
|---|---|---|
| Number of readers daily | | |
| 1-10 | 31 | 17 |
| 11-20 | 20 | 12 |
| 21-50 | 19 | 16 |
| 51-100 | 12 | 14 |
| 101-500 | 10 | 23 |
| Frequency of updates | | |
| 1-2 times a week | 23 | 19 |
| 3-6 times a week | 37 | 27 |
| once daily | 20 | 18 |
| Twice daily | 7 | 14 |
| Blogging experience | | |
| 1-6 months | 23 | 26 |
| 7-12 months | 16 | 21 |
| 1-2 years | 23 | 25 |
| 2-3 years | 19 | 15 |
| 3-4 years | 10 | 8 |
| Weblog reading experience | | |
| 1-6 months | 15 | 13 |
| 7-12 months | 15 | 13 |
| 1-2 years | 25 | 30 |
| 2-3 years | 20 | 19 |

| | | |
|---|---|---|
| 3-4 years | 13 | 15 |

*Note.* Percentages may not total to 100%, as some variables have more than 5 categories.

Table 3: Pearson's Chi-square Tests between Blogger Type and Blogging Habits

| Weblog habits | $\chi^2$ | Df | Cramér's V |
|---|---|---|---|
| Reasons for blogging | 410.00*** | 9 | 0.58 |
| Type of weblog content | 482.33*** | 18 | 0.63 |
| Primary intended audience | 213.84*** | 3 | 0.42 |

Note: n = 1224, ***$p < .001$.

Table 4: Independent T-tests Between Blogger Type and Blogging Habits

| Blogging habits | $n$ | $M$ | $SD$ | $t$ | $df$ |
|---|---|---|---|---|---|
| Number of readers daily | | | | | |
| Personal | 791 | 3.48 | 1.54 | -9.59*** | 412.92 |
| Non-personal | 291 | 4.75 | 2.06 | | |
| Frequency of updates | | | | | |
| Personal | 892 | 4.03 | 1.29 | -5.04*** | 476.98 |
| Non-personal | 332 | 4.55 | 1.72 | | |
| Time spent writing | | | | | |
| Personal | 892 | 1.84 | .76 | -2.99** | 563.81 |
| Non-personal | 332 | 2.03 | 1.05 | | |
| Extent of knowing one's readers very well | | | | | |
| Personal | 886 | 4.71 | 1.37 | 5.54*** | 540.02 |
| Non-personal | 328 | 4.19 | 1.51 | | |
| Frequency of checking access | | | | | |
| Personal | 578 | 4.50 | 1.57 | -3.37** | 593.71 |
| Non-personal | 263 | 4.84 | 1.33 | | |

Note: n = 1224, **$p < .01$. ***$p < .001$, degrees of freedom adjusted for unequal variances.

*Ethical Beliefs and Practices*

RQ3 asked what ethical beliefs personal and non-personal bloggers value.  Within-subject ANOVA models were used to test whether means for the four ethical beliefs differed significantly.  For personal bloggers, results indicate the overall model was significant ($F$ (3, 891) = 321.6, $p < .001$), and pairwise comparisons reveal that differences in means between the four ethical beliefs were all significant.  For non-personal bloggers, the differences in means were significant, except for truth telling and attribution beliefs (see Table 5).  Therefore it can be concluded that personal bloggers valued attribution most, followed by minimizing harm, then truth telling, then accountability.  Non-personal bloggers valued both attribution and truth telling most, followed by minimizing harm, then accountability.  For both groups, attribution was most valued, and accountability least.

Table 5: Mean Scores of Ethical Beliefs of Personal and Non-personal Bloggers

| Ethical beliefs | M | SD |
| --- | --- | --- |
| Personal | | |
| Truth telling | $5.22_a$ | 1.35 |
| Accountability | $4.44_b$ | 1.39 |
| Attribution | $5.89_c$ | 1.04 |
| Minimizing harm | $5.35_d$ | 1.11 |
| Non-personal | | |
| Truth telling | $5.68_a$ | 1.45 |
| Accountability | $4.53_b$ | 1.51 |
| Attribution | $5.79_a$ | 1.03 |
| Minimizing harm | $4.99_c$ | 1.25 |

Note: Within group, values with subscripts in common do not significantly differ at

$p < .05$.

To compare whether personal and non-personal bloggers differed in valuation of the

four ethical beliefs, independent-sample *t*-tests were conducted.  Results indicate significant

differences for two of them.  Specifically, non-personal bloggers valued truth telling belief

more than personal bloggers, $t(1222) = -5.11$, $p < 0.01$.  Personal bloggers, however, valued

minimizing harm more than non-personal bloggers, $t(537.3) = 4.57$, $p < 0.01$.

RQ4 asked what ethical practices personal and non-personal bloggers report that they

adhere to.  As with RQ3, within-subjects ANOVAs were run to determine whether means for

the four ethical practices were significantly different.  For personal bloggers, differences in

means between three of the four ethical practices were significant, but the difference between truth telling and attribution practices was not (see Table 6). For non-personal bloggers, the overall model was significant ($F$ (3, 315) = 27.7, $p < .001$), but pairwise comparisons indicated none of the differences in means were significant, except for accountability and the other three ethical practices.

Table 6: Mean Scores of Ethical Practices of Personal and Non-personal Bloggers

| Ethical practices | $M$ | $SD$ |
|---|---|---|
| Personal | | |
| Truth telling | $5.78_a$ | 0.83 |
| Accountability | $5.13_b$ | 1.35 |
| Attribution | $5.74_a$ | 1.21 |
| Minimizing harm | $6.06_c$ | 0.87 |
| Non-personal | | |
| Truth telling | $5.97_a$ | 0.95 |
| Accountability | $5.35_b$ | 1.39 |
| Attribution | $6.02_a$ | 1.07 |
| Minimizing harm | $5.94_a$ | 1.00 |

Note: Within group, values with subscripts in common do not significantly differ at

$p < .05$.

To compare whether personal and non-personal bloggers differed in their reported ethical practices, independent-sample $t$-tests were conducted. Results show that non-personal

bloggers practice three of the four ethical principles more frequently than personal bloggers. The three practices were truth telling practices ($t(1222) = 3.29$, $p < .01$), accountability practices ($t(1205) = 2.50$, $p < .01$), and attribution practices, $t(650.61) = 3.91$, $p < .01$.  No significant difference was found for minimizing harm practices.

*Blogging Ethics Code*

RQ5 asked whether personal and non-personal bloggers see a need for a blogging ethics code, and both groups tended to support a code (see Table 7).  A one-sample *t*-test using the value 4 (4 = neutral) indicated that overall, bloggers slightly agreed that a blogging ethics code is needed, $t(1223) = 9.11$, $p < .001$.  Both personal bloggers ($M = 4.5$, $SD = 1.73$) and non-personal bloggers ($M = 4.39$, $SD = 1.73$) slightly agreed that there was a need for an ethics code, and an independent sample *t*-test revealed that this was not a significant difference, $t(1222) = .93$, $p = .35$.

Table 7: Bloggers' Agreement on the Necessity of an Ethics Code

|  | Personal bloggers (n = 892) | Non-personal bloggers (n = 332) |
| --- | --- | --- |
| At least slightly agree | 56 | 53 |
| Neutral | 19 | 16 |
| At least slightly disagree | 24 | 31 |

*Note*. Values represent percentages of bloggers who responded to this question.

Discussion

This exploratory study of blogging ethics used a broad distinction between personal and non-personal bloggers to examine differences between their ethical beliefs and practices, and compared demographics, blogging experiences and habits to identify differences between these two groups.  In addition, we investigated whether bloggers see a need for a blogging

ethics code. Though are results are not generalizable, due to the impossibility of random sampling, purposive stratified sampling may present some of the best available data to date.

Comparing demographics, our findings show non-personal bloggers are more likely to be older males with more formal education than personal bloggers.  Since more specialized knowledge is required to write about topics like government and politics, compared to expressing one's feelings, it follows that non-personal bloggers would be more educated and older.  These findings are consistent with those of Herring et al. (2004a), who found journal style bloggers tend to be young female teenagers, whereas filter style bloggers tend to be older males.  Lenhart and Fox (2006) found that among American bloggers, the most popular topic was their personal experiences.  Like Herring et al. (2004a), we believe that, to fully understand blogging, more attention needs to be paid to the large number of personal bloggers.

Our study found several significant differences between personal and non-personal bloggers' blog experiences and habits, though at this point we can only speculate about the reasons .  Non-personal bloggers had more readers daily than personal bloggers, perhaps because, unlike personal bloggers who write mainly about their personal lives, non-personal bloggers write about topics with potentially broader appeal.  Non-personal bloggers report checking more frequently than personal bloggers on how many readers access their blogs, perhaps as a way of judging quality of their content.  Non-personal bloggers also spent more time writing each entry than personal bloggers, perhaps because to provide commentary, they need to spend more time on research and analysis.

Overall, bloggers report that they value the ethical beliefs and adhere to the practices inquired about, with some variations.  This first large-scale survey of blogging ethics revealed no shocking lack of ethics in these areas.  Our findings show that among ethical beliefs, personal and non-personal bloggers valued attribution most.  (Non-personal bloggers

valued truth-telling belief as much as attribution belief.) The strong value placed on attribution, consistent with findings of Herring et al. (2005), may be because in blogging, attribution serves a community-building function (Blood, 2002).

Among non-personal bloggers' reported practices, attribution was practiced as frequently as truth telling and minimizing harm. Among personal bloggers' practices, however, attribution was practiced less frequently than minimizing harm. A likely reason that non-personal bloggers practice truth telling, attribution, and minimizing harm with similar frequency is the nature of their blogs. To provide convincing commentaries, non-personal bloggers need to provide accurate information, cite sources and provide links. Telling readers the 'truth' may not suffice; they need to show readers where they get their truth.

Accountability was least valued and least practiced by both groups of bloggers. Possible explanations include Viegas' (2004) finding that most bloggers do not believe people can sue them for blog content, or perhaps because bloggers have lower perceptions of social risk (i.e., diminished personal cost if interactions or relationships fail) for online compared to face-to-face communication (Morahan-Martin and Schumacher, 2000; Turkle, 1995; Wallace, 1999; Walther, 1996).

The two groups of bloggers valued truth telling differently. Among beliefs of non-personal bloggers, truth telling holds the same importance as attribution. Drawing from earlier explanations for beliefs regarding attribution, non-personal bloggers may value truth telling and attribution highly because of the nature of their blogs. For personal bloggers, belief in truth telling was third most valued, behind beliefs in attribution and minimizing harm. One possible reason is that personal bloggers blog mainly to express their thoughts and feelings (39%) and to document their lives (22%). For instance, a personal blogger may blog about an argument with her parents, and use her blog more like a diary, where she can

freely express her feelings rather than present a truthful account of why the argument occurred. Non-personal bloggers' main reasons for blogging is to provide information and commentary, with topics often centered on government and politics (28%) and news (10%), so they may believe journalistic principles such as truth telling are essential for credibility, whereas personal bloggers may see less need to establish credibility.

Non-personal bloggers reported adhering to truth telling practices as frequently as attribution and minimizing harm practices. Personal bloggers reported adhering to both truth telling and attribution practices less frequently than minimizing harm practice. Belief in minimizing harm was more valued than belief in truth telling for personal bloggers and less valued than belief in attribution and truth telling for non-personal bloggers. One reason personal bloggers believe more in minimizing harm than in truth telling may be that they know their readers better than non-personal bloggers (see Table 2). A significant positive correlation between belief in minimizing harm and how well bloggers know their readers supports this idea, $r(1212) = .10$, $p < .01$. Related to this, the fewer readers personal bloggers have, the more likely they will know their readers better, $r(1070) = -.13$, $p < .01$. Another possible reason personal bloggers value minimizing harm belief more than truth telling belief is that many write for people they know personally (39%). Personal bloggers may believe it is more important for them to prevent harm to friends than to tell the truth.

Although scholars and commentators have proposed blogging ethics codes, this is the first study to examine whether bloggers themselves see a need for a code. Though some cast calls for blogging ethics codes as reactions of journalists attempting to defend their turf (Singer, 2003), it must be noted there was strong (if not enthusiastic) support for an ethics codes among bloggers themselves, including both non-personal and personal bloggers. As most non-personal bloggers take a journalistic approach (Kuhn, 2005), one may expect them to see more of a need for a code--akin to a journalism ethics code--compared to personal

bloggers. However, our findings revealed no significant difference between personal and non-personal bloggers' agreement on the need for a blogging ethics code. A possible reason for the less than enthusiastic support for a code is that blogging is almost always for leisure (Drezner and Farrell, 2004), so bloggers may not see a strong need for an ethics code to restrict a recreational activity. An ethics code, even if self-imposed by bloggers, may be seen as a constraint on the free expression championed in much of the blogosphere, or as interference with bloggers' autonomy to make ethical decisions, just as ethics codes are sometimes regarded among journalists (Black and Barney, 1985-86).

A code is only as useful as the number of people who adhere to it. Given their diversity, it may be unrealistic to expect bloggers to agree on much at all, or to be bound by any one code. Indeed, ethics codes may be little more than sets of ideals, unless they have 'teeth' in the form of sanctions. Some have observed that industry self-regulation, in which industry players enforce ethics codes on their members, seems to work best when a relatively small, cohesive group enforces standards against members who have high incentives to maintain membership, as in a profession like law or medicine (Ang, 2001). By contrast, the blogosphere is exceptionally large, diverse, and linked only informally. 'Membership' in the blogosphere presents very low barriers to entry, with none of the qualifications that characterize some professions, like specialized training. Perhaps subgroups of the blogging community would have stronger motivation to follow an ethics code than the blogosphere as a whole. If future blogging ethics codes are proposed, codes may be tailored for different types of blogs, given differences among bloggers and their ethical beliefs.

Though the prospect of thousands of bloggers unmoored by any shared ethical standards or training may seem frightening, the reality is that bloggers profess that they value the principles and adhere to the practices we inquired about. Moreover, the blogosphere is more interactive than traditional media, allowing instant feedback to bloggers who violate

readers' standards.  Bloggers may profess to value accountability least among the principles

we inquired about, but accountability exists in the form of feedback, often vigorous.  Such a

'sanction' on unethical behavior may largely supplant the need for a formal blogging ethics

code, but bloggers support a code nonetheless.

*Limitations and Conclusion*

A problem with any survey of bloggers is that random sampling is impossible, and

therefore so is generalization.  Web surveys, like other self-administered surveys, have

shortcomings including low response rate and lack of verification of participants' identities.

Reaching bloggers through mass e-mail is difficult, since e-mails may be disregarded or

mechanically filtered out as spam.  As our survey was in English, only English blogs were

sampled.  Future research should examine non-English speaking bloggers.

Some might criticize the simple distinction made between personal and non-personal

bloggers in this study.  While these groups differ in demographics, blogging experiences and

habits, and ethical beliefs and practices, perhaps other important distinctions can be made

between other categories of bloggers.  As the blogosphere evolves, perhaps becoming more

specialized, future studies might build on this one to investigate further differences among

different types of bloggers, and reasons for differences we identified.  For example, regarding

our finding and that of Herring et al. (2004a) that non-personal bloggers tend to be male:

Some have suggested that women are disinclined to participate in the non-personal

blogosphere because it is dominated by men who hold them to different standards (Ratliff,

2007), a topic that future research might explore.

Ethics is not a one-way street.  Future studies might examine not only bloggers' views

of their ethical obligations, but others' expectations of bloggers too.  Though blogs, because

of their interactivity, break down traditional distinctions between content providers and

audiences, it is through research not only into views of bloggers but of parties to whom their

obligations are owed—their readers, and the people they write about—that the ethics of the

blogosphere can be best understood.

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Appendix

*Items for Ethical Beliefs*

Truth telling Index

1. Honesty should be a guiding principle when people blog.

2. Telling the truth should be a guiding principle when people blog

3. Bloggers should always make sure that their weblog entries are accurate

Accountability Index

1. Bloggers should be responsible to their readers.

2. Bloggers need to be accountable to their readers.

3. Bloggers should take responsibility for any harm their weblogs cause.

4. Bloggers should be answerable for any negative consequences their weblogs may

   have.

Attribution Index

1. Bloggers should always credit others' work that they use in their weblog.

2. Bloggers ought to get permission to use substantial parts of others' work.

3. Bloggers should never plagiarise.

4. Bloggers should respect copyrighted materials.

Minimizing Harm Index

1. It is important to be mindful of others' feelings when blogging.

2. It is important to treat everyone with dignity when blogging.

3. Bloggers should protect confidential information of the people they blog about.

4. It is important to respect people's privacy when blogging.

5. Respect for others should be a guiding principle when people blog

*Items for Ethical Practices*

Truth telling Index

1. I make up characters in my weblog.

2. I exaggerate facts or figures in my weblog.

3. I make changes to my previous weblog posts.

4. I sometimes distort facts in a way that favor my opinion.

5. I present false information in my weblog.

6. I include fictitious material in my weblog.

7. I have included facts which may not be accurate in my weblog.

Accountability Index

1. I take responsibility for any negative impact my weblog may cause.

2. I own up to my readers the mistakes I made in my weblog.

3. I write in a way I would want others to write about me.

4. I correct any misinformation in my weblog.

    When I correct any misinformation in my weblog, I make it known to my readers

Attribution Index

1. I give credit to any sources I obtained my information from.

2. In my weblog, I list picture credits for images I do not own.

3. When I copy and paste a substantial amount of material from another website or

    weblog, I clearly indicate it to my readers.

4. I borrow material from other websites for my weblog without attributing it to its

    source.

Minimizing harm Index

1. I write abusively about others in my weblog.

2. I post confidential information about others on my weblog.

3.  I post private information about others on my weblog.

4.  I have written about others in a disrespectful manner in my weblog.

5.  I discriminate against a particular group or groups when I blog.