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# Social Networking and the Perception of Privacy within the Millennial Generation

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# SOCIAL NETWORKING AND THE PERCEPTION OF PRIVACY WITHIN THE MILLENNIAL GENERATION

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**Abstract**

Has technology caused a generational divide between current college age users (Millennial Generation) who have no problems posting intimate details of their personal life on the Web and more traditional older users who seem to value privacy? This paper presents the results of a survey of 251 university students and follow-up focus groups on the topic of the perceptions of social networking and privacy. We will use Facebook as an example of social networking, and review attitudes about privacy and control over personal information among traditional and non-traditional college age users and light and heavy users of social networking sites.

## 1. Introduction

When Scott McNealy, chief executive officer of Sun Microsystems, pronounced that ―You have zero privacy anyway. Get over it.‖ (Sprenger, 1999) he was speaking to middle-aged journalists. Supposedly there is no need to tell this to the younger generation. Many adults are shocked by what they see on Facebook and believe that most teenagers don‗t take the risks seriously. In an article written for the New York Times ―When Information Becomes T.M.I.‖, Warren St. John (2006) writes, ―Through MySpace, personal blogs, YouTube and the like, this generation has seemed to view the notion of personal privacy as a quaint anachronism. Details that those of less enlightened generations might have viewed as embarrassing — who you slept with last night, how many drinks you had before getting sick in your friend‗s car, the petty reason you had dropped a friend or been fired from a job — are instead signature elements of one‗s personal brand. To reveal, it has seemed is to be‖. The issue for those of this generation is not privacy but how their image is presented. Users accept that they cannot control what is said about them but want control over who sees the site and what is on it. Why do those of the Millennial generation see little threat to privacy as they live in the fishbowl of social networking? This question intrigued the authors who decided to conduct a study on this generation‗s view on privacy as it pertained to their use of social networking.

Is it true that young men and women don‗t care about privacy? Do they take a cavalier attitude toward access and property rights? Do they have little regard for controlling personal information? Do heavy users of social networking sites differ from light users in their attitudes toward privacy? Are they more cavalier, indifferent or passive? To address such questions, we conducted a survey of 251 college students [38] and follow-up focus groups with 13 of those students. We compare younger and older respondents and light and heavy users of social networking sites on their survey responses to privacy and other issues pertaining to computer ethics. Focus group participants, aged 19-25, were asked both written and open ended verbal questions regarding their use of social networking sites. To assess the respondents‗ awareness about control and ownership of content, we questioned them about Facebook‗s terms of service and business practices. We also explored the legitimate and illegitimate use of social networking in both work and university contexts.

Part 1 presents the survey methodology and findings and Part 2 provides additional qualitative results from the focus groups. In Part 3 we discuss the implications of the findings.

## 2. Survey Methodology

We assess two conventional understandings 1) that young men and women as compared to older men and women are significantly different in their attitudes toward privacy and other IT/IS ethical

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[38] Our survey was conducted as part of an international study of college students in the 2008-2009 academic year, of which we were co-sponsors. Although this was a multi-site study (USA, UK, and Canada), we limit our report to the data collected from our site in America and a satellite campus in Luxembourg.

issues and that 2) light, moderate, and heavy users of social networking sites, likewise, differ significantly in their attitudes. The values for the first independent variable, age, are operationalised as ―under 25" and ―25 or older." The values for social networking use, the second independent variable, include ―up to 1 hour," ―5 hours," ―10 hours," and ―11 or more hours" per week.

College students provided the data for these and other variables. During the Fall 2008 and Spring 2009 semesters we drew a purposive sample from two campuses of students enrolled in business ethics or computer ethics courses. We conducted an exam-style survey in the classrooms. The questionnaire included 31 Likert-style items that were used to measure respondents' attitudes on a number of computer or internet issues. Students were instructed to indicate their level of agreement or disagreement to provocative statements such as, ―It is acceptable for me to make unauthorised copies of commercial software for my own private use." Respondents were provided the option of selecting ―indifferent."

We generated three composite dependent variables. The first, labelled ―indifference," is simply the total number of questions that a respondent selected indifferent as his or her response. In our sample, this varied from a low of 0 to a high of 22 with a mean of 5.4. The second dependent variable combines 6 indicators of attitudes towards access and property rights, for example, the acceptability of making unauthorised copies of commercial software, accessing data without authorization, and using passwords without permission. Agreement indicates disregard for rights or a cavalier attitude. Points were assigned according to this system: strongly disagree = 1, disagree = 2, indifferent = 3, agree = 4, and strongly agree = 5. The theoretical range is 6 to 30 and the actual range was 6 through 27 with a mean of 13.8. The third dependent variable, privacy protection, indicates a level of insistence that employers or universities use electronic surveillance only with the consent and knowledge of those subject to monitoring. It combines 4 items that describe different surveillance contexts: the workplace, labs/libraries, university residences, and web-based instruction platforms, e.g., VLE and Blackboard. Agreement signifies support for privacy protections. The scoring method described above was also used and the actual range matched the theoretical range of 4 through 20, the mean was 14.8.

Consistent with the conventional understandings, six hypotheses are tested:

- H1: There is a significant difference between those under 25 years of age and older men and women, such that the former will have a higher average indifference score.
- H2: There is a significant difference between those under 25 years of age and older men and women, such that the former will have a higher average score on disregard access/property rights.
- H3: There is a significant difference between those under 25 years of age and older men and women, such that the former will have a lower average privacy protection score.
- H4: There is a significant difference between social networking users, such that heavy users will have a higher average indifference score.
- H5: There is a significant difference between social networking users, such that heavy users will have a higher average score on disregard access/property rights.
- H6: There is a significant difference between social networking users, such that heavy users will have a lower average privacy protection score.

## 2.1 Survey Results

|  | Age | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Indifference | -25 | 216 | 5.5556 | 4.37399 | .29761 |
|  | 25+ | 27 | 3.6296 | 4.86074 | .93545 |
| Disregard Access/Property Rights | -25 | 207 | 14.4058 | 3.83894 | .26682 |
|  | 25+ | 27 | 10.4074 | 3.79533 | .73041 |
| Privacy Protection | -25 | 206 | 14.99 | 3.563 | .248 |
|  | 25+ | 20 | 13.25 | 3.823 | .855 |

**Table 1A Age: Comparison of Means on Dependent Variables**

Turning to Table 1A and Table 1B we find confirmation for hypothesis 1 and 2 but not for hypothesis 3. Younger respondents had a significantly higher average on the indifference tally. The difference was not large, however, with the younger respondents selecting two additional statements to register their indifference (5.6 versus 3.6 for older respondents). A more significant difference was apparent in disregard for access/property rights with younger students showing less zeal for upholding rights. To put this in perspective, however, disagreement with disregarding rights would have yielded a score of 12 and agreement a score of 24. The mean for those under 25 of age was 14.4-- closer to disagreement. Finally, younger respondents had a significantly higher average score on privacy protection, albeit separated by less than two points from the average for older respondents.

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
| | | | | | | | | 95% Confidence Interval of the Difference | |
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Dif | Std. Error Difference | Lower | Upper |
|---|---|---|---|---|---|---|---|---|---|
| Indifference | .502 | .479 | 2.130 | 241 | .034 | 1.92593 | .90408 | .14502 | 3.70684 |
| Disregard A/P Rights | .129 | .720 | 5.097 | 232 | .000 | 3.99839 | .78452 | 2.45270 | 5.54408 |
| Privacy Protection | .381 | .538 | 2.072 | 224 | .039 | 1.740 | .840 | .085 | 3.395 |

**Table 1B Independent Samples Test of Age and Dependent Variables**

According to the cross tabulation results in Table 2, age and hours of use are highly related. For instance, two-thirds of the 25+ subset spent less than 1 hour per week on social networking sites as compared to only one-eighth of the under 25 subset. When assessing the difference between light and heavy users on the dependent variables we decided to exclude the 25+ subset primarily due to its lack of heterogeneity. Moreover, with the exclusion of those 26 cases, age is controlled (analysis is within one age group-- those under 25) while we test the second independent variable.

| | | | Age | | |
| | | | -25 | 25+ | Total |
|---|---|---|---|---|---|
| Hours Per Week on Social Networking Sites | <1 | Count | 35 | 18 | 53 |
| | | % within Age | 16.4% | 66.7% | 22.0% |
| | 1-5 | Count | 89 | 4 | 93 |
| | | % within Age | 41.6% | 14.8% | 38.6% |
| | 6-10 | Count | 44 | 4 | 48 |
| | | % within Age | 20.6% | 14.8% | 19.9% |
| | 11+ | Count | 46 | 1 | 47 |
| | | % within Age | 21.5% | 3.7% | 19.5% |
| | Total | Count | 214 | 27 | 241 |
| | | % within Traditional / Non-Traditional Age | 100.0% | 100.0% | 100.0% |

**Table 2 Cross tabulation of Hours Per Week on Social Networking Sites by Age**

Based on the results in Tables 3A and 3B we find that those putting in 6-10 hours per week on social networking sites have the highest means for indifference but also privacy protection. According to the hypotheses, heavy users should have shown the most indifference and privacy protection should have been higher for the modest and minimal users. The 11+ group has the highest average score on disregard of access/property rights and the minimal users showed the least indifference—both anticipated by the hypotheses. In any case, the ANOVA results indicate that the four use groups are not significantly different in their scores on indifference, disregard for access/property rights, and privacy protection. Hypothesis 4, 5, and 6 are not confirmed.

| Hours Per Week on Social Networking Sites | | Indifference | Disregard Access/Property Rights | Privacy Protection |
|---|---|---|---|---|
| <1 | Mean | 4.9143 | 13.9394 | 14.94 |
| | N | 35 | 33 | 34 |
| | Std. Deviation | 3.91356 | 3.89663 | 3.584 |
| 1-5 | Mean | 5.6629 | 14.4302 | 14.53 |
| | N | 89 | 86 | 83 |
| | Std. Deviation | 4.48468 | 3.82727 | 3.610 |
| 6-10 | Mean | 6.1136 | 14.2439 | 15.79 |
| | N | 44 | 41 | 43 |
| | Std. Deviation | 4.23285 | 4.31729 | 3.349 |
| 11+ | Mean | 5.4130 | 14.7111 | 15.22 |
| | N | 46 | 45 | 45 |
| | Std. Deviation | 4.71676 | 3.46162 | 3.586 |
| Total | Mean | 5.5794 | 14.3756 | 15.01 |
| | N | 214 | 205 | 205 |
| | Std. Deviation | 4.38315 | 3.84509 | 3.554 |

**Table 3A: Social Networking Hours: Comparison of Means on Dependent Variables**

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Indifference | Between Groups | 29.935 | 3 | 9.978 | .516 | .672 |
|  | Within Groups | 4062.214 | 210 | 19.344 |  |  |
|  | Total | 4092.150 | 213 |  |  |  |
| Disregard Access/ Property Rights | Between Groups | 12.312 | 3 | 4.104 | .275 | .844 |
|  | Within Groups | 3003.766 | 201 | 14.944 |  |  |
|  | Total | 3016.078 | 204 |  |  |  |
| Privacy Protection | Between Groups | 47.505 | 3 | 15.835 | 1.258 | .290 |
|  | Within Groups | 2529.451 | 201 | 12.584 |  |  |
|  | Total | 2576.956 | 204 |  |  |  |

**Table 3B ANOVA of Social Networking Hours and Dependent Variables**

## 3. Focus Groups

The exponential growth of social networking sites and especially Facebook has not only caught the attention of social researchers and business analysts, but it has become the subject of numerous articles in the popular press. For example, a writer for the New York Times gushes ―Facebook promises to change how we fundamentally communicate by digitally mapping and linking peripatetic people across time and space, allowing them to publicly share myriad and often very personal elements of their lives" (Stone, 2009). Facebook keeps users on its site for an average of 169 minutes a month compared to Google news or the NYT which have about 10 to 13 minutes a month. The typical user spends 20 minutes a day and over two thirds log in at least once a day (Hempel, 2009).

After viewing the results of our survey, we wanted a better understanding of the ―typical user", so we invited a total of 13 students, 8 females and 5 males, all Facebook users, to participate in 2 focus groups on the topic of social networking sites, their uses, advantages and risks. Students were from sophomore, junior and senior years and were residents of the United States campus. They did not know each other prior to the focus group. Some students had a computer ethics course in their Computer Science major and some had a Business Ethics course in the business administration major. Others from the College of Arts and Sciences had no ethics courses prior to attending the focus group. The students all used the Facebook site from as little as one half hour a day to as much as 5 hours per day.

These Facebook users did not seem to fit the stereotype of being naïve and reckless. With a few exceptions, they were aware of the many advantages and disadvantages of this service. Most praised the ease by which they could stay in touch with family, friends and acquaintances and keep updated with what their Facebook friends were doing, thinking, etc. Of all the Facebook features, the favourite is the ―Wall" because it is ―good for communication" and ―is a good way to keep up w/friends." Those who liked ―Status Update" emphasised the same benefits: ―these let me know what people are up to" and ―it is nice to see what people are doing sometimes." Even so, the students pointed out the downsides, for instance, that nasty comments are posted on the Wall and that with Status Updates ―people do this too much"; it ―si kind of annoying- telling everyone what you are doing all the time." One person confided that

> it can cause harm with all the gossiping. A group of friends get together and look at pictures and gossip about the pictures. It sparks mean gossip and you make judgments before you even know them.

The group participants discussed privacy issues and control over personal information. One person confided that she kept her Wall private to retain some degree of control over access and content. Many acknowledged the potential risk that photos, and other artefacts that they intended for a private audience, might reach the eyes of prospective employers; nevertheless, they claimed to have

strategised ways to avoid this. Some try to maintain a ―clean‖ site while others planned to alter or cancel their account when the time seemed right: ―The reason I would cancel my account would be to get rid of my content, so I would not want my pictures or info still available to whomever wants it.‖ It is noteworthy that two students who declined participation in the focus group said that they did not use Facebook out of concern over employers seeking information and finding damaging pictures or other information that could be held against them.

One of the researchers asked the students to respond to the controversy over whether Facebook administrators may exercise property rights over the users‗ content. Most responded with incredulity and fear:

> Makes me feel unsafe. Never know where photos will end up. Are the photos my property or Facebook‗s?

> I do not like that at all- I would only delete my facebook if I really needed to (getting a job). If my pictures + information are forever theirs to do what they please I am in jeopardy to be exploited later.

> I don‗t appreciate it. I don‗t think they should be able to use our stuff without our knowledge or approval.

> I feel like I could be in jeopardy of being exploited or black mailed in the future…. I would not like to see my face on some advertisement w/out any knowledge.‖

A few of the students perceived this as a violation of privacy:

> Why? Stupid and they need to recognise people‗s privacy everything belongs to us and they have <u>NO </u>right to own anything of <u>ANY</u> person placed on facebook!‖

> There is an invasion of privacy issue. It enables people‗s life information to be sold in the public domain.

> It‗s a privacy concern. I don‗t need the whole world knowing my business since on facebook I am extremely private.

These young men and women do care about privacy, controlling their personal information, and exposure. Nevertheless, by their reactions to the controversy over the use of content it was evident that they were not familiar with Facebook‗s terms of agreement and did not consider the vulnerable position that they are in vis-à-vis Facebook administrators. They may know and want consumer protections, however they, themselves, are not proactive. Their sense of being in control is wishful thinking.

## 4. Discussion

What conclusions can we draw from the survey and the focus group follow-up? Most importantly, we found little evidence of a rift between light and heavy users of social networking and between older and younger students on privacy concerns and control over personal information. Light to heavy users of social networking were very similar in their support for protections. Young men and women, as compared to older students, expressed slightly more indifference to particular ethical stands and did not show as much regard for access and property rights, however, they scored higher on privacy protection. Either way, the differences between the age groups were not substantial.

It is possible that our sample of college students missed segments of the population more likely to differ dramatically in attitudes and behaviours. Admittedly, our sample did not include many middle-aged (or older) men and women. In regard to Facebook, some say the ‗network effect‗ has won over the older generation who can watch their kids, store pictures from trips, find jobs and connect professionally not just for personal fun and games. According to the site insidefacebook.com the median age of a user is 26 but the fastest growing user group (up 175% in 6 months) is women 55 or older with men 55 and older increasing use by 138% in 6 months (Gates, 2009). Our study did not

target this population. We did not sample high school students. A future study would do well to sample these age categories and test whether the rift is most apparent across the wider expanse of maturity and experience.

Facebook continues to expand both in terms of users and applications. It now has over 200 million users and is growing at the rate of 5 million new users a week. It has doubled in sise since August, 2008 and has been called the Web's dominant social ecosystem and an essential personal and business networking tool in much of the wired world. In 2006 Facebook introduced communities for commercial organizations and is widely used by companies as well as universities. One of the Facebook founders, Chris Hughes, brought social networking to the campaign for the presidency. Facebook was used by the Obama campaign as a political tool and Obama stated, ―there's no more powerful tool for grass roots organizing than the Internet" (Associated Press, NYT, 7/7/08). Facebook also enables broad based activism such as the mobilization of 12 million people to protest around the world against the FARC rebels in Columbia (Stone, 2009).

It appears that a certain percentage of social networking users discover or are led to use sites in ways that go beyond simple socializing. We found in our survey that approximately half of the heavy users (11+ hours per week) indicated that they would use social networking sites for career advice. Only one-sixth of very light users (<1) expected to do this. Forty five percent of heavy users and 25% of very light users anticipated using social networking sites to look for a job.

If dedicated users utilise social networking sites for professional development, we must question the assumption that social networking is a passing fad or lifestyle soon left behind when the young grow up and enter the real world. Future studies should explore whether, with serious purpose in mind, users will replace a somewhat lazy consumer mentality with a more sensible and activist stand on consumer rights. We found in our investigation that the appropriate values and attitudes regarding privacy and information control are in place, but compromise comes through passivity and wishful thinking. Perhaps this will change as students graduate and the stakes become higher.

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