

Understanding Privacy Behaviors of Millennials within Social Networking Sites

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ABSTRACT

Creating and defining an online persona is something most Millennials will find themselves doing as they transition into adulthood. Today having an online profile is almost essential to fully network with friends, family, and employers. Despite the popularity of this technology amongst teenagers, not a lot is understood in terms of their privacy behaviors or attitudes regarding privacy within social networking sites (SNS). To investigate this, we designed an interview-based study, in which we questioned several high school students about their thoughts and privacy practices, and habits. We found, contrary to popular thought, that privacy is a concern for most Millennials and manifests itself in both attitudes and practice for young users. Popular media, and often times concerned parents, have assumed teenagers do not understand the nuances of Social Networking Sites and believe Facebook is a danger-ridden landscape for young people's well being and reputation. This study however found a group of savvy Millennials that understood the potential dangers affiliated with low privacy settings, and took precautions with their identity and online personas. The findings from this study, along with guidelines set forth for practice and additional research, will help the information community better evaluate Millennial behaviors and serve their online needs.

Keywords

Privacy; Millennial; Social Networking Sites (SNS); Internet.

INTRODUCTION

A recent review of the scholarly literature indicates that use of Facebook and similar social networking sites, such as MySpace, by Millennial (members of the "net generation" Jones & Healing, 2010; Millennials, 2010), is not currently

well understood and continues to change rapidly.

Public and Academic librarians perhaps share the main responsibility for providing service for these young adult users. With Millennials entering into adulthood and ready to use virtual platforms for their research, it is important to understand how they are functioning in online environments if we, as information professionals, are going to best serve their information needs. Set to work with the Millennial generation in our careers as librarians in academic, public and school libraries, we wanted to explore how we can best meet our users' needs in virtual environments. Going straight to our users seemed like the best option to get at our needed information. We decided interviews and small focus groups with high school seniors would be ideal for the basis of an exploratory study.

This interview-based study was conducted with a small set of 21 high school seniors and their use of social networking sites, particularly Facebook. Currently there is no clear direction or general understanding for how SNS and their adoption will affect this population of young adults. Understanding these online services is critical due to their ubiquitous use and adoption. We are just now starting to realize how embedded this technology has become in the everyday social life of Millennials, as both a conduit for content and as a social connective tether. Because of this generation's connection to social networking sites, it is important for educators and institutions to understand the general social networking habits of their students and the important role that these social technologies play in their lives.

The goal of this research is to discover ways we, as information professionals, can integrate ourselves into virtual social spaces in a respectful manner while connecting our users with solutions to their information needs. In order to balance these potentially conflicting issues we needed to know more which brought us to one of the most interesting themes we uncovered in our study: privacy settings.

We were curious how, if at all, teens were using privacy features and settings with their online profiles, photos, and personal information. More precisely, our investigation on this topic was driven by one central question – how do privacy and online security concerns impact Millennial

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behaviors and interactions within Social Networking Sites (SNS)?

Studying the social networking behaviors of young adults' and their concern for privacy online is helpful in understanding what types of things the typical student is comfortable sharing online. Since libraries often have social networking profiles for marketing and other purposes, it would be interesting to see what types of virtual services can be introduced via social networking platforms that users would find helpful. With these goals in mind we can meet the "net generation" where they live: on the net. Certainly virtual reference is an online environment with the option of anonymity where students don't need to reveal anything about who they are, other than what type of information they are looking for. However convenient instant messaging has its limits. For instance it may hinder rapport building between librarian and patron, which is often essential in determining a user's information need (Radford, 2006). If we can meet our users in an online environment using social networking sites, can we build the rapport required to connect users with information?

The first step in this process is learning how our users are interacting in online environments. Also, knowing how our users handle privacy matters and online security is essential to effectively move in virtual environments. If there is little education on the topic of online privacy and security with the community, it may become another essential class libraries use to serve their users' needs right along with setting up emails accounts, searching skills, and other computer literacy basics.

There are certainly many more gains for librarians connecting to users through a virtual space. With a clearer understanding of the uses and habits of Millennials within social networking sites, librarians and educators will be better equipped to guide them through high school and college, into online environments and better prepare them to make responsible decisions in their virtual worlds.

LITERATURE REVIEW

The potential for negative or even dangerous experiences for the more trusting and vulnerable young participants in online environments, SNS in particular, has been widely recognized and extensively documented (Valkenburg & Peter, 2011). Initially, the dangers were presented as remotely possible scenarios rather than actual possibilities. However, over time many of these 'potential' negative impacts have been documented. For example, the potential for stalking – both benign and destructive – provided by Facebook disclosures has begun to receive significant scholarly attention (Chaulk & Jones, 2011). Although it is not possible within the parameters of this paper to exhaustively review that literature, discussion of a few central and representative studies should serve to accurately reflect and represent it.

Hew's review of numerous empirical studies of Facebook use by teachers and students yields mixed results with respect to students' use of privacy settings to protect online self-presentation from the attentions of unknown users or 'others' (Hew, 2011, p. 666). Patchin and Hinduja document the increased caution and control that social network participants have brought to their personal information between 2006 and 2009 (Patchin & Hinduja, 2010). Their work applies only to MySpace, and thus begs a comparison with the larger and more popular Facebook.

Information Behavior

There are solid theoretical grounds for considering the information behavior of a social group as a unit of analysis (Berger & Luckmann, 1966/1989). Symbolic interactionism regards language, communication, and the manipulation of information by members of a group, as essential elements in the co-construction of a social space. Within this the meaning of objects and events is determined for that group (Goffman, 1959). Information is seen as bounded by the group, reflecting an epistemological acquisition of knowledge by a group of collective "knowers". Mathiesen contends that "our epistemic lives are increasingly dependent on complex social systems of investigation and dissemination of knowledge", making an "epistemic investigation of social groups...essential" (Mathiesen, 2007, p. 209).

Building online identity using Social Networking Sites

Millennials have incorporated electronic communication tools into the major social aspects of their lives. These include email, texting, Tweeting, instant messaging, blogging, maintaining personal sites, and participating in social network sites such as Facebook. Facebook is clearly recognized, not just by Millennials but by our culture as a whole, as a medium for young people (in addition to participating adults, and a range of commercial entities) to create online social identity. Use of this online identity generally includes displaying photos, personal preferences in media and music, descriptions of the kind of people with whom they associate, and how many friends they have. It is a way for Millennials to start experiencing adult freedoms while still under parental authority (Walsh et. al., 2009). These online venues also afford a previously unimagined degree of connectivity between family, friends, associates, and peers.

High school students often conform to what might be considered a typical pattern: most are members of Facebook and friends with their peers and classmates. Certainly this is not a rule for all high school students; some are not involved with Facebook (See Mikami *et al.*, 2010, p. 50-51 for a possible explanation of failure to engage with Facebook). Facebook provides members with several ways to engage their network including updating their status, sharing videos and links, instant messaging, and posting photos where others can tag and comment on them. There are also opportunities to connect Facebook with other social networking sites like Twitter (a popular

micro blogging platform). Social networking sites provide functional online communication tools in the service of social interaction. It is essential that any investigation should define and situate them as communication platforms in a social context.

The social significance of participation in SNS is inescapable, but scholarly emphasis has been placed more often on the nature of the effect on the individual or on society and culture as a whole, rather than on effects on individual group members.

Walther (2009) extends the study of social networks to the role played by semiotic elements of a Facebook page that members cannot control, namely, the images of friends and the nature of posts made by friends on the member's wall. The study demonstrates these factors do influence observers' perceptions of the target member (who is, within the study, not an off-line friend). The work indicates that the nature of social evaluations made by viewers is subtly, but undeniably, influenced by the specific formal elements and protocols, the semiotics, of Facebook. This finding invites close formal analysis of the ways in which this social 'language' is used by its native speakers, and supports the contention that formal aspects of Facebook will in fact reflect the nature of the connections between members of school groups (Walther *et al.*, 2009).

The Role of Networking sites in Off-line Adolescent Social Groups

The pioneering work of boyd and Ellison, and Donath, is highly relevant when discussing the role of social networking sites and in off-line adolescent social groups. boyd and Ellison describes the nature of Facebook as a social networking tool at length, recognizing the extent to which it reflects and supports off line ties. They provide a much-cited definition of a social network site:

“a web-based service that allows individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system” (p. 211).

As the introductory article in an issue of the *Journal of Computer-Mediated Communication*, the survey notes that social networking sites are vehicles for individual “impression management, self-presentation, and friendship performance” (p. 219), which allows users “to negotiate presentations of self and connect with others” (p. 219). Ellison also recognizes the distinct nature of categories of friends noting that “richer, ethnographic research on populations more difficult to access...would further aid scholars' ability to understand the long-term implications of these tools” (p. 224). This insight is clearly applicable to groups of “school friend”. This distinction of friendships and its effect on the individual were also noted in our study.

There is a strong connection of behaviors in groups and the influences that get amplified and distributed within them. There is a strong possibility that the technology is amplifying the perceptions and behaviors of those inside these socially cohesive networks. We see some of this in our prom dress Facebook group which we will discuss later.

Subrahmanyam & Greenfield (2008) address the overall implications of the growing use of online communication modalities by adolescents. They found, counter to popular thought, social network participation actually reinforces face-to-face relationships rather than replacing them. For example, allowing participants to look up and 'add' newly acquired face to face friends and acquaintances to their networks helps maintain that initial interaction and opens online ties to meet again in the future. Subrahmanyam and Greenfield's focus is an overall evaluation of the risks and benefits of social network participation, so it is also important to review a more focused study. These were also results observed from our interviews. The high school teens perceived that their social interactions on FaceBook allowed them to keep in touch even through periods where they could not have face-to-face contact. And this contact did not diminish the desire or occurrence of contact when the teens were finally physically able to meet.

Focusing primarily on the social determinants of online behavior, Mikami *et al.* describe the success of networking web pages in “support[ing] communication with many friends, and encourag[ing] users to recognize connections between individuals” (Mikami *et al.*, 2010, p. 53). It is interesting to speculate that if individuals do in fact focus greater attention upon the variety of their relationships as a function of Facebook engagement, it is perhaps not too far-fetched to suppose that those most heavily engaged in Facebook interactions would be the most articulate about the nature and purpose of their various groups of friends making them excellent ethnographic ‘informants’.

We found this true for the prom dress group, which gave the teens a space where they could have both individual and group interactions related to the garment each girl had selected / reserved for prom (once reserved other girls were not allowed to wear the same dress). This group did indeed have a rich and active network around its subject area as students of both sexes checked out comments and photo submissions of potential prom dresses.

The extensive literature of developmental psychology focused on adolescent relationships, specifically friendships, has rarely ventured inside the school building to consider whether or not group affiliation, or having “school friends”, plays an identifiable or significant role in the formation of healthy relationships specifically, and in the overall development of the individual generally. Here, the gap is beginning to be recognized. Williams and Merton, for example, published a study in the journal *Adolescence* that takes an analytical look at online profiles in order to “to learn how online social networking sites

could benefit and give direction for future research on adolescent behavior and development” (Williams & Merton, 2008, p. 272). It notes, however, that “to date there has been little research on dynamic social and emotional content provided in blogs [including social network pages] and how such content relates to adolescent development, peer relationships, and indicators of emotional well-being” (p. 254).

The literature focused on the uses of social networking has yet to explore ways in which social networking sites are employed as a tool in the formation or maintenance group identity and connection. It may be that the technology itself is directing group attitudes and perceptions regarding privacy behaviors. Research that does address the intersection of social networking and technology does not do justice to the variety, complexity and nuance of the social organization and information behavior of adolescents. Although scholarship has considered the use of Facebook within the social lives of adolescents, it stops short of proposing/defining the connection between the configuration and developmental purpose of the group, the ontological implications of the site in which it forms – and the resulting shaping of the members’ information behavior.

As the use of social networking sites continues, its users become more adept at understanding the security implications of having an online persona. Facebook has allowed teenagers to build a stage to express their personalities by displaying what their interests are in movies, music, politics, and religion. The only missing aspect is race, although with the use of a photo, in the profile, this aspect is addressed as well (Grasmuck et al., 2009). This certainly is not the only information that can be found on social networking sites. For instance, a couple years ago at George Washington University, students came to suspect that their campus police were eaves dropping on their Facebook conversations. To test their theory, the students posted news of a keg party to be held at one of the dorms. On the scheduled evening of the event campus security showed up to enforce university rules only to find a group of students eating cupcakes with the word beer written on them (Timm & Duven, 2008). This event, rather light heartedly, shows the implications of private information in a public place. Certainly not all of the consequences of personal information available to the public can end in cupcakes, there are of course serious implications that need to be considered with privacy settings in online environments.

Student’s Attitudes towards Privacy

Initially, online privacy settings allowed personal information to be kept private and secure, not accessible by others on the network. For instance, if a user did not want their birthday revealed, it could be blocked from view. Today a range of different privacy settings are available allowing members to set specific rules on items in their profile. This so that they can be seen (or not seen)

dependent on how other users fit into the member’s social network. For example on Facebook, users can make photos available to only their friends or their friends of friends.

Teenagers show a dichotomy between private and public behaviors removed from adult supervision, influence, and rules, resulting in a very expressive display of their identity performance in their social spaces. These social spaces, or profiles, function as testing grounds for personality and identity manifestations, within the framework of self-censorship and self-preservation. This understanding of private and public space is a theme present in other areas of behavior and is perhaps due to the identity formation and a socially constructed group that helps these teens learn share and assimilate attitudes towards their behaviors in Social Networking Sites (Walsh et al., 2009). Facebook provides privacy and security tools for their users. But users may or may not have a true understanding of privacy, or the maturity to care about future impacts on their current behavior. Anything beyond what is offered by the sites is up to user. This forces the user to become knowledgeable of their own online vulnerabilities and be able to set up their profiles to their preferred privacy settings. Users who do not inform themselves risk making private information public (Timm & Duven, 2008). Whether a student is able to or cares enough to set appropriate privacy levels is a different matter altogether. As one student we observed said, they felt that privacy on Facebook was useless since nothing was private.

Teens display information that, according to other generations, seems personal with hundreds of friends (that are not friends in terms of closeness, but friends in terms of a social networking framework), the teens themselves may not share these views and feel that they are quite private, regardless that their birthdays, political, religious views, and cities of origin is information available to their network. These details demonstrate a generational divide with the very definition of privacy. The reasoning for this sharing between Millennials is to create trust and intimacy allowing teens to form and retain closer ties and develop social capital with each other (Livingstone, 2008). This may result in a more cavalier attitude towards privacy consequences.

METHODOLOGY

Although exploratory, this study shared an interest in the research described above by attempting to better understand the privacy behaviors of Millennials in social networking sites. The study was conducted during the spring in a suburban high school. The community is within easy commuting distance of a large metropolitan area where 79% of commuters use cars rather than an available rail system. According to statistics from the year 2007 the town had a population of approximately 18,000, a median age of 59, and a median household income above \$80,000. Over 60% of the adult population was married, and households averaged just over 2 individuals, this is due in part to a large resident population of affluent retirees. Over

90% of adult town residents are white and college graduate and the median home value is over \$600,000. The community is ethnically and culturally homogenous, with families residentially stable, allowing students to know most of their schoolmates from kindergarten through high school. The high school itself has 1000 students, and over 95% graduate and attend college. Although the community has certainly felt the effects of the recent recession, with home depreciation and job losses, it remains an enclave of relative prosperity and privilege.

Collecting Data

A total of 21 high school seniors participated in either an interview or small focus group in the high school library office or a classroom. All of the students were graduating seniors who had been accepted into a university for fall of 2011. This demographic was not sought out specifically, but is rather the make up the majority of the student population. The students participating were among those who regularly socialize near or in the library where they were notified and could sign up to be a part of the study. Students with signed parental permission slips on their scheduled day were able to volunteer their time and were compensated \$10 cash.

At the beginning of each interview or focus group a description of the project was given verbally and each participant was notified they did not need to answer questions they did not feel comfortable answering. No one declined to answer any questions.

Interviews were conducted with one or two interviewers in the room; when two, one would ask questions while the other took notes. It was noticed that if the interviewer who was conversing with the students kept note taking to a minimum and engaged the student in a one-on-one conversation while maintaining eye contact, and a kept the conversation casual and relaxed the students seemed more at ease and spoke more openly about their social networking habits. Some interviews were done where the researcher both interviewed and took notes. All of the focus groups were held with two interviewers present. A summary of our participants is provided in Table 1.

Table 1: Summary of participants.

Method	# of participants
Individual interview	11
Focus groups of size 2	2x2 = 4
Focus groups of size 3	2x3 = 6
Total	21

It was noticed students in focus groups that were part of similar social circles tended to yield more discussion from each participant than between peers who were unfamiliar with each other.

Our study captured the privacy behavior of small groups of teenagers in the form of comments that pointed to certain Facebook friends, (who perhaps were not as closely tied to

the students in the study), as being overly open and sharing about personal problems. One student observed that some people were too depressing or dark, and as a result would be actively disconnected from the person so that they would not have to read their posts. This shows a connection and choice in what is appropriate behavior and personal sharing, for some students.

Surveys, being rather rigid and predetermined, would be unable to capture all of the aspects and nuances of Social Networking use and would not allow for the flexibility of each individual’s use of different platforms and habits. We wanted students to be able to expand on their answers and felt follow up questions were essential in this exploratory study to discover new habits and the features we were not aware of that the students may be using.

Interviews tended to last 20-30 minutes and focus groups 35-45 minutes. Data was collected by asking pre-prepared questions, listening to the answers and asking follow up questions. Students were encouraged to expand on topics, and many of the follow up questions were asked of interviewees. Copious notes were taken and interactions were recorded for data verification later.

When asked about a particular feature available on social networking sites, students generally were knowledgeable about it. If students did not use the feature themselves they would often expand on an alternative feature or service they used regularly. Students would also discuss why they did or did not use a particular feature.

Analyzing Data

Data was analyzed based on the eight steps in John Creswell’s *Research Design: Qualitative & Quantitative Approaches* (1994). First, after the interviews the more straightforward data and quantitative data (length of time spent on Facebook, where and how they access sites, etc.) were put into shared spreadsheets and added to as interviews went on.

After the interviews and focus groups, notes and transcripts were inspected for overall themes and substance. Notes were made by individual researcher, and then shared with other team members and discussed procedures via e-mails and meetings. Prominent themes were pulled out and focused on. Since this particular study was small and relatively focused, coding systems were not used to analyze the data.

RESULTS AND DISCUSSIONS

The focus of this paper is on privacy behaviors of Millennials. We have also provided a few additional findings relating to SNS usage from among our participants.

Millennials and Privacy

Our participants seem to have an implicit understanding of the Facebook stage, which as described before, is at once private and also very public, much like a car that drives on public roads yet provides a private inner space. The High

School seniors we interviewed had attitudes that ranged from lack of concern (with one participant mentioning that many of her Facebook friends were from her religiously affiliated organization, and that she was thus assured of having her personal information secure), to ten other students, who (in order to be on the safe side) had established high privacy settings. One participant was not a member of any social networking site due to parental restrictions. The students' behaviors demonstrate that Millennials' interactions with social network sites range widely between individuals but their actions are generally careful and premeditated.

This study also suggests, that, Millennials mostly "friend" and message people that they already know, or occasionally who are friends of friends. Some participants had even friends of friends pass a formal due diligence process, where the student will dismiss a request if they are only weakly connected to their network, (i.e., only share one friend in common), or will query the mutual friend about the stranger to verify their authenticity. Exceptions to this rule are parental ties, where just over half of the students preferred to exclude their parents as friends and in doing so deny access to their personal Facebook space. When asked if they plan to add their parents after they leave for college, participants never fully committed, but rather an "I'll think about it." or a "maybe" answer was given. Livingston (2008) shared these findings saying that privacy for teenagers is very important and they have concerns about parents viewing their intimate life details more so than sharing the same information with strangers.

Asking about of privacy and security behaviors showed most social networking Millennials select high security settings for Facebook. This means only a name and a pre-selected 'profile picture' can be seen by strangers, or those excluded from access. Participants said this security setting seemed common among their friends and there is a general atmosphere of high privacy settings in online environments. All of the students interviewed use their real name, although it may not be their full name. Some used their first and middle name in lieu of their first and last. Two of the three citing the reason was they did not want universities to potentially make decisions based on their online profile.

Perhaps due to the small sample interviewed, there were no noteworthy incongruities of the students' views or behaviors regarding privacy. Most took appropriate precautions and understood how to deal with less desirable picture and status tags. Students seem to understand that in order to participate in Facebook's social space one has to relinquish some private information such as one's email, zip code, etc. (Timm & Duven., 2008). It is the price they feel they have to pay so that they can socialize and connect with their friends in online environments.

One participant of interest joined Facebook as a freshman, which our study found most common. However this student ended his use of Facebook during his sophomore

year and switched to MySpace due to the feeling that Facebook was not rigorous enough with its privacy standards. He rejoined last year, but only after determining that security features on Facebook had improved.

Teens' thoughts on security often manifest themselves visually through the use of photos they select as their identifiers, or profile pictures. Several students described the process by which they will select a picture showing them with perhaps a group of friends, so only people who they have met previously will be able to identify them.

The students also understood how to quickly evade unwanted tagging and leaked information. All of the participants knew they can escape unwanted photo tags by just using the un-tag feature (which removes unwanted photos from their profiles). Furthermore, many students were concerned about private information in the public arena, described a type of self-censorship regarding their wall posts and photos. A couple of students even voiced concerns saying some of their peers were putting too much private information out on Facebook. These same students voiced suspicion regarding the Facebook "location" feature, which announces to their network that they are at a specific place. Students felt if everyone knows you are on family vacation, they also know your house is probably unattended.

It is important to note that Millennials often know about just a few features within Facebook. Most do not fully explore their chosen social networking site, and seem unaware of a lot of the available (and less utilized) features, such as notes (for blogging) or groups (subset grouping of friends). Like all users, it is important they read the help screens and test the different features or they will remain in the dark, which can be to their detriment especially in relationship to their privacy settings and applications which can often access information users think is private (Livingstone, 2008).

Opportunities for Educators and Librarians

SNS literacy could be a common ground for educators, librarians and Millennials. Librarians could offer SNS literacy classes as well as:

1. Techniques to help them use their time more effectively and be able to disconnect from their SNS when they need to, so that they can use their focus for more demanding academic work.
2. Use social networking sites in classrooms and have students understand and build their own digital online portfolio.
3. Create institutional policies regarding social networking sites, that understand the importance and use of these sites by millennials.
4. Have responsible online and social networking etiquette they can take with them as they leave for college.

5. Understand the implications and importance of privacy settings and online security for themselves and their future.
6. Have librarians join student academic SNS groups to gain experience and help with research and the crafting of future quality programs.

Do SNS make Millennials lose focus?

The Millennials we interviewed averaged 400 – 500 friends in their network, although two had fewer than 200 and one had 5,000. These are friends and acquaintances they regularly share connections, and company on Facebook with, while on their computers doing homework, or listening to music or on the phone. Studies show students tend to interact within social networking sites to confirm their friendships with quick simple comments that are meant to keep each other company or augment their social capital. Messages are also used to keep a certain standing within their social groups by getting listed as your friends top friend or having friends leave consistent comments on their profiles. As Livingston describes, this may help explain why teens constantly check their status and leave comments on their Facebook pages. Social pressure entices one to become absorbed, losing hours checking in and monitoring Facebook connections (Livingstone, 2008).

Several students with Facebook accounts said Facebook took up more time than they would like saying “a lot” or “too much” when asked how much time they spent on the site. Students utilizing social networking sites said they check their Facebook daily, with a couple students saying they only spend a few minutes, while others said they always have a tab open on their browser so they can be immediately updated when there is activity in their network.

Three of the students felt that Facebook was a negative influence because of its ability to distract one from staying focused. Other than these three students, most felt that Facebook’s positive connections to friends and social aspects far outweigh the time spent on the site. Because of the perceived benefits Facebook has been growing quickly within the teenage population, where the negative consequence of displaying information to a stranger is vastly outweighed by sharing with trusted members (Charnigo & Barnett-Ellis, 2007).

We find that Facebook is becoming not only a social network site of choice but a digital platform, where our teenage Millennials inhabit and diminishing their need of standard email services, since regular emails can now be sent from within Facebook itself. The use of Facebook seemed to be the primary mode of communication, phone texting or voice are also used although to a lesser degree. Depending on the situation teenagers choose the tool and technology that served them best, the denominator being not so much the tool as to what would give them the desired ability to achieve a feeling of connection in that particular moment (Walsh et al., 2009).

Groups strengthen ties and help form personalities

Identity creation as described by boyd, allows teenagers to broadcast their uniqueness to friends as well as conforming and becoming acculturated with views held by their social groups (boyd & Ellison, 2008) within SNS.

The formation of groups strengthen ties around an event, idea, or shared experience (such as friendships formed abroad or at summer camp).

Similar to the findings by boyd & Ellison (2008), the studies’ interviews showed that social networking participants appreciated the communication aspects of Facebook with regards to their friendships especially when they were geographically removed or had time constraints. The barriers traditionally set up with maintaining a connection long distance were not as bothersome. They still kept in touch with groups they met on summer trips or who had moved. Some students even used the “groups” feature on Facebook to keep in touch with a set group of people.

‘Groups’ is a feature that allows one to create a subset of friends that some of the students used and liked for collaborative school work. The students discussed how these groups were also vital for planning all the traditional senior events like senior skip day, senior prank, prom dress group, prom bus and perhaps most important the group dedicated to their graduating class. Outside of senior activities students would join a groups to keep connected with their summer camp or to create connections with their next step in life by joining their “class of” at their universities.

Building identity in unique ways inside of SNS

Humor is often used as a way to connect with people on social networking sites. More than just posting a joke in a status, teens often make (or later change) their profiles for a comedic affect. Livingstone (2008) described a boy who set up a comedic profile where he described himself as a 36 year old married man living in Africa, who likes to humiliate others, and get unconscious. While we did not encounter as extreme an example of this, one of our more lively focus groups, moved to the topic of unwanted tagging and went into a discussion of students showing a sense of humor using a peer’s wall status, as we see in the following excerpt.

Student 2: *And usually if there is something like an outrageous status, you know that, that person didn’t make it... it’s like you know someone stole their phone...*

Student 1: *Yeah (laughing).*

Interviewer: *How often does the... I don’t want to say malicious, but these types of things happen? Joke posts...*

Student 2: *A couple ... a couple of times a day.*

Student 1: *A couple of times...(laughing).*

Student 2: ... and you know when these ... when it's somebody that has their phone and someone hacked onto their Facebook, like you know it's not ... like you know there is some outrageous things that are just funny... but meant as jokes...

Interviewer: Does it ever come down to be a problem? You know what I mean? Has there been any bad outcomes of this... or is it pretty much, 'oh that's just funny'?

Student 2: Yeah, I think for the most part its all, fun, but, I don't think I have seen any bad outcomes...

Student 1: I don't think I've ever seen a problem from someone.

Interviewer: Do you two steal peoples' phones? ...

Student 1: I've done it before.

Student 2: Yeah! (laughing)

Interviewer: Just because they left it on the table?

Student 1: Yeah, yeah (laughing)...

Student 2: And it's also the fact, we, we all know everyone in our grade I guess, we have 700 friends, more than what we have in our grade, but, we all kinda know each other, and we all know that we are joking around, and it's not like we're friends with people we don't know, and don't understand our humor...

Student 1: Yeah! (laughing)

Although these students in a way infringed on one another's private information, there does not seem to be any animosity towards the culprits. It was not stated explicitly, but it seemed to be acceptable and a common occurrence for unattended phones to be fair game for jokes via changed wall statuses and updated postings. In other words, within their trusted groups students were quite comfortable playing with the boundaries of privacy and used humor as a motive to steal and alter one another's wall statuses with outrageous comments making it obvious that someone's phone had been playfully hijacked. When asked about this phenomenon in other focus groups and in interviews, no one had much to say about it other than confirming they see it happen with regularity and is entertaining to those involved.

IMPLICATIONS

Since now more and more high schools are using computers for school work it is no surprise that the electronic social communities are popular with students. There is also a correlation between the heavier use of Facebook coupled with academic activities and planning, while there is a decrease during leisure periods such as the weekends (Golder *et al.*, 2006).

Knowing the student body is, for the most part, heavily using Facebook, it seems reasonable for authorities and

educators to set up educational opportunities for learning about online safety and risk involved with using social networking sites. It is equally important for authorities, educators, and administrators to create policies in the event they encounter students violating institutional rules or laws and develop procedures for dealing with the ethical questions of disciplining or even turning students in to authorities (Timm & Duven, 2008).

Furthermore, high schools might try adopting Facebook or its own social networking site as a learning platform for students integrating lessons about privacy and security on their profiles. The educational program can teach students to respectfully network with their peers, future colleagues and employers. It can prepare students to create online portfolios of their best work, senior projects and community activities creating a positive online presence directly out of high school.

Public and Academic Libraries are not shy about utilizing social networking sites to connect with users, and there is no reason why high school librarians cannot do the same with their students. Since so many of their students are using social networking sites to create 'groups' to work on projects, it might make sense to have librarians become embedded into their groups to assist them academically.

FURTHER AREAS OF STUDY

In terms of description and definition of social networking use, work remains to be done in a number of areas. These include:

1. Understanding the specific mechanisms that motivate the selection of categories of 'friends' as well as individual 'friends', investigating the links between personality – personal agency – and/or social roles – collective agency – and the selection of particular content.
2. Design of a more focused study to capture the specific tasks and time spent on social networking-related pursuits, to provide a better basis for evaluating if Facebook is as large of a distraction as many of the students in the study mentioned.
3. Educators and administrators need to develop procedures and methodologies for dealing with both the moral and ethical questions of disciplinary action, which could run the gamut from calling in outside authorities to using violations of rules as teachable moments (Timm, & Duven, 2008). The outcomes of these policies should be published for evaluation and possible adoption and dissemination.
4. The rapidly expanding popularity of Twitter, particularly in terms of the ways in which its communicative functionality overlaps with that of Facebook, promises to be as significant an aspect in the lives of Millennials as it is currently among older users, not to mention Google+, which has yet to reach a critical mass of users.

5. A more in depth analysis on the amount of time correlated to the strength of connection and social depth of interactions and influences. This would tell us more about how friendship relations are viewed and cultivated on social networking sites. In other words: are all friendships on Facebook equal or does frequency of contact specifically fall within a smaller range of friendships?
6. A long term study looking at students from when they are first introduced to social networking sites and how they use them throughout high school and, college years, to determine variations in behavior, attitudes and changes towards privacy.

CONCLUSION

There are several limitations to this study. First the study was small and of a very homogenous group of students. Broader assumptions could be made if the study were expanded to a few years, with more participants, from several geographical areas, and with more socioeconomic variations. Carrying out a less exploratory and more focused study might help refine some of our findings. A study, perhaps similar in size, which focusing on the profiles and social networking habits of Millennials could yield better results. This study would be more intrusive, but would yield more reliable quantitative data.

This study revealed high privacy minded Millennials. The first implication of this study is that Millennials' perception of privacy may be very different than other generations. While not wanting their parents to view their private information, they don't mind sharing with their hundreds (sometimes thousands) of friends in order to be able to create stronger ties, trust and the formation of their individual personas.

We found that Millennial privacy practices, have been influenced by their connected profiles and statuses. Since they observe and copy good security behaviors from each other. Millennials are much savvier regarding privacy settings and online security than often thought and for the most part created smart social networking habits.

We find that their site privacy settings are high so little personal information is available outside of their networks. They also manage who is allowed in by only 'friending' people who they know personally or who have been vouched for by a trusted peer.

They protect their identity when setting up their profiles by taking photos with other friends, allowing only someone who knows them to be able to pick them out of a small group in their profile photo.

All of our subjects understood the use of the un-tagging option to remove their names from photos that they did not want to be associated with.

Students that knew about Facebook's location feature avoided its use, since it would let someone know when you

are away from home, and they felt that was a potentially dangerous.

Many students used First and Middle names only, without a last name. In this way only friends would be able to find them. It also prevents potential employers and university admission personnel from viewing their profiles.

Millennials that do not want their activities spied on, know how to set up harmless decoy events to see if they are being monitored by their educational institutions.

This study found that students enjoyed spending time cultivating their social connections, using face-to-face, phone, texts and Facebook to strengthen those connections. Often humor is used, either by fake profiles or status updates and to keep a positive atmosphere in social networking sites.

Educational institutions need to realize that SNS are more than just a time consuming teenage diversion, but instead a way for Millennials to connect to each other, share information, bond, and strengthen social ties that will become persistent throughout their lives if they so wish. Librarians need to be able to connect with Millennials inside of Social Networking Sites if they hope to stay relevant. Millennials are guarded about who they 'friend', so it is up to librarians to learn the social rules within these networks. This way librarians might be sought out for library services in these sites rather than passed up for other means of information gathering. Once friended, it is important to connect to Millennials within the sites in order to build rapport with library users and social credibility with in the social network. Respect and reserving judgment is important if one is to be allowed into their domain. It is not enough to be accessible on Facebook if no one 'friends' or 'likes' you.

Millennials respect and enjoy information that is tailored to their interests including short fun media reviews. Librarians need to explore and share not just great books, but movies, DVDs, videos, games, phone reviews, computer tips and music and use the social networking site to post the information. Librarians can also boast library classes and events directed at Millennials. By doing this Librarians help foster online communities that make information sharing possible. The Library brand is generally already established within a physical community so being able to build on its capital inside a social network will be different for many librarians, but no less important and not beyond their capabilities.

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REFERENCES

- Berger, P. L., & Luckmann, T. (1966/1989). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York: Anchor Books.

- boyd, d. m., & Ellison, N. B. (2008). Social Network Sites: Definition, History, and Scholarship. (d. m. boyd & N. B. Ellison, Eds.) *Journal of Computer-Mediated Communication*, 13(1), 210-230. Morgan Kaufmann Publishers. Retrieved from <http://blackwell-synergy.com/doi/abs/10.1111/j.1083-6101.2007.00393.x>
- Charingo, L., & Barnett-Ellis, P. (2007). Checking out Facebook.com: The Impact of a Digital Trend on Academic Libraries. *Information Technology and Libraries*, 26(1), 23-34. American Library Association. Retrieved from <http://www.acrl.org/ala/lita/litapublications/ital/262007/2601mar/charningo.pdf>.
- Chaulk, K. & Jones, T. (2011) Online Obsessive Relational Intrusion: Further concerns about Facebook. *Journal of Family Violence* 26, 245-254.
- Creswell, J. (1994). Research design: Qualitative & quantitative approaches. Thousand Oaks, CA. Sage Publications.
- Donath, J. (2008). Signals in social supernets. *Journal of Computer-Mediated Communication* 13, 231-251.
- Goffman, E. (1959). *The Presentation of Self in Everyday Life*. New York: Anchor Books.
- Golder, S., Wilkinson, D.M., & Huberman, B.A. (2006). Rhythms of Social Interaction: Messaging within a Massive Online Network. In *Proceedings of the 3rd International Conference on Communities and Technologies*, 30, 1-16.
- Grasmuck, S., Martin, J., & Zhao, S. (2009). Ethno-Racial Identity Displays on Facebook. *Journal of Computer-Mediated Communication*, 15(1), 158-188. John Wiley & Sons. Retrieved from <http://doi.wiley.com/10.1111/j.1083-6101.2009.01498.x>
- Hew, K. F. (2011). Students' and teachers' use of Facebook. *Computers in Human Behavior* 27, 662-676.
- Hill, J. P., & Monks, F. J. (1977). *Adolescence and Youth in Prospect*. Humanities Press.
- Jones, C., & Healing, G. (2010). Net generation students: agency and choice and the new technologies. *Journal of Computer Assisted Learning*, 26(5), 344-356. Retrieved from <http://oro.open.ac.uk/23653/>
- Livingstone, S. (2008). Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression. *New Media & Society*, 10(3), 393-411. SAGE Publications. Retrieved from <http://nms.sagepub.com/cgi/doi/10.1177/1461444808089415>
- Mathiesen, K. (2007). Introduction to special issue of *Social Epistemology* on "collective knowledge and collective knowers". *Social Epistemology*, 21(3), 209-216.
- Mikami, A. Y., Szewedo, D. E., Allen, J. P., Evans, M. A., & Hare, A. L. (2010). Adolescent peer relationships and behavior problems predict young adults' communication on Social Networking websites. *Developmental Psychology* 46(1), 46-56.
- Patchin, J. W. & Hinduja, S. (2010) Changes in adolescent online social networking behaviors from 2006-2009. *Computers in Human Behavior* 26, 1818-1821.
- PewResearchCenter (2010). Millennials. A portrait of generation next. Retrieved from <http://pewsocialtrends.org/files/2010/10/millennials-confident-connected-open-to-change.pdf>.
- Radford, M. (2006). Encountering Virtual Users: A qualitative investigation of interpersonal communication in chat reference. *Journal of the American Society for Information Science and Technology (JASIST)*, 57(8):1046-1059. Specific page: 1050.
- Subrahmanyam, K., & Greenfield, P. (2008). Online communication and adolescent relationships. *The Future of Children* 18(1), 119-146.
- Timm, D. M., & Duven, C. J. (2008). Privacy and Social Networking Sites. *New Directions for Student Services* 124, 89-102. Retrieved from http://ryanpstone.com/yahoo_site_admin/assets/docs/socialnetwork1.250104344.pdf.
- Valkenburg, P. M. & Peter, J. (2011). Online communication among adolescents: An integrated model of its attraction, opportunities, and risks. *Journal of Adolescent Health* 48, 121-127.
- Walsh, S. P., White, K. M., & Young, R. M. (2009). The phone connection: A qualitative exploration of how belongingness and social identification relate to mobile phone use amongst Australian youth. *Journal of Community Applied Social Psychology*, 19(3), 225-240. Retrieved from <http://doi.wiley.com/10.1002/casp.983>
- Walther, J. B., Van Der Heide, B., Kim, S., Westerman, D., & Tong, S. T. (2009). The role of friends' appearance and behavior on evaluations of individuals on Facebook: Are we known by the company we keep? *Human Communication Research* 34, 28-49.
- Williams, A. L. & Merton, M. J. (2008). A review of online social networking profiles by adolescents: Implications for future research and intervention. *Adolescence* 43(170), 253-274.