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GROOMING, GOSSIP, FACEBOOK AND MYSPACE

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Zeynep Tufekci

GROOMING, GOSSIP, FACEBOOK AND MYSPACE

What can we learn about these sites from those who won't assimilate?

This paper explores the rapid adoption of online social network sites (also known as social networking sites) (SNSs) by students on a US college campus. Using quantitative (n = 713) and qualitative (n = 51) data based on a diverse sample of college students, demographic and other characteristics of SNS users and non-users are compared. Starting with the theoretical frameworks of Robin Dunbar and Erving Goffman, this paper situates SNS activity under two rubrics: (1) social grooming; and (2) presentation of the self. This study locates these sites within the emergence of social computing and makes a conceptual distinction between the expressive Internet, the Internet of social interactions, and the instrumental Internet, the Internet of airline tickets and weather forecasts. This paper compares and contrasts the user and non-user populations in terms of expressive and instrumental Internet use, social ties and attitudes toward social-grooming, privacy and efficiency. Two clusters are found to influence SNS adoption: attitudes towards social grooming and privacy concerns. It is especially found that non-users display an attitude towards social grooming (gossip, small-talk and generalized, non-functional people-curiosity) that ranges from incredulous to hostile. Contrary to expectations, non-users do not report a smaller number of close friends compared with users, but they do keep in touch with fewer people. Users of SNS are also heavier users of the expressive Internet, while there is no difference in use of instrumental Internet. Gender also emerges as an important predictor. These findings highlight the need to differentiate between the different modalities of Internet use.

Keywords Social network sites; Dunbar; Goffman; presentation of self; social grooming; Internet; Facebook; Myspace

Social computing applications, led by social network(ing) sites (SNSs) like Facebook and Myspace, have burgeoned in the past few years; scholarly research on the social consequences of social computing has not caught up. A focus of past research has been possible inequalities rising from the Internet's capacity to provide access to information, jobs and economic mobility, education, access to government services and similar benefits (Dimaggio *et al.* 2004). As Internet access has become near-universal in rich nations, earlier concerns regarding a digital divide have mostly faded from public and policy discussions. Yet looking at Internet use in a fine-grained manner, disaggregating specific modalities of practice, does reveal persistent divisions and differences. The specific character of Internet use and socio-psychological disposition of users can also influence social outcomes, even after controlling for demographics and total Internet use (Zhao 2006; Livingstone 2007). It is not just the Internet but what you do with it – as well as who and what kind of person you are.

The rise of social computing opens a new dimension of benefits (and harms) stemming from differential use. These applications have the potential to create gaps in social capital (Putnam 2000), transform the role of weak ties (Granovetter 1973) and shift the boundaries between public and private.

The rapid diffusion of SNSs within a few years invites two connected questions about their adoption process. Why have these applications, which initially had little corporate backing, no paid advertisements and significant negative media attention, attracted so many users so quickly? Conversely, even on college campuses, where access is rarely the bottleneck, why has a small but seemingly persistent minority chosen not to adopt these technologies – and what can we learn from an analysis of these non-users? How do these applications relate to the larger context of Internet use? Finally, what are the possible social implications of use and non-use of these sites?

Social network(ing) sites (SNSs): a brief overview

These sites center on the *profile*, which for users is 'a representation of their sel[ves] (and, often, of their own social networks) – to others to peruse, with the intention of contacting or being contacted by others' (Gross 2005). Boyd offers the following definition: 'A "social network site" is a category of websites with profiles, semi-persistent public commentary on the profile, and a traversable publicly articulated social network displayed in relation to the profile' (Boyd 2006a).

The most prevalent examples of SNSs are Facebook, which started as a college site and is still dominated by college users, and Myspace, which has always been open to the general public. Multiple studies show that somewhere between 80 and 90 per cent of all college students have a profile on an SNS (Gross *et al.* 2005; Lampe *et al.* 2006; Stutzman 2006). All SNS

allow users to articulate their social network via links between their profile page and other profiles. Profiles linked to each other in this manner are called *friends*. Profile owners also express an online persona through pictures, words and page composition, as well as through data fields where information ranging from favourite books and movies to sexual orientation and relationship status (single, in a relationship, etc.) is indicated.

Partly due to the high level of offline–online integration (Ellison *et al.* 2007), students tend to use their real names and engage in high levels of self-disclosure, especially on Facebook (Tufekci 2008). Facebook allows users to ‘tag’ individuals on photographs uploaded to the site, which means identifying the person in the photograph and thereby linking the picture to that person’s profile, and thus creating a searchable digital trail of a person’s social activities. A ‘news feed’ feature shows what one’s ‘friends’ have been doing on the site: a typical entry might read ‘Sally has Left a Message on Jim’s Wall’, or ‘Alice and Bob are now friends’. Users also provide status reports – ‘Mary has a headache from studying for the organic chemistry exam!’ All of this activity is framed by semi-public comments people leave on each other’s profiles – short salutations, humorous repartee and more. A profile on an SNS is not a static entity; rather, it is a locus of social interaction that evolves and changes to reflect various dynamics within social networks and communities.

Conceptualizing SNS

I draw on the work of Robin Dunbar (1998), who proposed that gossip, people-curiosity and small talk, all of which are seemingly non-functional and are often popularly understood as mere distraction or deviation, are in essence the human version of social grooming in primates: an activity that is essential to forging bonds, affirming relationships, displaying bonds, and asserting and learning about hierarchies and alliances. Dunbar suggests that our seemingly insatiable appetite for gossip is neither a random, irrelevant fact, nor simply a construction of a singular culture. While the particular forms of gossip are entangled in culturally shaped constructions, ranging from celebrity gossip in our mediated mass culture to daily chatting around the village well in a peasant society, gossip in general can be seen as a corollary of our disposition towards sociality, which integrally involves figuring out where we and all others stand in relation to each other (Dunbar 1998).

Social grooming should be seen as both a bonding activity and a *competitive* activity: it is a means to improve one’s reputation and status as well as access to resources and social and practical solidarity. An inability, unwillingness or lack of talent in social grooming activities may be of real detriment to a person’s interests through a disadvantage in accumulation of *social capital*,

which can be understood as resources that accrue to an individual through 'more or less institutionalized relationships of mutual acquaintance and recognition' (Bourdieu & Wacquant 1992, p. 119; see also Putnam 2000).

SNSs replicate many of the functions of gossip or social grooming: users display their own bonds and observe those of others through profile 'friends', leave semi-public messages for each other (which serve mainly as acknowledgement), present a public self for their community, and watch and participate as all others also engage in these activities in an interlocked dance of community formation.¹ At their core, these sites are about mutual acknowledgement, status verification and relationship confirmation (Boyd 2006b).

Much of the activity on an SNS can also be conceptualized as a form of presentation of the self, in the sense of Goffman (1959). Users engage in impression management by adjusting their profiles, linking to their friends, displaying their likes and dislikes, joining groups, and otherwise adjusting the situated appearance of their profiles (Boyd & Heer 2006; Lampe *et al.* 2007; Tufekci 2008).

Dunbar's notion of social grooming and Goffman's concepts of the presentation of the self and impression management are complementary aspects of the construction of the social self. As Goffman articulated, 'for a complete man to be expressed, individuals must hold hands in a chain of ceremony' (Goffman 1956, p. 493). It is through social interaction and socially embedded public or semi-public action that we affirm our relations, construct our status and ultimately produce the social 'me' in the sense proposed by Mead (1934).

Factors in SNS adoption

Given the recent rise of these sites, it is not surprising that there are relatively few large-scale, quantitative analyses of SNS use that incorporate details about users and non-users, types of use and possible consequences. However, existing research already finds important social consequences as well as differences in access and usage. Due to the limited amount of existing research on SNS, this study was developed in a two-step approach which involved incorporating early qualitative findings into the research design in the latter stages.

Expressive and instrumental Internet

Previously, scholars have generally categorized Internet use under three broad headings: commercial, informational and communicative uses (Kraut *et al.* 1999; Weiser 2001). Following Petric (2006) and Zhao (2006), I suggest a related but somewhat different division: between social and non-social uses, between the *expressive Internet* and the *instrumental Internet*. By the *expressive Internet*, I mean the practice and performance of *technologically mediated sociality*:

using the Internet to perform and realize social interactions, self-presentation, public performance, social capital management, social monitoring, and the production, maintenance and furthering of social ties. The expressive Internet should be recognized as 'a social ecology involving other people, values, norms and social contexts' (Petric 2006). The *instrumental Internet*, on the other hand, refers to information seeking, knowledge gathering and commercial transactions on the Internet, and non-social communication involved in such transactions. This is the Internet of online banking, shopping and checking the weather.²

The expressive Internet has been expanding rapidly, a process often described in the popular press as the rise of social computing. Studies show that these tools have been assimilated as a means of social interaction and social integration for increasing numbers of people and communities (Haythornthwaite 2005; Quan-Haase 2007), and that people are increasingly using the expressive Internet in ways that complement or further their offline sociality (Wellman *et al.* 2001; Hampton & Wellman 2003; Hampton 2007). Given the social grooming conceptualization of SNS proposed in this paper, users of SNS can be expected to be interested in social uses of the Internet.

RQ1: How does social network site usage fit with different types of Internet use as well as total amount of use?

Friendship and social ties

While these applications are designed in order to facilitate social interaction, there is fairly little known about the strength of their impact on existing or potential social relations. Ellison *et al.* (2007) found some differences in social capital formation among college students depending on their intensity of Facebook use. The strongest association they found was between Facebook use and *bridging social capital*, i.e. looser ties between people situated in different, non-overlapping social groups. Such ties, also referred to as weak ties, are crucially important in providing a window of access to opportunities outside one's own immediate network (Granovetter 1973). Due to the high levels of offline integration (Ellison *et al.* 2007) SNSs could also promote strong ties.

RQ2: How does SNS use relate to number of friends kept in touch with as well as to weak or strong ties?

People may differ in their inclination to view the Internet as a place for engaging in social activities and friendship management. While some researchers have argued that the Internet has serious shortcomings for

community and friendship building (Blanchard & Horan 1998), others find that it may facilitate interaction (Walther 1996).

RQ3: Do people's attitudes toward online sociality in general impact on their SNS adoption?

Demographics and place of residence

Hargittai (2007), in one of the few academic publications concentrating on non-users of SNS, provides a unique level of detail regarding the demographic and socioeconomic background of college level users and non-users of SNSs. Her findings were that demographic and place of residence matter and that being female, not living with parents, having ready Internet access and spending more time on the Internet were associated with higher rates of SNS adoption. Gender remains a strong pivotal point. Although access and total amounts of use have converged between genders, strong divergences in modalities of use, in self-perceived and real skill levels, and in attitudes remain (Boneva 2001; Jackson *et al.* 2001; Hargittai & Shafer 2006).

RQ4: How do demographics and place of residence influence SNS adoption?

Privacy

Another important consequence of SNS adoption concerns privacy. Participation in these sites involves extensive self-disclosure (Tufekci 2008) and may discourage those who are concerned about privacy (Acquisti and Gross 2006). While privacy controls exist for most sites, a significant number of users do not employ them. This makes sense if, as I argue, the purpose of using these sites is to be seen. Further, the privacy controls often simply mean that only SNS 'friends', who may number in the hundreds and thousands, can access the profile. Most SNS users, especially college students, freely add most people who ask to be 'friended'. There have already been many cases reported in the media about negative consequences stemming from SNS posts, ranging from denied diplomas to lost jobs.

RQ5: How do students' privacy concerns impact on their decision to join SNS?

Social grooming

While social grooming through language may well be an important human activity (Dunbar 1998) there is no reason to presuppose that everyone will

be equally disposed to such activity. Interest in exchanging and browsing social information about friends and acquaintances, and curiosity about people, is likely to be related to interest in how an application specifically facilitates such activity.

RQ6: How does general interest in social grooming relate to adoption of SNS?

Methods

Sample and data collection

This study reports results based a sample of college students in a diverse, mid-sized public research university. The quantitative results ($n = 713$) were collected at three points in time (spring and fall of 2006 and spring of 2007) and qualitative results ($n = 51$) at two (spring and fall of 2006).

The qualitative phase consisted of focus groups. Undergraduate respondents were recruited through announcements in classes specifically excluding those in which the survey was administered. The focus groups were divided into non-users (no profile), light users (rarely checks the profile), medium users (checks the profile a couple of times a week) and heavy users (checks and updates almost everyday) in order to better gauge the consensus beliefs of these subgroups (citation) and to understand the differences between users and non-users. The interviews were transcribed and coded.

The survey instrument was developed in light of the findings of the qualitative phase and pre-tested with a group of non-users and users. The survey was then administered to students enrolled in multiple sections of an introductory social science course, a popular elective for fulfilling general education requirements. The survey was administered in class, in a paper-and-pencil format.

Questions were added to the survey after the first round of data collection, based on a preliminary analysis of the first round results and further qualitative interviews. The advantage of this approach was that this allowed for further probing based on data in an area for which there was virtually no published research during the time of the study. However, this incremental approach also introduces a weakness in that not all questions were asked across all the samples. The data from the three rounds of survey data collection were compared with regard to key variables, and there were no statistically significant differences in racial or gender composition or in average age of the students. The sample was thus combined for analysis for questions that were asked in all three rounds. Analysis was performed separately for questions that were asked only in later rounds. While I do not have any reason to suspect that

TABLE 1 Demographics of the combined sample.

| | <i>percentage of the sample (n = 713)</i> |
|---------------------------|---|
| gender | |
| female | 52.6 |
| male | 47.4 |
| race/ethnicity | |
| White | 45.2 |
| African-American | 12.7 |
| Hispanic | 2.3 |
| Asian-American | 31.2 |
| other | 8.6 |
| grade | |
| freshman | 44.7 |
| sophomore | 28.9 |
| junior | 19.2 |
| senior | 9.2 |
| social network site (SNS) | |
| user | 85.4 |
| non-user | 14.6 |

the six-month apart samples differed in any key aspects, it must be kept in mind that some analyses are in effect from a different, later sample.

Demographic characteristics of the sample are described in Table 1. The combined sample was generally representative of the undergraduate population of the university, as the targeted class was a popular choice to fulfil mandatory requirements. Women were somewhat overrepresented (52.6 per cent, as opposed to 44.0 per cent in the university as a whole). The school reports minority enrolment of 41 per cent, arrived at by aggregating African-American, Hispanic and Asian-American students, leaving 59 per cent as combined sum of white and 'other' – the similar total in the sample was 53.8. Thus, white students might potentially be somewhat underrepresented, although it is not possible to ascertain this for certain. The sample had a significant portion of first-year students (44.0 per cent), who tend to be heavy users of social network sites. Students, to the degree they had declared majors, ranged from humanities and social sciences to engineering and physical sciences and were not concentrated in any particular major.

Measures and variables

To address the relationship between SNS usage and maintenance of social ties, the students were asked how many friends they kept in touch with at least once a week (*Weekly Friends*). (The response options were 0–5, 6–10, 11–16 friends a week, etc.) A subsample was about their ties. We distinguished the strength of the tie (Marsden & Campbell 1984) by asking about the number of people to whom they felt very close (*Very Close Ppl*) and the number of people to whom they felt somewhat close (*Somewhat Close Ppl*). Following previous research on social networks, *Somewhat Close* was defined to include those who are more than acquaintances but less than those who are very close.

The instrument also measured the amount of daily Internet use (*Daily Internet*) and whether students used Instant Messaging at all (*Uses IM*). Daily Internet was measured in intervals of 30 minutes, topping at 3 hours or more. Similar to previous research on SNS (Ellison *et al.* 2007; Hargittai 2007) place of residence was controlled by asking students if they lived in dormitories (*Lives Dorm*).

Students were asked whether they thought that a person could have a close friendship with someone they know only through online methods in order to gauge the impact of a general disposition toward online sociality. Students were also asked about their level of concern with online privacy (*Privacy*) with options ranging from 1 = not concerned at all to 4 = very concerned.

Questions used to probe the types Internet activities were adapted largely from the Pew Internet & American Life Project which been ongoing for many years. The selected questions were used in multiple Pew surveys, including the 'Parents and Teens' survey of 2004 which used these questions for both teenagers and adults (Lenhart & Madden 2005). However, unlike the Pew survey, which asked whether the activity was performed *at all*, this instrument asked about the frequency, coded from very often to never (4 to 1). Table 2 lists the wording of these questions as well as means and standard deviations for responses from the total sample.

Items that corresponded to social interaction, self-expression, communication or entertainment were aggregated into a variable called *Expressive*, and those that corresponded to informational and commercial uses to a variable called *Instrumental*. *Expressive* thus comprised the use of email, instant messaging, sending or receiving text messages, going online just for fun, reading blogs, and working on a personal web page. *Instrumental* included purchasing things online, doing school work, looking for health and fitness information, news, politics, job searching, going online to look up a college, looking up websites of movies and seeking information about health issues. Online games were excluded because interviews

TABLE 2 Internet practices among college students.

| <i>expressive</i> | | | <i>instrumental</i> | | |
|--|-------------|-----------|---|-------------|-----------|
| <i>question</i> | <i>mean</i> | <i>SD</i> | <i>question</i> | <i>mean</i> | <i>SD</i> |
| send or read email | 3.805 | 0.486 | look for health, dieting, or physical fitness information online | 2.202 | 0.895 |
| send or receive instant messages | 3.391 | 0.946 | go online to get news or information about current events | 3.079 | 0.846 |
| send or receive text messages using a cell phone | 3.128 | 10.058 | look for news or information about politics | 2.429 | 10.016 |
| go online for no reason at all, just for fun or to pass the time | 3.632 | 0.687 | look for religious or spiritual information online | 2.127 | 0.875 |
| read blogs of other people | 2.386 | 10.083 | look for information about a job online | 2.321 | 0.946 |
| go online to create or work on your own web page | 1.761 | 10.003 | go online to get information about a college, university or other school you were/are thinking about attending | 2.890 | 0.911 |
| | | | go to web sites about movies, TV shows, music groups, or sports stars you are interested in | 2.431 | 10.085 |
| | | | look for information online about a health topic that's hard to talk about, like drug use, sexual health, or depression | 1.751 | 0.905 |
| | | | buy things online, such as books, clothing or music | 2.213 | 0.724 |
| | | | go online to do school work or research | 3.511 | 0.608 |

Scale: very often (4) = everyday or almost everyday; sometimes (3) = once a week or so; rarely (2) = once a month or so; and never (1).

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revealed the complicated nature of games, ranging from very social to very insulating (Steinkuehler & Williams 2006). The *Instrumental* scale, summing nine variables with a maximum value of 36, had a mean of 22.4 and a standard deviation of 4.4 (Cronbach's $\alpha = 0.74$). The *Expressive* scale, summing five variables with a maximum value of 20, had a mean of 14.2 and a standard deviation of 3 (Cronbach's $\alpha = 0.66$).

Social grooming. Since there were no existing scales that measure social grooming, eight questions that closely followed social grooming themes of people curiosity, social interaction and keeping in touch (Dunbar 1998) were created.

Efficiency. Also, as non-users strongly suggested in interviews that they believed efficiency was the main motivation for SNS use, five questions measuring interest in efficiency on and off the Internet were added. Since these questions were derived using preliminary results, they were asked only of a sub-sample of the students in the later waves (listwise $N = 498$). These questions are shown and analysed in Table 4.

Analysis and findings

Predictors of SNS use

To model the odds that a person would become an SNS user, I ran three logistic regressions (Table 3). In our first model, our predictors were female (dummy coded), age (ranging from 18 to 25+), dorm residence (dummy coded), amount of time spent on the Internet, number of friends kept in touch with every week, Instant Message use (dummy coded user or not), Expressive Internet Use scale and Instrumental Internet Use scale. In the second model, I added number of close friends and somewhat close friends, and in the third model, I added a variable indicating whether the student believed friendship through only online methods was possible (dummy coded as possible or not).

Amount and type of Internet use

The total amount of time a student used the Internet in general was not linked to the likelihood of SNS use. In the interviews, non-users of SNS indicated that they felt comfortable using the Internet. Similarly, use of instant messaging, another popular method of communication, was not associated with a change in the odds of becoming an SNS user.

However, while the total amount of Internet use was similar between non-users and users, the manner of Internet use mattered significantly. In the interviews, non-users of SNS also reported Internet use concentrated around practical needs: online banking, shopping, researching and such. Quantitative results confirmed that the use of the Internet for expressive

TABLE 3 Logistic regression results: odds ratio (e^b) of using a social network site.

| | <i>model one</i> | | <i>model two</i> | | <i>model three</i> | |
|--------------------------|------------------|----------------|------------------|----------------|--------------------|----------------|
| | <i>uses SNS</i> | <i>p value</i> | <i>uses SNS</i> | <i>p value</i> | <i>uses SNS</i> | <i>p value</i> |
| female | 4.191*** | 0.000 | 5.021*** | 0.000 | 4.987*** | 0.000 |
| age | 0.867† | 0.086 | 0.836† | 0.077 | 0.837† | 0.081 |
| lives dorm | 1.725 | 0.105 | 1.245 | 0.573 | 1.235 | 0.589 |
| internet per day | 1.022 | 0.886 | 1.108 | 0.543 | 1.130 | 0.477 |
| weekly friends | 1.257* | 0.031 | 1.340* | 0.050 | 1.333* | 0.054 |
| uses IM | 0.680 | 0.357 | 0.474 | 0.153 | 0.464 | 0.143 |
| online privacy concern | 0.709* | 0.027 | 0.667* | 0.029 | .666* | 0.029 |
| expressive | 1.464*** | 0.000 | 1.486*** | 0.000 | 1.493*** | 0.000 |
| instrumental | 0.950 | 0.176 | 0.928 | 0.110 | 0.923 | 0.094 |
| no. of very close people | | | 1.031 | 0.878 | 1.036 | 0.860 |
| somewhat close people | | | 1.049 | 0.734 | 1.051 | 0.727 |
| online friendship | | | | | 0.787 | 0.512 |
| baseline odds (constant) | 1.570 | 0.828 | 2.945 | 0.683 | 3.093 | 0.669 |
| Cox and Snell R2 | 0.19 | | 0.21 | | 0.22 | |
| N | 506 | | 369 | | 363 | |

*Significant at 0.05; **significant at 0.01; ***significant at 0.001; †marginally significant ($0.10 > p > 0.5$). Since not all questions were asked in all samples, and since not all subjects answered all the questions, the N for the models varies. Specifically, number of close friends was asked to a subsample of subjects. Running model one specifically for the subsample used in model two and three revealed no substantive differences in the results.

purposes was highly significant in predicting SNS use, while use of the Internet for instrumental purposes was not.

Our interviews revealed that the differences in disposition towards Internet use persisted even when non-users of SNS were employing expressive applications. To the degree they used social network sites, they had specific objectives – looking up musical groups, finding ideas on fashion and makeup, and so on. The interviews revealed that the non-SNS users could understand looking something up, but not necessarily looking around just for fun. One non-user confessed that the constant pressure to join these sites had her seriously considering whether she should: ‘I’m not going to do it because what’s in it for me? Nothing.’ This pattern was also observed in other mediated methods: one student expressed, with the understanding that she knew this was out of the ordinary, that she checked email only when she knew someone was going to email her.

Social ties and online sociality

In interviews, SNS non-users emphatically stated that they had friends in their lives and were involved in social interactions with people around them. As can be seen in all the models in Table 3, the number of friends students kept in touch with weekly was significantly associated with SNS use. However, in our third model, I added the number of close or somewhat close friends and found no association between SNS usage and numbers of close friends. Also, in model three, I added a dichotomous variable which indicated whether or not the student students believed close friendship could be achieved through online interaction alone. This variable was also not statistically significant.

Privacy concerns

In the interviews, the non-users were often concerned with online privacy, but they did not see online SNS as dangerous. Many pointed out that disclosure on these sites was voluntary: 'But if you don't put it on there, no one can find it.' Another compared it to threats in real life: 'Some random person from the mall could follow you home, that's way more dangerous than someone tracking you down on the Internet.' In line with previously reported results (Tufekci 2008), the logistic regressions did show that higher online privacy concerns somewhat lowered the odds that a student would use SNS.

Demographics and other characteristics

Gender was the strongest predictor in the model and the only demographic variable that was statistically significant. In all the models, the odds of a woman using SNSs were four to five times the odds of a man.

Living in dorms was not associated with an increased likelihood of using SNS. While age appeared to be marginally significant, I found that the significance of age declined with each round of data collection, suggesting that this effect may have been an artefact of the spread of SNS initially among a younger population.

Social grooming, efficiency, and SNS users and non-users

In the interviews, a majority of the SNS users talked about how much they enjoyed learning about their friends' and even strangers' lives. The heavy users in particular expressed that their use of these sites was partially driven by their curiosity about how people from their pasts were doing or whether they had changed. Some students also reported 'getting lost' in

TABLE 4 T-tests comparing social grooming and efficiency disposition between users and non-users of SNS.

| | | <i>N</i> | <i>mean</i> | <i>p value</i> |
|---|----------|----------|-------------|----------------|
| <i>social grooming</i> | | | | |
| I am curious about other people's lives** | user | 443 | 3.12 | 0.037 |
| | non-user | 86 | 2.93 | |
| I like keeping in touch with friends** | user | 443 | 3.46 | 0.006 |
| | non-user | 86 | 3.24 | |
| I am curious about people from my past*** | user | 446 | 3.13 | 0.001 |
| | non-user | | 2.82 | |
| I am outgoing* | user | 449 | 3.19 | 0.023 |
| | non-user | 86 | 2.98 | |
| I like to follow trends*** | user | 445 | 2.43 | 0.001 |
| | non-user | 85 | 2.11 | |
| I do not enjoy social events* | user | 439 | 1.81 | 0.013 |
| | non-user | 85 | 2.08 | |
| I am shy | user | 446 | 2.43 | 0.819 |
| | non-user | 86 | 2.45 | |
| I like meeting new people | user | 446 | 3.32 | 0.116 |
| | non-user | 86 | 3.17 | |
| <i>efficiency</i> | | | | |
| I am worried about wasting time on the Internet | user | 445 | 2.29 | 0.130 |
| | non-user | 86 | 2.10 | |
| I value efficiency highly | user | 441 | 3.44 | 0.421 |
| | non-user | 86 | 3.50 | |
| I am a very busy person | user | 442 | 3.13 | 0.405 |
| | non-user | 86 | 3.21 | |
| I am usually bored | user | 442 | 2.32 | 0.398 |
| | non-user | 86 | 2.23 | |
| I am always in a hurry | user | 443 | 2.50 | 0.594 |
| | non-user | 85 | 2.55 | |

*Significant at 0.05; **significant at 0.01; ***significant at 0.001.

social networking, continually checking profile after profile, leaving message after message. One student talked about how receiving messages made her feel good, so she tried to leave messages to extend the good feeling to her friends. The important element in this interaction was not the content of the message, but the act of leaving the message as a means of acknowledging the other person.

Among non-users of SNSs, a very different response emerged. The idea of SNSs as fun did not seem comprehensible to the non-users. They were all familiar with these sites, and all had been asked by their friends to join. But why they should *want* to use them was just not clear. One non-user remarked how her friends would check out other people's profiles and sighed, 'I don't understand what people get out of looking at other people's profile. Live your life.'

Non-users generally reported that that they did not find it interesting to keep up with friends from their past. One student was somewhat exasperated: 'People from my high school would try to find me... I had 39 pending friendship requests. I looked at the list and I knew five of these people. Five. Who the hell are you? Why are you bothering me? I haven't seen you in seven years, if I've seen you at all.'

Non-users expressed that they also did not understand why people are so curious about people they do not know, commenting about not just about social networking sites, but life in general. There was a spirited discussion about how confusing, and stupid, they found it that many of their friends followed the lives of celebrities, or gossiped about people they hardly knew. One said in a mocking voice, to approving nods: 'Look at what Katie did this weekend, she's with who now? [sighs] You don't even know this person.'

These differences are clearly visible in Table 4, where the responses to questions clustered around social grooming, especially regarding curiosity about other people, people from one's past and enjoyment of keeping in touch with friends, were significantly different between users and non-users. SNS users were also more likely to enjoy social events and reported being more outgoing. However, shyness or enjoyment at meeting *new* people was not significantly different between the two groups. The differences between the groups were more about how and how much to keep in touch with existing friends – be they weak or strong ties.

Efficiency

When asked about what they thought drew people to SNSs, the consensus theory among non-users was efficiency – people must be using these sites as a time-saver. One non-user suggested that, as college students, they were all very busy, and SNSs were 'more and more taking the work out of meeting people. If you are a college student you have many things to do and it's cutting one element out and also giving you the benefit you desire.' While SNS users did mention the efficiencies of SNSs, such as being able to find classmates to get notes for missed classes, or updating large numbers of people quickly on developments in one's life, for most users of these sites, the main theme was one of satisfaction derived from social interaction and observation itself.

I tested the efficiency/time-crunch hypothesis with multiple questions and found that this was not the difference between the users and non-users,

no matter how the question was phrased. Questions such as 'I value efficiency highly', 'I am always in a hurry', 'I am worried about wasting time on the Internet', 'I am a very busy person', and 'I am usually bored' produced similar responses across both sub-groups (see Table 4).

Self-presentation

The non-users also did not like the idea of engaging in presentation of self through these sites. One remarked, shaking her head: 'America is so self-obsessed. They are so about "Look at me. Look how I cool I look in this dress I'm wearing right now drinking with my friends. Check out how long this beer-bong cable is." I don't understand it.' Another complained that people were just fishing for affirmation: 'People will out-and-out lie on their profile. "My favourite movie is this movie; my favourite band is this band." I've been friends with you for ten years and I've never in my life heard you listen to that band. You are just saying so that people will look at your profile and will say, "Oh man, that is so cool. That's cool".'

One non-user remarked: 'They are wasting their talents. They should be paid for that kind of work.' Once again, engaging in this kind of activity without a direct goal, such as making money, seemed hard to comprehend for this group.

Are the non-users disappearing?

While the number of non-users decreased from 17.1 per cent to 12.5 per cent during the sampling time frame, the differences were not statistically significant (Table 5). The per cent of female users remained steady across the three time periods (9 per cent of women were non-users in all three waves) while men steadily increased their participation (26 per cent of the men in the first wave, 21.7 in the second wave, and 15.4 in the last wave were non-users).

TABLE 5 SNS site usage over time.

| | wave one (%) | wave two (%) | wave three (%) | total (%) |
|----------|--------------|--------------|----------------|-----------|
| user | 17.1 | 14.5 | 12.5 | 15.1 |
| non-user | 82.9 | 85.5 | 87.5 | 84.9 |

($\chi = 1.896$, asymp. two-sided $p = 0.388$).

Limitations

This study examined a purposive sample of undergraduate college students. Since the data in this paper are from a purposive sample, this limits the generalizability of the results. The study also represents data collection at more than one point in time and some of the questions were only asked of sub-samples. In effect, this can be seen as related to subsequent studies. Causal assertions cannot be made, as the data are cross-sectional in nature.

Discussion and conclusions

Contrary to the perceptions of non-users, SNS adoption does not seem to be about efficiencies, or yet another shortcut in the students' busy lives. The students who do not use SNSs are neither hermits, nor socially isolated, nor fearful of the Internet. However, the non-users are less interested in activities that can be conceptualized as social grooming.

Also contrary to what one might expect, the non-users reported similar numbers of very close and somewhat close friends as compared with SNS users. However, the number of friends kept in touch with weekly was significantly higher among SNS users. Keeping in touch may be conceptualized partially as a form of social grooming. Even if social grooming is essential to the functioning of complex societies, it may be that not engaging in it as much as other people do is not harmful to a small minority of individuals' capacity for maintaining friendship.

In fact, the lack of overlap between instant message non-use and SNS non-use shows that SNS non-users are not reticent toward communicating via the Internet; nor are they closed to the possibility of genuine social interaction through online methods. It is the social browsing (Lampe *et al.* 2006) and social grooming functions of SNSs that they are less interested in. Conversely, activities which can be grouped under these headings were often mentioned as among the most attractive features of SNSs in interviews with users.

The most significant predictor of SNS use in the logistic models, besides gender, was the tendency to use the Internet for *expressive* purposes: reading blogs, creating web pages, emailing, etc. Importantly, there was no relationship with *instrumental* uses of the Internet, such as information seeking and commercial transactions. This result highlights the need to differentiate between the different modalities of Internet practices.

In the interviews, non-users confessed to disinterest in and bafflement by social grooming activities and this was demonstrated in the quantitative analysis. Non-users might understand why one might sit in a sidewalk café with a friend and chat, but not comprehend why one would spend hours there simply to watch people go by, see who is sitting with whom, and observe how others

interact among themselves. It was as if the non-users were people without a sense of smell, wondering why others buy expensive water with which to squirt themselves. Why waste so much money? People must like the shape of the bottle, they might imagine.

The combined analysis of quantitative and qualitative results suggests two principal clusters that influence SNS adoption among undergraduate students: disposition towards social grooming and privacy concerns. Our sample of non-users was too small to perform factor analysis to model these clusters. They may represent different groups of non-users, or they may overlap partially or totally.

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Notes

- 1 Donath (2007) has made a similar argument in a paper published while this article was under review.
- 2 As with any ideal typology, there will be activities that reside on the boundaries. People do chat about products on Amazon and blog about the weather.

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