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Instant Messaging: A Social Phenomenon

A qualitative study of instant messaging habits amongst college students at a small liberal arts college

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Bachelor of Arts

Submitted in partial fulfilment of the requirements for

College Honors

Departmental Distinction in Sociology

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A qualitative study of instant messaging habits amongst college students at a small liberal arts college

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Introduction

Over the past decade, Internet communication has become engrained in modern culture. People check e-mail, post on forums, share pictures, send e-cards, blog, and increasingly, send instant messages. Because the use of communication technologies has become so routine in the daily lives of Americans, it is often difficult to conceptualize them as social phenomena. In fact, if one were to ask students at colleges and universities across the country about their participation in the instant messaging social phenomenon, one would be likely to receive blank stares and protestations of "I don't know." Though it is not always recognized as such, instant messaging (IM) is a social phenomenon, with Generation Y (Americans age 18-27), especially college students, comprising the largest number of participants. According to a Pew Internet & American Life Project (Pew) study conducted in May of 2004, "62% of Generation Y Internet users have sent instant messages, and 20% do it on a typical day" (Lenhart and Shiu 2004: 3). Similarly, a 2002 Pew study found that, "college internet users are twice as likely to use instant messaging on any given day compared to the average Internet user. On a typical day, 26% of college students use IM" (Jones 2002: 2). Because the computer technologies change and spread quickly, it would not be surprising if these numbers have risen considerably since these studies were conducted.

In addition to its function as a communication tool for its users, IM drives revenue for the large corporations that develop and maintain M networks. Companies such as AOL Time Warner, Yahoo!, Microsoft, and Google sell advertising to their software clients that have the potential to reach millions of people. Many corporations are also using IM as a means of increasing communication and productivity in the workplace. Despite the growing popularity of

this medium of communication across several applications of the technology, little academic research has been done in this area and I believe it is an important void to fill.

This exploratory study is aimed at investigating how and why college students use IM. To achieve this goal, the following theoretically grounded research questions will be addressed by this study: What function does instant messenger serve for its subscribers? What meaning(s) do instant messenger users attach to this activity? Does IM contribute to a sense of community?

In order to explore these questions, a theoretical framework is necessary to consider them. This study is theoretically grounded in functionalism, social constructionism, and symbolic interactionism. Functionalism, a theory credited to Emile Durkheim and Talcott Parsons, also plays an important role when considering instant messaging. Functionalists focus on the role of a social function in fulfilling a specific social need or to generate social stability. A social function is, "the contribution made by any phenomenon to a larger system of which the phenomenon is a part" (Hoult 1969). Social functions can be functional or dysfunctional, manifest (recognized) or latent (unrecognized) (Merton 1968). Instant messaging is a social function in that it is changing the communication landscape, particularly among college users. Whether or not it is latent or manifest, functional or dysfunctional is yet to be determined.

Peter Berger and Thomas Luckmann developed the theory of social constructionism, an influential factor in the postmodern movement and an important school of thought in cultural studies, in their 1966 book *The Social Construction of Reality*. Berger and Luckmann are interested in how members of society contribute to the creation of their perceived reality, particularly through the creation and institutionalization of social phenomena (Wikipedia.org 2006). Thus, "when people interact, they do so with the understanding that their respective perceptions of reality are related, and as they act upon this understanding their common

knowledge of reality becomes reinforced. Since people negotiate this common sense knowledge, human typifications, significations and institutions come to be presented as part of an objective reality" (Wikipedia.org 2006). Because instant messaging has been a part of the culture for several years now, it is no longer regarded as a phenomenon by its users but instead is seen as objective reality, simply another communication tool. This theory will prove useful in considering the meanings that users attach to instant messaging.

Howard Blumer and George Mead, the sociologists whom symbolic interactionism is most associated with, viewed society as the sum of the interactions of individuals and groups, focusing on a microlevel analysis rather than the macrolevel. They are particularly interested in interaction in the form of communication of small groups. This is particularly useful for the study of instant messaging, as communication between members of society, or interaction, takes place most times between only two people and instant messengers often send messages to no more than ten people at any given time (Lenhart and Shiu 2004). The symbol then, is the text of the IM through which ideas and emotions are conveyed. By examining this form of interaction, communication across a symbolic, technologically advanced medium, a better understanding of the role of IM in the process of communication can be gained.

This study is important for several reasons. IM is relatively new technology, having only been available in the past decade and gaining most of its popularity only since 2000. Because the technology is new and is still taking hold, its full impact remains to be seen. As Generation Y ages and corporations continue to look for ways to reduce cost while improving productivity, instant messaging will likely become an even more significant tool for corporate America. Fifty three million adults already use instant messaging. Add to that the approximately thirteen million teens (IM is also widely popular amongst teenagers) that use

instant messaging, and it is apparent that this technology plays a significant role in the life of a large percentage of Americans (Lenhart 2001). In addition, instant messaging has real potential to change how we communicate with one another as the use of our time and other media changes with an added media option.

The first section of four sections of this study includes a review of pertinent literature on both instant messaging and related fields. The literature review is followed by a description of the methods used to conduct this study, highlighting the purposive sampling model and the importance of quantitative research in this field. The third section includes a detailed analysis of the collected data. The conclusion provides an analysis of the findings and draws together this research with that of the reviewed literature and sociological theory while reiterating the importance of the study.

Literature Review

The notion of communicating across a computer network is certainly not a new one. The very idea of a computer network is to allow computers in remote locations to communicate with one another. This idea was expanded to include human communication with the inception of the Internet and World Wide Web (WWW) in the late 1980s and the early 1990s. In the process of the development of computer networks, a new body of academic research, Computer Mediated Communication (CMC), emerged, constituting a large body of literature that serves as the foundation of research on instant messaging.

The Internet itself has been the subject of much broad sociological academic research. The Pew Internet & American Life project conducts several studies on the role of the Internet in American life each year. However, one report pertinent to this study is one conducted by UCLA in 2003, a broad overview of Internet usage, and its categories include who is using the Internet,

media use and trust, consumer behavior, communication patterns and social effects. The study draws on survey interviews of 2000 people and concludes that "email and instant messaging" is the most popular activity in 2002 with 87.9% of respondents indicating it as the number one online activity (Lebo, Suman, Schramm, Lunn, and Aquino 2003). A 2002 Pew study also investigates Internet usage by college students. In this study, Steve Jones makes several important conclusions. He finds that 85% of college students owned a computer and 26% use IM on a typical day (Jones 2002). He also found that, "72% of college students say most of their online communication is with friends" (Jones 2002). Another study conducted by Paul DiMaggio, Hargittai, Neuman, and Robinson (2001) focus on the research that has been conducted thus far on the social implications of the Internet. Specifically, he concludes, "Sociologists need to study the Internet more actively and particularly, to synthesize research findings on individual user behavior with macroscopic analyses of institutional and political-economic factors that constrain behavior" (DiMaggio, Hargittai, Neuman, and Robinson 2001: 307). This study is an attempt to provide the analysis of individual user behavior.

Some authors have considered the ramifications of the Internet on the social involvement of the individual, although the findings seem to be contradictory. For instance, Nie and Erbing's findings support the notion that time spent on the internet results in a lost contact with social ties (Nie and Erbring 2002). Furthermore, Nie and Hillygus find support for the theory that internet use displaces the use of other things, that is that "time online is largely an asocial activity that competes with, rather than complements, face-to-face social time" (Nie and Hillygus 2002: 1). Nie's findings seem to support the findings of a 1998 report by Kraut, Patterson Lundmark, Kiesler, Mukopadhyay and Scherlis, in which the conclude that,

Greater use of the Internet was associated with declines in participants' communication with family members in the household, declines in the size of

their social circle, and increases in their depression and loneliness. (Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay, and Scherlis 1998: 1017)

By contrast, Neustadtl and Robinson found that increased time spent on the Internet does not decrease the amount of time spent with friends and family. His study found that, "there is virtually no difference in the overall visiting of lesser-versus-greater-versus non-Internet users" (Neustadtl and Robinson 2002: 73). "Kraut, Kiesler, Boneva, Cummings, Helgeson, and Crawford also retracted their previous claims when they found that, "this sample generally experienced positive effects of using the Internet on communication, social involvement, and well-being" (Kraut, Kiesler, Boneva, Cummings, Helgeson, and Crawford 2002: 49). Keisler concurs finding that, "many people, especially those with good social resources, have integrated the Internet into their ordinary lives to their advantage" (Kiesler, Kraut, Cummings, Boneva, Helgeson, and Crawford 2002: 120). In 2002, Coget published the results of a sample of survey of 2096 Americans conducted in 2000. Coget's results are similar to the findings of Neustadtl and Kiesler. The report concludes, "there is no evidence of displacement of face-to-face relationships with online ones, and Internet use is slightly associated with a decreased level of loneliness" (Coget, Yamauchi, and Suman 2002: 180).

These studies present two contradictory views that could be applied to instant messaging. Nie would suggest that as an Internet activity, instant messaging, a technology that promotes communication might somehow detract from social involvement. On the other hand, Neustadtl would argue that Internet usage, including instant messaging, would not negatively affect the amount of time spent in face-to-face interaction. The interplay of these two views will be examined in the conclusion section of the study.

In relation to the Internet and the individual, two authors have focused on online relationships. McQuillen focused on the quality of online relationships, concluding that,

"...CMC [has] started to replace Face-to-Face interaction. Relationships are not being initiated with 'real' people, but with the projected, edited, 'spun' images the users share online" (McQuillen 2003: 616). Rather than focusing on the quality of online relationships, Wolak, Mitchell and Finkelhor looked to describe the scope of online relationships amongst adolescents. In their findings they state that despite the fact that a large percentage of adolescents were in contact with people whom they hadn't met in the physical world, most online communication, "did not lead to close relationships or face-to-face meetings" (Wolak, Mitchell, and Finkelhor 2002: 451).

While these authors focused on the social aspects of the Internet in relation to the individual, other authors have given considerable attention to the Internet as a social network. Barry Wellman is a leading researcher in online social networks. His studies began as early as 1996 with a study on computer-supported social networks (CSSNs), in which he found that CSSNs create social ties in varying degrees of strength and that relationships created in a CSSN environment with its own "norms and structures" often function both on- and off-line (Wellman, Salaff, Dimitrova, Garton, Gulia, and Haythornthwaite 1996). Wellman (1999) also notes that computer networks as social networks do not exist outside of societal influences. He states, "even when only two persons communicate, they are not dancing duets in isolation. Their interactions are conditioned by the availability of others to supply resources, cause problems, or enforce norms" (Wellman 1999: 17). Wellman then, considers a computer network to be more than a social network. Instead he finds it a "technological infrastructure that enhances the ability of people and organizations to communicate for better or worse" (Wellman 1999: 17). Wellman also collaborated with Garton and Haythornthwaite to highlight the importance of the social network approach to studying CMC (Garton, Haythornthwaite, Wellman, and Jones 1999).

A number of researchers have also considered the communal aspects of Internet interaction. For instance, Robert Plant identifies several categories that allow for easy classification of online communities (Plant 2004). In a very comprehensive Pew report, Horrigan's findings support Barry Wellman's theory of "glocalization", which states that Internet users are now engaged both globally, by Internet interaction, and locally, by physical ties (Wellman 2002). The 2001 report finds that, "The Internet...also helps them increase their contact with groups and people they already know and it helps them feel more connected to them" (Horrigan 2001: 2). Barry Wellman also examines the possibility of community online. He concludes that,

The Internet adds to existing face-to-face and telephone contact. Rather than increasing or destroying community, the Internet can best be seen transforming community such that it becomes integrated into rhythms of daily life, with life online integrated with offline activities (Wellman, Boase, and Chen 2002: 151).

This notion was based on Wellman's study of the Internet in relation to social capital and community (Wellman, Hasse, Witte, and Hampton 2001). A final, yet crucial study in this field is that of Pippa Norris. Norris (2004) highlights a Putnam theory of bridging versus bonding relationships. The Putnam theory suggests that bridging "refers to social networks that bring together people of different sorts, and bonding...brings together people of a similar sort" (Norris 2004: 31). Upon examination of a Pew survey, Norris finds that the Internet is both a bridging and bonding technology for most users. This study is an attempt to discover if this conclusion can be extended to instant messaging as well.

Offline community is also a popular and relevant field of interest and academic research. Wellman's early work lies in this field. In a 1990 study, he discusses the role of community ties in the provision of social support (Wellman 1990). Of course there are also the recognized works of Robert Putnam and Mark Granovetter, whom most of the aforementioned authors cite

in their works. Putnam's work is in the area of declining social capital in the form of civic engagement, neighborliness and social trust in America. He claims the decline is the partial result of the transformation of how Americans spend their leisure time (Putnam 1995). Granovetter (1973) argues that through small-scale networks of interpersonal communication, macro level patterns can be observed (Granovetter 1973).

There has been some scholarly research and much popular commentary on instant messaging itself, most of which has focused on teenagers. Rebecca Grinter is a leading researcher in this area. Grinter, in addition to her work in the area of teen text messaging on cellular phones (Grinter and Eldridge 2001), published a qualitative study on teenage instant messaging use (Grinter 2002). In this study she examines several areas of teenage instant message usage that are also applicable to my study including: use frequency & connectivity, technology choice and adoption, social congregation: means and purpose, and privacy management (Grinter and Palen 2002). Specifically, she highlights three main uses of instant messaging amongst teenagers; chatting, planning and schoolwork. She finds "differences in the nature of use between high school and college teens" (Grinter and Palen 2002: 1). She attributes these differences to several factors including connectivity access and degree of autonomy. She also finds that the "practice is also tied to concerns around peer pressure, peer group membership and creating additional opportunities to socialize" (Gripter and Palen 2002: 1). Amy Quinn took a different approach in her 2003 study of teen instant messaging. She restricted her focus to the content of conversations, user's communication partners, and conversation multi-tasking. Two notable findings from this study are that, "while using IM, teens mainly talk to friends from daily life and rarely with those they met online" and that, "Conversations often consist of inconsequential small talk, but can offer opportunities for more substantial social support...teens

report that they enjoy IM conversations far less than they enjoy face-to-face visits and phone conversations" (Quinn, Boneva, Cummings, Shklovski, Kraut, Kiesler, and Brynin 2003: 1).

Arguably, Lenhart and Shui's (2004) provide the most comprehensive quantitative study on adult instant messaging habits. They provide an overview of statistics on the demographics of instant messaging usage in a national sample, focusing on instant messaging in the workplace, age of user, services used, multi-tasking, and key feature usage (Lenhart and Shiu 2004). Key findings include that 53 million American adults have used instant messaging, 35% of those who instant message belong to Generation Y, and that the AOL Instant Messenger (AIM) application was most popular amongst college students (Lenhart and Shiu 2004). A few authors have even noted instant messaging usage among college students. Jerry Finn, studied online harassment via e-mail and instant messaging among college students (Finn 2004). Another author, Abraham Nachbaur of Stanford, considered instant messaging amongst college students for the use of flirting. He also examined the usage of away messages and provided a detailed analysis of the content of conversations (Nachbaur 2003). It is important to note that this study is not published, provides few references and is not generalizable due to the implementation of convenience sampling methods. However, it may prove useful to compare my results with that of Nachbaur due to the fact that study was conducted in a university setting similar to the setting of this study. One final notable study in this field is that of Yifeng Hu, Wood, Smith, and Westbrook in which "the relationship between the amount of Instant Messenger use and the level of perceived intimacy between friends" was examined (Hu, Wood, Smith, and Westbrook 2004). Hu et al. found a positive association between verbal and social intimacy and instant messaging usage (Hu, Wood, Smith, and Westbrook 2004: 1). This would indicate that instant messaging usage actually encourages intimacy, a finding that will be interesting to test.

Despite this vast body of applicable literature, no research has been conducted to ascertain why instant messaging is such a popular media choice amongst college students and what meanings college students attach to this activity. In addition, despite the fact that many college students live in a close-knit communal environment in a physical space, the notion of digital community through instant messaging in a college setting has gone overlooked. This study provides a base from which that void can be filled.

Methods

This study began with a search for literature on instant messaging, social networks and community. Because the research questions of this study cannot be easily answered through statistics, qualitative interviews are a logical choice as the method of data collection. In order to obtain qualified subjects, as well as to provide a basis for the qualitative research, a survey (Appendix A) was developed and administered over the Internet via surveymonkey.com. The survey questions were adapted from the 2004 Tracking Survey of adults age 18 and older conducted by Princeton Survey Research Associates for the Pew Internet & American Life Project, as well as from Yifeng Hu's 2004 study entitled "Friendships through IM: Examining the Relationship between Instant Messaging and Intimacy." The final survey contained fortythree questions, with fifteen pertaining to demographic information and the remaining questions focusing on instant message usage. Because AOL Instant Messenger (AIM) is undoubtedly the most popular instant messaging technology used by college students (Lenhart and Shiu 2004), the survey was advertised on an AIM account for a period of approximately two months. Respondents were asked to pass the survey link along to several friends, as the snowball portion of the sampling method. During the two-month period, one hundred sixty (160) people responded to the survey. Of the contacts that indicated they would be willing to answer

additional questions, ten (10) were purposively selected to participate in in-depth interviews. The candidates were selected based on the following criteria: they 1) Fell within the targeted age range of 18-27, 2) currently attend or attended in the past Albright College, and 3) proved to be experienced instant messaging users based on their survey responses. Subjects were gender stratified, consisting of five Caucasian females and five Caucasian males between ages twenty (18) and twenty-four (24), with an average age of approximately 21. The sample included two post-graduates with the remaining eight subjects still attending Albright College. None of the subjects are married or have children. Subjects reported personal income levels of between \$3,000 and \$44,000, with an average of approximately \$18,000 per year and two subjects choosing not to respond. Only three respondents chose to share their parent's household income.

Interviews were scheduled and five were conducted in person. The remaining five interviews were conducted over the phone, with each interview lasting approximately thirty-five (35) minutes. Each interview consisted of twenty-eight (28) total questions (Appendix B). The first fourteen questions were designed to obtain demographic information from each subject, while the remaining fourteen focused on topics relating to the four research questions presented in the introduction of this study. Interviews were unstructured, so as to allow the subject to feel comfortable as well as to allow for impromptu discussion and questions not included in the general outline. All interviews were digitally recorded, and all subjects were afforded the opportunity ask questions following the interview and to have a digital copy of their interview forwarded to them. Each subject consented to participate and, at the time of the interview, had already agreed to the informed consent form required for the web survey. To ensure the subject's privacy, subjects shall be referred to as "S" followed by their number (i.e.- S2). Albright College's Institutional Review Board reviewed and approved both the web survey and

the interview questionnaire. Once the interviews were completed, each was transcribed. Using QSR N6, a qualitative data analysis software program, each transcribed text file was coded so that the data could be further examined and organized.

Analysis

The Function of IM

Entry & Service Choice

Given the categories provided by Plant, IM would be regarded as a for-profit, open and regulated community (Plant 2004). It is for-profit as it is the product of corporations whose goal is to generate revenue and turn a profit, mostly through the sale of advertisements. It is open in the sense that anyone with a connection to the Internet may join, however its users are governed by an end-user license agreement and are subject to the regulations established by the corporation operating the servers. With that in mind, entry into the instant messaging community is relatively easy; it is simply a matter of downloading and installing the software. The average age of entry for my sample was 14.5. Several subjects indicated using instant messaging as early as middle school.

In examining the function that instant messaging serves in the lives of college students, it is necessary to consider how and or why subjects first began instant messaging. The overwhelming response in this sample was an allusion to peer pressure. Several subjects indicated that they began instant messaging because their peer group was already instant messaging. For instance, S2 and S7 indicated that their offline peer group's adoption of the technology influenced their decisions in the following statements:

Umm, I started in high school and I used it cause everybody else was starting to get on it... (Personal Interview 2, July 18th 2005)

Well, I remember when it first came out I was living in Germany. One of my friends told me about it and then basically by whole class because we have a real small class over there in my school. Basically, everyone got it and started talking to each other. (Personal Interview 7, July 22nd 2005)

In the case of S2, a peer actually set up the instant messaging account for him. S6 shares a similar experience:

Well, there was this really good looking girl down the hall that asked me for my screen name and I didn't have a screen name so, I figured hey, I should probably go and get an instant messenger screen name so she stopped by and helped me set up a screen name and I've had the same one ever since. (Personal Interview 6, July 27th 2005)

Four subjects; S1, S3, S4, and S5, indicated that they began using instant messaging because it was a built in function of their Internet Service Provider, America Online (AOL). Because the instant messaging service was packaged with the internet service provider software, AOL gained a clear advantage in the IM market and now holds the number one position in the number of users (Lenhart and Shiu 2004). S3 explains why he believes the AOL service has gained such popularity:

Umm, the only reason I prefer AOL's service right now is because a majority of the people that I know use AOL, I mean that's just because I think they got the jump on the service and they've I mean they've had it around for many years and most people who started off using the internet using the AOL that's how they're familiar with this. Umm, therefore they don't want to have to go and learn something new. However, feature wise, AOL is probably one of the most limited clients I have seen. (Personal Interview 3, August 20th 2005)

If AOL's instant messaging service is truly as limited as S3 indicates, why then is it the most popular (Lenhart and Shiu 2004)? In fact, nearly 98% of respondents to this study's web survey indicated that they used AOL instant messaging most frequently. Several interview subjects indicated that they knew about other services and some had even used other services, yet all respondents indicated that the AOL client is their current client of choice. S4 illustrates this in the following statement:

I, I think I knew of them but I don't remember anyone ever using them. Pretty much everyone was either AIM or AOL. (Personal Interview 4, August 19th 2005)

Subjects may use AOL due to the fact that peer groups often determine the service that will be used, providing individuals little choice if they hope to remain connected. Consider the following statement made by S5 when asked why she chose AOL as her instant messaging client:

Cause that's what all my friends had and so if I wanted to talk to them it didn't make any sense to get a different one because I wouldn't have had access to them. (Personal Interview 5, July 18th 2005)

S6 was entering a new peer group and the adoption of a specific technology for that group's communication had already occurred. Rather than trying to change the entire peer group's service, it would be far simpler for S6 to adopt the existing service used by the peer group in order to remain connected to that group. Thus, the peer group he joined predetermined which service he would use.

Subjects may also continue to use the AOL service because they have had little reason to change clients. It is possible that subjects were satisfied with the AOL service, or it was an inconvenience to change to another service. S6 and S7 cited these reasons in the following statements:

I don't know. I never really felt like I needed another screen name or anything. (Personal Interview 6, July 27th 2005)

Uh, it was the first one I had and never had the problem with it. It's easiest just to stay with it. (Personal Interview 7, July 22nd 2005)

Even subjects who had used other services in the past, switched to the AOL service. For some it was the function of a change in Internet service provider, while others found their peers switching to AOL. Whether or not users chose to use AOL's instant messaging service out of convenience, as a provision of an internet service provider, or as a function of peer group

adoption, it is evident that AOL's instant messaging service became the primary client of the members of this sample.

Because most of the subjects of this study adopted instant messaging early in their lives, they have had an average of seven years of experience using the technology. Had Instant Messaging not been functional to the subjects, they would likely have discontinued using the service or found a more functional way to communicate. It is because of this experience that the subjects of this sample provided excellent insights into the functional aspects of instant messaging through their usage habits and by citing advantages and disadvantages of the medium, particularly in comparison to other communication media.

Usage, Advantages and Disadvantages

Usage

Perhaps one of the largest contributing factors to the popularity of instant messaging among college students is the ease of access to the medium. Broadband networks have made it a possibility to remain signed onto IM services virtually twenty-four hours a day, seven days a week. Several subjects indicated that they noticed a difference in their IM habits once they became college students due to the ease of access.

Uh, I'd say it changed much more once I got to correge because then you're on almost 24 hours a day. (Personal Interview 7, July 2nd 2005)

Sure. Well college because you're signed on basically 24 hours a day because of the...we can do that at school. Umm, and your computer is right next to you basically any time you are you know wherever you're in your residence. So it's just there. (Personal Interview 4, August 19th 2005)

"Oh yeah, my frequency of use has skyrocketed cause now we have the T1 connection and it's so fast and I'm on the internet so much more than I was in high school." (Personal Interview 10, March 14th 2006)

However, as broadband enters more and more American homes, it would be expected that differences between home and college usage would diminish. S2 indicated that changes occurred when his family switched to cable as a freshman in high school.

Umm, I did but I was leery of it cause I mean, I didn't have a cable Internet so I was getting charged by the time I was online and I couldn't really get online for long periods of time to talk. But, then when I got cable as a freshman I started using it more and more. (Personal Interview 2, July 18th 2005)

With further regard to access, students who bring their own computer to college most likely aren't sharing that computer with others like they might share a computer at home. S7 also cited this reason in the following statement:

And most people have their own computers. They don't have to get on and off, you know, sharing with brothers or sisters or something like that. So you tend to, I guess, especially I guess on your away messages you ask like if you need information you can just tell people if they'll leave it there because no one else is going to sign you off because they have their own computer. I guess you're just on much more when you're at school. (Personal Interview 7, July 22nd 2005)

It is evident, then, that access to instant messaging networks, via an Internet connection or availability of one's own computer, is a key factor in one's usage habits including time spent communicating with one's "buddies". The more a user is online, the more opportunities a user has to communicate with others, for offline communication is not possible using the AOL protocol.

As was previously mentioned, most subjects indicated that at college they are signed onto instant messenger for most, if not all of the day. However, most subjects indicated that though they are signed on most of the day, they spend a majority of that time with an away message posted.

Freshmen year, I used it a lot and now it's... I think I have spent more time with an away message up than I do actually on it talking. (Personal Interview 5, July 18th 2005)

But a lot of times I'm probably actually on the Internet all day everyday but I'm away. I have an away message up most of the time so... (Personal Interview 8, July 25th 2005)

The amount of time spent actually instant messaging varies greatly. According to the web survey, 45.9% of respondents indicated using instant messaging for less than one hour per day, with another 45.9% reporting usage from between one and three hours per day. The interview subjects also indicated a broad range of time spent instant messaging, some as short as ten minutes per day, some as long as two hours. When asked how long they spent actually "talking" with people via instant messenger, S1 and S3 responded:

Probably like ten minutes. (Personal Interview 1, July 20th 2005)

Umm, actually instant messaging, probably I mean, when I am at work it's about two hours out of my entire day I spend, instant messaging, give or take oh a half hour or so depending on what's going on. (Personal Interview 3, August 20th 2005)

Advantages

The popularity of IM among college students indicates instant messaging may be more advantageous than other forms of communication. The interview subjects were able to cite several of the advantages to using instant messaging in comparison to other forms of communication, including e-mail as a text based alternative to IM. The most frequent answer was a derivative of convenience. In a society that places such emphasis on instant gratification, the fact that instant messaging is well, instant, appears to be very important to its users.

Uh, if someone's online and you're talking to them you get answers real fast. You don't have to wait for a reply like email. You don't have to wait for a return call if you were to use the cell phone. (Personal Interview 7, July 22nd 2005)

Umm, it's really fast and easy and even if, actually, the one thing I like about it a lot is that even if someone is online they have an away message up you can just leave them a message. Like, I've had a lot of instances with cause I'm on the tennis team and I have some of the girls screennames so if I have to tell them something about a practice change or you know we're having a team dinner,

something like that, I can just leave them messages and I don't have to worry about calling them or anything like that. So it's really convenient and it lets me keep in touch with a lot of my friends from home. I think that if I didn't have that, I would probably only talk to them like once a week or something. (Personal Interview 8, July 25th 2005)

Like I dunno, it just seems easier sometimes to get ahold of somebody sometimes. Rather than e-mail and waiting for them to get back, you know. It's convenient. (Personal Interview 2, July 18th 2005)

In comparison to usage of other communication media, subjects preferred instant messaging for less formal interactions that required immediate response. Subjects indicated that instant messaging is less invasive than a phone conversation and subjects claimed to reserve e-mail for more formal, less time sensitive communication.

Calling someone I feel is showing a lot of effort to get in touch with someone where instant messaging is kind of more like oh that person is there so I'll say hi and start a conversation. It's not quite as like in your face, like I am trying to talk to you kind of thing. (Personal Interview 4, August 19th 2005)

It's actually I think it's more common to ask someone for their screen name like especially for class and stuff than for their phone number because it's kind of less invasive but it's more convenient. (Personal Interview 8, July 25th 2005)

Umm I use e-mail to people older than me like adults, coaches, teachers and stuff. (Personal Interview 1, July 20th 2005)

E-mail is one of the services where it's nice if you want to send somebody a lengthy letter or files or something like that. But Limean if I want to get a response to something instant messaging is the way to go just because it's fast and it's easy. (Personal Interview 3, August 20th 2005)

If I send an email I can't guarantee that they're going to get that right away. Unless they're people like me who religiously check their email at school. (Personal Interview 5, July 18th 2005)

In fact, in direct contradiction of the Pew Study (Lenhart and Shiu 2004) where 70% of respondents indicated using e-mail more frequently than IM, this study's web survey indicated that 72.9% of respondents preferred instant messaging to e-mail.

It is important to note that while subjects found instant messaging advantageous, most subjects seemed to have a hierarchical ladder of communications with instant messaging being the bottom rung. That is, most subjects preferred higher forms of communication if possible. S3 discusses this in the following excerpt.

I mean it's just, it's just convenient is the only reason. I mean it's, it's something, and it's just another way to stay connected for me. Um, I mean the higher, more detailed in depth conversation I can have with people, like I mean if I can have a face-to-face conversation with somebody, I much prefer that rather than doing it over the phone. Or I'd much prefer having a phone conversation with somebody than by doing it by instant messenger. (Personal Interview 3, August 20th 2005)

Umm sometimes, I think that it can be to me it's important to be face to face but then other times it's not really important like if it's just a quick conversation you know I don't need to run to another dorm and talk to them about it you know it's just like a short conversation that takes five minutes yes, but if it's like an in depth conversation about like a family matter or a sensitive subject I'd rather be face to face. (Personal Interview 2, July 18th 2005)

Subjects also indicated that instant messaging provided them with a medium that allowed for communication on their own terms, meaning they had greater control over how, when and for how long they communicated. S1 and S8 highlight this in the following statements:

You can just type something if you don't feel like talking to someone that you know will yap your ear off you can just like leave them a message. You don't have to, umm call them up wait for it to ring you can just type it and send it and they can get the message whenever and just type it back. (Personal Interview 1, July 20th 2005)

But If something comes up you can just be like ok gotta go. Kind of like, when you are on the phone you kind of get stuck in conversations and... (Personal Interview 8, July 25th 2005)

Cost effectiveness was another commonly cited advantage to instant messaging. Because college students are often using the LAN connection provided by the school, instant messaging really comes at no cost, or at least a cost built into tuition. Furthermore, it is logical that when

students are at home, they are using an Internet connection provided by their parents, thus the cost factor is essentially eliminated for the subject.

Cost-wise it makes more sense cause when I'm at school or even here I can't use my cell phone before 9pm unless I want to start running up my daytime minutes. I can drop messages to friends at school much quicker and much more cost affective than I can via my cell phone. (Personal Interview 5, July 18th 2005)

Two subjects, S5 and S6, stated that it was a cost effective method for communicating with friends abroad.

Subjects also noted that a benefit of instant messenger was that it allowed them to obtain information about their friend's whereabouts and activities. Because away messages and user profiles often contain such information, it is easily obtained. According to this study's web survey, 85% of respondents post an away message "Every day or almost every day". Additionally, 95% of respondents indicated that they "post a specific message about what you are doing or why you are away". As a result, Nachbaur (Nachbaur 2003) found that "Friend-stalking" appears to be a common practice. He found that 39.4% of respondents at Stanford claimed to check others' away messages "often" (Nachbaur 2003). This study's respondents also provided insight on the practice. When asked why she spends nearly fifty minutes a day checking away messages and profiles S1 responded:

I like knowing what people are doing and where they are and how things are going. (Personal Interview 1, July 20th 2005)

I guess so...I mean I kind of liked, I liked it's kind of an easy way to stalk someone which is kind of funny but, umm I figured then if someone like needed me it's like ohh well she's in the admissions office I can just stop by there. (Personal Interview 4, August 19th 2005)

Yeah I check away messages a lot. Usually that happens when I am doing something else on the computer. (Personal Interview 9, March 6th 2006)

I hate people who use away messages as a poster board for your interests...Like I am very logical I guess so if I'm not at my computer and you're my friend, I'll put

dinner or tennis or out. Like I can't stand it when people put, I don't know, "I heart you" or something. That doesn't really tell me anything. Because If I am going to IM you, I need to know if you are going to be there or not. (Personal Interview 10, March 14th 2006)

S4 talked about this issue as well, attempting to explain why people are compelled to put such information in an away message in the first place.

It's like people just, you want to let people know where you are...Which is weird because you most likely you know, and a lot of people looking at you probably don't want to have them know where you are because like no one really needs to know your minute by minute schedule. (Personal Interview 4, August 19th 2005)

One respondent, S3, regards instant messaging as more of an answering system and willingly puts up such information knowing that it will make him easier to find in certain social settings. Consider the following:

I mean it's nice to be able to I mean you can put up an away message and you can check to find out where, I mean let's say you're going out tonight or whatever, you can put an away message and put your cell phone number in that message people who come along anytime check your message and find out "oh he's out" whatever such and such you can either stop by or give him a call or find out if he's available or something like that or what he's up to if he's not around. It's more or less like an answering service I suppose? (Personal Interview 3, August 20th 2005)

Similarly, S5 talks about IM as a message board in the following excerpt:

Yeah, I mean for me it's just like a message center. Because my mom will be like, "why did you leave the computer on all day." and I'm like "Oh, well I was waiting for my roommate to send the account number for our cable bill. And it's so it's like so I know either A) where I'm supposed to be at any particular time, or somebody can tell me that they did the homework and that they can help me with it or whatever the case may be.

Interestingly, privacy was never cited as a concern for those who do post such information. This is likely due to the fact that users have control over who can and cannot view their profiles and away status and most of the people on their buddy lists are friends or people that they know.

The interview subjects also cited the ability to multi-task while instant messaging as an advantage to using this communication medium. Lenhart found that "IM-ers are multi-taskers" (Lenhart and Shiu 2004), a result that was confirmed by this study as well. This study's web survey indicated that 74.5% of respondents are doing other things on their computer such as playing games or surfing the Internet every time or almost every time they IM. When asked about doing other things not on the computer, such as watching television or talking on the phone, while IM-ing, 44.7% indicated that they did so every time or almost every time. Respondents discuss their ability to multi-task in the following statements:

I can do two or three things at once if I'm talking online because I'll sit and type papers or read for school or read for fun or whatever and be doing six other things besides talking on the internet because it's not like I have phone attached to me I can kind of give my attention to more than one thing. (Personal Interview 5, July 18th 2005)

Yeah I usually look at websites or check my mail or watch TV or sometimes talk on the phone. (Personal Interview 1, July 20th 2005)

You can kind of, kind of take in a lot of different things at once, so I could be doing some work and making sure, you know, what I'm doing at the job is going well, while having a conversation with Rich, Little Joe, or like you know some girl, something like that. (Personal Interview 6, July 27th 2005)

Instant messaging is also used advantageously for academics. Forty-two percent (42%) of web survey respondents reported using IM to collaborate on a group project once a week or more often and 46% reported using IM to seek help with homework or a project once a week or more often. While these numbers suggest strong use for academics, such as getting help with assignments, finding out about readings or homework, and communicating with other students in their classes, the web survey results seem to be contradictory. Only 7% of web respondents reported that they use IM at school to stay in touch with classmates about school-related things. Another 55% reported that they use it to keep in touch with friends, family and classmates

equally for both school and non-school matters. Only 30% indicated that IM has improved teamwork at school. Arguably, academics are an ancillary rather than primary, function of instant messaging. Seemingly more odd is the fact that despite it's utility as a communication tool for both social and academic matters, few students have used it to contact a professor. In fact, 71% of web survey respondents indicated that they have never used IM to contact a teacher/professor. Though privacy seemed not to be a concern for away messages and profiles, many interview subjects indicated it would be a concern if professors had access to them via IM.

Because half of them are, I would never want them to know what I am doing. I don't want them to know personal information about me that they could get. I don't want them to see pictures of me that I have in my profile and basically I think there should be a difference between personal life and student professor life. (Personal Interview 1, July 20th 2005)

I think some students would feel a little bit weird about it because of some of the things people put in their profiles their professor might read and think differently of them. (Personal Interview 2, July 18th 2005)

Yeah I mean for me I don't have anything to hide per say but instant messaging is kind of where I am more associated with my peer group not so much people outside of my peer group and my professors are definitely outside of my peer group. (Personal Interview 3, August 20th 2005)

A few subjects also addressed the fact that few professors provide their screen names to students.

No all the professors I've had usually just give out their e-mail address. Then the most they've ever given me past has been like a home e-mail address, but never a screen name. (Personal Interview 2, July 18th 2005)

Disadvantages

Though nearly 60% of web respondents indicated that they couldn't live without instant messaging at college, web respondents and interview subjects both cited disadvantages to using IM. Several of the advantages listed above were also mentioned as disadvantages in the interviews as well. For instance, because instant messaging is about instant gratification, frustration occurs when response time is slow and unlike e-mail where messages are hosted on a

server until deleted, IM's may be lost if the user is disconnected from the IM service. However, distraction was the most commonly cited disadvantage to instant messaging. Forty-six percent (46%) of web respondents indicated that IM has been a distraction. Interview subjects confirmed this as well.

It's downside is the fact that it is so distracting sometimes and there have been situations that I've seen and I've experienced how like you get on that and you just block out everything else, like you may have work to do. I mean you kind of just lose focus...(Personal Interview 2, July 18th 2005)

You can really over-extend yourself sometime. It's like if you're trying to do something at work and your talking to 6 friends at once it can kind of be a like just a little bit of a distraction. (Personal Interview 6, July 27th 2005)

Respondents also indicated several other disadvantages such as the inability to adequately express and interpret emotions, a lack of real ties to others, the loss of community and the deterioration of communication skills, all matters which will be discussed in later sections of this study.

What meanings do users associate with IM?

Another Means of Connection

In a society that seems to place importance on constant connectivity (i.e.- wifi hotspots, importance placed on cellular devices, etc), it is not surprising that IM would be viewed as "just another way to stay connected." Several subjects indicated that they consider IM as such.

I mean it's, it's something, and it's just another way to stay connected for me. (Personal Interview 3, August 20th 2005)

It is just way of communicating in an easier way. (Personal Interview 9, March 6th 2006)

For me it's like a post-it note rather than a way to get to know someone or something like that. (Personal Interview 5, July 18th 2005)

While IM's meaning as a social tool is demonstrated in the above quotes, this view is contradictory. Though subjects consider IM as "just another tool", they also indicated that IM is an extension of the self and personality.

IM as an Extension of Self

Just as we have come to see devices such as cellular phones and PDAs as an extension of our selves (Turkle 2006), we have also extended this view to instant messaging. Because respondents spend large amounts of time in IM, often hours each day, and go to great lengths to create profiles and away messages, it would be difficult for IM not to be an extension of one's self and personality. In fact, most agreed that instant messaging was an extension of self, manifested in many ways. One of the most popular methods is the utilization of a profile. Ninety-One percent (91%) of web respondents indicated that they have created a profile that is visible to other users. Profile content varies greatly, however there are several common themes including: contact information, quotes, links to websites and photos, personal news, countdowns to events, "shout-outs" to friends or significant others, inside jokes, etc. The web survey indicated that users incorporated all of these themes in their profiles, with quotes, "shout-outs" and inside jokes having the highest response rate (83%, 52% and 60% respectively). The interview subjects discussed profiles as an extension of the self in the following statements:

I mean people generally put things that mean a lot to them in their profile. Umm, you know either quotes I mean a lot or memories or you know mentioning certain specific people. (Personal Interview 4, August 19th 2005)

And I think if you look at the profile like I know the stuff in mine that is stuff that's important to me. Like right now I think it says like, that I'm home in Maryland and I know that at the bottom it there's tributes to people that I've known that have died...I like it because like they were very important to me and I want that to always be there I guess. And it almost starts conversation sometimes. You know, people will go, "whose initials are those?" and I'll say, "oh, it's so and so". And then it brings them back up so that it does not ever allow them to just kind of fade...Like, when I'm at school my profile is much more elaborate

because there's a lot more inside jokes. A lot more... like that's when I put my Greek letters in; I don't usually have them when I'm home. That's definitely when it's a lot more about what's going on school when I'm at home since I'm not on very often I'm like, "eh, I didn't really take the time to put one together." (Personal Interview 5, July 18th 2005)

Ummm, I have a few lyrics from songs that I like and kind of shout-outs to my friends and my boyfriend and that I go to Albright and a few things about me. (Personal Interview 8, July 25^{th} 2005)

Yeah, I mean I know if I put a quote in my profile it's usually something lighthearted or funny it's not usually something you know deep or you know something I'll like something of a more sensitive subject matter. That's the kind of stuff that you don't share to all your friends because anybody on your buddy list can look at your profile that has your screen name and you know I don't want somebody to see that you know what I mean? (Personal Interview 2, July 18th 2005)

It is evident that the emphasis and content of these profiles varies greatly depending on the individual. S5 places a lot of emotion and personal information in her profile, while S2 keeps his light-hearted. In each case, the user finds something that they identify with to use in their profile, whether its song lyrics, quotes, or tributes to loved ones. In so doing, they are attempting to reflect aspects of their personalities (meaning) utilizing symbols (text). These meanings are interpreted when viewed by those that the user interacts with, and meaning is reassigned based on the viewer's understanding.

Like profiles, away messages are often used in the same manner. The web survey data show that most respondents (95%) customize their away message and 83% use a quote or a thought of the day as their away message. The interview subjects again demonstrated a wide range of content for away messages, from the basic to the elaborate; however, most agreed that away messages are a reflection of the person's personality.

Yeah, you can tell a lot by away messages. Like I love putting little smiley faces and I put them all the time and then some people are always have depressing away messages and frowny faces and complaining and you can completely tell that their miserable people. And then there are other people that you can just tell

what you are doing people will say if they're happy if they're sad if their tired if they're bored. I think you can tell whether it's true or not. (Personal Interview 1, July 20th 2005)

A lot of people who are you know are really into music put up a quote about how they feel about the day. People who are really open, you know like the people you walk up to in real life and are like "oh how was your day" and they're like "oh god today was probably the worst day of my life" you know they're the people who's away message is probably like "this day sucks". (Personal Interview 10, March 14th 2006)

The extension of self through instant messaging contributes to the notion that the user's online self and physical self are portrayed in the same way and are indeed one and the same. While the subjects felt as though their online personality was similar to their "offline" or inperson personality, they were also aware that the ability to "censor" oneself or the lack of intimacy causes their online behaviors to differ slightly from their in-person tendencies.

Oh I try to keep mine to reflect my personality. Just because I think it makes it a lot easier to communicate with people and they can understand me better. (Personal Interview 3, August 20th 2005)

I try not to let it be but I know sometimes if someone... if we're having a conversation or if I'm actually taking the time to sit down and start talking with somebody if it looks like we're going to get into a fight I can get really cocky just because I know they can't see me. You definitely have more time to think about what you're going to say. So in some respects I can edit what I'm saying and it's not when I'm talking to a person when my first thought that comes into my head comes flying out of my mouth. (Personal Interview 5, July 18th 2005)

Yeah my personality is the same, it's just not as detailed because I use abbreviations and it's more like simplistic than say a face-to-face conversation with someone. (Personal Interview 9, March 6th 2006)

I...I'm pretty much the same. Like, I say the same things online that I would say in person I think. Sometimes I am, I guess it just depends on what we're talking about. I don't think it's drastically different than in person. (Personal Interview 8, July 25th 2005)

Difficulty expressing oneself

One of the noted disadvantages to text communication is that it is exceptionally difficult to convey the same meanings with text as one would in a face-to-face conversation. Absent voice cues, tone inflection, facial expressions, posture, hand gestures, and other body language associated with face-to-face communication, the message can become distorted or misunderstood as two users communicate via IM. For this reason, interview subjects indicated that it is often difficult to express oneself adequately when instant messaging.

You can't detect sarcasm, you can't detect body language, you can't see how they're reacting to you and they can't see how you're reacting to them. There are a lot of different things that you lose through instant messenger. You almost have to know the person to be able to understand how they're going to umm, interpret your conversations when using instant messenger. (Personal Interview 3, August 20th 2005)

Yeah I mean, especially in the conversation with that you can't really show like you said earlier it's hard to show emotions. It's something that you can't you know read the other person you don't know what their reaction is. If something is exciting I mean sure you can put exclamation points and smiley faces but I mean that may not show it. (Personal Interview 2, July 18th 2005)

Sometimes it's hard to... you can't really see the other person's mood you can just see what their words are. You can't tell how they're being spoken or how would they would be spoken so sometimes you can misinterpret things. (Personal Interview 7, July 22nd 2005)

S2 and S7's quotes illustrate that even the emoticons, graphic tools built into the software, can be inadequate when trying to convey emotions. The inability to convey emotions and feelings, when combined with difficulty in interpreting meanings from text in IMs, can create tension between IMers. Several subjects indicated that instant messaging has created situations that have caused tension in their relationships, mostly due to misinterpretation of a message. Consider the following statements:

Yeah, I've actually gotten in trouble with my girlfriend for saying things and you can't express emotion so it's kind of like "why'd you say that" (Personal Interview 2, July 18th 2005)

I've had many occasions...where people have misinterpreted something I've said over instant messenger. Or they or I have misinterpreted something they've said and it's led to more of a hostile conversation between them and things of that nature come up rather than just because something was said and sarcasm wasn't interpreted or something of that nature and like I said the situation turned bad pretty quickly. So I mean I've had that happen on multiple occasions and like I said, I don't know I think if those conversations had taken place in other mediums like over the phone or in person it would never have happened. So it's definitely added some stress. (Personal Interview 3, August 20th 2005)

And, I don't think it's, it's usually you know I think everyone's had an experience where you know you just misunderstand something and it turns into a bad thing. (Personal Interview 4, August 19th 2005)

Umm sometimes, I mean I've been in fights with people via instant messenger and it's been people who don't go to Albright so it's not like you're able to face them and you know talk the problem out. It's kind of like you just let it go since you are on instant messenger and you just throw up an away message and go away. (Personal Interview 2, July 18th 2005)

It is not surprising, then, that if users are having difficulty expressing themselves with text and interpreting text, they prefer "higher" forms of communication for serious matters. This is evident in the results of the web survey, which indicated that most of the conversations topics were trivial. Relationships, the latest social gathering, the days events, and gossip received the highest percentage of responses to the question, "My IM conversations are generally about". The fact that a majority of conversations are about trivial matters may contribute to users ideas that the connections formed over IM are false or less real than those formed in face-to-face contact or via other media.

Does IM contribute to a sense of community?

As mentioned earlier, IM can be viewed as a community. Its unique software allows for only members to communicate with one another, thus in order to instant message, a user must

subscribe to the AOL, ICQ, MSN or Yahoo community in order to participate. However, do users of the software view instant messaging as a community? If so, is the community already established and simply moved online, or is a whole new community created via IM? Are the ties and connections that are formed within the online community as valid as connections made in the physical world?

Bridging vs. Bonding

Norris suggests that online communities can serve two roles, either bridging or bonding (Norris 2004). Norris quotes Putnam who defines bridging and bonding networks, "Bridging social capital refers to social networks that bring together people of different sorts, and bonding social capital brings together people of a similar sort" (Norris 2004: 31). Instant messaging, when viewed as a communication tool as many of our subjects have, is a form of social capital that can serve one of these functions as well.

The web survey probed this issue only somewhat. Eighty-eight percent (88%) of respondents indicated that hey have received an unsolicited IM from someone they did not know, and only 20% of respondents continued to communicate with the person from whom they'd received the unsolicited IM. By contrast, all of the interview subjects indicated that they used IM to communicate with friends more often than anyone else, a claim supported by Jones (2002) who found that 72% of college students indicated that most of their online communication was with friends. The subjects were also asked if they felt that instant messaging more so enhanced ties with existing friends or helped to create new ties with people they did not know.

Ummm, I think it's a little bit of both. Umm, you know I've stopped talking to people online because you know like you grew distant from them because you can only talk so much about different things but then I've also built relationships with people you know during the school year you meet a lot of people and sometimes you know during the week people are doing homework and

they can't go out so you might talk to them online just to get to know them a little bit. (Personal Interview 2, July 18th 2005)

Uhh, I guess, both. I mean, I wouldn't know if I'd say make new friends because if I get just like a random message I'm kinda guarded about it. Like "who are you and why are you talking to me?" that kind of thing. But like it's good if you meet a person for the first time and like "Oh let me get your screen name" its kinda almost like getting a number nowadays you get like a screen name at a bar or something like that. Well not at a bar, but I mean you talk to the person, you hit it off, and you get their screen name. So I would say it helps develop relationships more so than just getting random IMs out of the blue. (Personal Interview 6, July 27^{th} 2005)

Uhhh I think both actually. I've met a lot of new people and become closer with a lot of people especially at the college, um through instant messaging but also my friends from home I've been able to keep in touch with and become closer with since I...especially since we're all at different schools in different areas. (Personal Interview 8, July 25th 2005)

As illustrated above, most respondents felt that instant messaging both enhanced existing relationships and helped to create or strengthen newer ties. Other subjects however, found that it doesn't help enhance ties that exist, but did help them meet new people.

Well, with people that I already know it hasn't necessarily enhanced the relationship it's just kept it there so you don't lose touch with people. And with new people it definitely helps get to know them better a little bit. (Personal Interview 7, July 22nd 2005)

Umm it's helped me meet more people kind of in the fact that if someone finds out my screen name they'll be like oh hi this is blah blah and I start talking to people but it hasn't really enhanced any friendships I mean, I don't really need AIM to be friends with people. (Personal Interview 1, July 20th 2005)

I've met people using stuff like going onto online chat rooms and stuff like that and we've ended up communicating through instant messenger and stuff like that rather than in chat rooms and things of that nature and I still talk to people that way who I've never met in person basically. (Personal Interview 3, August 20th 2005)

This variance replicated the results of Norris (2004: 40), who found that "the internet generally serves both functions, although the strength of this effect varies in important ways by the type of online group in the United States." The lack of the physical aspects of

communication combined with the idea that communication and ties created via IM are somehow false (discussed later in this section), may be factors contributing to the views that instant messaging does not serve a bonding function.

Notion of community

Because all of the subjects use instant messaging primarily to communicate with friends, and the AOL instant messaging software allows a user to maintain buddy lists of 200 people and sort their buddies into user-defined groups, it is logical that a user could derive a sense of community from using the software and communicating within specific groups. However, the results from the interviews appear to be inconclusive. While some subjects indicated that IM did contribute to a sense of community, many also felt as though IM could not contribute to community based on the lack of physical contact. Consider the following excerpts from the personal interviews:

So I would I would say... yeah it definitely helps community, you know you can be identified within the community and kind of uhh I guess keep, keep up with that community because of instant messaging. (Personal Interview 6, July 27th 2005)

I think it does. You and all your friends are all on so you're all always talking to each other so... and you can see who is on or who is not so if everyone is on you feel like you're there with everyone else. (Personal Interview 7, July 22nd 2005)

Umm, I derive community from being able to actually really interact with people and get to know them as well as you can and I think that builds community a lot better than just talking to somebody. Other than that, I just think I would say I'd probably say no to that question. (Personal Interview 3, August 20th 2005)

No I don't feel any more a part of a community by talking to them online. Like I said before you can't see anyone, you can't talk to anyone. If anything you feel less close cause you have no actual physical connection...If you have inside jokes in a profile, generally it is for a select few people not a community. (Personal Interview 1, July 20th 2005)

While subjects S6 and S7 believe community can be achieved via IM, S3 and S1 feel as though the physical connection must be present. S3 and S1 show their preference for "higher level" communications. Several subjects did however indicate that IM helped to foster a sense of community and/or connection between their high school friends or friends who are not in the same physical locale.

But, I do think it lets you form...talk more often to people who aren't right near you...Umm, you just stay better connected and I think you feel more connected to each other because you can constantly be sending messages and talking. You don't have to run into each other or make phone calls you can just be sitting there doing your homework and talking to someone from anywhere. Friends from home, you know anywhere. (Personal Interview 4, August 19th 2005)

To them I would say yes only because I forget to call them on the phone but... like my best friend from high school we'll leave each other messages all day and that's how she and I keep in touch more than the phone because neither one of us have time really to sit down and have a long phone conversation. So I mean in that sense yeah. (Personal Interview 5, July 18th 2005)

Because there's always those nights, or even days where you'll see someone online that you haven't talked to in like three years, and out of the blue you'd just be like "hey what's going on?" and without instant messaging there's no way I'd call or send them a letter. I mean I'd probably never talk to them again. Because of instant messaging I would say I'm still in contact with like 50 people that I haven't seen in probably over 3 years. (Personal Interview 6, July 27th 2005)

And Instant messenger has helped me keep in touch with some people who I haven't really seen in years so...(Personal Interview 3, August 20th 2005)

This study's web survey indicated that 64% of respondents had never set up a group conversation over instant messenger. Given the absence of group chat and the structure of the software (individual to individual communication), the facilitation of connections between individuals rather than groups is more prominent. One interview subject confirmed this, as he indicated that IM helps him remain connected to individuals rather than groups or communities of people.

Uhh, I think I actually sometimes feel more connected to people umm I know like you know during the summer when I'm not around with my friends from school that's really kind of sometimes the only way that you can feel connected to them, is having like a really good conversation online. (Personal Interview 2, July 18th 2005)

Instant messaging also has the potential to detract from community. Several respondents indicated that if they stopped instant messaging with a friend or a buddy on their list for a long duration, they might remove that buddy from their list, severing any opportunity to communicate with that person unless that person contacts them or is added to the list again. S2, S3, and S5 illustrate this point in the following excerpts:

I've definitely lost a lot of friends from talking online. Umm I know, umm friends who I lost it was just kind of like there was nothing anymore to talk about and they were just you know either maybe not even be online anymore or maybe they deleted your name or maybe they'd be online and they wouldn't talk to you and then I was just like ok and just deleted their name. Ummm, I think it's a little bit of both...Umm, you know I've stopped talking to people online because you know like you grew distant from them because you can only talk so much about different things. (Personal Interview 2, July 18th 2005)

Yeah it definitely has helped with those ties and such, um in some respects. But, with other things to like people have, I mean I've also lost contact with some people too. And Instant messenger has helped me keep in touch with some people who I haven't really seen in years so...(Personal Interview 3, August 20th 2005)

I'm already with... I'm always taking screen names off my list because it's like, we have talked for awhile but we weren't really that good of friends, so I don't know why I put their name on my list anyway. (Personal Interview 5, July 18th 2005)

Fake connection

Web survey respondents agreed that the largest percentages of their conversations were generally about trivial matters such as gossip (60% agree), the day's events (80% agree) and the latest social gathering (72% agree) rather than family, fears, and future aspirations. The trivial nature of IM interactions and the lack of the physical interactions associated with face-to-face communication appears to be a contributing factor to the idea that connections formed through

IM are not real. Several interview subjects commented on the idea of seemingly fake connections formed through IM.

Umm, I think it's kind of a fake connection because you... there are a lot of people that I feel like you talk to online that you're like oh I'm friends with that person but really you're not because they're just a person that you kind of chitchat with and it's not like you are actually spending time together and making an effort to like learn about each other it's just kind of like what friendship is about. Umm, I mean I think it makes communication as in like meeting more people easier but I feel like just because you say hi to someone online doesn't necessarily mean that you'll say hi to them the next day when you pass them. (Personal Interview 4, August 19th 2005)

I mean, it's more just like a superficial "what are you up to? How are you doing? What's new?" If I really like... if my cousin really wants to talk because he's having a bad day or he's fighting with his girlfriend we'll wait until 9:02 and then get on the cell phone. (Personal Interview 5, July 18th 2005)

Ummm, I think in some respects I would agree that it does create artificial, like superficial relationships in that I guess you can't guarantee that when you're talking to this person that that's how they're going to be in person. And I think if you get to know the online personality and then you have the like, the face-to-face one and they're not the same, you might almost prefer the person online. (Personal Interview 5, July 18th 2005)

These subjects seem to support the view that the ties established through that medium or conversations occurring across that medium are not real or are and should be of a less serious nature. This view aligns with the notion of instant messaging as the bottom rung of the "communication ladder" presented earlier in this essay.

Conclusion

In examining the three core research questions of this study: What function does instant messenger serve for its subscribers? What meaning(s) do instant messenger users attach to this activity? Does IM contribute to a sense of community?, several important conclusions about instant messaging have been reached that both support and challenge the reviewed literature. This study has demonstrated the importance of this technology in the lives of college students as

a serious medium for communication. Furthermore, it has produced results that could be the basis for further study.

This study has concluded that despite its limited features, users prefer AOL's instant messaging client (AIM). This service was adopted by subjects early in life largely due to peer pressure or peer influence, but may also have been influenced by the inclusion of the software by their Internet service provider. In many cases the subjects peer group had already adopted this protocol, leaving the subject little choice if they hoped to maintain their group ties.

Instant messaging fulfills Hoult's (1969) definition of a social function as a contribution of a phenomenon to the larger system in that IM provides its users with a quick, convenient, and cost-effective method of communicating with one another. Increased access at college due to broadband LAN networks, which allow for 24/7 connectivity, contributes to increased usage at college. Because students are nearly always online, the speed and convenience of this mode of communication is unrivaled by other forms such as e-mail or phone, which may be viewed as more formal means of communication or intrusive, respectively. Furthermore, instant messaging provides the user more control over how, when and the duration for which they communicate while also affording them to multitask by conducting other activities such as homework, watching television, listening to music, checking e-mail or surfing the internet while engaging in communication, a function that may or may not be possible within other media. Though IM has proven useful to subjects and survey respondents as an academic tool and despite this medium's utility across many functions, this technology has not been adopted for communication between students and professors. This is largely due to student's concerns about their own privacy being compromised when professors had access to their profiles and away messages.

This study has also concluded that instant messaging provides its users with information about their buddies, acting as an answering service and a bulletin board. Subjects noted the advantage of being able to look at a user's profile or away message to learn more about their current mood, feelings, location or activities. Because most subjects and survey respondents indicated that they create a profile and use away messages on a regular basis, these text representations of feelings, moods, and emotions have come to be viewed as an extension and/or reflection of one's personality. Users perceive these reflections as extensions of the personality, thus users view the conveyed meanings in these profiles and away messages as real representations of the person with whom they are communicating. These findings are contrary to McQuillen's findings (2003: 616), which indicate that, "relationships are not being initiated with 'real' people, but with the projected, edited, 'spun' images the users share online."

The findings of Nuestadtl and Robinson (2002), rather than those of Nie and Hillygus (2002) or Kraut (1998), appear to be validated by this study. That is, online communication, in this case via instant messaging, does not displace or compete with face-to-face interaction, but rather complements it. This is evident in several of the subject's notion of a communication technologies hierarchical ladder. Thus, instant messaging is viewed as just another way to stay connected, added to the e-mail and the cellular telephone. Subjects prefer more intimate forms of communication when available, relegating text communications such as instant messaging and text messaging to the bottom rung of the ladder. This occurs mainly because of the perceived fakeness of online ties and the difficulty conveying ones emotions and feelings using text.

Because text communication lacks voice cues, facial expressions and other physical aspects of communication, subjects indicated difficulty in adequately expressing their own emotions and feelings via IM and in turn interpreting the meanings conveyed by others. It is

logical then that web survey respondents and interview subjects alike reported that the content of conversations was mostly superficial or trivial. Because the technology gives users the feeling that the connections are superficial or fake, these subjects are less likely to share serious or personal information using that medium. Instead, interview subjects preferred a telephone or face-to-face communication for more serious matters. These findings support those of Quinn (2003: 1), who found that, "Conversations often consist of inconsequential small talk, but can offer opportunities for more substantial social support...teens report that they enjoy IM conversations far less than they enjoy face-to-face visits and phone conversations".

This study is inconclusive on how IM is perceived as a communal activity. Some subjects feel very strongly that the physical connection must be present in order to create such an environment, thus community can't exist at all online. On the other hand this study has demonstrated that instant messaging serves more of a bridging role than a bonding role between groups of individuals in that it has helped users to meet many new people, adding to an existing community. These results confirm those of Wellman who states:

The Internet adds to existing face-to-face and telephone contact. Rather than increasing or destroying community, the Internet can best be seen transforming community such that it becomes integrated into rhythms of daily life, with life online integrated with offline activities. (Wellman, Boase, and Chen 2002: 151)

This study is important because it has filled a gap in the research that existed over the largest percentage of the population that is using instant messaging most frequently. Furthermore, it has demonstrated how a phenomenon such as this one becomes internalized and becomes a part of a tradition rather than being recognized as a phenomenon. For this reason, instant messaging can be regarded as a functional latent social function that greatly impacts the ways in which these students communicate.

While this study is a testament to how students use instant messaging at a small liberal arts school, it cannot be generalized to include all college students due to a lack of a random sampling method, however that direction could certainly be a valuable pursuit in the future. In addition, I would recommend that future qualitative research on this subject conducted in the same manner, include a modified web survey that investigates in greater depth profiles, away messages, and conversation content to better align with the interview data. Future studies may also include data from usage habits both before and after college to provide a comparison.

Finally, as instant messaging continues to grow in popularity and validity as a communication technology, it will no doubt become a larger and more integral part of our communication, changing and supplementing how we communicate in the process. In the words of Wellman,

"The Internet adds to existing face-to-face and telephone contact. Rather than increasing or destroying community, the Internet can best be seen transforming community such that it becomes integrated into rhythms of daily life, with life online integrated with offline activities. (Wellman, Boase, and Chen 2002)

This quote, when applied to instant messaging, summarizes this study, which has demonstrated the ways in which IM has already become integrated in the lives and offline activities of these college students. As a technology which has such a profound impact on such a large portion of our population, instant messaging will demand the full attention of social researchers, in order to further explain and understand the ways in which we communicate with one another so that we might better facilitate that process and meet societal needs and expectations for communication.

Appendix A - Glossary of Terms:

IM: An instant message or the technology of instant messaging. An instant message is text exchanged synchronously between two users on a computer network.

Buddy: A buddy is an online friend who appears on a list. A user can communicate with a buddy via instant message, view information about that buddy, share files, etc.

Buddy List: A list of buddies.

Profile: User generated information about oneself that is visible to buddies and other members on the network.

Away Message: Most IM clients (software programs) allow a user to set a status. An away message is a standard or custom-made text message indicating to buddies that the user is not at their computer or is otherwise unavailable.

Emoticons: A series of "smiley faces" designed to convey specific emotions



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Appendix B – Interview Instrument:

INTERVIEW GUIDE (Revised 7/21/05)

Preliminary Questions:

I now need to ask you if you have any questions regarding the study.

- 1. Would you like to participate in the study and if so, is it okay to record the interview?
- 2. May I please have your full name?
- 3. Can I please have your home address and telephone number?
- 4. Do you have an email address? May I have that?
- 5. Would you like me to send you a copy of the digital file after we are finished?
- 6. May I have your age?
- 7. Do you work?
- 8. How many hours do you work?
- 9. Are you currently married?
- 10. Does your spouse work outside the home?
- 11. What does s/he do?
- 12. How many hours does s/he work per week?
- 13. Do you have any children? How many? Boys or girls? Ages?
- 14. Could you please tell me your total household income?

Interview Questions:

- 1. When/how/why did you start using instant messaging (IM)?
- 2. What chat clients do you currently use? Why these?
- 3. Which chat clients have you used in the past? Why these?
- 4. About how much time would you say you spend instant messaging in a typical day?
- 5. What other forms of communication do you use to communicate with others? (e.g. email, cell phone, etc.)
- 6. Who do you normally instant message? (e.g. parents, friends, significant other, etc.)
- 7. What are some of the reasons that you use instant messaging?
- 8. What advantages (if any) do you feel that IM has over other forms of communication?
- 9. Do you believe that instant messaging has helped you become a better communicator with those you IM with? Why or why not?

- 10. Do you believe that instant messaging has enhanced your ability to feel connected to others?

 If so, how? If not, why not?
- 11. Do you believe that IM can help contribute to a sense of community by those who use it? If so, how? If not, why not?
- 12. Do you believe that using instant messaging is, in any way, a reflection of your personality?

 If so, how?
- 13. Do you ever feel that your online personality while Im'ing is somehow different than your "actual" personality? If so, in what way?
- 14. Has the use of IM ever created a problem or contributed to tensions in your life in any way?

 If so, how?

Conclusion:

- 1. Can you recommend 2 or 3 people that might be interested in talking with me?
- 2. May I contact you again if I need more information?

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