#### ABSTRACT

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	Thomas James Bern, Masters of Arts, 2008
Directed By:	Dr. Lory Dance, Sociology Dr. Melissa Milkie, Sociology

This study is a qualitative investigation into the effect of internet technologies on the social lives of college students who frequently employ them. Three research questions are addressed. First, how do college students understand the various roles or functions of the Internet in terms of their social ties with others? Second, what problems related to interaction occur through the use of these communication technologies? Finally, what problems or effects related to the notion of "the self" occur when maintaining social ties via Internet communication technologies? Focus groups with college students indicated that they could not possibly imagine maintaining their social lives without them. Among the limitations and problems frequently indicated were a difficulty in using these communication options to discuss important, sensitive, or emotional issues with significant others. Finally, these college students appear to be more authentic online and less-fragmented by this form of communication than previous literature would suggest.

## INTERNET COMMUNICATION AMONG COLLEGE STUDENTS: ITS ROLE AND PERCEIVED EFFECTS ON INTERACTION AND THE SELF

By

Thomas James Bern

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Advisory Committee:

Dr. Lory J. Dance (Co-Chair) Dr. Melissa A. Milkie (Co-Chair) Dr. Steven Martin

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#### **Introduction: Internet Communication and Interaction**

In the last decades the telecommunications and Internet industry has proliferated and expanded into many facets of the lives of Americans. What was once primarily a technology used in the workplace has broadened into wider applications for a much more diverse group of users (Cummings and Kraut 2000).

The different uses of the Internet that may account for its social impact are still to be established. Using the World Wide Web, with its access to informational and commercial resources, is quite different from using the Internet for interpersonal communication. One might expect that highly interactive interpersonal communication with friends and family might have more beneficial effects on social involvement and psychological well being than using the Internet for information, playing computer games, or communicating with strangers (Kraut et al. 2000, p. 26)

To this end, this research project is an attempt at understanding such

communication through the experiences (and words) of those who employ it.

Understanding the impact of the Internet on people's social relationships requires two types of evidence. First we need to know how computer-mediated communication affects the quality of particular social interactions and relationships. Are the interactions and relationship sustained online better than, as good as, or inferior to those sustained by other means? Second, we need to know how computer mediated communication affects one's mix of social interactions and relationships. The impact of the Internet is likely to be very different if it supplements communication with already established friends and family or if; instead, it substitutes for more traditional communication and traditional social ties (Cummings et al. 2000, p. 3)

As is suggested in the above quote, at the conclusion of this project, I hope to

have gained a deeper understanding of the role of IM and email within the social lives, the relationships, and the selves of its users. Three areas of scholarly literature are reviewed below related to each of these domains: An extended Uses and Gratifications Approach, Social Psychological work on interaction and Social Psychological and Internet literature on the Self.

Part I of the literature review introduces a uses and gratifications theoretical framework for the discussion of college students use of internet communication technologies. This will provide a backdrop for discussing how important these technologies have become to the social functioning of these students. Part II discusses literature focused on interactions with others as it is affected by modern communication mediums. This discussion allows a way to look at the findings surrounding how the meaning of communication through these mediums is perceived by the college students who use them. Finally, Part III of the literature review, the uses and gratification approach is extended in order to speak to the question of authenticity of self as it is affected by the frequent use of these technologies. As this thesis will show in Part I, the students report that the technologies are fundamental to the functioning of their social lives. The results reported for Part Ii indicate that there, indeed, are difficulties related to interaction both between persons who are close to the individual as well as those with weaker ties. Finally, in Part III, the findings demonstrate that there is little perceived loss of authentic self suffered by the students who participated in this research.

#### Part I. A Uses And Gratifications Approach to the New Medium

A recurring theme has occurred amongst those attempting to study this new communications medium. A return to the use of a uses and gratification approach to the study of these technologies has emerged. Researchers engaged in this approach examine the functional outcomes for the users. This approach has taken primacy over a social network capital (Grannovetter 1985) in research such as the current study, because it

allows for a closer examination of the impact of the studied technologies on the self. Chiefly it allows for a focus on the motivations and benefits for the individual user outside of a given social network. This is especially important since the decisions made and effects experienced by individual users may extend beyond any one social network. The beginning of such investigations into the gratification provided by media can be traced back to studies by Lazarsfeld and Stanton (1942). The fundamental key to these approaches (which is followed through in the present attempt) was a methodological approach that allowed respondents an open-ended opportunity to describe the reason they partake in such media endeavors. This type of qualitative approach allowed for a later attempt to group respondents answers into labeled categories, regardless of the frequency of the category within the overall population. Only later were researchers interested in linking these statements of use and gratification to psychological and sociological "needs" that may have driven their pursuit. Beginning with McQuail, Blumler, and Brown (1972), the audience is perceived as active and mass media use is perceived as goal directive. Once mass media begins to become more interactive, the value of this approach becomes more obvious.

It is only a couple of decades after the original work of Lazarsfeld and others that a broad approach to the understanding of uses and gratifications comes into form. The elaborate scheme of Katz, Gurevitz, and Haas (1973) attempts to explain how individuals use media to connect (or disconnect) to other types of people whether strangers or those who are close in "real life." It is only in this type of understanding that attempts gain perspective on the full range of reasons why people feel the need to be "connected" to others. This approach therefore, is necessary as we move into a communications age where mass media is increasingly centered on connection and interaction.

Once an investigator has determined which needs are being fulfilled for an individual by a specific media source, it is another matter entirely to attempt to understand the psychological and sociological drives that create that need; to understand why. In thinking through this connection, Katz et al (1973-1974) develop a series of ways in which to link real life social situations to the need for media consumption. These are:

- 1. The social situation produces tensions and conflicts, leading to pressure for their easement via mass media consumptions (Katz and Foulkes 1962).
- 2. The social situation creates an awareness of problems that demand attention, information about which may be sought in the media (Edelstein, 1973)
- 3. The social situation offers impoverished real-life opportunities to satisfy certain needs, which are then directed to the mass media for complimentary, supplementary, or substitute servicing (Rosengren and Windahl, 1972)
- 4. The social situation gives rise to certain values, the affirmation and reinforcement of which is facilitated by the consumption of congruent media materials (Dembo 1972).
- 5. The social situation provides a field of expectations of familiarity with certain media materials, which must then be monitored in order to sustain membership of valued social groupings (Atkins 1972).

While these five connections serve as a wonderful backdrop for a pursuit of understanding into the motives surrounding the flocking to this newest communications

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medium, as we will see, they do not fully allow for cross application into the more interactive technologies which this research attempts to study.

The first item in the above typology is probably the most vague and mysterious. Certainly this mystery is not any less when such a statement is applied to individuals' reasons for seeking out connection via email and the Internet. Obviously, life does produce tensions, and in a purely escapist manner, it can be understood how previous media such as television and radio served as distraction from these tensions, but with the development of more interactive technologies, this escapist approach seems limited. Or does it? As will be discussed later, and as is mentioned in number three of the above list, these media outlets often go beyond the escapist in fulfilling needs that persons do not find in their ordinary social situations.

The second reason is very applicable to the Internet. With the amount of information (trustworthy and otherwise) available on the Internet growing exponentially, it is easy to see why people in search of quick access to information would seek it out in virtual space. Whereas once the problem was limited access to information about the world, the problem now has become filtering the overwhelming amount of information that the Internet makes available.

The third rationale behind the uses and gratifications people find in the media is perhaps the most fascinating as it relates to communication via online technologies. The fulfillment of desires not possible in "real life" is a subject which Internet researchers have taken great interest in. The Internet as outlet for identity is something that will be discussed shortly later in the investigation of the work of Sherry Turkle (1997, 1999) and others. One of the underlying goals of this research is to inquire of individuals whether or not they have differing identities online versus their "real" existence. And if so, how do they attempt to reconcile the two and what impacts do such identity divergences have for the individual.

Interestingly, it appears as though the fourth and fifth motivations can be considered, vis a vis the Internet, as connected. As already discussed, events or social situations produce events or problems which one may attempt to learn more about through mass communications. What this investigation will examine is the effect to which the Internet provides a means to uncovering information about these problems. But it will also inquire of individuals the extent to which the means has become as important an object of knowledge as the events themselves. In other words, for college students today, is it important to be knowledgeable about the use of the Internet in order to maintain social ties and have a common level of understanding regarding current events and phenomena in order to engage in social interaction with their peers? Is there a culture amongst young people today that requires a knowledge and use of the Internet and email?

Deriving from an extended Uses and Gratifications approach then, the research question to be addressed is how does the internet (IM and email) function in relation to social lives of college students?

Three conclusions, solely or in conjunction with one another can be reached about the role of these technologies in the social lives of the students studied here. First, it is unlikely that escapism will provide an adequate answer for the use of email or the Internet. Certainly for some, it provides a portion of the answer, but there are too many functional uses of these tools for this to be posited as the sole "use or gratification" to be found here as it was often suggested with television or movies. Second, it is only slightly more likely that the purely functional or informational/communicative goals of Internet communication will be observed in the responses of focus group participants. While this may be the initial, superficial explanation for the use of the Internet, it is important that the research investigates further to understand social or psychological reasons, beyond the pragmatic as to why young people have taken to these technologies so quickly and so overwhelmingly.

A third outcome emerges as most likely. A personalized technology that can provide nearly any use or gratification the user desires. Therefore, when analyzing respondents' answers it will be important to look for how technologies are used for social connection and expression. To that end, this research will employ focus groups of college students to examine the role these technologies have in their social lives. It is this age demographic which has been most exposed to these technologies and for the greatest portion of their lives. The adaptation to them, has therefore, been quicker and easier, and they provide, arguably, the best insight into how these communication mediums will continue to shape the social landscape. Below I review literature related to interaction problems and the Internet.

#### Part II. Internet Technology and perceptions about interaction with others

Classic work within social psychology focuses on interaction. Mead (1934) posits that interaction is fundamental for understanding others, ourselves, and indeed, for making society happen. Yet Mead was working in a context in which virtually all interaction was face to face. Mead's notion of a self is one which is structured by the roles an individual assumes in relation to those around them. How are these roles altered when they are played out in a fast-paced virtual realm? James also places an enormous emphasis on social interaction for the definition of the social me (one of his three components of the self) (James 1890). Given the speed and multiplicity with which such modern computer-mediated interactions take place, is the self-reflective benefit Mead envisioned resulting for the self from social interaction still a viable notion? In other words, given the high volume and speed of Internet interactions, is the self still able to gain reflective insight through such communications? Gergen's (2000) answer to these question is to observe and predict dramatic changes in the way people communicate (technologically) and in the speed and multiplicity of these communications.

Several Theorists have talked about the difficulties of social interaction via online communication. It is likely that "meanings" get distorted when communication is not only, not face to face, but it has no ability to communicate with voices. Meaning that is distorted may lead to a breakdown of interaction according to these classic theorists.

Thus, ties with significant others, with who a face to face relationship already exists, may be somewhat difficult online. That is because of not being able to monitor or assess the other during interaction.

Ties with less significant others may too be difficult as Gergen (2000) suggest. It may be difficult to maintain the preferred social distance from the people occupying such ties. Given the power speed and accessibility of the technology, people may feel as though they have too many interactions with people they who they do not feel "close" to. Or because of the lack of face to face interaction, that people they are not "close" to, feel too comfortable talking to them online about problems they don't feel appropriate discussing. This leads to research question two. Here, the current research investigates what problems are encountered by college students who maintain social ties through online interaction. Below, I review social psych literature on the self-concept, as well as recent work by internet social scientists who discuss the self.

## Part III: Escape versus Compensating Identity Outlet: An extension of the Uses And Gratifications of the Internet

Sherry Turkle is one of the pioneers in studying virtual identities and their relationship to the identity of individuals in "real life" Through her investigations of MUDs (multi-user dungeons) much has been learned about how people compensate for their lives perceived shortcoming in a virtual world of their own making. MUDs are virtual habitats that are programmed by the user or in collaboration with other computer users. People interact via computer and keyboard to facilitate interactions in this virtual space. These interactions are far less bounded (at least logistically) by constraints of geography, income, and social ability. For many, Turkle found, these environments provide a more satisfying arena in which to exist socially (Turkle 1996).

While this investigation does not specifically deal with such role-playing in people's use of the Internet, it is a subject which the investigator is keenly open to in the responses received from focus group participants. Certainly, it is possible to alter ones persona and exhibit differing characteristics online than one would in face-to-face social interaction. Physical distance and anonymity allow for this, and this divergence of "selves" is one of the more interesting manifestations of the virtual communications of the Internet and email. Certainly, many users may simply use these tools to facilitate expedited communication without any conscious altering of their personalities. Even in these cases, however, it may be possible for respondents to self-report manners in which different aspects of their "real life" personalities are given greater or less voice in email or Internet communications; ways in which they are more or less "themselves" through the use of these technologies. Toward this end, the focus group seems ideally suited toward the investigation of this phenomenon in that, through discussion, participants may recognize changes in their personality online as opposed to off that hadn't occurred to them prior to witnessing someone else admitting similar.

The result, for Gergen, is that the self becomes saturated by these interactions and previous notions of an objective, more knowable self become far more hazy and difficult to negotiate for the individual (Gergen 2000). Will we find this to be the case with the first generation (today's college students) who have known these technologies most of their lives? Will they, indeed become saturated and confused as Gergen envisions or will a hierarchy of interactions occur as suggested by Rosenberg's discussion of significant and non-significant others (Rosenberg 1979). In other words, if it is indeed true that the number of interactions increases for the individual situated in a computer-mediated context, how will this effect the role these interactions has upon their perceived self?

In the end, it is hoped that the previous literature of the self and of uses and gratifications can be forged in a manner in this research, so that we can discuss the ideas of altered identities in terms of uses and gratifications. In this way the theoretical work of Katz and others will have been extended to the new millennial technologies. There is indeed something dramatically different between passively watching television and communicating with friends or strangers across hundreds or thousands of miles via email and the Internet.

These differences also affect the applicability of Gergen's work on the saturated self. While he anticipates and discusses social communication technologies, they are grouped with other technological innovations such as the proliferation of television channels and other media outlets (Gergen 2000). While it is true that all of these technologies play a part in the saturating of the post-modern self, it is important to understand the social differences between them. Gergen views such postmodern communication technologies as allowing the social actors involved to portray themselves inauthentically which creates a world of social actors for whom there is less objective truth and this exacerbates the social saturation of the user who has to try to figure out what information can be believed and which should be discarded as inauthentic. Certainly Erving Goffman's (1963) work on self presentations would suggest that this is a reasonable concern. If human beings are already conceived of as actors who play parts in order to satisfy the needs of specific interaction (Goffman 1963), the distancing and often anonymity-creating realm of the Internet will only make this "play" more difficult to figure out for the various actors. However, the present study seeks to ascertain what amount of college students' Internet communication is actually anonymous and how much difficulty the actors truly have in judging the authenticity of actor's behavior.

#### **Summary and Research Questions**

In this section, I will summarize some of the major aspects of investigation sought after by this research project. First, this research will take an extended "uses and gratifications" approach towards the meaning of the Internet communication to users. Of foremost interest will be the self-reported benefits of the use of these technologies for the focus group participants. Through follow up questioning and analysis then, this research will attempt to link these uses and gratifications to underlying psychological or social needs. It is hoped that trends will emerge from these focus groups data will allow analytical statements to be made regarding what social functions these technologies serve for the college students.

Second, based on classic social psychological work on interaction, this research seeks to understand perceived problems in interactions that result from this new form of communication. While much literature has focused on the quantity of interactions possible with this new mode, and how it might impact the sociability of people, here I examine the perceived quality of interactions about college students.

Third, based on research on the post-modern self and identity, I examine how these technologies affect the self; both self-presentation in the form of authenticity, and the potential fragmentation of the self as suggested by Gergen, but not assessed subjectively for those who engage in these forms of communication. Thus, the three research questions are as follows:

- Research Question 1: How do college students understand the role (uses and gratifications functions), of the Internet in terms of their social ties with others?
- Research Question 2. What are the problems related to interaction that occur with maintaining social ties to others via IM and email.?
- Research Question 3. What are the problems related to "the self" that occur when maintaining social ties to others via IM and email?

#### **METHODS AND SAMPLE**

#### **Focus Groups**

This investigation will employ focus group methodology in order to gain a deeper understanding of the manner in which email and the Internet impacts the "social" lives of its users. The main benefit of this type of methodology is its ability to gain a contextual understanding of the social phenomenon in a social setting and to provide details that would be lost in a solely quantitative research undertaking.

Focus Groups have achieved a great level of success in unearthing people's opinions about a given social phenomenon. For example, in Jhally and Lewis's (1992) work on enlightened racism in the Cosby Show, focus groups were used to build a body of data consisting of people's discussion of the show. In this way, rather than simply having people's reaction to a question, you have a group's discussion, which is more likely to uncover the controversial. Because they were dealing with sensitive discussion areas like race, "The groups were made up of families and/or friends; (the) main requirement was that group members should be close to one another and feel comfortable about watching television together." In an informal setting, conversation could be allowed at appropriate moments to flow freely without interruption from the interviewer (Jhally and Lewis 1992).

In Shively's paper about the perceptions of western films among various ethnic groups, focus groups were used in order to create a specific dynamic meant to facilitate discussion between members of the same racial groups. Anglos were matched with Native Americans and then a discussion of the presentations of race in western films was begun in groups segregated by race. In this way, representatives of these two groups were matched on various demographic characteristics. The discussion that followed allowed for easy comparison on the effects of one's ethnic identity on their impressions of western films and the presentation of "cowboys and Indians" therein. While this precise approach will not be employed in this study, the ability to gather demographic data and use it in conjunction with focus group statements by the individual participants can add another level of analysis to the current project.

In Liebes and Katz work on different cultures understandings of western television programming, focus groups are used to uncover various ethnic groups reactions to the popular U.S. television show Dallas. In this way, the researcher is left with a discussion of the topic rather than simply one person's reaction to a given question. "Indeed, some of our discussion groups took off on their own almost from the initial question and virtually ignored the interviewers who had a hard time intervening with the subsequent questions" (Liebes and Katz 30). This methodology, therefore, holds great promise for coming closest to replicating natural settings and therefore deriving people's actual impressions of a given social phenomenon. In this way, focus groups allow researchers a glimpse into people's impressions as they might be given to a friend. This is most likely, a more accurate depiction than that which would be given, one-on-one, to an unknown researcher.

While the three above cited examples comprise more intense research efforts than the current endeavor, there is strong reason to believe the same dynamic can be accomplished on a smaller scale. Focus group research, while not easily generalizable, provides a great benefit to social scientific understanding of a social phenomenon. When set against a backdrop of quantitative data regarding people's email use patterns, such research allows for a greater depth of understanding as to what these patterns may mean to those who engage in them. In this way, this project will have a small but rich body of qualitative data from which to draw regarding how people have incorporated this technology into their daily life and how they believe it has impacted their social lives.

The main advantage focus groups offer is the opportunity to observe a large amount of interaction on a topic in a limited of time (Morgan 1997). In this way, this project will be able to capitalize on an actual conversation about the varying approaches and reactions to this technology, rather than simply relying upon survey responses.

"(Another) advantage of group interviewing is that the participants' interaction among themselves replaces their interaction with the interviewer" (Morgan 1997). This will be particularly important because I will be interviewing those younger than myself and I may not know the type of questions to ask which would elicit responses indicative of the manner in which undergraduate college students use such technology. This information is far more likely to emerge from interactions between members of these groups.

As Krueger and Casey note, focus groups work because they "promote selfdisclosure among participants (Krueger and Casey 2000)." In his studies of selfdisclosure, Jourard found that "subject tended to disclose more about themselves to people who resembled them in various ways than to people who are different than them (Jourard in Krueger and Casey 2000)."

This type of rich description is the very goal of choosing the focus group methodology chosen for this project. It will represent one of the few current attempts to gain an organized understanding of this newly emergent social phenomenon in the words of those who use it.

#### Sample

To recruit respondents, the author contacted prior students from undergraduate courses to participate. I stated that the study would involve how the students employ email and IM for personal and school uses. Of seven students contacted, five students quickly agreed and recruited their friends. This method of snowball sampling is appropriate for this technique and research question. The environment is then most conducive to disclosure about the internet and sociability. The recruitment process began with one individual and inquires will be made as to whether they have 2 or 3 friends that would also like to participate. The participants will be more likely to talk openly among their friends then in a room filled with strangers.

The five focus groups consisted of a total of 17 people, all enrolled at the University of Maryland-College Park. Two of the groups contained four people and three groups had three persons each. Of the 17 respondents, eight were sophormores, seven were juniors, one a freshman and one a senior. While the majority were social science majors, there were two engineering majors included, as well as a computer science majors and several pre-med students. Overall the groups contained three African-American students, two Asian students and one Latino. The rest of the students were Caucasian. With only one exception, the groups were comprised of friends who knew each other fairly well before participating in the project. The names that are referred to in this study are pseudonyms.

#### **Interpreting the Focus Group Data**

Once the focus groups were completed, the process of combing through the data for relevant themes and information began. First, I looked through the transcripts of the focus groups conversations for patterns of explanation. In other words, phrases and segments of conversation were selected for further analysis based upon the inclusion of specific concepts central to this work. While it is important to allow coding structure to flow from the conversations (data) themselves, it is hoped that they will further the understanding of the core areas of interest for this research and investigation. Because of this method of coding, it will be possible to make statements that generalize to the overall experience of those who took part in these focus groups. There was not overall consensus regarding everything on the part of the participants in addressing these themes found through a careful coding of the transcripts. When findings are presented, I indicate what portion of the respondents agreed with the general consensus. An attempt was made to address as many points of view as there were on a given question or topic by presenting minority viewpoints.

This coding technique is borrowed from grounded theory method of qualitative analysis. As Strauss states: "The initial type of coding done during a research project is termed 'open coding'. This is unrestricted coding of the data. This open coding is done by scrutinizing the field notes, interview, or other document very closely: line-by-line, or even word-by-word. The aim is to produce concepts that seem to fit the data (Strauss 28). When used in actual grounded theory research, this open coding is the first step of the process, which then informs further investigation. However, for the purposes of this investigation, the same technique will be employed in order to get a handle on the data and to be able to present coherent and insightful themes gleaned from the data.

As was mentioned earlier, the strategy adopted for sorting through the rich data that resulted from these focus groups was that of open coding. What follows is analysis derived from that technique. After completing the focus groups, the conversations were transcribed and then important portions of the text were sorted by the extent to which they answer or speak to the three research questions set out by this project. Through this process, general themes emerged which will now be discussed. It is believed that these themes will be informed by allowing actual user's words to paint a portrait of the meaning of the use of these technologies.

#### RESULTS

Here I present findings related to the three research questions described above. The first research question is how do college students understand the role (uses and gratifications functions) of the Internet in their social ties with others? Among the important findings include reports of staggeringly high levels of IM and email use by college students. In addition to the high levels of use, are the numerous arenas of life into which these technologies have been integrated by the students participating in this research.

# Internet Communication Technologies are Fundamental to the Social Interactions of College Students

Research Question 1: How do college students understand the role (uses and gratification functions), of the Internet in terms of their social ties with others?

The initial general finding to emerge in the course of these focus groups with college students was the high rates of use of Internet communication technologies. Most

of the focus group participants indicating they spent at least two or three hours in front of a computer a day and several indicating much more than that. For most students, the use of Internet Messenger (IM) had already surpassed email as the preferred form of casual Internet communication. This program allows one to converse via the keyboard in real time with multiple people at once in separate conversations. Many students described having their IM programs open all the time, allowing friends and relatives the opportunity to begin a conversation with them at any time they were around their dorm room or computer. This ability is aided by the fact that most students were living on campus and had computers that were employing the University's high-speed Internet access.

#### Advantages

It is important to understand that most of these students have lived most of their social lives (at least high school and beyond) with these technologies and are very well versed in their use (both technologically and socially). They were quick to point out the advantages to email and IM over a phone call in most instances. One student, Kelly, summed it up well:

IM is perfect for making plans with friends cause information about what is going on can be spread very quickly and you can decide what you are doing in the course of a few minutes rather than having to make a bunch of phone calls back and forth to a bunch of different people.

This statement was typical of the way most students described the function of these technologies. Remarks such as this one formed the bulk of the coding category referring to user's comments regarding the use of the technology. This is a theme that would come

up again and again as participants were asked to describe the effect of IM and email upon their daily lives.

#### Procrastination

With a few exceptions, most students admitted that most of what was discussed in these forums was far less intellectual than schoolwork. Tim, for instance, said, "Sure, I use it to talk to people about my papers and get ideas for things I'm working on, but mostly I use it to procrastinate. At any hour of the day, it seems like there is always at least a friend or two that I can chat with and avoid my work". Many students, in fact, were quick to point out that IM rivaled television viewing for the activity that took up the most of their free time. Debbie lamented,

Even when I write papers, I'm always chatting with friends on IM, it makes it hard to concentrate, but it's a lot more fun than writing papers or doing homework.

The issue of the use of IM and email for the purposes of procrastination came up

again and again. Since most participants admitted that they did most of their schoolwork

via the computer, IM and email were always handy tools of procrastination. As Jill said,

You can be sitting at the computer, making it look like you are working hard, but can avoid doing your actual schoolwork because of all the conversation you are taking part in while trying to work. I have to shut off the IM and not check my email in order for me to get any real work done.

This theme was parroted by other people throughout all of the focus group sessions. Several students who also worked at part-time office jobs said that the procrastination they took part in online within an office setting was even greater. They described having great difficulties getting work done because they spent most of their time interfacing with friends who were also online during the day. In this way, we can begin to see the functionality of Internet communication technologies in a more well-rounded way. We can understand that while these mediums provide great timesaving assistance for many, at other times, they have the exact opposite effect on efficiency, by providing an opportunity to escape from the task at hand. In this way, while all participants lauded the *possibilities* provided by IM and email, many were quick to admit that they often abused them or used them as a means of distraction.

#### **Talking With Friends**

Most students agreed that while email was good for more official purposes, including asking a professor or teaching assistant a question, that IM was the preferred method of talking with their friends. This is due mostly to the fact that you can, assuming the other party is online and in front of the computer at the time, get an instant response, and the conversation can continue like a typed phone call. Susan summed up the obsolescence of email well:

If I'm gonna take the time to actually think out an entire statement to someone and type it all out and make sure it makes sense, I might as well go talk to them. With IM it's more like a conversation.

Most students said that they still use email as a way of communicating with family, but didn't use it as a day-to-day regular communication tool. IM had supplanted that function.

The function that these technologies fill, then, is obviously a complicated issue. It is a matter of context and purpose. Certainly, every student agreed that when used properly, IM and email have facilitated quick conversation and the transmission of information in an expedited matter. The possible downside, as described previously, is the tendency described by many students to overuse the technology for social purpose to the expense of their schoolwork or other obligations. In this way, this technology is no different than the telephone, which shares both of these possible uses. It is important to recognize that nearly all students demonstrated their capability to appreciate this consistent "contextual" understanding of the role of the technology.

Upon a first pass through the conversations resulting from these focus groups, the reader would most likely be struck by the excitement most respondents expressed for these communication technologies. Most responses to do you use them and like them ranged from, "yes, it's very useful" to "I don't know what I would do without it". It was hard for many students to remember not using IM and email to communicate with friends. A large number said that it would be very hard to feel as connected to other people and to events and information that was important to them without it. Such support can be summarized well by Julia's comments.

It's (IM) the way I find out about what's going on. I don't have to look for all sorts of information on my own. My friends can send me interesting articles I never would have taken the time to find on my own. I can chat for a bit then take a break and come back and talk to them later. I don't have to exert the same amount of energy to feel connected to people.

Sentiments similar to this were quite common, with focus group participants exchanging stories of how they were able to get social events planned without having to have everyone in the room at the same time. Overall, the students who participated described themselves as fairly social and as having a fair to large number of friends. It is important to note that many students found it difficult to consider questions regarding how the Internet affected their communications with their friends. Marcus put it this way: That's like asking my mom how the phone helps her stay in touch with her friends. Of course it does, but it's hard to talk about cause you kinda just take it for granted.

Given its narrow scope and qualitative methods, this research is departure from many of the larger, more quantitative attempts to understand the Internet communications phenomenon within people's social lives (Kraut 1997, Cole 2000). Since this investigation was limited to college students under the age of 23, the findings reflect the reactions of individuals who are most likely have the highest levels of use and acceptance. In terms of adapting their social lives to these technologies, and vice versa, for most of the people involved, the process had already been completed. Therefore, it is difficult to gauge the effect on sociability in a before and after manner. Most students had a very difficult time considering how things might be for them socially without these technologies.

The conversational approach that seemed better suited to the investigation was to begin a discussion of potential or real drawbacks to these forms of interactions. Once this conversation was initiated, students were able, amongst themselves, to develop notions of the limitations of these technologies. Then, in turn, they spoke openly, about how these limitations have, on occasion, negatively impacted their social experiences. Again, however, it important to note, that among the students who participated, none of them had gone so far as to stop using these forms of communication.

A second general finding emerged in terms of how these technologies were part of the students' social lives. Using the open coding schema, it was possible to sort through various ways in which students felt that their social interactions were detrimentally effected by the use of IM or email---the quality was different than in "normal" face to face interaction, as will be detailed in the findings presented below on interaction. But here it is worth noting that students felt the overall quality of their social lives as lowered, through "personal disconnection." Many students expressed the feeling that too many of their interactions or conversations took place in the ether of online space. They described their apparent inability or difficulty in actually meeting personally and physically with their friends and acquaintances. Many said it was "just too easy" to IM them, so that they didn't take the time to interface personally with people. Several students described their recognition of the need to get away from the computer more often in order to develop stronger, more often in order to develop stronger, more personal connections with people. They stated, that while IM and email facilitated many friendships it often served as a hindrance as well. Kathy said:

Sometimes, I feel like I'm drifting away from my friends even thought we "communicate" daily. It isn't until I meet up with them or go out shopping with them or whatever, that we are really able to connect.

This notion came up again and again. Participants said that they too often used IM inappropriately and that it unfortunately served as a replacement for "real" communication. It is through pondering this drawback, that we develop a richer understanding of the diverse effects on sociability that they Internet has created. While it is quite useful for keeping in touch, it provides a convenient but flawed method for strengthening significant interpersonal bonds. As with most social phenomena, people's individual experiences run the spectrum of possible outcomes. One participant, for instance, stated that she had taken great efforts to scale back their Internet use as they felt it was really keeping them from "living their lives." In other words, students, to a greater or lesser degree were aware that email and IM were best used to supplement real

communication and that if it began to replace more meaningful "in-person" communication, problems would arise. This is not a common response, and most students reiterated throughout that they were aware of and comfortable with the social risks and drawbacks of the technology and felt that they developed a good sense of when the application of these mediums was appropriate.

In sum, students described that although the technology is absolutely fundamental to their social lives, there is a very different quality to their interactions. The second research question; What problems related to ineraction occur through the use of these communication technologies to maintain social ties? focuses directly upon the differential qualities of interaction with both significant others and acquaintances. Interestingly, the respondents noted that the depth of interaction was often inappropriate for both strong or significant ties, and for weak ties or acquaintances.

## The Difficulty Achieving Proper Depth of Social Interaction with Significant Others Online

Research Question 2: What are the problems related to interaction that occur with maintaining social ties to others via IM and email?

Although IM and email served many fundamental social purposes for these students, the counterpoint that came up repeatedly throughout the conversation related to problems in communicating with two types of social ties. As Kelly stated:

It's not for deep conversations, but mostly for chatting about whatever, or coordinating groups of people to do something.

The utility of IM or email for engaging in serious or emotional discussions was generally agreed to be at best limited, and at worst, such conversations were described as impossible via this communications medium. The main reasons cited were the lack of non-verbal cues such as facial expression or body language that would be observable in a face-to-face conversation. As Mead (1934) points out, role taking is necessary to successful interaction, but successful role-taking may be extremely difficult when one cannot assess these cues.

Regarding the attempt to have a "serious" discussion with a girlfriend on IM about problems in a relationship, Tom summarized the general feeling well:

It's just not really workable, there is too much that can be misunderstood. You can't really let yourself come out over IM, it's very hard for the other person to know if you're serious about something or what tone you make a certain statement with.

Several students described similar difficulties saying that they no longer try to have such conversations online. When things were serious or important, it was generally agreed that face-to-face conversations were best, but even telephone conversations were preferable to those online because they would allow the other party to hear voice inflections that make communication more deep and meaningful. This point speaks to the question of personal authenticity in these formats, which will be visited shortly. At this juncture, it is enough to say that students did not feel that it was impossible to be authentic online, or even less likely. But they did say that it was very difficult to judge another person's authenticity in such a format. This was true even when participants like Tom were describing conversations with people that they knew very well.

# Problems Maintaining Proper Emotional Distance in Online Social Interaction with Weaker Ties

Research Question 2: What are the problems related to interaction that occur with maintaining social ties to others via IM and email?

Nearly every student was quick to point out that these technologies, especially IM, were very useful in allowing them to maintain ties to a lot more people than they would ever be able to in person. Almost every student, at one time or another during the focus groups, lauded IM as a great way to keep up on other people's lives and said it made them feel like they had more friends because they were able to talk to them more often. However, the downside can be well described by what Jill referred to as "IM friends":

I have friends that I rarely ever hang out with, maybe I was just in one class or something with them and we got along. But I don't seem them very often but I'll chat with them all the time, mostly about nothing. It sometimes feels like I don't have the same quality of friendships as I might have if I were just focusing on a few good friends that I actually see all the time.

Others were quick to agree, at least in part with this sentiment. John commented,

Sometimes it's TOO easy to talk to people or for them to talk to you. I feel like sometimes everyone is bugging me about really small things and I don't even feel like we're all that good of friends.

This shallowness of conversation was the most frequent complaint regarding these computer mediated forms of communication. Frequently, focus group participants described feeling like they had "talked" with people on IM for a long time without really feeling that they had gained anything worthwhile from it. Others indicated that the inability to read non-verbal cues or voice inflections limited the depth of conversations you could have in this format. Marcus summed this up nicely:

I can't see whether they're really laughing or laughing sarcastically. I can't tell whether they're depressed or happy as easily. I mean they can tell me or put a smiley face in their IM or something, but it's not the same as looking someone in the face when you're talking to them. You don't really connect very well.

More interestingly, students discussed that often times their use of email and IM meant that they were more involved in other people's lives than they necessarily cared to be. Jill, for instance, said

Since they don't have to face you to tell you their problems, I know people that I'm only sort of friends with, not that close, who tell me things and expect advice as if I really knew them. It's like it's an open forum and sometimes it's not appropriate.

This difficulty in drawing social boundaries within this emerging virtual communication space came up several times during the course of the focus groups. This notion of IM friends seemed to be one of the more difficult tasks involved with managing a social life online. The problems associated with interpreting interpersonal connections without the aide of non-verbal cues has been mentioned previously, but these difficulties extend beyond the inherent limitations of the technology. With the ease of communication, and the instant accessibility to numerous numbers of people, the problem becomes knowing how to set boundaries and define different levels of friendship and familiarity with different people within this context. Several students described feeling like they were often too honest or open with people online and made statements that they would not have done if they had had to deal with the in-person reaction of the person they were talking to. Kathy stated it well:

You have to remember, that in most cases, you will have to deal with the *real world* consequences of what you say online. People remember these things and it's not always just chitchat. This is why I try to have important conversations in person.

This was the most frequent problem described in negotiating relationships online. The complexity with which most students described their process of distinguishing between levels of friendships and the types of conversations that were appropriate to each of them online suggests that the sociability of these students has been forced by technological adaptation to become more sophisticated then that of previous generations. The outcome of this sophistication is often a difficulty having a level of interaction that is deep enough for close friendships. Conversely it can be equally difficult to maintain a level of emotional detachment from those one considers to be less significant friends or acquaintances.

On occasion, IM and email were described as facilitating more open and honest communication because of the physically detached nature of the exchange. However, a couple of students recalled instances where this openness led to problems.

Lucas: Once a person I didn't know that well ended up telling me about something really horrible that had happened to them. I think they were just looking to tell someone, but since we weren't that close of friends, I didn't know how to respond and it made facing that person uncomfortable later. It was really awkward

Jen: Yea, I've had that happen too. People think sometimes that what you say on there doesn't really mean anything, or they act differently then they would in front of someone and it can cause big problems

Mark: Yea, it's a really bad way to talk about serious things or to get emotional support or anything like that. I mean, how supportive can someone really be when using a keyboard.

This is a key area of discovery that lends insight to the ongoing debate regarding the Internet and social life. Such discoveries begin to frame the discussion of sociability and the internet in terms of quality rather than quantity. In this way, we gain a better understanding of the positive or negative impacts of these technologies on people's social lives, rather than simply a record of the number of interactions they have online. What is far more difficult to enumerate or elucidate is the extent to which the quality or depth of a friendship is affected by the mode of communication. Is it quite possible that these technologies, while superficially appearing to create heretofore impossible numbers of communication opportunities, are by their nature, limiting the depth of the resulting communication? This is a difficult question to answer quantitatively. The attempt to answer it qualitatively leads us to research question three. One of the key steps towards understanding the quality of the interactions resulting from these online communications is to gain an understanding of how authentic the users perceive their online interactions to be.

### Self-Perception of Online Personality as Authentic

Research Question 3: What are the problems related to "the self" that occur when maintaining social ties to others via IM and email?

The third research question: "What are the problems related to "the self" that occur when maintaining social ties to others via IM and email?" is discussed in two parts, related to authenticity (here) and to fragmentation (below). Despite literature (Gergen 2000; Turkle 1999) suggesting a high degree of inauthenticity in new communication technologies, respondents when talking about themselves, generally felt THEY were authentic unless they were purposely setting out to play a game.

A key question proposed by this research involved whether or not individuals felt that their selves were altered within the context of online interactions. I initially discovered minimal evidence of this factor in the initial superficial reactions of my focus group participants. Upon inquiring further however, some interesting facets of the technologies as they relate to users exhibited personalities came to light. It is important to make a distinction at this point, as it was for most of the respondents, between communication that occurred with friends or familiars (from the "real", offline world) and the communication that occurred with strangers (or those that the individual knew only from Internet communication.

When discussing the main function of email or IM for most respondents, it became clear that most of them spent the majority of their time conversing with other people who they knew from their offline lives. In these instances, most respondents reported that they exhibited the same personality, more or less, that they did in person. Despite this, many indicated that certain personality traits such as sarcasm or the propensity for flamboyant speech was more likely in an online setting. As Josh put it:

It's just easier to say crazy things when you don't actually have to hear them come out of your mouth. Plus my friends kinda just assume anything you say on IM is half-joking, at least.

"Stranger interactions" will be discussed below, but this a good opportunity to delve deeper into the concept of "inauthentic personalities" as perceived by the participants of this research. As long as we were just talking about conversations held with "real world" friends and acquaintances, most respondents said that any deviation from their offline personality was slight at most and usually amounted to aspects of their personality which could not be translated into a text-based communications medium. This included aspects such as friendliness or being outgoing. Several respondents said that they had been told that they were not as friendly online and that they assumed this was because it was hard to read one's mood online and things such as smiles or body language were absent from such communication. While these respondents found this inability to properly express their personalities online frustrating, few felt that it amounted to an inauthentic presentation of themselves.

This pattern of authentic presentation did not necessarily hold true when the participants were communicating with strangers online. A couple of the students admitted to holding conversations online, in either chat rooms (like IM but with more than two participants) or message boards in which they said things that they did not believe or portrayed a personality that did not match their true selves. The reasons given for doing this were multi-faceted. These students claimed that they enjoyed the ability to anonymously take on different personalities and to rile people up with provocative statements. They felt that there was little or no harm that came from this inauthentic behavior online. One student equated it with "playing devil's advocate" in an anonymous argument. "I can throw out ideas and see how other people react to them." The student said that he enjoyed using these online formats for bouncing story ideas for upcoming fictional works of his off of other people, without worrying that people he knows will be shocked by the things he thinks about.

It is important to note that most students described most, if not all of their online communications as taking place between them and people that they knew from their offline lives. It was infrequent that these participants used online technologies to make friendships or to have anonymous conversations with one other person. Given this, many of the social phenomena theorized about regarding the anonymity of social interactions online was not applicable to the bulk of these student's experiences. It is easy to imagine that the ramifications for the social lives of users who engage predominantly in this type of talk with virtual strangers would be much different than what is described above. This investigation does not attempt to make the case that such instances do not take place, or that they do not have many and varied positive and negative social outcomes for those who experience them. It is merely beyond the scope of nearly all of the anecdotes related by the focus group participants.

#### **Too Many Simultaneous Interactions Create a Fragmented Self**

Research Question 3: What are the problems related to interaction that occur when maintaining social ties to others via IM and email?

While all of the students who participated in the focus groups expressed enthusiasm for the Internet and the communication opportunities it affords, a few of the students were quick to point out that it can become a bit all-consuming at times. Jill was eager to disagree with her fellow students who said they didn't have any problems coping with the amount of communication afforded/demanding by IM and other mediums.

Sometimes, it's, like, way too much. Sometimes I just have to turn the machine off or just ignore it for a while, cause I have other things to do besides talk to people and oftentimes my friends are just bored and want to chat, which is fine, most of the time, unless I've got things to do.

Most students when presented with this complaint admitted that at times the constant communication that was possible online could become distracting. Tom reiterated this concern, "Whenever I sit down to write a paper or work on something, I have at least two or three friends who I could talk to instead, so before I can start I have to explain to them why I can't talk."

A few students went further and described scenarios in which the flood of conversation itself became overwhelming, as Gergen suggests in The Saturated Self (2000). Jerry's description of this feeling was fairly typical.

A lot of times, I have so many windows open talking to so many different people, that I lose track of what I'm talking to each of them about. I don't feel like I'm really talking to anyone anymore. It can get to be too much.

Given the high levels of use among these students and their general excitement

and acceptance of these technologies, it was quite noteworthy that most described this multiplicity of simultaneous social interactions as one of the drawbacks of IM. While in a typical phone conversation you are only concerned about your conversation with the one other person on the line, with IM you can talk to many people at once. Jill, for instance, described it this way:

At any given time, I may have a bunch of different roles in different conversations. I may be talking to friends and them I'm just sorta chatting, but I may also be on IM with my mother and trying to ask my TA a question about an assignment. I prefer only talking to one person at a time, but sometimes it doesn't seem that's possible.

The inescapability of interaction was stated and agreed upon by more than a few of the students. They described feeling like if they were to ignore IM or email while working, they might miss out on some important information or conversation. More frequently, people discussed worrying about offending a friend by not being able to "talk" on IM at the moment. "The problem is", Chad said, "that once you're on IM with someone it can be hard to get out of the conversation. If they don't have anything else to do, it can go on too long, and then you have to be rude and/or lie and say you have to go or something". While most said that this problem was similar to the way things work with the telephone,

many said it was more problematic because it was on the computer and therefore was always there when they were trying to complete schoolwork.

Obviously, these social negotiations, at their core, are not dissimilar to those experienced with face-to-face communication or with other forms of technologically facilitated interaction. This does not mean, however, that there are not new challenges presented by this technology. Most students were quick to relate the ubiquity of these modes of communication. Within the college dorm communication structure, the use of these technologies was descried as the norm. The result of this is that while the nature of the difficulty in managing social interactions maybe very similar, the speed and frequency of the need to do so, has increased by many magnitudes with the emergence of IM and email. For example, unlike the traditional phone call, an individual may receive numerous emails at once. With instant messenger, several conversations may be effectively maintained simultaneously in real time.

#### Summary, Synthesis of Findings, and Issues For Future Research and Inquiry

This research project has succeeded in verifying what others have found before it, and in contributing to the literature on the Internet and social interaction. The Internet and the communication technologies chiefly associated with it (email and internet messenger) have come to have a pervasive effect on the way in which people communicate. This dramatic effect is particularly true for college students who were the focus of this qualitative study.

Beyond that, however, there are limitation and drawbacks for the use of these technologies in forging and maintaining various levels of significant ties. The evidence suggests that these technologies are too casual for deeper emotional conversations that take place between significant others. Conversely, given the ubiquity and of communication and physical distance that these technologies provide, often times they facilitate conversations of a deeper and more personal nature with less significant others than participants may desire.

Respondents indicate that they generally view themselves as authentic online in that most of their conversations mirror what their attitudes would be in a off-line setting. This seems to contradict previous literature that focused on the anonymity of online interactions. Much of this disparity is owed to the fact that most of the college students in this study indicated that most of their conversational partners online were people they knew (to one degree or another) in their off-line lives. So the anonymity effect is mitigated by the reality that for most college students, their authenticity or lack thereof in an online setting would have ramifications in their "real" lives.

Finally, it does appear as though fragmenting of the self may be taking place (on a limited scale) as Gergen (2000) suggested. However, most of the students questioned indicated their ability to employ coping mechanisms to deal with the negative effects of simultaneous and abundant interactions made possible by these technologies. Much of this may be due to the fact that the college students interviewed in this project were among the first generation to grow up surrounded by these new communication options.

A great depth of understanding has been gained through the discussions that comprised these focus groups. This is a fairly new arena for social interaction, and therefore, not as much is known about how social norms and behavioral expectations have been translated into these mediums. The norms and expectations themselves, it seems are still being negotiated collectively by those who employ these technologies. As scholarship in this area continues, it will become increasingly valuable to map this process of social adaptation. This investigation has begun to uncover these adjustments to new social technologies.

Further inquiries should focus on the increasingly complex and stratified social spheres created by the use of these technologies. As the capacity for quick and widespread communication increases, so will the need for individuals to be ever more sophisticated in their understanding of their own social universes. Qualitative strategies for a clear and textured understanding of these social demands will focus on coping strategies of participants and a comparison of the social applicability of various types of communication in terms of their desired and perceived outcomes. It will become essential that scholars, employers, and the users themselves become more aware of the ever-changing social landscape that these technologies are creating. But what cannot be lost, is that while the technologies are indeed shaping the social interactions of those who use them, the users, the humans, are the ones simultaneously assigning the meanings of these technologies within their social existence.

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