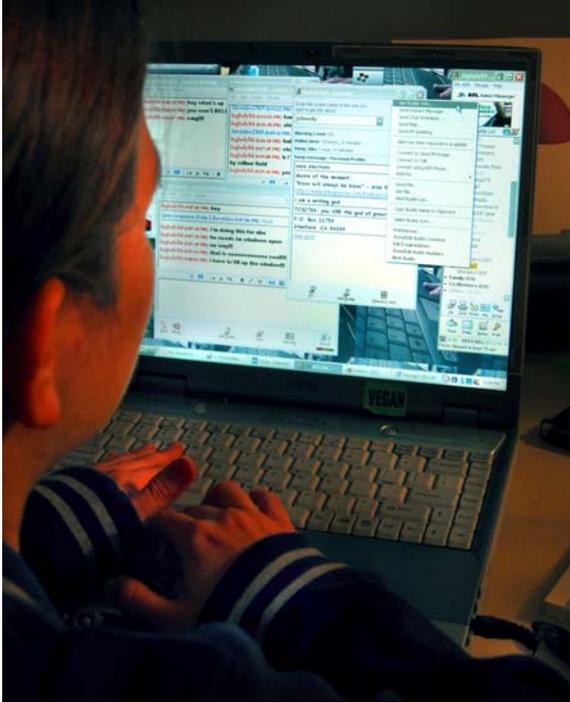


The Mercury Project for Instant Messaging Studies



How Does Instant Messaging Affect Interaction Between the Genders?

By Christine Lee

INTRODUCTION

Is the Internet really the great equalizer between males and females? Or do men and women still communicate differently with each other even when they're communicating online? Seeking to answer at least some aspects of these questions, I explored how the medium of instant messaging affects the way men and women act. To discover whether gender differences exist in the intimate setting of this one-on-one online medium – and if so, what kind and to what extent – I analyzed the logs of instant messaging exchanges of 50 pairs of college students that had taken place between September 2002 and May 2003. I divided these logs into three types: male-male, female-female, and male-female. In each pair, at least one of the participants is a student in my dorm at Stanford University.

I discovered that gender differences similar to those found in real space¹ do exist in instant messaging among college students, but that the nature of instant messaging lessens those differences in mixed gender conversations. Male-male and female-female conversations each possess distinctive characteristics, indicating that there are gender-based tendencies in instant messaging. However, in male-female conversations, instant messaging equalizes some of the

¹ The term “real space”, as it is used in this paper, refers to everything that is not online.

traditional gender differences found in real space interaction, as well as some of the differences found between male-male and female-female conversations.

GENDER DIFFERENCES IN OTHER ONLINE SETTINGS

Gender differences exist in online mediums other than instant messaging; recent research, however, seems to possess at least two differing opinions regarding their nature. This research does not deal directly with gender interaction through instant messaging, but focuses on the differences in Internet usage between genders. A study done by Lindsay H. Shaw and Larry M. Gant (2002) regarding the differences in how comfortable men and women feel using and communicating on the Internet shows that “gender differences did not approach significance, [which] might be attributed to the population studied” (p. 525). The studied population was that of college students.

But some scientists feel that it is too soon to say the Internet will soon be gender neutral (Sherman, 2000). Odell, Korgen, Schumacher, and Delucchi (2000) determined that “while the gender gap in use of the Internet has nearly closed, differences still remain in how male and female undergraduates use the Internet” (p. 861). According to their research, “more female than male college students use the Internet for E-mail and also for school research, but significantly more males use the Internet to visit sex sites, research purposes, check the news, play games, and listen to or copy music” (p. 862). Susan Herring (1996) also states that “gender differences online reproduce and even exaggerate differences found in face-to-face interaction” (p. 118), with men more likely than women to flame others and women more likely than men to be supportive online.

Both these views support in some way my own findings on gender differences in instant messaging among college students. My data showing equalization in male-female conversations

supports the idea that gender differences do not exist or are disappearing online. But gender differences can also still be found in male-male and female-female instant messaging conversations, as is also shown in my data.

GENDER DIFFERENCES IN INSTANT MESSAGING

The characteristics of the same-sex instant messaging exchanges that I studied group into three categories: content, greetings², and tone. Males speak more about technology-related topics (e.g., computers or cars), while female conversations contain more emotional subject matters. Females are also more likely to greet each other than males, and the tone of their instant messaging exchanges are not as rough as exchanges between males. The differences in these categories between male-male and female-female conversations indicate differences in gender behavior in instant messaging.

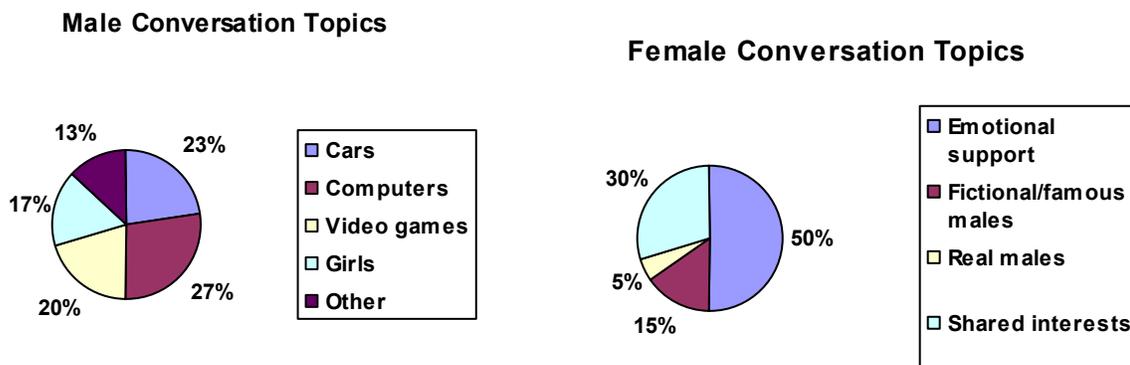


Figure 1:
These two graphs show the breakdown of instant messaging topics among males and females.

The content of conversations between two males generally deals with what is seen as more traditionally male topics, such as cars, computers, video games, and girls. Of the topics

² I use the term “greetings” to refer to both how a conversation begins (“hello”, “how you doing”, etc) and how it finished (with a “good bye”, talk to you later”, etc)

that appeared in male exchanges, 23% related to cars, 27% to computers, 20% to video games, and 17% to the opposite gender. The following exchanges illustrate some of these conversations³:

Male1: I only got to first base with her once, in 6 months.
Male1: That is sad!
Male1: And I could bitch about it to her, but then she'd probably take it the wrong way, and you know.
Male1: I mean, I don't pressure girls.
Male2: Yeah, really.
Male2: first base = ?
Male2: kissing?
Male1: I mean, yeah, we kissed a lot, but....
Male1: I'm not really a huge fan of frenching, but....
Male2: but?
Male1: Ahh, maybe I was just in poor form that night

Male3: Hehe, got the car last night...
Male4: What kind? Brand new?
Male3: Yup, 2003 Mitsubishi (Eclipse (I WISH!)) Lancer ES
Male4: Cool! You probably would have gotten into too much trouble with the Eclipse anyway.
Male3: Nah, what are you talking about? I might've destroyed it.... but that's ok....
Male4: Yeah but, too much power. You could have gotten carried away pretty easily.
Male3: Hahahaha, no...
Male3: the color of the car is so pretty too, it's the same color as the one in the Eclipse commercial... Coronado Sand Metallic..

Conversations between females, on the other hand, tend towards topics of a different nature.

Emotional support is frequently sought and given, conversations revolve around common interests, and if males are discussed, they tended to be fictional males. Within the female exchanges, a full 50% of the topics concerned matters of emotional support, 20% were of males (15% fictional or famous men, 5% real) and the rest related to common interests. The excerpts below show typical conversation topics:

Female1: sigh...joscelin⁴ * ___*
Female2: I know... siiiiiiiiigh
Female1: where are these guys in real life? ;___;
Female2: I want him so much ;___;
Female2: haha I know!

Female3: general feelings of discontent and malaise abound...
Female4: awww... *hug* =.\nFemale4: What's wrong?
Female3: :hugs: nyaaa...I dunno, I'm just kinda moody
Female4: Do you want to talk about it?
Female3: well, if you have time
Female4: sure

³ All instant messaging exchanges are used with permission.

⁴ Joscelin is a fictional male in Jacqueline Carey's *Kushiel's Legacy* trilogy

This discrepancy in content resembles real space interaction as well. Lynn Smith-Lovin and Dawn Robinson (1992) note about real space discussion that “women’s talk is generally oriented to maintaining relationships and developing intimacy” (p. 124) and that “men are taught to be more instrumental, whereas women are taught to be more socioemotional, supportive” (p. 124). Regardless of the medium of communication, men and women still follow certain traditional conversational patterns.

Tone also differs greatly between the two kinds of same-gender conversations. In an average 40 line conversation, there will be approximately 32 smileys if the participants are female, but only 9 if the participants are male. When addressing each other, men will use derogatory names 80% of the time, but females only 0%-2% of the time. Derogatory name calling, harsh teasing, and a general lack of emoticon or smiley usage characterize online male conversations, as shown below:

Male5: you're just fucked up
Male6: You're the one who's fucked up, yo.

Male7: j0? Bastard?
Male8: What, bitch?

In contrast, conversations between females are rife with emoticons and smileys and much more sympathetic in tone. If teasing exists, it is of a gentler nature than the sort seen in male conversations. The following image shows examples of both heavy usage of smileys and mild teasing:



Mary Talbot (1998) says in *Language and Gender: An Introduction* that in real space, “women tend to focus on rapport and the affective, supportive function of conversation...men on the other hand tend to focus on report and the informational function of conversation” (p. 101). And in other online settings, according to Herring, “men tend toward adversariality and women toward support/attenuation” (p. 120), with “female Net users...interpreting adversariality of any kind...as unconstructive and hostile in intent” (p. 129). Similarly, in instant messaging, a woman reading through male IM conversations may be shocked at their brusque treatment of each other, while a man reading through female IM conversations may be surprised by the emotional level of those talks.

Male-male and female-female conversations also differ in how these conversations begin and end. Males demonstrate a tendency to ignore greetings and goodbyes in their conversations, starting and finishing their exchanges abruptly. Females on the other hand will generally open a conversation with a greeting of some sort, and when they need to end the conversation, state their reason for leaving before saying a goodbye. In 50 different instant messaging exchanges

between a pair of males, the conversation was opened with a greeting 12 times and ended with a goodbye 15 times. In 43 instant messaging exchanges between a pair of females, the conversation started off with a greeting 36 times, and finished with a goodbye 33 times. This may relate to the differences in tone between the sexes; to formally open and close a conversation is to be polite, a characteristic more likely to be found in the gentler female conversations as opposed to the rougher male ones.

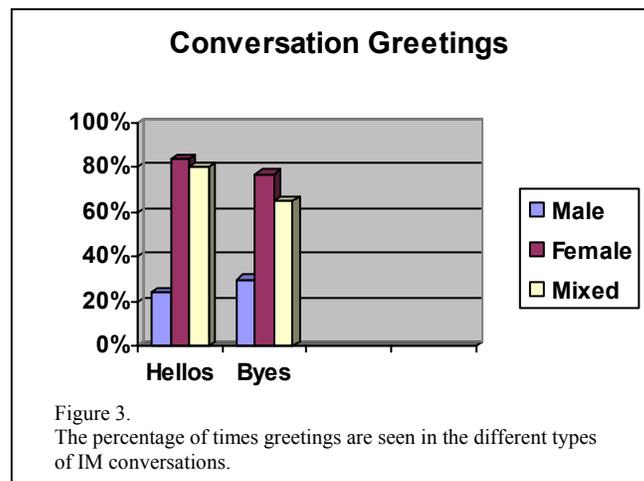
GENDER EQUALITY IN INSTANT MESSAGING

When the two participants of an instant messaging conversation are male and female, these gender differences become less pronounced and some of the traditional gender differences in real space conversation, such as turn taking, topic switching, and conversation dominance, are equalized. For example, in real space conversations, Smith-Lovin and Robinson found that in real space, “men interrupted women much more than women interrupted men, whereas same-sex conversations showed very well-coordinated speech with few interruptions” (p. 130). With instant messaging, however, there isn’t such a clear division over which gender interrupts the other gender more. In an average 10 minute instant messaging conversation between a male and a female, the male will interrupt around 10 times and the female 8. In same-sex conversations of the same length, males interrupt approximately 9 times and females 11. This may be due to the way instant messaging works. Although IMs are a type of synchronous communication, one participant cannot see or hear what the other person is typing until that person sends the message, unlike real space conversations. Because of this, it becomes easy to unknowingly interrupt someone by typing and sending a message at the same time the person whom you’re talking to also sends a message. By the same reasoning, it’s also difficult to interrupt a person on purpose, as you are unaware if he or she is typing something or not.

Another discrepancy between real space and IM conversations exists in topic switching. Deborah Tannen (1994) notes in *Gender and Discourse* that in real space, “women exhibit minimal or no difficulty finding something to talk about, and they talk about a small number of topics...men exhibit great difficulty finding something to talk about...so they produce small amounts of talk about each of a great number of topics” (p. 99). But in all three types of instant messaging exchanges (male-male, female-female, male-female), participants frequently switch topics. Males spend on average three minutes and five seconds on any one topic, while females spend approximately three minutes and forty-two seconds on one topic. In mixed conversations, the average length of time given to one topic is three minutes and twenty seconds. Instant messaging has thus blurred one customary difference between male and female conversations. The frequency of topic switching occurs at nearly the same amount between males and females as between males with males and females with females, implying that the nature of instant messaging is one that discourages staying on one topic for very long.

Males and females also speak approximately the same amount in male-female conversations. In the studied conversations, men spoke on average 54% of the time, while women spoke 46% of the time. This differs from real space conversations, where Smith-Lovin and Robinson have observed that males “talk more [and] make more directive comments...” (p. 129) because “in mixed-sex groups, men are assumed to be legitimate leaders” (p. 129). It also differs from other online settings, which according to Herring’s research, “can be seen to reproduce male dominance and female submission” and “marginalize women by rendering them largely silent in mixed-sex forums” (p. 137). The fact that male-female interaction in instant messaging is at nearly equal levels demonstrates a reduction in the amount men speak or an increase in the number of times women speak, or perhaps both.

Male-female conversations differ from their same-sex counterparts in the use of emoticons and greetings, content, and tone. Greetings and goodbyes are much more common in female-female conversations than male-male conversations, but in mixed gender conversations, males use conversations openers and closers more frequently than when just talking to males. These mixed conversations open with a greeting 80% of the time, and end with a goodbye 65% of the time.



Additionally, males who rarely use emoticons or smileys when speaking with other males will use more emoticons and smileys when conversing with females. Females use emoticons the same amount with males as they do with other females. The excerpt below took place between Male2 and Female5, who were quoted earlier as well:

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Male2: I like Evanescence. T_T
Male2: So good.
Female5: evanescence? o_o
Female5: oh wait, isn't that a band?
Male2: Try them out. ^^;
Female5: send me some songs then
Male2: Okies, sure.
Male2: So slow. o.o
Female5: ish so slow
Female5: oh, and you owe me a phone call =p
Male2: Yes, I know, I know.
Female5: o.o
Male2: ^^;;

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Although in the earlier quoted male-male conversation, Male5 never used any smileys in his messages, in this conversation with a female, he used at least one smiley about every two

messages. In general, males will use around 21 smileys every 40 lines of text when speaking to a female, as opposed to 9 when speaking to a male, and females will use about 35, a number close to their 32 smileys when speaking with another female. Gender behavior changes in mixed gender conversations, but it is the male behavior that undergoes the more dramatic changes, not the female's.

In content and tone as well, the noted characteristics of male-male and female-female conversations fade into a neutral middle ground. The topics discussed became less gender specific and dealt with subjects such as movies, school, books, and other common interests. Small talk made up 35% of the content, movies 15%, school 17%, and books 20%, with the remaining 13% consisting of other common interests or acquaintances. The tone of these exchanges was also more balanced, being more teasing than female-female conversations, but not as derogatory as male-male conversations. The conversation below demonstrates the teasing nature apparent in many male-female IM exchanges.

Female: lol
Female: how amusing
Male: What? =P
Female: XD
Male: Amusing? *grin*
Female: yep
Male: Why? ^^;
Female: :patpat:
Female: don't think about it
Male:... I'm curious.
Female: are you now?
Male: Yep.
Female: ahahaha
Female: how cute
Male:... *glare*
Female: *^^*
Male: Ugh. =P
Female: ^ _ ^
Male: So annoying.
Female: who, me?
Male: Yeap.
Female: hehe

The friendly banter in this exchange, punctuated with the use of various smileys, creates a tone generally not found in same-sex conversations but apparent in at least two-thirds of male-female exchanges. This tone is also unique from real space interaction, where Smith-Lovin and

Robinson found that males are “more likely to interrupt and to use commands, threats, or boasts” (p. 127), rather than treat females as equals.

One might argue that this amelioration of gender differences in mixed sex conversations is not a result of instant messaging, but of the fact that the participants are college students. Today’s college students may be more aware about gender roles than the generations before them, and thus more conscientious about avoiding them. While this may contribute to the lessening of gender differences, various research has also shown that gender differences among college students do exist online, in settings other than instant messaging. Sherman et al. (2000) describe their research in “The Internet Gender Gap Among College Students: Forgotten But Not Gone?” which shows that men in college have more positive attitudes towards technology than women in college and are more comfortable with participating in online discussions. Tannen also notes that when interruptions between college students were observed, “96 percent of the interruptions were instances of men interrupting women” (p. 55-6).

CONCLUSION

It is important to keep in mind that my data was generated solely among people in my dorm, and so different conclusions might be gathered from a larger and more diverse corpus of data from a random sample of college students. If I were to research this topic again, I would also survey a sample of the college student population to gather their opinions on instant messaging and gender roles and compare those results with what was apparent in the actual instant messaging exchanges. I’d also like to look at how the use of profiles, buddy icons, and away messages relate to gender.

Gender differences in instant messaging exist, but only in certain settings. Females act a certain way when conversing with other females, just as males behave in a particular manner

among other males. These behavioral patterns change when a male and a female converse, placing males and females at an equal level – an occurrence rarely observed in past real space interaction. Interestingly, it is not so much that females are becoming more aggressive or more “male-like”, but rather that males alter their behavior much more drastically than females do, becoming less rough and more considerate of the person whom they’re speaking to.

Perhaps this indicates that instant messaging influences male behavior more than female behavior, and that if women wish to be treated as equals by males, they should talk to them through instant messaging. Or maybe this trend reflects a growing behavioral pattern in today’s generation of students – which may or may not have been brought about by their high exposure to the Internet. It’s still a little premature to say that the Internet really is the “great equalizer” between men and women, but in instant messaging at least, traditional male and female behavioral trends are both undergoing changes – and for the better, I think.

References

- Herring, S. (1996). Posting in a Different Voice: Gender and Ethics in Computer-Mediated Communication. In C. Ess (Ed.), *Philosophical Perspectives on Computer-Mediated Communication* (pp. 115-145). Albany: State University of New York Press.
- Odell, P. M., & Korgen, K. O., Schumacher, P., Delucchi, M. (2000, October). Internet Use Among Male and Female College Students. *CyberPsychology & Behavior*, 3(5). Retrieved May 2, 2003, from <http://lucia.ingentaselect.com/vl=4430638/cl=25/nw=1/rpsv/catchword/mal/10949313/v3n5/s16/p885>
- Shaw, L. H., & Grant, L. M. (2002, December). Users Divided? Exploring the Gender Gap in Internet Use. *CyberPsychology & Behavior*, 5(6). Retrieved May 2, from <http://lucia.ingentaselect.com/vl=4430638/cl=25/nw=1/rpsv/catchword/mal/10949313/v5n6/s2/p517>
- Sherman, R. C., & End, C., Kraan, E., Cole, E., Campbell, J., Birchmeier, Z., Klausner, J. (2000, October). The Internet Gender Gap Among Students: Forgotten But Not Gone? *CyberPsychology & Behavior*, 3(5). Retrieved May 2, 2003, from <http://lucia.ingentaselect.com/vl=4430638/cl=25/nw=1/rpsv/catchword/mal/10949313/v3n5/s18/p885>
- Smith-Lovin, M., & Robinson, D.T. (1992). Gender and Conversational Dynamics. In C. Ridgeway (Ed.), *Gender, Interaction, and Inequality* (pp. 120-146). New York: Springer-Verlag New York Inc.
- Talbot, M. M. (1998). *Language and Gender: An Introduction*. Malden: Blackwell Publishers Inc.

Tannen, D. (1994). *Gender and Discourse*. New York: Oxford University Press, Inc.

Wolf, A. (2000, October). Emotional Expression Online: Gender Differences in Emoticon Use.

CyberPsychology & Behavior, 3(5). Retrieved May 2, 2003, from

<http://lucia.ingentaselect.com/vl=4430638/cl=25/nw=1/rpsv/catchword/mal/10949313/v3>

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