

Emotional Expression Online: Gender Differences in Emoticon Use

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ABSTRACT

The analysis of emoticon (emotional icon) use in online newsgroups appears to reinforce the stereotype of the emotional female and the inexpressive male until further examination suggests otherwise. The most interesting finding of this study is illustrated by the pattern of change that develops for both genders when they move from a predominantly same gender newsgroup to a mixed-gender newsgroup. The changes that take place in emoticon use when moving from same-gender to mixed-gender newsgroups indicate that rather than the emotional expression of females being silenced or muted by male encoding of emoticons, males adopt the female standard of expressing more emotion. Furthermore, women have added dimensions including solidarity, support, assertion of positive feelings, and thanks, which were absent from the male-created definition of emoticons and their use.

INTRODUCTION

AN ABUNDANCE OF RESEARCH reveals diverse explanations for the lack of male expressiveness offline ranging from socialization to power plays.¹⁻⁵ However, no one has researched whether the socialization that many claim stifles the male expression of emotion carries over in computer-mediated communication (CMC). Some studies indicate that while the Internet may not be the promised great equalizer for the sexes, women have found a voice in CMC denied them in face-to-face encounters.^{6,7} Conversely, the question arises whether this new online voice extends to men in allowing them to communicate in nontraditional ways on the Internet. The occurrence of online gender swapping reinforces the idea that both men and women may be experi-

menting with nontraditional emotional expression in the privacy and comfort of cyberspace.

While certainly no lack of material exists illustrating how emotional expression differs according to gender, one finds relatively few works examining gendered emotional expression on the Internet. Shirley Ardner⁸ claims that the "male control of meaning extends to the *registers* of public discourse so that it is both the meaning and the *form* in which that meaning is expressed (in public discourse) that has been encoded by men and is controlled by men." Certainly this is true of the technological environment. Research shows that men have traditionally dominated the technology and have comprised the majority of users of computer networks since their inception.⁹ Ardner holds that the encoding of the public register by men compels women to "monitor their expressions"

and "transform their meanings so that they conform to male requirements." It is in this way that women become a *muted* group.⁸

Herring⁹ maintains that despite the claim that CMC neutralizes distinctions of gender, women and men exhibit recognizably different styles in posting to newsgroups and listservs on the Internet, and that women and men value different kinds of online interactions as appropriate and desirable. Herring⁹ claims that "entire lists can become gendered in their style as well. It is tacitly expected that members of the nondominant gender will adapt their posting style in the direction of the style of the dominant gender." This study examines emotional expression via the use of emoticons (emotional icons) to determine whether the male encoding of the online registers silences or mutes the emotional expression of women in CMC.

BACKGROUND

Many CMC participants use what are called "smileys," officially known as "emoticons." *The Hacker's Dictionary* provides a section on the origins and proper use of emoticons. This dictionary provides the generally accepted definition of an emoticon:

an ASCII glyph used to indicate an emotional state in e-mail or news. Although originally intended mostly as jokes, emoticons (or some other explicit humor indication) are virtually required under certain circumstances in hi-volume text only communication forums such as USENET; the lack of verbal and visual cues can otherwise cause what were intended to be humorous, sarcastic, ironic or otherwise non-100% serious comments to be badly misinterpreted (not always even by newbies) resulting in arguments and flame wars.¹⁰

Fahlman¹⁰ claims he invented the emoticon on the CMU bulletin board systems around 1980. He later wrote, "I wish I had saved the original post, or at least recorded the date for posterity, but I had no idea that I was starting something that would soon pollute all the world's communication channels."¹⁰ Fahlman's quote, *sans* emoticon, might lead one to speculate about his definition of "pollution;" does he

mean expressions of *emotion* pollute the Internet or that emoticons merely waste bandwidth? Andrews¹¹ maintains that "the [emoticon] craze has peaked. It's time to ban smileys (originally called emoticons, since only a few smileys actually smile and some of the more esoteric ones are downright scatological). They're the smallpox of the Internet; smoke signals on the information highway." He warns that now smileys infect commercial networks as well due to the "newbies" (new Internet users) discovery and use of them. This newbie use caused the emoticon to cease being the identifying mark of an insider of the digital age. Andrews claims that emoticons waste bandwidth, have inconsistent definitions and are superfluous: a well-constructed sentence needs no clarification; emoticons serve no purpose.

Some people consider emoticons a form of "ASCII art," which encompasses a wide variety of creative and complicated images created by using ASCII (American Standard Code for Information Interchange) characters. Emoticons exemplify a minimalist approach to ASCII art—and attempt, in as few characters as possible, to display one's true feeling.¹² Emoticons consist of various punctuation marks and are viewed by turning the page sideways or tilting one's head to the left. The following represent the most widely used emoticons:

:-) Basic Smiley
;-) Winking Smiley
:-(Sad Smiley

Hyphenless forms, often called midget smileys, are also quite common. Hundreds of emoticons have been proposed, but only a few are in common use. Unfortunately for those who agree with Andrews, new emoticons continue to develop.

Many different emoticon collections exist online in several different languages. Internet and computer-related books often devote a section to proper emoticon use. The Electronic Frontier Foundation's website, EFF's (Extended) Guide to the Internet, contains The Unofficial Smiley Dictionary in which emoticons are categorized in the following ways: Basic Smileys, Widely-Used Smileys, Midget Smileys, Mega Smileys, USENET Smileys, and Emotional Smileys.¹³

Andrews's claim of disparate emoticon interpretations often does have merit. In some instances the emoticon :-Q means "user smokes"; others define it as meaning "tongue hanging out in nausea" or "sticking out tongue." A more widely used emoticon for "user sticking out tongue" is :-P. The more elaborate the emoticons become, the greater variation one finds in the definitions available for them. The basic smiley, frowney, and winkey are generally accepted as meaning humor, sadness, and teasing/sarcasm, respectively.

The views of Fahlman and Andrews, along with the definition given by *The Hacker's Dictionary*, give rise to the question of how the men who encode the rules of the Internet register view expressing an emotional state: as humorous, "nonserious," or passé? In many ways, the online world, named cyberspace by William Gibson, evokes its own culture, morals, and expectations, but in just as many ways it replicates the biases, contradictions, and prejudices of our society.⁷ It seems men create the terminology and rules for cyberspace (Gibson, Fahlman, Andrews, et al.) but we must question whether their rules appropriately suit women. Some may take issue with the dictionary definition of emoticon and its subsequent defining of an "emotional state" as being humorous, sarcastic, ironic or otherwise non-100% serious. Nevertheless, this remains the standard definition supplied for the word emoticon and the generally accepted mode of use. If the emoticon expresses emotion, a quality historically reserved for women, what are we to make of the following warning from *The Hacker's Dictionary*: "Note for the newbie: Overuse of the smiley is a mark of loserhood. More than one per paragraph is a fairly sure sign that you've gone over the line."¹⁰

DATA AND METHODOLOGY

The sample was comprised of three USENET support groups and a football related newsgroup, believing that they would provide ample expressions of emotion. These unmoderated newsgroups, including alt.support.eatingdisord(er), alt.support.depression, alt.support.divorce, and alt.sports.football.pro.

dallas-cowboys, produced a total of 251 posts. Females comprised the overwhelming majority of participants in the eating disorder support newsgroup, while the divorce and depression support groups enjoyed a balanced mix of female and male participants. The sports newsgroup consisted almost exclusively of male participants. A male sports newsgroup was included to avert a potential female bias that both males and females would express emotion on a support newsgroup, traditionally the domain of the stereotypical "nurturing, caring woman." Additionally, sports represent an area in which males are culturally "allowed" to express emotion. The posts were collected on March 20 to March 25, and on April 2 to April 5, 1996.

Totals were tabulated representing female-generated posts, male-generated posts, and those with gender neutral names (Thumper, Thrasher, Moonbeam, etc.). The content of the gender-neutral posts was examined to determine if the authors or those responding to the post disclosed the uncertain gender via personal pronouns or through other means. Although some research claims that men and women often have recognizable communicative CMC styles,⁹ the category of "unknown gender" was established for the posts for which the gender of a poster was unidentifiable. Approximately 11% of the sample fell into this category. While relying in large part on the names given and personal pronouns used by participants to identify gender, it is recognized that the nature of the medium lends itself to potential deception in terms of self-identification. Additionally, rather than simply counting the number of male and female names in the return addresses, signatures were checked against the name in the return address to verify the gender, because more than one person can post from the same account.

The gender composition of the newsgroup was determined by counting the number of female, male, and unknown gender posts after monitoring the newsgroup over a 30-day period (March 2 to April 7, 1996). Totals were then tabulated for the number of posts to the predominantly female newsgroup, the predominantly male newsgroup, and to each mixed-gender group.

After determining the variety of emoticons used three main formal categories were established: smileys, including the variations of the basic smiley, :-), the various frowneys, :-(, and variations on the winkey, ;-). Meaning categories were developed to indicate how an emoticon was used: to express teasing/sarcasm, humor, sadness, despair, confusion, to offer an apology, a positive feeling or thanks, or to express solidarity/support. Additionally, categories were created for those emoticons having either an unclear or no apparent purpose, those represented in a reposting of a prior message, or those occurring in a signature file.

The emoticons were then coded based primarily on available dictionary definitions. While most definitions are quite similar, there are cases in which several inconsistent interpretations are given for the same emoticon. Those cases in which emoticon use greatly varied from the generally accepted use fell into the category of unclear meaning.

Tables were created illustrating the variety and frequency of emoticons used both by newsgroup and gender of the poster, as well as the total for all groups combined. The totals were used to determine the patterns of emoticon use on predominantly same gender newsgroups, and the changes in those patterns when examining mixed gender newsgroups. The following represent the findings.

RESULTS

All the newsgroups monitored in this study are unmoderated, and are classified as open networks. Kramarae and Taylor assert,¹⁴ "In almost any 'open' network, men monopolize the

talk." While the figures in this study bear out their claim, the numbers are not as disparate as those examined in other studies. This is unusual in that the majority of USENET participants are male. The theme of three of the newsgroups, support, may play a role in the high percentage of female participants (Table 1).

Predominantly female newsgroup

In the predominantly female newsgroup, emoticons appear in 7 of the 11 meaning categories, with the greatest number of smileys occurring in signature files (36%). The categories of humor, solidarity/support, and assertion of positive feeling/thanks rank equally for the second most frequently occurring categories (14.3%).

The midget smiley, :), represents the most frequently used emoticon on the predominantly female newsgroup. The basic smiley category represents the bulk of emoticon use (93%), with only 7% representing another emoticon, :(, the basic frowney. The most salient finding in this newsgroup is the absence of emoticons indicating teasing/sarcasm.

Predominantly male newsgroup

Males use emoticons in 3 of the 11 meaning categories in the predominantly male newsgroup. Two categories, teasing/sarcasm and humor, represent the only emoticon use expressing an emotive intent. The only other emoticon use occurs in a reposting of a previous message that includes a winkey. Variations of smileys and winkeys appear in equal frequency (43% each) and represents the greatest frequency of emoticon occurrence.

TABLE 1. COMPOSITION OF NEWSGROUP BY GENDER

Newsgroup	Female	Male	Unknown gender	Commercial
alt.support.eatingdisord(er)	95% (42)	2% (1)	2% (1)	0%
alt.sports.pro.football.dallas-cowboys	0%	82% (42)	8% (4)	10% (5)
alt.support.divorce	42% (18)	51% (22)	7% (3)	0%
alt.support.depression	39% (44)	43% (49)	18% (20)	0%

Mixed-gender newsgroups

When in the predominantly female newsgroup, women use 5 different variations of emoticons in 7 of the meaning categories. In mixed-gender newsgroups, women exhibit an increase the variations of emoticons (6) and an increase the utilization of meaning categories (10). Men, in the predominantly male newsgroup, use a variety of 6 emoticons in 3 meaning categories. In mixed-gender newsgroups men use a variety of nine emoticons in 6 meaning categories. In the predominantly same-gender newsgroups, there are no instances of emoticon use by those of unknown gender. However, on the mixed-gender newsgroups, unknown gender uses one emoticon type, the frowney, to express two categories, sadness and despair. On the mixed-gender newsgroups emoticon use most often expresses teasing/sarcasm.

Female patterns on mixed-gender newsgroups

Women most frequently use emoticons to express humor (35%); the expression of teasing/sarcasm represents the next highest frequency (17%). The variations on the basic smiley exhibit the most frequent use of emoticon type overall. The most striking finding in the analysis of the mixed-gender groups is the female use of teasing/sarcasm; a category noticeably absent in the predominantly female newsgroup.

Male patterns on mixed gender newsgroups

Men use emoticons most often to express teasing/sarcasm (31%). A significant percentage of emoticon use falls into the signature file category (24%), and consists of a stylized vari-

ation of the basic smiley, | -). The =) accounts for the most frequent use of an emoticon in an emotive capacity on this newsgroup. A notable finding in the analysis of these newsgroups is the male use of emoticons to express apologies (7%).

Unknown gender patterns on mixed gender-newsgroups

No instances of posters of unknown gender occur on either predominantly female or predominantly male newsgroups. On the mixed-gender newsgroups, sadness (40%) and despair (60%) were the only two emotive categories used by those of unknown gender. The midget frowney, :(, represents the only emoticon used.

SUMMARY AND CONCLUSIONS

At first glance, the results of this study seem to reinforce the stereotype of the emotional woman and the inexpressive man (Table 2). However, further examination reveals that on the mixed gender newsgroups, the difference between male and female frequency of emoticon use was not statistically significant (p 0.3859). The most intriguing finding of this study lies in the pattern of change that develops for both genders when moving from a predominantly same-gender newsgroup to a mixed-gender newsgroup. Rather than the females adopting the offline male standard of *less* emotional expression, the opposite occurs: both males and females display an increase in emoticon use. Although the slight increase in emoticon use that occurs when females move from a same gender to a mixed-gender newsgroup is not significant (p 0.3483), the same is certainly

TABLE 2. TOTAL POSTS AND EMOTICON USE BY GENDER

Newsgroup	Eating disorder			Dallas Cowboys			Mixed-gender combined			Total		
Gender	Posts	Emoticon use	Ratio	Posts	Emoticon use	Ratio	Posts	Emoticon use	Ratio	Posts	Emoticon use	Ratio
Female	42	14	.33	0	0	0	62	23	.38	104	37	.36
Male	1	0	0	42	7	.17	71	28	.39	114	35	.31
Unknown	1	0	0	4	0	0	23	5	.22	28	5	.18
Commercial	0	0	0	5	0	0	0	0	0	5	0	0
Total	44	14	.32	51	7	.14	133	56	.42	251	77	.31

TABLE 3. DISTRIBUTION OF POSTS TO FOUR NEWSGROUPS COMBINED

<i>Emoticon used</i>	<i>Teasing/ sarcasm</i>	<i>Humor</i>	<i>Apologetic</i>	<i>Sadness</i>	<i>Despair</i>	<i>Confusion</i>	<i>Solidarity/ support</i>	<i>Assert positive feeling/ thanks</i>	<i>Sig</i>	<i>File</i>	<i>Repost</i>	<i>Unclear</i>	<i>Totals</i>
:-)	1 (F)	3 (F)						1 (F)	1 (F)	1 (F)	1 (F)		8 (F)
:)	1 (M)	2 (M)											3 (M)
		4 (F)	1 (F)			1 (F)	1 (F)		4 (F)				11 (F)
=-)	1 (M)	1 (M)									1 (M)		3 (M)
=)		2 (F)						1 (F)					3 (F)
							1 (F)	1 (F)			1 (F)		3 (F)
:D	2 (M)	2 (M)										2 (M)	6 (M)
=P		1 (F)											1 (F)
		1 (M)							2 (F)				2 (F)
-)									7 (M)	1 (M)			8 (M)
:>	1 (M)												1 (M)
8-)		1 (M)											1 (M)
;-)	1 (M)										2 (M)		3 (M)
:)	3 (F)										1 (F)		4 (F)
	5 (M)												5 (M)
; >	1 (M)												1 (M)
=(2 (M)								1 (M)		3 (M)
:(2 (F)	1 (F)	1 (F)	1 (F)						5 (F)
				2 (U)	3 (U)								5 (U)
Totals	4 (F)	10 (F)	1 (F)	2 (F)	1 (F)	2 (F)	3 (F)	3 (F)	7 (F)	3 (F)	1 (F)		37 (F)
	12 (M)	7 (M)	2 (M)	0 (M)	0 (M)	0 (M)	0 (M)	0 (M)	7 (M)	5 (M)	2 (M)		35 (M)
	0 (U)	0 (U)	0 (U)	2 (U)	3 (U)	0 (U)	0 (U)	0 (U)	0 (U)	0 (U)	0 (U)		5 (U)

not true for males. When moving from same gender to mixed gender newsgroups, male frequency of emoticon use soars (p 0.0057).

The majority of emoticon use by females lies in the meaning category of humor; the bulk of male emoticon use expresses teasing/sarcasm. In restricting the focus from overall occurrences of emoticons to these two most frequently used meaning categories, the data show that males use more emoticons denoting teasing/sarcasm and humor on the same gender newsgroup than in the mixed-gender newsgroups. Conversely, female use of emoticons to express teasing/sarcasm and humor increases when moving from same-gender to mixed-gender newsgroups. These findings suggest that both genders converge toward each other on the mixed-gender newsgroups. Female use of emoticons to express humor more than doubles from same-gender to mixed-gender newsgroups, from 14% to 35%, and the occurrence of emoticons to represent teasing/sarcasm, noticeably absent in the same-gender newsgroup, accounts for 17% of emoticon use on the mixed-gender news-

groups. Male use of emoticons to express teasing/sarcasm and humor drops from 43% each on the same-gender newsgroup to 39% and 14%, respectively, on mixed-gender newsgroups.

What emerges from a closer inspection, however, is that while emoticons are defined as vehicles to express emotion—hence “emotional icon”—their actual function hinges on the definition of the word *emotion*. The male creators of the cyberspace definition of emoticon appear to have expanded on the conventional definition of emotion. While it can be argued that sarcasm and teasing, for example, derive from or are comprise different emotions, whether they constitute an emotion is debatable. Gendered changes in emoticon use do occur when moving from same-gender to mixed-gender newsgroups but the emotional expression of women is not being silenced or muted by the male encoding of emoticons. Indeed, the most striking changes are observed in male usage patterns. Males may have altered the definition of emoticon to suit their conception of emotion, but females have taken the same liberty with the actual use of emoticons.

Females have expanded on the male definition of emoticons and their use, adding other dimensions including solidarity, support, assertion of positive feelings, and thanks.

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