

IF E-MAIL IS FOR OLD PEOPLE, ARE UNDERGRADUATES OLD PEOPLE?

Wallace A. Wood, Bryant University, wwood@bryant.edu
Suhong Li, Bryant University, sli@bryant.edu

ABSTRACT

This study investigated the use of e-mail and other means of electronic communication by undergraduates at a northeastern university and whether gender and student year of study impact the use of various electronic communication means. It was found that 94% of the students check their university e-mail account at least once a day with the major use of university e-mail to communicate with instructors and keep up with the notices from the school. 79% of the students have other e-mail accounts, but they do not use the other e-mail accounts as frequently as the university e-mail. In addition to e-mail, many students use other electronic communication means on a daily basis. E-mail is considered by 17% of the students as their favorite means of electronic communication, while 29% favor the cell phone and 25% favor instant messaging. It was also found that gender impacts the use of text messaging and student year of study impacts the use of instant messaging and facebook.com. In general, this study did not find that undergraduates have abandoned e-mail as reported in some periodicals.

Keywords: Undergraduate e-mail use, electronic communication by undergraduates

INTRODUCTION

Recent articles in several widely read and varied publications have raised the question of whether e-mail is really for old people. The position raised in these publications is that young people have moved on to other forms of electronic communication leaving e-mail to old people. Old here covers a wide range of ages.

The whole issue of the young (undergraduates in this case) going on to other forms of communication is articulated very well in the October 6, 2006 issue of The Chronicle of Higher Education (3). This article profiles the problems that several colleges have cited in that their students do not read the official e-mails from the administrations of these colleges. It also reports on the reasons given by some of the undergraduates for not doing so. One such reason is

the perception that using a combination of a student's first and last name along with a number is too complicated to give to a friend or give out on line. The article also cites the problem of too many official e-mail messages of varying degrees of importance from college offices so that students just turn them all off. Lastly, the article addresses how some colleges are using other communication technologies such as social networking sites much like MySpace and Facebook to communicate with students. In fact, some colleges are using Facebook rather than developing their own site (8). Many of the colleges cited in the Chronicle article have essentially given up on e-mail for official purposes.

On the other hand, some colleges require students to read their e-mail messages from the administration and hold them responsible for the official information in them. The problem of students not using official e-mail may be overstated for some colleges, such as the University of Illinois at Chicago which reports that 86% of their students still use campus e-mail regularly (3) and the University of Colorado at Boulder which reports that almost 92 percent of their students had e-mail accounts (7). The University of St. Thomas reported that for nearly 91 percent of its students e-mail was their first choice for communication with the institution (1).

Other colleges are trying instant messaging (IM) and text messaging on cell phones to reach students. This would be consistent with research done by the Pew Internet and American Life Project which indicates that teens use many means to communicate and they do continue to use e-mail. However, they do prefer IM to e-mail for communicating with friends and reserve e-mail for talking to "old people", institutions, or to send complex messages to large groups (9). This preference by teens for IM was also borne out in a study by AOL-Associated Press (5) and Media Metrix found that e-mail use by teens decreased 8% in the year ending April 2006 (2). USA Today reports that e-mail is so last millennium, that many view e-mail as the new snail mail, and that there is a sense of a migration away from it (6). Some argue that the use of IM by students is a

precursor to the widespread use of IM by faculty in communicating with and teaching students (4).

It is likely that there is no single best way for colleges to communicate with students. This is because technology changes so quickly that by the time the institutions catch up with the technology, the students have moved on to the newest technology (10). This means that proactive colleges will use a variety of methods from low-tech flyers and posters to e-mail to IM.

The purpose of the research is to determine whether the undergraduate students perceive the official university e-mail system as do undergraduates at some of the reported colleges and universities and whether they would prefer to have some other official means of communication. In addition, the impacts of gender and student year of study on the use of various electronic communication means were also investigated.

RESEARCH METHODOLOGY

The data for this study was collected from undergraduate students enrolled in several courses at a northeastern university during the academic year 2006-2007. A total of 277 usable responses were collected and Table 1 shows the demographics of the sample.

Table 1. Sample Demographics

| | | Number | Percentage |
|-----------------------|----------------|--------|------------|
| Gender | Male | 136 | 49.1 |
| | Female | 141 | 50.9 |
| Current Year of Study | Freshman | 76 | 27.4 |
| | Sophomore | 76 | 27.4 |
| | Junior | 82 | 29.6 |
| | Senior | 43 | 15.5 |
| College | Business | 240 | 86.6 |
| | Liberal Arts | 22 | 7.9 |
| | Both | 14 | 5.1 |
| | Undeclared | 1 | 0.4 |
| Major | Accounting | 76 | 27.5 |
| | Marketing | 72 | 26.0 |
| | Management | 26 | 9.4 |
| | Finance | 23 | 8.3 |
| | Int'l Business | 22 | 7.9 |
| | Communication | 14 | 5.1 |
| | Others | 44 | 15.9 |

It can be seen that freshmen, sophomores and juniors each account for about 30% of the sample, while seniors account for 16%. The majority of the

students (87%) are in the business college, while only 8% are in the liberal arts college and 5% of them are in both business and liberal arts as they are double majoring in both schools. The sample is almost evenly distributed between males and females. As for majors, 28% are majoring in accounting, 26% in marketing and the rest in various areas.

RESULTS AND DISCUSSION

In addition to demographic information, the students were asked about their use of the university e-mail system, other e-mail accounts, as well as other means of electronic communication.

Use of the University E-mail Account

Students were asked to indicate how often they check their university e-mail account and the activities they do using the university e-mail. Table 2 shows that 83% of them check the university e-mail several times a day and 11% of them check their e-mails once a day. Table 2 also shows that over 90% of them use the university e-mail to send messages to instructors, receive messages from instructors, and receive official messages from the university. It can be seen that university e-mail is still used by a majority of students frequently to communicate with instructors and keep up with the notices from the school. This finding is consistent with the findings from the University of Illinois at Chicago, the University of Colorado at Boulder, and The University of St. Thomas (1,3,7). In addition, it can be seen that over half of the students also use their university e-mail account to communicate with their family and friends while only 35% of them supply the university e-mail account in online shopping.

Use of Other E-mail Accounts

The students were also asked to indicate how many other e-mail accounts they have besides the university account. About 79% (220) have other e-mail accounts. Among all students having other e-mail accounts, 51% have one other e-mail account and 21% have two other e-mail accounts and the rest (28%) have at least 3 other e-mail accounts.

Table 2 shows that students do not check their other e-mail accounts as frequently as their university e-mail account as only 45% of them check their other e-mail accounts at least once a day compared to 94% for the university e-mail account while 30% of them only check their other e-mail accounts once a week or once a month. Table 2 shows that the major uses of

Table 2. Use of University E-mail and Other E-mail Accounts

| | | | |
|-------------------------------|---|--|--|
| 1. | | How often do you check your university e-mail account? (277) | How often do you check your other e-mail accounts? (220) |
| | Several Times a day | 83.4% (231) | 23.7% (52) |
| | Once a day | 10.8% (30) | 20.5% (45) |
| | Every two or three days | 4.7% (13) | 23.7% (52) |
| | Once a week | 0.7% (2) | 15.1% (33) |
| | Once a month | 0% (0) | 14.2% (31) |
| | Almost never | 0.4% (1) | 2.7% (6) |
| 2. | | Which of the following do you do using your university e-mail account? (277) | Which of the following do you do using your other e-mail accounts? (220) |
| | Send messages to my friends | 56.3% (156) | 55.9% (123) |
| | Receive messages from friends | 57.0% (158) | 59.1% (130) |
| | Send messages to family | 58.5% (162) | 53.6% (118) |
| | Receive messages from family | 60.6% (168) | 60.0% (132) |
| | Send messages to my instructors | 94.2% (261) | 4.5% (10) |
| | Receive messages from my instructors | 97.1% (269) | 3.6% (8) |
| | Receive official messages from the University | 91.3% (253) | 4.5% (10) |
| Supply it for online shopping | 35.4% (98) | 69.1% (152) | |

Table 3. Use of Other Means of Electronic Communication

| | Several Times a Day | Once a Day | Every 2 or 3 days | Once a Week | Once a Month | Never |
|---------------------------------|---------------------|------------|-------------------|-------------|--------------|-------|
| Cell phone | 90.9% | 4.4% | 2.9% | 0.4% | 0.4% | 1.1% |
| Instant messaging | 86.2% | 4.0% | 4.3% | 2.2% | 0.7% | 2.5% |
| Text messaging | 53.1% | 10.5% | 14.9% | 7.3% | 4.7% | 9.5% |
| Facebook.com | 52.9% | 23.0% | 10.2% | 4.7% | 1.8% | 7.3% |
| Campus Portal | 48.5% | 15.7% | 12.0% | 6.9% | 6.2% | 10.6% |
| MySpace.com | 16.8% | 8.8% | 9.9% | 3.7% | 7.0% | 53.8% |
| Land line phone (regular phone) | 4.5% | 7.5% | 6.8% | 10.2% | 25.2% | 45.9% |
| PDA | 3.8% | 0.8% | 0.4% | 2.3% | 1.1% | 91.6% |
| Personal blog | 1.1% | 0% | 0% | 1.9% | 0.8% | 96.2% |

the other e-mail accounts are for on online shopping (69%) and communicating with friends and family (above 50%). Students rarely use other e-mail accounts to communicate with their instructors and to receive messages from the school.

Use of Other Means of Electronic Communication

The students were also asked to indicate how frequently they use various methods of electronic communication and the results are shown in Table 3. The five electronic communication means used most frequently by students are cell phone, IM, text messaging, facebook.com, and the campus portal, in that order. Cell phones and IM are used respectively

by 91% and 82% of students several times a day. In addition, text messaging, facebook.com, and the campus portal are used by more than 64% of them at least once a day. In contrast, PDAs and personal blogs are used very little.

From the above analysis, it seems that students use many electronic communication tools regularly. To verify this observation, the six most frequently used electronic communication tools: university e-mail, cell phone, IM, text messaging, facebook.com and the campus portal, were selected based on the percentage of students using them several times a day. The number and percentage of students using 6, 5, 4, 3, 2, 1 and 0 electronic communication tools

several times a day were also calculated. The results are presented in Table 4 where it can be seen that 17% of the students have used six electronic communication tools several times a day. Students using five, four and three electronic communication tools several times a day account for 27%, 29%, and 15% respectively. In sum, about 88% have used at least three electronic communication tools frequently (several times a day). These results show that today's students do not rely on any single tool for communication; instead, they are using many means of electronic communication on a daily basis. These findings are consistent with those of the Pew Internet and American Life Project (9).

Table 4. Number of the Six Electronic Communication Tools Used by Students

| # of Electronic Communication tools | Number | % |
|-------------------------------------|--------|------|
| 6 | 46 | 16.6 |
| 5 | 75 | 27.1 |
| 4 | 79 | 28.5 |
| 3 | 41 | 14.8 |
| 2 | 22 | 7.9 |
| 1 | 9 | 3.2 |
| 0 | 5 | 1.8 |

Students were asked to write down their favorite means of electronic communication in the survey. The results show that the cell phone and IM are considered by 29% and 28% of the students as their favorite means of electronic communication, followed by e-mail (17%) and text messaging (15%). In addition, 8% and 3% consider facebook.com and PDA as their favorite means of electronic communication respectively.

In the previous analysis, it was found that about 94% of students check their university e-mail account at least once a day; however, e-mail is only considered by 17% of them as their favorite means of electronic communication. This may indicate that students' frequent use of e-mail is not from their interest, but from the need to keep up with their school work and announcements.

The students were also asked to provide additional comments regarding the use of the university e-mail. Some of the comments are as follows: e-mail is for school-related activities and for more formal communication; e-mail is slow, not instant and personal; they do not always get the response from e-mail, they receive too many official announcements/junk e-mails, e-mail is not an

effective way to reach friends/family since some of their friends/family may not have e-mail accounts. These comments from students partially explain why students do not consider e-mail as their favorite means of communication.

Impact of Gender on the Use of Electronic Communication Tools

In line with the previous analysis, the six most frequently used electronic communication tools were selected to test the impact of gender on the use of electronic communication. A series of t- tests were used to see whether the frequency of use of each of the six electronic communication tools differ between male and female students. Table 5 shows the results. It can be seen that gender impacts the frequency of the use of text messaging by students. Female students use text messaging more frequently than male students. No significant gender differences were found regarding the use of university e-mail, cell phone, IM, facebook.com and the campus portal.

Table 5. Impact of Gender on the Use of Electronic Communication Tools

| Tools | Gender | Mean | Mean Difference | p-value |
|-------------------|--------------|------|-----------------|------------|
| University E-mail | Male (136) | 4.74 | 0.03 | .55 |
| | Female (141) | 4.78 | | |
| Cell Phone | Male (136) | 4.78 | 0.08 | .33 |
| | Female (141) | 4.86 | | |
| Instant Messaging | Male (136) | 4.64 | 0.00 | .90 |
| | Female (141) | 4.66 | | |
| Text Messaging | Male (136) | 3.35 | 0.71 | .00 |
| | Female (141) | 4.06 | | |
| Facebook.com | Male (136) | 3.85 | 0.26 | .14 |
| | Female (141) | 4.11 | | |
| Campus portal | Male (136) | 3.59 | 0.05 | .80 |
| | Female (141) | 3.64 | | |

Impact of Student Year of Study on the Use of Electronic Communication Tools

ANOVA was used to test the mean difference of the use of each of six electronic communication tools among the freshmen, sophomores, juniors and seniors with the results displayed in Table 6. It can be seen that facebook.com is significant at the 0.05 level and IM is significant at the 0.10 level. Further t-tests found that freshmen and sophomores use IM more frequently than juniors and seniors. In addition, freshmen, sophomores, and juniors use facebook.com more frequently than seniors. No significant differences were found between other communication tools and the level of students.

Table 6. Impact of Student Level on the Use of Electronic Communication Tools

| Tools | Student Level | Mean | F - value | p value |
|-------------------|----------------|------|-----------|-------------|
| University E-mail | Freshman (76) | 4.75 | 0.74 | 0.53 |
| | Sophomore (76) | 4.84 | | |
| | Junior (82) | 4.70 | | |
| | Senior (43) | 4.74 | | |
| Cell Phone | Freshman (76) | 4.83 | 0.89 | 0.45 |
| | Sophomore (76) | 4.87 | | |
| | Junior (82) | 4.72 | | |
| | Senior (43) | 4.90 | | |
| Instant Messaging | Freshman (76) | 4.83 | 2.15 | 0.09 |
| | Sophomore (76) | 4.75 | | |
| | Junior (82) | 4.48 | | |
| | Senior (43) | 4.50 | | |
| Text Messaging | Freshman (76) | 3.89 | 1.71 | 0.17 |
| | Sophomore (76) | 3.92 | | |
| | Junior (82) | 3.39 | | |
| | Senior (43) | 3.66 | | |
| Facebook.com | Freshman (76) | 4.33 | 6.69 | 0.00 |
| | Sophomore (76) | 4.18 | | |
| | Junior (82) | 3.90 | | |
| | Senior (43) | 3.17 | | |
| Campus Portal | Freshman (76) | 3.74 | 0.21 | 0.89 |
| | Sophomore (76) | 3.63 | | |
| | Junior (82) | 3.52 | | |
| | Senior (43) | 3.56 | | |

CONCLUSIONS

The results of this study found that a majority of students (94%) still use their university e-mail account on a daily basis to communicate with instructors and keep up with the notices from the school even though many students do not consider e-mail as their favorite means of electronic communication. The results of this study are consistent with previous studies (1,3,7). It is inconsistent with other reports citing examples of colleges which are abandoning e-mail (3). Moreover, today's students are multiple communicators using many electronic communication tools on a daily basis, including cell phones, IM and text messaging. To communicate effectively with students and overcome some of the limitations of e-mails (as indicated by students in the previous section), universities should try multiple ways of communicating with students. In addition to e-mail, text messaging or IM should be considered to make sure students do not miss any important announcements and to increase students' interest in reading and responding to the messages.

The results also show that females use text messaging more frequently than males; therefore, text messaging may be a very effective way of reaching female students. In addition, IM and facebook.com can also be used to reach freshmen more effectively.

The current study was based on the undergraduate students and may not apply to graduate students. Future study can focus on the use of various electronic communication means for graduate students. Furthermore, the impact of other factors (e.g. age and personal characteristics) should also be investigated.

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