

Email Use among International Students in a U.S. University

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Abstract

This study examined the characteristics of email use among international students studying in a U.S. institution of higher learning. 130 international students were interviewed, and interview data were analyzed by taking the thematic analytical approach. Email has become the most frequently used interpersonal communication medium among international students studying in U.S. colleges. Email is more likely to be used to communicate with professors, classmates, and general friends, while phone calls and particularly free Internet phone calls or instant messaging APPs are more likely to be used in communications with parents, close friends, and important others.

Key words: *International students, email use, interpersonal communication, relationship maintenance.*

1. Introduction

With recent advances in informational technology and particularly the growing popularity of the Internet, more and more people are communicating via Email. This fast and efficient method of communication has the edge over other communication methods such as postal mails and phone calls. Email has come quite a long way since its introduction, and has changed the way we live, learn, and do business. Sure, some may complain about the amount of email they receive every day. But, when all is said and done, using email has impacted our life in a positive way. For many of us, email has become a relational management platform (Rabby & Walther, 2003). Whether we are sending a greeting to a friend or sending files to a colleague, we can easily utilize email to do so. The many uses of email are what make it so versatile and so appealing to people from all walks of life. The United States of America accommodates a large body of international students. For this population group, communication with classmates, professors, friends, relatives, and significant others becomes an important part of everyday life. The authors, as once international students in the United States, still remember the days when making long-distance phone calls was considered a luxury. It is the introduction of the Internet and particularly email that has made the cost of interpersonal communication and particularly long-distance or international communication no longer prohibitive. The authors have thus been very curious about what roles email plays in the daily communication of today's international students, how they perceive the advantages or disadvantages of email in maintaining interpersonal relationship, and what factors determine their decision of use or not to use email in daily communication and relational maintenance.

A preliminary review of relevant literature suggests that few research studies have examined email use among international students in U.S. institutions of higher learning. Instead, studies to date are mainly focused on exploring the characteristics of email use among U.S. (hereinafter American) college students. Overall, American college students count on email to communicate with family members, friends, romantic partners, or significant others (Trice, 2002). For instance, a good many college freshmen receive up to 6 emails per week from their parents. Email communication with high school friends is up to 35%. Followed is email communication with friends on college campus, accounting for 24%. Emails sent to friends off campus account for 20%. American college students also communicate with their romantic partners or significant others via email. 11% of American college students use email to communicate with their romantic partners (Pew Internet, 2002a). However, the frequency of email contact with both geographically close and long-distance romantic partners is negatively associated with loneliness levels of students (Johnson, Haigh, Becker, Craig, & Wigley, 2004).

Existing studies have also explored the factors leading to the popularity of email use among American college students. Email as a relationship-maintaining tool allows asynchronous communication at the user's leisure and with lower long-distance expenses (Boneva, Kraut, & Frohlich, 2001). It provides college students an affordable and convenient way to keep the relationship in existence, to be open, and to accomplish goals (Rabby & Walther, 2003). Email, along with other forms of computer-mediated communication (CMC), also enables college students to communicate more strategically than they might in face-to-face interactions (Walther & Parks, 2002). What's more, email is not constrained by geographic distance (Stafford, Klime, & Dimmick, 1999) and thus "[provides] a rewarding medium for maintaining relationships" (Johnson, Haigh, Becker, Craig, & Wigley, 2008, p. 383).

Email seems to have become a dominant channel of interpersonal communication among American college students, with 72% of them checking email at least once a day (Pew Internet, 2002a). Because U.S. institutions of higher learning provide free Internet access, American college students use email to communicate a lot more than the general public (Johnson et al., 2008; Odell, Korgen, Schumacher, & Delucci, 2000). College is a time when many individuals leave friends and family behind to attend school, potentially rendering many important relationships long-distance (Johnson et al., 2008). Current college students are more likely to maintain contact with high school friends because of new communication technologies, resulting in their having greater number of social ties than their parents (Pew Internet, 2002a). Email as a relatively cheap, convenient channel provides students with more opportunities to maintain and receive support from faraway family, friends, and romantic partners. Email not only helps college students stay in contact with these individuals but also help them combat homesickness (Tognoli, 2003).

In sum, studies to date have disclosed a variety of factors leading to the increasing popularity of email communication among American college students. Nonetheless, these findings do not represent the latest status of email use among college students as they are based on mostly out-of-date sources, considering the rapid advances in information technology and online communication in particular. It is thus necessary to gather and generate up-to-date data so as to renew and expand our knowledge with regard to email use among college students. Furthermore, existing studies, as noted earlier, have rarely looked at email use among international students in U.S. institutions of higher learning. While international students in U.S. colleges and universities understandably are expected to share some (if not all) of the characteristics of email use among American college students, they are different from their American counterparts in many aspects. For instance, in comparison with the relatively much lower cost of domestic phone calls for American college students, international students in U.S. are believed to be significantly influenced by the prohibitive cost of long-distance or international phone calls and thus tend to rely more on the Internet and email to communicate with relatives and friends in home country. In addition, due to limited English proficiency, many international students very often shy away from phone calls or face-to-face conversations with college students and professors and thus tend to use email in communication with college classmates, friends, and professors.

Therefore, examining email use among international students would be an area in need of investigation. The present research study is such an effort. Specifically, this inquiry is guided by the following general research questions: (1) When, to whom and how often do international students in US universities send emails? (2) How do they perceive the roles of email in maintaining relationships with those they send emails to? (3) What makes international college students in US universities decide to use email rather than make phone call or other channels of communications?

2. Methods

2.1. Sample

A sample of 130 students was selected from a pool of 659 international students enrolled in a public 4-year university located in southeastern United States. To gather this sample, the authors employed both proportional stratified sampling and random simple sampling methods. Table 1 presents the process and results of stratified and random sampling. First, the home country of each international student was viewed as a separate stratum, including China, India, South Korea, Pakistan, Saudi Arabia, Japan, Turkey, Nepal, and Jordan. We decided to interview 20% of the 659 international students, which amounts to a total of 132 individuals: 73 from China, 24 from India, 9 from South Korea, 9 Pakistan, 6 Saudi Arabia, 4 from Japan, 3 from Turkey, 2 from Nepal, and 1 from Jordan.

Table 1. Stratified and random sampling results (N = 130)

Stratum	Proportional Stratified Sampling			Random Sampling
	Sample Size	Proportion of TIS*	Number of SBS*	Number of SAS*
China	364	55.24%	73	72
India	121	18.36%	24	24
South Korea	47	7.13%	9	9
Pakistan	43	6.53%	9	8
Saudi Arabia	31	4.70%	6	6
Japan	22	3.34%	4	4
Turkey	17	2.58%	3	3
Nepal	9	1.37%	2	2
Jordan	5	0.75%	1	1
Total	659	100%	132	130

Note: TIS = Total International Students; SBS = Students to be Selected; SAS = Students Actually Selected

Then, random sampling method was applied within each stratum via the online research randomizer (Urbaniak & Plous, 2008). Finally, we gathered a sample of 132 students. However, two students (1 from China and 1 from Pakistan) dropped out in the process of interview. Considering the insignificant influence of two dropouts, we did not seek supplements and ultimately interviewed these 130 students. They includes 78 females and 52 males, ranging in age from 19 to 32. These participants were enrolled in ESL (n = 64), undergraduate (n = 48), or graduate (n = 18) programs. All arrived at the United States in the past 22 months. The current university they were studying in is the first U.S. higher learning institute they have attended.

2.2. Data Collection

To answer the major research questions, the authors interviewed the 130 participants to collect qualitative data through semi-structured interviews. The use of semi-structured interviews as major means of collecting

qualitative data is mainly based on the consideration that this type of interview not only helps generate data necessary for this inquiry but also keeps the present inquiry open to unexpected, emerging themes. Specifically each participant was interviewed about 10-15 minutes. All interviews were conducted in English and tape-recorded. Collected interviews were then transcribed for further coding and analysis.

2.3. Data Coding

The coding first involved developing a start list of codes. To do so, the author randomly selected the transcriptions of 3 interviews, respectively from ESL, undergraduate, and graduate students, and looked at each by marking the text where it was believed interesting and offered something towards the overarching research questions (Seidman, 1998). The author then looked for repetition in language (words, phrases, or other meaningful units), situations, questions, and problems to recognize what might amount to meaningful trends. In so doing, 3 initial ways of daily communication emerged, including “the use of the Internet” (coded as INT), ‘the use of telephone’ (coded as TEL), and ‘traditional face-to-face communication’ (coded as F2F).

At this moment the authors were a little uncertain if this conceptualization of these initial themes was solid enough, and decided to try the codes out, coding the 3 selected transcriptions, paying attention to any other potential themes, and noting down supportive quotes for each theme. The authors closely examined the supportive quotes so as to give an operational definition to each code and explicate the relationships between different codes. These efforts brought about a tentative start list of codes, entailing codes and their definitions while suggesting the relationships between different codes.

To test the reliability of the codes, the authors invited another person to be a third coder. Introduced to the codes, their definitions, and the relationships between different codes, he independently coded on clean copies of the three selected transcriptions that the authors had already coded. Then we calculated the inter-rater reliability, which was high (up to 90%). Aided by this start list of codes, the authors coded all the interview transcriptions. In coding the interviews, the authors assigned each interviewee an ID so as to shadow the identification information of the participants.

2.4. Data Analysis

The analysis of interview data involves four major steps. First of all, coded transcriptions were split into “coded segments” (Miles and Huberman, 1984), each of which, marked with its code, the participant’s ID number, was filed into an organizer of the category to which the coded segment belongs. The authors closely examined the coded segments of each category and underlined key words, phrases or sentences.

Then, the key words, phrases, or sentences were entered into what Miles and Huberman (1984) called a “conceptually clustered matrix”. The first column of the matrix lists informants’ IDs, and other columns are arranged to bring together the key words, phrases or sentences that belong to a certain category. One salient advantage of a conceptually clustered matrix is that reading down the columns enables analytical comparisons between different informants; and reading across the columns enables analytical comparisons between different categories (Miles & Huberman, 1984). The same strategy was also used to construct a “conceptually clustered matrix” for each of the identified themes and further analyze specific features of each theme.

Then, data entered into conceptually clustered matrixes were further analyzed. The authors then counted the number and computed the percentage of informants who reported a certain category. Finally, the authors analyzed the relationships among salient themes by closely examining informants’ narratives in order to create concept maps (Maxwell, 1996; Strauss & Corbin, 1998).

3. Results

3.1. Ways of Communication

As illustrated in Table 2, three general ways of communication were identified, including the use of the Internet, Phone calls (home phone and cell phone), and traditional Face-to-Face (F2F) Conversation. The use of the Internet includes 5 specific means: Email, Skype, QQ, MSN, and Face-book. Of them, email was used most frequently; all of the 130 participants reported using emails to communicate with individuals, similar to the percentage of cell phone users.

Table 2. Ways of communication (N = 130)

Ways	Internet					Phone		F2F
	Email	Skype	QQ	MSN	Face-book	Home	Cell	
Frequency	130	50	90	100	40	40	130	60
(%)	(100%)	(38%)	(69%)	(77%)	(31%)	(31%)	(100%)	(46%)

3.2. Time & Frequency of Sending Emails

Time and frequency of sending emails were analyzed. In terms of the time students send emails, 72 (55%) of the 130 interviewed students reported that they usually sent emails at night (after 6pm), 48 (37%) of them reported email use whenever necessary, and 10 (8%) reported email use only at daytime. In terms of frequency of students' email use, 74 (57%) of the interviewees reported sent emails almost every day, 30 (23%) sent emails every other day, and 26 (20%) sent emails whenever necessary.

3.3. Recipients of Emails

As can be seen in Table 3, students usually send emails to their professors, friends, classmates, parents and colleagues (e.g., on-campus student workers). Specifically, 126 (97%) of the 130 participants reported that they sent emails to their professors, 112 (86%) of them reported emailing to friends, and 51 (39%) emailing to classmates, 28 (22%) to parents, and 12 (9%) to colleagues.

Table 3. Recipients of emails (N = 130)

Recipient	Professors	Friends	Classmate	Parents	Colleague
Frequency	126	112	51	28	12
(%)	(97%)	(86%)	(39%)	(22%)	(9%)

3.4. Advantages of Email

Table 4 presented the various advantages of email use as reported by the participants. Of the 130 participants, 54 (42%) of the participants maintained that in comparison with other communication ways, email is very convenient, and can be sent whenever and wherever the Internet is available and accessible. 44 (34%) reported that using emails in daily communication is good for sending files and attachment; and another 44 (34%) students believed that using email in daily communication allows the sender to prepare in advance what to say and clearly explain details which otherwise are difficult to make clear. 21 (16%) of the students stated that unlike ordinary use of telephone and F2F conversations, information communicated through emails could be saved and stored, which made it possible for them to track and make use of the information when necessary. Also, In addition, 10 (7.7%) students said that email use helps save time and money.

Table 4. Advantages of email (N = 130)

Advantage	Frequency (%)
Good for sending files and attachment	30 (23.1%)
Good for preparing what to say and explaining details	30 (23.1%)
Good for saving contact record for later review	20 (15.4%)
Convenience	50 (38.5%)
Save time and money	10 (7.7%)

3.5. Rationales for Sending Emails to Particular Recipients

Participating reported that emails were in general best (1) for communicating with more neutral relationships such as professors, classmates, and general friends; and (2) for situations in which phone calls or F2F conversations were inadequate. In comparison, students tend to be using phone calls for more personal or private relationships such as parents, significant others, or close friends; and for situations in which immediate responses or answers were expected. Overall, regular mails are least frequently used and only used in very formal situations such as job applications.

4. Discussion

Email has become the most frequently used interpersonal communication medium among international college students studying in the United States. However, email has not yet replaced more traditional communication media such as phone calls. Important is that email is more likely to be used in situations in which communications are needed with professors, classmates, and general friends, all of whom are somewhat neutral in their relationship with email senders. Instead, to communicate with parents, close friends, and important others, phone calls (including free internet phone calls or APP) are more frequently used.

Findings of this study did not support the existing literature which suggested that email was widely used to maintain interpersonal relationships among college students; at least the specific student group—international students in U.S. universities—has not developed that tendency. But rather, email use in relationship maintaining is relationally or situationally specific. For close relationships, phone calls remain the most frequently used communication medium; for neutral relationships, emails are more likely to be used. Email has many advantages for college students who need to contact professors, classmates, and general friends. However, for international students studying in U.S. universities, they chose to use phones (e.g., cell phones) or Internet phone calls (e.g., MSN) as main communication media with relatives and friends in their home country.

Findings generated from this study suggest that email communication becomes very important on college campus, for both academic and general/neutral interpersonal communications. In this sense, maintaining and improving on-campus Internet access is believed to help college students communicate with professors, classmates, and friends.

Furthermore, for international students in U.S. colleges, traditional phone calls and more advanced Internet phone calls (e.g., MSN, QQ, Weixin) are still dominant in students’ daily communications with important others in their home country. Considering the fact that the Internet is the main vehicle for Internet phone calls and other online communication ways (e.g., Face-book), developing high-speed on-campus Internet system and increasing the accessibility of on-campus Internet are critical for international students to maintain and strengthen both general and private relationships.

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