Evidence Based Library and Information Practice

Evidence Summary

Post-Secondary Students Prefer IM to E-mail for Personal and Social Communication

A review of:
Lancaster, Sean, David C. Yen, Albert H. Huang, and Shin-Yuan Hung. "The Selection of Instant Messaging or E-mail: College Students' Perspective for Computer Communication." Information Management & Computer Security 15.1 (2007): 5-22.

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Abstract

Objective – This study investigates college students' perceptions of instant messaging (IM) and e-mail for conveying emotions, aiding in relationship building, ease of use, and reliability.

Design – A survey consisting of 59 questions was administered to 1,000 college students, resulting in 545 usable responses.

Setting – The research took place at a midwestern university in the United States.

Subjects – 1,000 Management Information Systems (MIS) college students.

Methods – A 59-question survey was distributed to 1,000 MIS students during the 2005 academic year. 545 usable responses were returned. Participation was voluntary. During the pre-phase of the research, four categories were determined: emotion, relationship, usage, and reliability. Questions were then written for a pilot study using Likert scaling. The post-research phase involved evaluating the questions linguistically to ensure proper word usage, comprehension, and lack of bias.

Main Results – The questions in the section on conveying emotion dealt with how well the two technologies (e-mail and IM) communicated feelings and emotions. While both technologies were acknowledged as being able to communicate more than merely text, IM was clearly preferred for expressing emotion. Fifty-two percent of the respondents strongly agreed or agreed that they used emoticons (originally symbols created with letters and special characters; later evolving into graphical images produced and made available by IM companies) to express emotion in IM, while fewer than 11% agreed or strongly agreed that they did so in e-mail. More than 70% of the respondents strongly agreed or agreed that their friends used emoticons in IM, while fewer than 14% strongly agreed or agreed that their friends used emoticons in e-mails. More than 75% of respondents agreed that it is easier to convey emotions in IM than via e-mail.

Analysis on the questions that dealt with the technologies as useful relationship builders again showed a preference for IM. IM was preferred by a greater number of respondents for fostering friendships, improving relationships with friends or team members, building relationships, social interaction, and social networking. This section also found that more than 75% of the respondents felt that IM was more useful than e-mail when interacting with friends. However, when asked about interacting with co-workers specifically, only 44% were in agreement. Nearly 32% were neutral on this point, while 24% were in disagreement. It appears that IM is preferred over e-mail for fostering social and friendly relationships, but is not preferred when the interaction is work-related and more professional.

In terms of use, both technologies were considered easy to learn and use by more than 90% of respondents. In terms of preferred use, more than 60% of respondents use IM for personal and social interaction, while less than 1% uses IM for work-related activities. Nearly 80% of respondents preferred using e-mail for work, and nearly 75% preferred using IM for social interaction. Sixty-three percent of respondents did not agree that IM is just as effective as face-to-face meetings, while nearly 75% did not agree that e-mail can be as effective as meeting face-to-face.

In the areas of reliability, security, and privacy of IM and e-mail, respondents perceived e-mail more favourably. Sixty-four percent of respondents agreed or strongly agreed that IM is very reliable, while 80% of respondents felt the same way about e-mail. Just over 30% of those questioned agreed that IM is very secure, while more than 50% felt that way about e-mail. However, the gap is narrower when users were queried as to whether or not they worry about security: 13% strongly agreed with the statement that users do not worry about their security when using IM, while 15% strongly agreed with the statement as it pertained to e-mail. The same types of questions were asked about perceived privacy. Nearly 50% agreed that their privacy is protected with e-mail, while just under 35% had the same belief about IM. More than 60% of respondents reported that they do not worry about privacy when e-mailing, while about 53% of respondents do not worry about privacy with IM.

Conclusion – IM was perceived more favourably than e-mail in 3 of the 4 categories: conveying emotions, building relationships, and ease of use. In the reliability category, e-mail was perceived more favourably. However, there is a division between social interaction and professional communication. IM is preferred for personal and social relationships, while e-mail is preferred for work-related

communication. Neither of the technologies is as desirable as face-to-face meetings.

Commentary

This research project was fairly straightforward in its execution. The 59-question survey was ambitiously constructed to cover a wide range of topics: use, reliability, building relationships, and conveying emotions. The survey was designed using Likert scaling, but it was not made clear what the Likert scale range was for this particular survey. Additionally, the last four questions in the survey (56-59 inclusive) appear to be open ended questions where the Likert scaling would not be applicable. It is unclear as to how these questions were handled. The results of questions 56-59 are reported in the text of the article as well as via Figure 7. The two methods of reporting the results do not seem to coincide. The figure is somewhat confusing. The authors also fail to mention how they established the validity and reliability of the survey instrument.

As for the results of the survey, the analysis was merely descriptive and not inferential, so no conclusions may be drawn. There is one discrepancy in the article, which was cleared up with an e-mail to the corresponding author: the text of the article states that the survey consisted of 69 questions, while the list of questions (Table 1) numbered 59. The author confirmed that it was a 59-question survey.

The paper includes a brief section on the evolution of IM as well as a broad literature review on eleven different topics: information richness, ease of use, use of emoticons, multimedia, playfulness, flow, cognitive fit, bounded rationality, media selection, perceived commitment, and user satisfaction. All eleven dimensions inform the construction of the survey questions to seemingly variable degrees. Although the literature review is comprehensive in terms of items touched upon, some dimensions are merely given cursory treatment by the authors, with one or perhaps two articles pertaining to the topic. It is a broad literature review, but not a deep one. And while the literature review is lacking in depth in some areas, the authors are clear and succinct in their provision of a theoretical background.

The authors recognize the limitations of their study, which chiefly involve the selection of the study subjects. College students of approximately the same age are a narrow group, so it is somewhat unlikely that the results of this study could be applicable to other user groups. Additionally, it is likely that among the chosen respondents, any work-related conclusions would be drawn from course and group work rather than actual work experience. A further limitation, and one not stated in the paper, is that the students are all from the Management Information Systems program. At least, it is assumed that this is the program, based on the primary authors' affiliation and the information found at the University website. The article does not explicitly define the MIS acronym. This program places "an emphasis on state-of-the-art computing and IT skills" (Decision Sciences). Not only are the subjects college students of a similar age, they are also all in an academic program dealing with high level computer knowledge. There is the assumption that they are atypical users of technology. These factors taken together suggest that applying the study results to other user groups should be done with caution.

Despite the limitations, the results of this research would be beneficial if applied in a college or university setting in decision making around the area of reference services. Many institutions offer chat reference or reference services by e-mail.

Having a greater understanding of how college students perceive these technologies could help in deciding which kind of service to offer.

Works Cited

Decision Sciences & Management Information Systems. 2007. Farmer School of Business, Miami University. 27 Nov. 2007 <http://www.fsb.muohio.edu/departments/dsc-mis >.